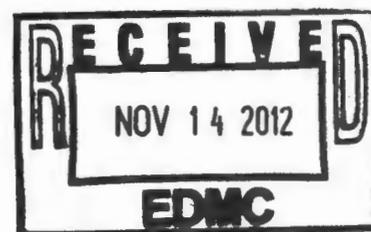


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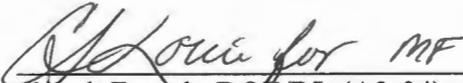
100/300 AREA UNIT MANAGER MEETING ATTENDANCE AND DISTRIBUTION

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Menard, Nina	NMEN461@ECY.WA.GOV	H0-57	ECO
Gadbois, Larry E	Gadbois.larry@epa.gov	B1-46	EPA
Hadley, Karl A	karl.hadley@wch-rcc.com	H4-21	WCH

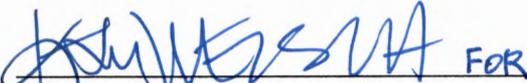


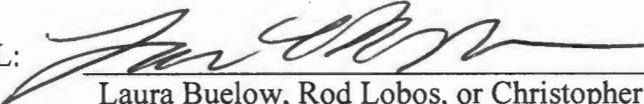
100/300 AREA UNIT MANAGERS MEETING
APPROVAL OF MEETING MINUTES

October 11, 2012

APPROVAL:  Date 11/8/12
Mark French, DOE/RL (A3-04)
River Corridor Project Manager

APPROVAL:  Date 11/08/12
Briant Charboneau, DOE/RL (A6-33)
Groundwater Project Manager

APPROVAL:  FOR Date 11/8/12
Nira Menard, Ecology (H0-57)
Environmental Restoration Project
Manager

APPROVAL:  Date 11/8/12
Laura Buelow, Rod Lobos, or Christopher
Guzzetti, EPA (B1-46)
100 Area Project Manager

APPROVAL:  Date 11/8/12
for 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); Field Remediation (FR); Mission Completion; and 100-K Sludge Treatment Project and 100-K Facility Demolition and Soil Remediation projects

October 11, 2012

ADMINISTRATIVE

- Next Unit Manager Meeting (UMM) – The next meeting will be held November 8, 2012, at the Washington Closure Hanford (WCH) Office Building, 2620 Fermi Avenue, Room C209.
- Attendees/Delegations – Attachment A is the list of attendees. Representatives from each agency were present to conduct the business of the UMM.
- Approval of Minutes – The September 13, 2012, meeting minutes were approved by the U.S. Environmental Protection Agency (EPA), Washington State Department of Ecology (Ecology), and U.S. Department of Energy, Richland Operations Office (RL).
- Action Item Status – The status of action items was reviewed and updates were provided (see Attachment B).
- Agenda – Attachment C is the meeting agenda.

EXECUTIVE SESSION (Tri-Parties Only)

An Executive Session was not held by RL, EPA, and Ecology prior to the October 11, 2012, 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 status and information for Field Remediation activities. Attachment 3 provides the Field Remediation Schedule for IU-2/6. No issues were identified and no agreements or action items were documented.

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

Attachment 1 provides status and information for groundwater. Attachment 2 provides status and information for Field Remediation activities. Attachment 4 provides the Field Remediation Schedule for 100-D. Attachment 5 provides the Field Remediation Schedule for 100-H. Attachment 6 provides status and information for D4/ISS activities at 100-D and 100-N. No issues were identified and no action items were documented.

Agreement 1: Attachment 7 provides Ecology's approval to establish three waste container storage areas at 100-D, 100-H, and Pit 23.

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

Attachment 1 provides status and information for groundwater. Attachment 2 provides status and information for Field Remediation activities. Attachment 6 provides status and information for D4/ISS activities at 100-D and 100-N. Attachment 8 provides the 100-N Area FR Schedule. No issues were identified and no action items were documented.

Agreement 1: Attachment 9 provides Ecology's approval to establish a waste container storage areas at 100-N.

Agreement 2: Attachment 10 provides Ecology's approval of the proposed changes for the new statistical sample locations for EX-3 and EX-4 at UPR-100-N-6.

Agreement 3: Attachment 11 provides DOE's and Ecology's agreement that exceedances of polycyclic aromatic hydrocarbons above soil Remedial Action Goals at several 100-N waste sites (listed in Attachment 11) are most likely attributable to cross-contamination from structural asphaltic materials and that no further remediation will be performed.

Agreement 4: Attachment 12 provides Ecology's approval of proposed additional remedial and resampling actions for the 116-N-4 waste site.

Agreement 5: Attachment 13 provides Ecology's approval of the proposed pathway for the additional remediation and resampling for the 100-N-60 grouping of waste sites.

Agreement 6: Attachment 14 provides Ecology's approval of the proposed pathway for the additional remediation and resampling for the 128-N-1 grouping of waste sites.

Agreement 7: Attachment 15 provides Ecology's approval of the proposed pathway for the additional remediation and resampling for the UPR-100-N-19 waste site grouping.

Agreement 8: Attachment 16 provides Ecology's agreement that turning on the bioventing system will satisfy the December 31, 2012, Tri-Party Agreement milestone.

Agreement 9: Attachment 17 provides EPA's and Ecology's concurrences that ERDF cans for non-radiologically contaminated waste being loaded out at 100-N need not be lined and that a TPA change request will be processed to revise DOE/RL-2005-93 to match the language in DOE/RL-96-17.

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

Attachment 1 provides status and information for groundwater. Attachment 2 provides status and information for Field Remediation activities. Attachment 18 provides a status of and schedule for the 100-K Sludge Treatment Project and the 100-K Facility Demolition and Soil Remediation projects. Attachment 19 provides a schedule for Field Remediation at the 100-K Area. No issues were identified and no action items were documented.

Agreement 1: Attachment 20 provides DOE's and EPA's approval with the proposed changes to sample locations for the 118-K-1 Burial Ground Trench N deep zone sample design.

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

Attachment 1 provides status and information for groundwater. Attachment 2 provides status and information for Field Remediation activities. Attachment 21 provides a schedule for Field Remediation at 100-B/C Area. No issues were identified and no action items were documented.

Agreement 1: Attachment 22 documents the common understanding between EPA and DOE project managers on the basis of the 100-BC milestone schedule proposed in TPA change number M-15-12-03.

Agreement 2: Attachment 23 provides DOE's and EPA's approval of the sampling and verification approach for 100-C-7:1 remediation.

Agreement 3: Attachment 24 provides DOE's and EPA's approval with abandoning the aquifer tubes and associated tubing in place on the 100-C-7:1 excavation floor.

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

Attachment 1 provides status and information for groundwater. Attachment 2 provides status and information for Field Remediation activities. 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 25 provides status of the 300 Area Closure Project activities. Attachment 26 is a paper to close action item 100-195 regarding whether the placing of inert demolition debris in excavations as backfill triggers any landfill closure requirements. No issues were identified and no agreements or action items were documented.

MISSION COMPLETION PROJECT

Attachment 27 provides status and information regarding the Long-Term Stewardship, 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

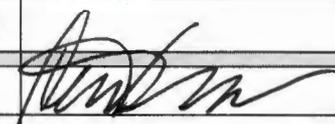
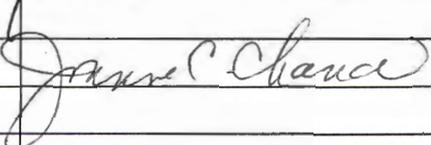
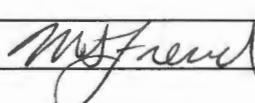
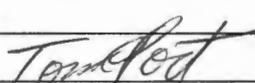
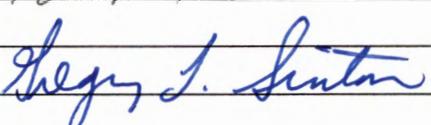
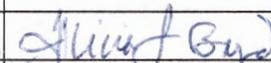
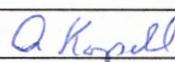
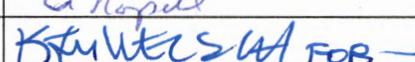
No changes were reported to the status of the CERCLA Five-Year Review action Items. No issues were identified and no agreements or action items were documented.

Attachment A

100/300 AREA UNIT MANAGER MEETING

ATTENDANCE AND DISTRIBUTION

October 11, 2012

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Attachment B

100/300 Area UMM
Action List
October 11, 2012

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-181	RL	J. Hanson	100-HR	DOE will provide Ecology with a briefing on the applicability and status of bioremediation of chromium and the associated feasibility studies.	Open: 4/14/11; Action: Closed 9/13/12
O	100-193	RL	M. Thompson	100-N	At the next UMM, DOE will discuss the potential sources of total organic carbon detected at well 199-N-165 down-gradient from the 1324-N/NA treatment, storage, and/or disposal units.	Open: 1/12/12; Action:
X	100-194	RL	M. Thompson	100-K	DOE will provide EPA and Ecology with the references to support the assumptions regarding the number of years required for habitat reestablishment.	Open: 4/12/12; Action: Closed 9/13/12
O	100-195	RL	R. Guercia	300	DOE will determine if placing inert demolition debris in excavations as backfill triggers any landfill closure requirements.	Open: 7/12/12; Action:
O	100-196	RL	J. Neath	100-D	DOE will determine if the ISRM Pond had been incorporated into the WIDS database, and if not, to finalize a discovery site checklist and get the site into WIDS via the MP-14 process.	Open: 7/12/12; Action:

Attachment C

100/300 Area Unit Manager Meeting
October 11, 2012
Washington Closure Hanford Building
2620 Fermi Avenue, Richland, WA 99354
Room C209; 2:00p.m.

Administrative:

- Approval and signing of previous meeting minutes (September 13, 2012)
- Update to Action Items List
- Next UMM (11/8/2012, Room C209)

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

- 100-F & 100-IU-2/6 Areas (Greg Sinton/Tom Post/Jamie Zeisloft)
- 100-D & 100-H Areas (Jim Hanson/Tom Post/Elwood Glossbrenner)
- 100-N Area (Joanne Chance, Rudy Guercia, Mike Thompson)
- 100-K Area (Jim Hanson, Jamie Zeisloft, Tom Teynor)
- 100-B/C Area (Greg Sinton, Tom Post)
- 300 Area - 618-10/11 exclusively (Jamie Zeisloft)
- 300 Area (Mike Thompson/Rudy Guercia)
- Mission Completion Project (John Sands)

Special Topics/Other

- 5-Year Record of Decision Action Item Update (Jim Hanson)

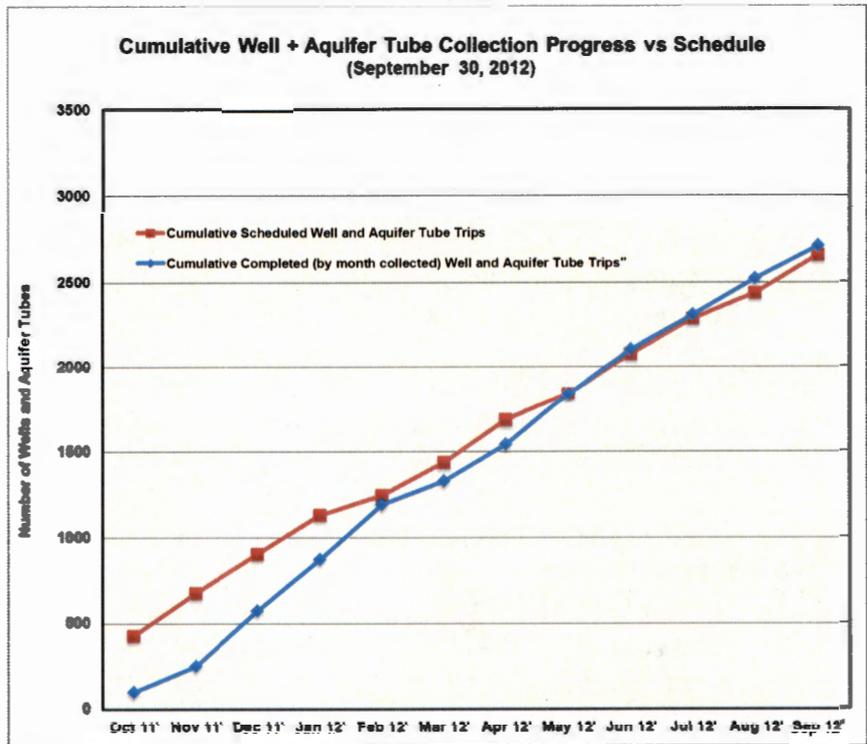
Adjourn

Attachment 1

**100/300 Areas Unit Managers Meeting
October 11, 2012**

General information on Groundwater Sampling

The wells sampled successfully during the reporting period are presented in the table on the last page of this handout. FY 2012 sampling is complete, and progress is shown in the figure at the right. To account for the optimization that occurs during the sample scheduling, sample events (or well trips) are now being reported, rather than each specific sample that is scheduled. This is to accommodate the current database architecture of HEIS and the scheduling tools. Results of sampling are available in the Environmental Dashboard at <http://environet.hanford.gov/eda/>.



Hanford Site Groundwater Monitoring for 2011 (DOE/RL-2011-118, Rev. 0) was released in August. The full report is available online via the Soil and Groundwater Remediation Project's web page: <http://www.hanford.gov/page.cfm/SoilandGroundwater>.

Hexavalent Chromium Groundwater Plumes in 100 Area – David Dooley / Lorna Dittmer

(M-016-110-T01, DOE shall take actions necessary to contain or remediate hexavalent chromium groundwater plumes in each of the 100 Area NPL operable units such that ambient water quality standards for hexavalent chromium are achieved in the hyporheic zone and river water column.)
Schedule Status – On schedule.

- White paper has been circulated to EPA and Ecology.

Cross Cutting RI/FS & PP Issue

- Current agreement between DOE and EPA senior management is to incorporate irrigation-based PRGs in to the River Corridor Proposed Plans.

100-FR-3 Groundwater Operable Unit – Bert Day / Mary Hartman

(M-015-64-T01, 12/17/2011, 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 – Missed. The planned delivery date for the 100-F/IU Draft A RI/FS Report to the regulators is December 28, 2012.

- CERCLA Process Implementation:
 - RI/FS: The document was delivered for RL review on September 27, 2012.
 - Proposed Plan: The format and structure updated for consistency with the 100-K Proposed Plan. The document was delivered for RL review on October 9, 2012.
- Monitoring and Reporting: All FY 2012 groundwater sampling has been completed. The FY 2013 sampling was scheduled for October. Approximately half of the wells and all but one aquifer tube were sampled ahead of schedule in mid-September. The remainder will be sampled in October.

**100/300 Areas Unit Managers Meeting
October 11, 2012**

100-HR-3 Groundwater Operable Unit – Bert Day / Kris Ivarson

(M-15-70-T01, 11/24/2011, 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 – Missed. The planned delivery date for the 100-D/H Draft A RI/FS Report to the regulators is December 14, 2012.

- CERCLA Process Implementation:
 - RI/FS: Comments from RL on the decisional draft were received on September 17, 2012. Comment resolution is in progress.
 - Proposed Plan: Submitted to RL for review and comment on September 12, 2012.
- Remedial Actions:
 - Operations continue at DX and HX pump-and treat system. September 1 through 30, 2012 performance:
 - The systems treated 53.7 million gallons
 - The system removed 34.4 kg of hexavalent chromium
- WCH Integration:
 - Power Outages: WCH is planning power outages on two Friday's in October to reroute power lines at 100-D to allow access to the 100-D-100 waste site remediation. These outages will impact both the DX and HX systems. The intent is to complete the work each Friday, but there is some possibility that the work could carry over into the Saturday in each case.
 - 100-D and 100-H Well Decommissioning and Replacement: The SAP for well realignment (decommissioning and replacement) is in RL review and incorporates the discussions held with Ecology on September 6' 2012. Decommissioning plans are underway.

100-NR-2 Groundwater Operable Unit – Marty Doornbos / Virginia Rohay

(M-015-62-T01, 9/17/2012, 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.)

Schedule Status – Tentative agreement has been reached to change the TPA milestone to June 30, 2013 for delivery of the 100-NR-2 OU Draft A RI/FS Report and Proposed Plan to Ecology.

- CERCLA Process Implementation
 - Work continues on preparation of the decisional draft RI/FS report. Several changes are being incorporated to be consistent with the technical and policy level agreements made in the 100K RI/FS.
 - A meeting was held with Ecology on September 10, 2012 to discuss the conceptual site model. Additional meetings have been scheduled with Ecology to discuss the preliminary modeling results and the regulatory approach for Sr-90 contamination in the groundwater.
- Yearly Sample Events for 2012
 - Annual sampling of CERCLA and AEA wells started two weeks early in August, for the scheduled September sampling events at 100-N. Sampling was completed on September 27, 2012 for all scheduled wells, with the exception of 199-N-16, where access is limited by nearby soil excavation.
- Apatite PRB Performance Monitoring
 - The low river stage (fall) sampling event was conducted on September 26 and 27. Samples were collected from all three sections of the installed barrier (upriver and downriver extensions and the original barrier) and included 12 monitoring wells and 10 aquifer tubes.

100/300 Areas Unit Managers Meeting
October 11, 2012

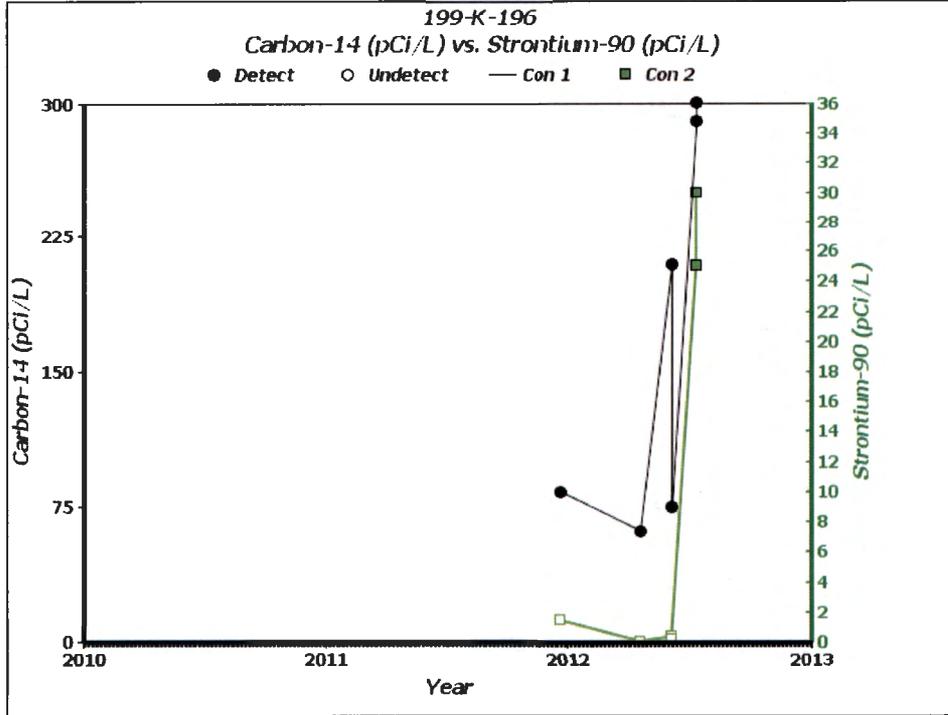
- RCRA Monitoring – 1324-N
 - Sampling has been completed for the five RCRA wells (199-N-165, 199-N-71, 199-N-72, 199-N-73, and 199-N-77) and wells 199-K-151 and 199-K-152 for the expanded analyte list, with the exception of TOC analyses for the two 100-K wells. Sampling for TOC at these two wells is scheduled for October 2012.
 - A meeting is scheduled with Ecology for October 16th to discuss the elevated TOC results.

100-KR-4 Groundwater Operable Unit – Bert Day / Chuck Miller

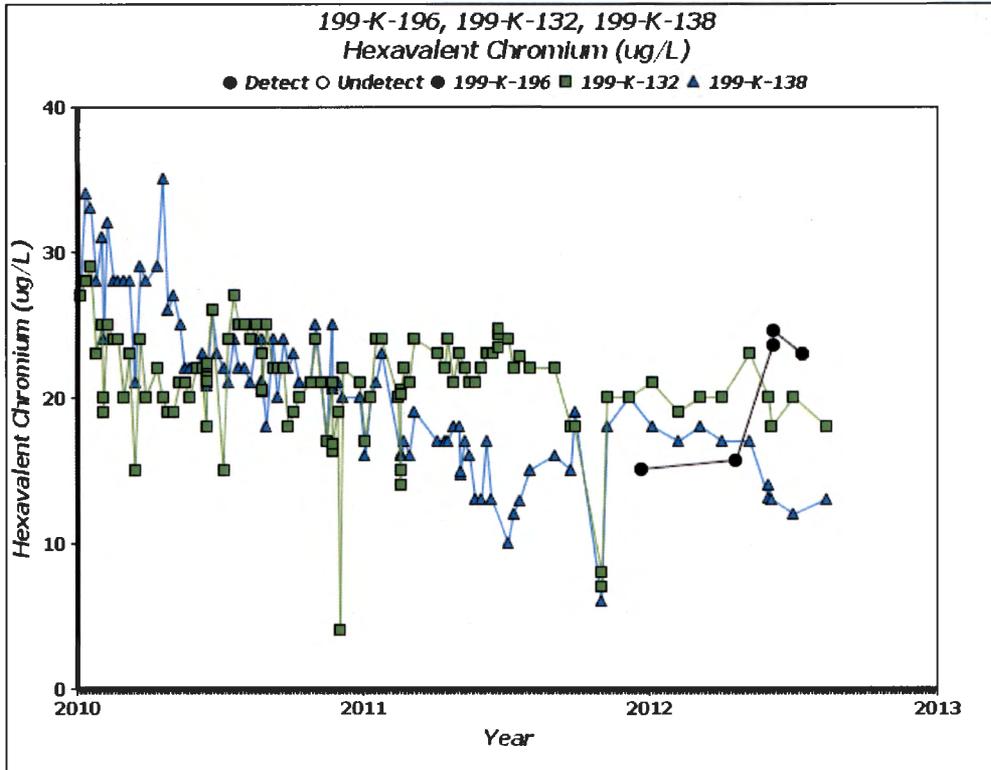
- CERCLA Process Implementation:
 - RI/FS and Proposed Plan: Production of both documents are on hold pending the path forward for characterization at KE Reactor waste sites, 100-K-111, and 100-K-64.
- Remedial Actions:
 - Operations continue at KX, KR4, and KW pump-and-treat systems. All three systems are operating with SIR-700 resin in each train. September 1 through 30, 2012 performance:
 - The systems treated 42.3 million gallons.
 - The system removed 4.6 kg of hexavalent chromium
 - Well 199-K-173, located within the elevated concentration hexavalent chromium plume downgradient of the 183-KW Head House, was realigned as an extraction well during September. This well exhibits the highest hexavalent chromium concentration of the extraction wells at the KW system. Operation testing is planned to be complete by October 12, 2012.
 - Activities to realign well 199-K-182 as an extraction well for the KX system were initiated in September. This well exhibits elevated Cr(VI) concentrations greater than 80mg/L and represents the eastern-most extraction well in 100-KR-4 OU adjacent to 100-N. Operation testing is planned to be complete by October 12, 2012.
- Monitoring and Reporting:
 - Hexavalent chromium concentrations in groundwater at 100-K are generally declining in apparent response to on-going pump-and-treat actions and are approaching the 20 ug/L interim action RAO in many locations.
 - Some co-contaminants are being observed in, and near, active extraction wells in the vicinity of the KE and KW reactor areas. For example:

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- Sr-90 was detected for the first time in Well 199-K-196, located down gradient of the 105-KE Reactor at a concentration of about 30 pCi/L. The C-14 concentration in that well also exhibited an increase in the July sample. The observed Sr-90 concentration was above the MCL-equivalent concentration for that nuclide; the C-14 concentration remains substantially below its MCL-equivalent concentration.



- The hexavalent chromium concentration in this well exhibits a trend similar to the neighboring extraction wells, 199-K-132 and 199-K-138.



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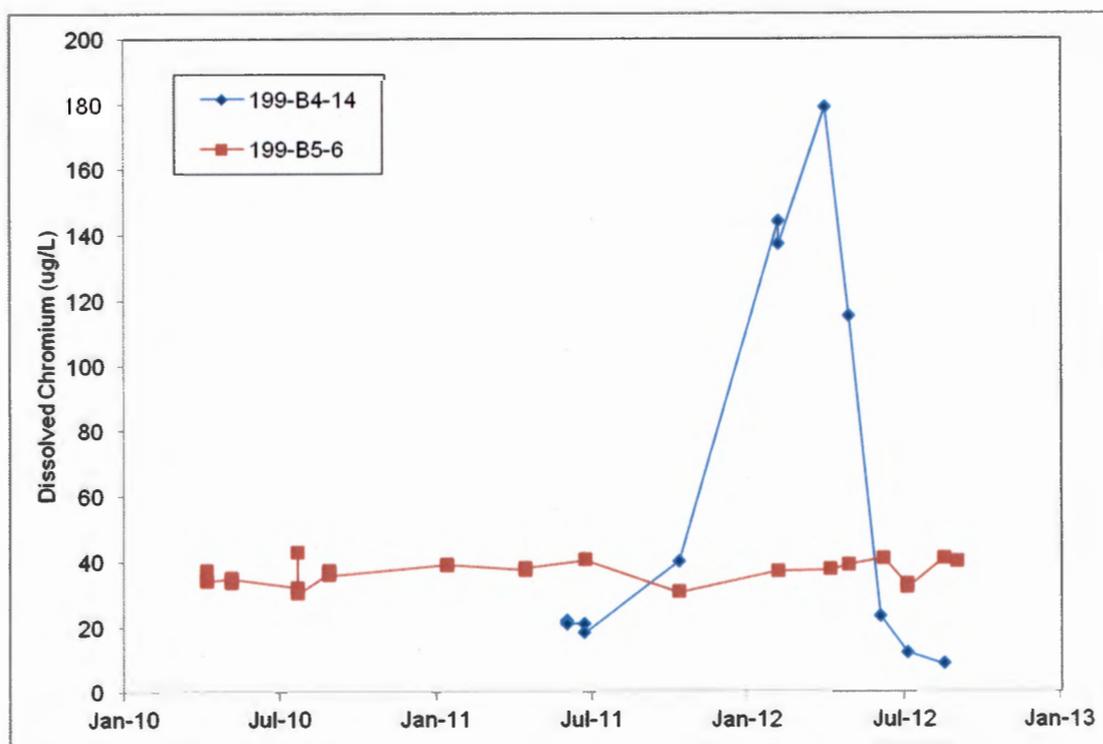
100-BC-5 Groundwater Operable Unit – Bert Day/ Mary Hartman

(M-015-68-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 – Missed. The planned delivery date for the 100-BC Draft A RI/FS Report to the regulators is under discussion between the Tri-Parties (see below).

- CERCLA Process Implementation:
 - The Draft A RI/FS for RL review was delivered on August 24, 2012; RL has placed their review on hold pending the agreement with the regulatory agencies to postpone the selection of groundwater remediation alternatives until additional data has been collected.
 - Initial discussions with the regulators indicate that the schedule for RI/FS and PP will be extended to December 2016 in order to reduce uncertainties in the groundwater/surface water interaction and evaluate the impacts of source remediation efforts on the groundwater system.
 - Additional milestones are also being negotiated to update the Work Plan and SAP and install additional monitoring capabilities. The Work Plan and SAP are planned to be updated using TPA change notices to allow changes to be made quickly to enhance the timeliness of the start of field work. The tentative date for delivery of the Work Plan and SAP updates to EPA is January 31, 2013.

- Monitoring & Reporting
 - Deep well 199-B5-6 and shallow well 199-B4-14, downgradient from 100-C-7:1, were sampled in September. As of this writing only the Cr(VI) result for 199-B5-6 had been received from the lab and it was on trend at 41 µg/L.



- All FY 2012 groundwater sampling has been completed.

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300-FF-5 Groundwater Operable Unit – Marty Doornbos/Virginia Rohay

- RI/FS report (DOE/RL-2011-99) Draft A delivered to EPA and Ecology on December 27, 2011.
 - EPA comments on the RI/FS and PP were received on February 13, 2012. Progress continues on incorporation of the comments into the Draft Rev. 0 RI/FS. RL's comments were received on the draft Rev. 0 RI/FS on July 9, 2012. The draft Rev.0 RI/FS is being continually updated in accordance with the comments received on the PP. Outstanding items include incorporation of the irrigation SSL/PRG for uranium based on the 300 Area site-specific groundwater model and updating the Native American risk assessment.
- Proposed Plan (DOE/RL-2011-47) Draft A delivered to EPA and Ecology on December 27, 2011.
 - The Draft Rev. 0 PP was provided to EPA on July 13, 2012. All outstanding issues have been resolved and progress continues on incorporation of comments.
 - The public comment period has been tentatively identified for February 2013.
- The 300-FF-5 Groundwater OU includes the groundwater impacted by releases from waste sites associated with three geographic subregions: 300 Area Industrial Complex, 618-11 Burial Ground, and 618-10 Burial Ground/316-4 Cribs. Principal controlling documents are:
 - 300-FF-5 OU operations and maintenance plan (DOE-RL-95-73, Rev. 1, 2002)
 - 300-FF-5 OU sampling and analysis plan (DOE/RL-2002-11, Rev. 2, 2008)
 - 300 Area RI/FS work plan (DOE/RL-2009-30, Rev. 0, 2010)
 - 300 Area RI/FS sampling and analysis plan (DOE/RL-2009-45, Rev. 0, 2010).
- 300 Area Industrial Complex — High uranium concentrations are noted at numerous 300 Area wells during periods of high water table conditions. Of particular note is the uranium concentrations from well 399-1-17A collected during periods of high water table conditions (Figure 300FF5-1). This well is located approximately 30 m south of the 300 Area Process Trenches and 20 m southwest of the 300-15 process sewer spur that conveyed effluents to the process trenches. The positive correlation between water-table elevation and uranium concentration is consistent with the conceptual site model that uranium remains in the lower portion of the vadose zone and periodically rewetted zone and is available to be remobilized during periods of high water-table conditions. Well 399-1-17A was sampled on August 21 and September 10 as part of RCRA monitoring for the 300 Area Process Trenches; results are not yet available.

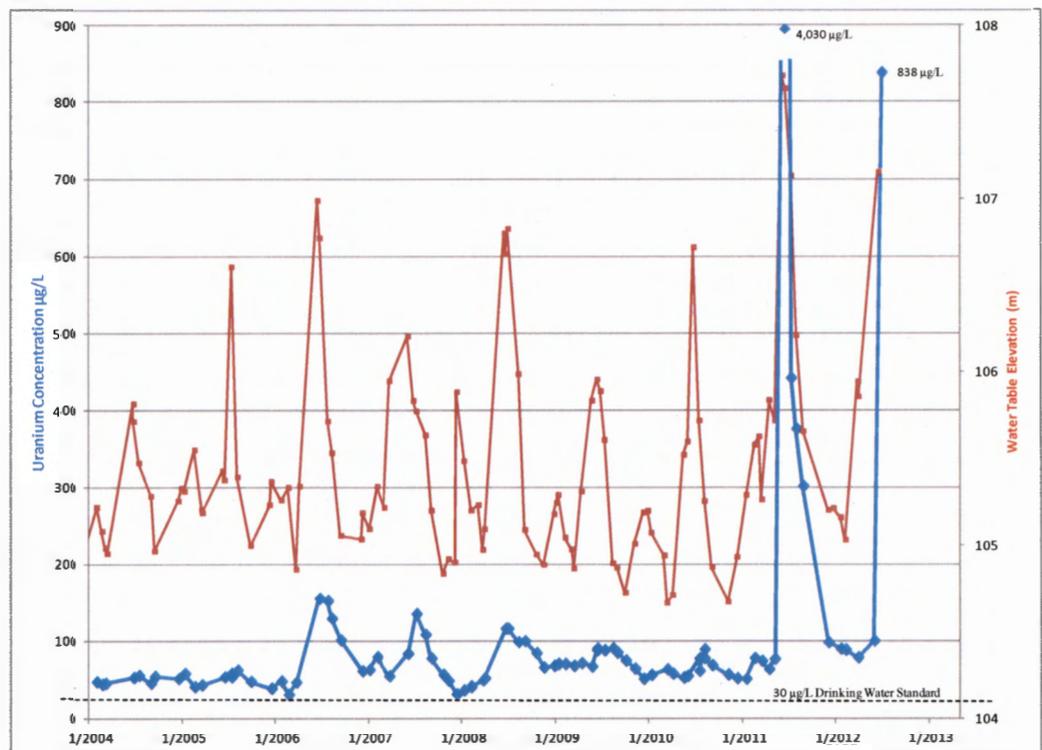
On May 16, a water line was discovered to be leaking south of the 324 Building. Repairs were completed on May 18. An estimated 20,000 gallons of water was released to the soil column. A plan to monitor the nearest downgradient wells for potential impacts was approved by DOE and EPA on May 17. The nearest well, 399-4-15, was sampled on May 30, June 29, July 25, August 15, and September 7. The gross alpha and uranium concentrations were higher in August (56 pCi/L and 111 µg/L), but declined to more typical levels in September (31 pCi/L and 88 µg/L) (Figure 300FF5-2). The temporary increase reflects the higher water table conditions due to the Columbia River that mobilize uranium from the periodically rewetted zone. The gross beta results increased in September to 40 pCi/L. Monthly sampling of well 399-4-15 was extended through December 2012 in response to the August 30th water line break to the west of the 324 building. Nearby wells 399-3-20, 399-4-9, and 399-4-14 also were sampled in August; results are not yet available.

- 618-11 Burial Ground — Tritium, nitrate, and gross beta results for the sample collected on May 3rd at well 699-13-3A, next to the eastern fence line of the Burial Ground, are consistent with previous trends. However, the technetium-99 concentrations appear to have increased from 35 pCi/L on 06/10/10 to 180 pCi/L on 05/03/12. These results are well below the technetium-99 Drinking Water Standard of 900 pCi/L. Well 699-13-3A was sampled on September 28.

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- 618-10 Burial Ground/316-4 Crib — Groundwater data from June 2012 at well 699-S6-E4L near the 618-10 burial ground show increased concentrations of uranium and of magnesium, followed by a decrease in uranium concentrations during July and August (Figure 300FF5-3). This temporary increase in uranium concentrations may have been from excavation activities that began in March 2011 at some of the trenches in the burial ground. Well 699-S6-E4K was sampled on July 25, 2012 and does not indicate a significant increase in the uranium concentration. The monitoring frequency for uranium was increased to monthly at well 699-S6-E4L, and the monitoring frequency for metals (calcium and magnesium, which are soil fixatives) was increased to quarterly at wells 699-S6-E4K and 699-S6-E4L to accommodate excavation and dust control activities as they occur at the burial ground. The increased sampling frequency will be performed for a period of six months. Well 699-S6-E4L was sampled on August 20 and September 13.

Figure 300FF5-1.
Uranium Trend Plot
(through July 3, 2012) for
Well 399-1-17A near the
300 Area Process
Trenches and North
Process Pond.



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Figure 300FF5-2.
Gross Beta and Gross Alpha Trends (through September 7, 2012) at Well 399-4-15 near the 324 Building.

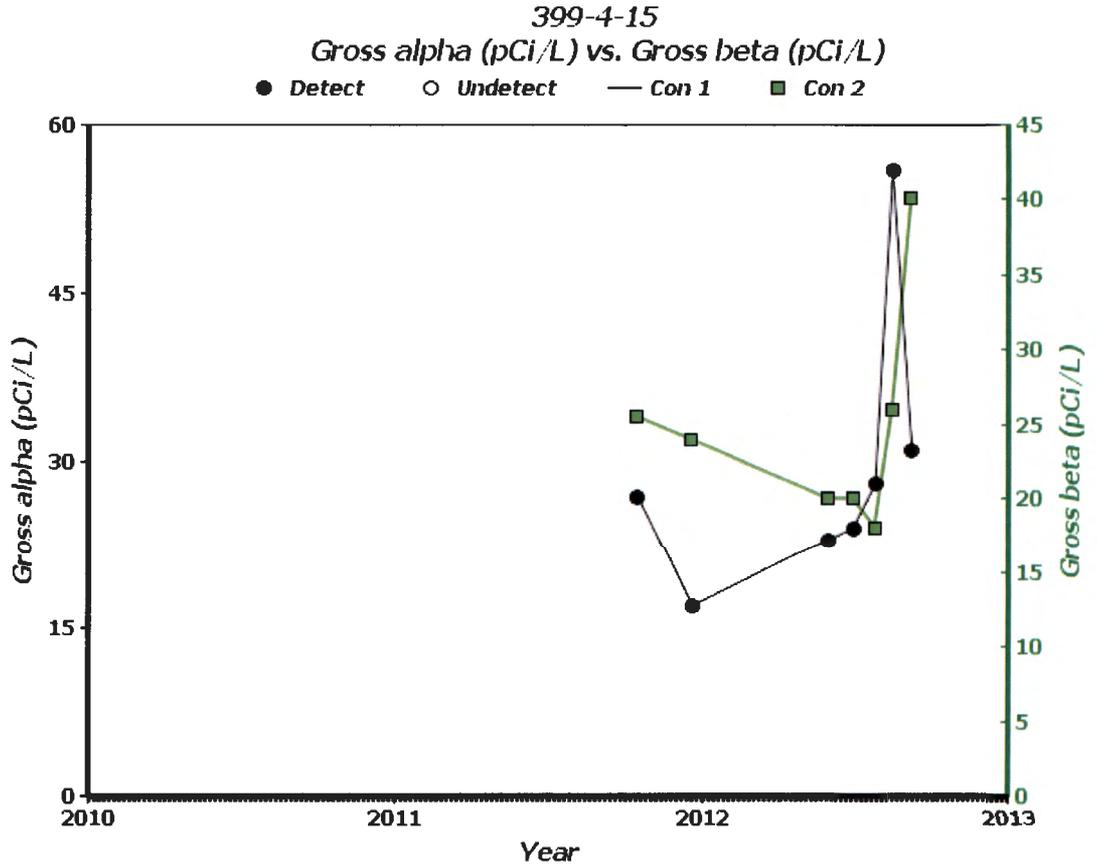
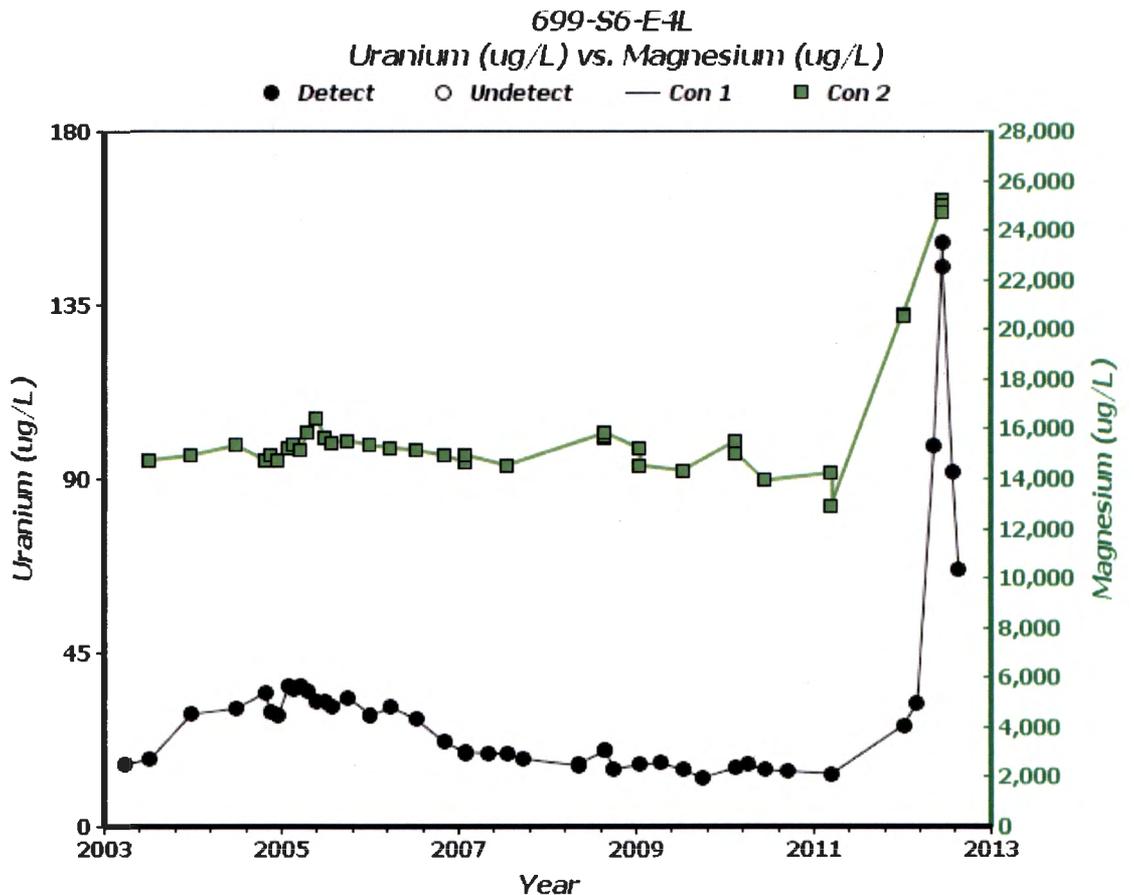


Figure 300FF5-3.
Uranium and Magnesium Trends (through August 20, 2012) at Well 699-S6-E4L at the 618-10 Burial Ground.



**100/300 Areas Unit Managers Meeting
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Summary of Wells & Aquifer Tubes Sampled in the River Corridor Areas During September 2012						
Week	100-BC	100-K	100-N	100-D/H	100-F	300 Area
04-07 Sep 12	199-B5-6 199-B4-14 Unsuccessful		199-N-71 199-N-34 199-N-57 199-N-81 199-N-41 199-N-74 199-N-165 199-N-77 199-N-73 199-N-72 199-N-28 199-N-3 199-N-105A 199-N-2	199-D5-144 199-D5-119 199-D5-99 199-D5-122 199-H4-3		399-1-10A 399-4-15 399-3-18 399-1-2 399-1-10B 399-1-21A
10-14 Sep 12	199-B4-14		C6132 C6135 N116mArray-13A N116mArray-14A N116mArray-15A N116mArray-8.5A Unsuccessful N116mArray-9A N116mArray-10A Unsuccessful N116mArray-8A C7881 N116mArray-6A N116mArray-12A Unsuccessful N116mArray-11A NVP1-4 NVP1-3 NVP1-2 NVP1-5 NVP2-115.1 NVP2-115.4 NVP2-115.7 NVP2-116.3 NVP1-1 NVP2-116.0 199-N-92A 199-N-104A 199-N-64 199-N-32			399-1-16A 399-1-17B 399-1-18B 399-1-17A 399-1-16B 399-1-18A 699-S6-E4L

**100/300 Areas Unit Managers Meeting
October 11, 2012**

Summary of Wells & Aquifer Tubes Sampled in the River Corridor Areas During September 2012						
Week	100-BC	100-K	100-N	100-D/H	100-F	300 Area
17-20 Sep 12		199-K-201 199-K-21 199-K-18 199-K-34	N116mArray-3A N116mArray-4A N116mArray-10A N116mArray-1A N116mArray-2A N116mArray-0A N116mArray-8.5A N116mArray-12A N116mArray-13A 199-K-150		199-F5-56 199-F5-1 199-F5-53 199-F5-4 199-F5-54 199-F5-55 199-F8-7 199-F7-1 199-F5-48 199-F8-2 C6305 64-M 62-M C6303 C6302 64-S C6307 C6306 C6308 199-F1-2 64-D 199-F5-52 C6312 C6309 C6311	
24-28 Sep 12		C6240 AT-K-1-D C6241 C6242 C6243 C6244 C6239 17-D	199-N-21	199-D4-19 199-D4-13 199-D4-86 199-D4-78 199-D5-36 199-D4-20 199-D5-93 199-D5-141 199-D5-19 199-D5-17 199-D4-15 199-D5-37 199-D5-14 199-D8-4	C6315 66-M C6316 66-D C6314 AT-F-1-S AT-F-1-M AT-F-1-D 68-D 68-S 68-M 67-S 67-M 66-S 75-D 74-D 77-D 76-D	399-1-56 699-13-3A 399-2-32 399-1-61

Attachment 2

October 11, 2012 Unit Manager's Meeting
Field Remediation Status

100-B/C

- Commenced excavation, load-out and backfill activities at 100-C-7:1
- Power pole disposal delayed until end of extreme fire danger

100-D

- No excavation/remediation field activities being conducted at 100-D at this time
- Continue evaluation of subcontractor bid packages, contract award to be issued in October 2012
- Began backfill of 118-D-3, 100-D-8 and 100-D-56

100-F

- No field activities being conducted at this time, remediation complete at 100-F

100-H

- No excavation/remediation field activities being conducted at 100-H at this time
- Continue evaluation of subcontractor bid packages, contract award to be issued in October 2012

100-K

- No field activities being conducted at this time, re-start target = October 29th.
- Collected closure samples at 118-K-1, Trench N
- Continued discussion on path forward for 118-K-1, Trench N

100-N

- Contractor mobilization complete, remediation started
- Began plume chasing at 128-N-1
- Began site preparation for excavation and load-out at 100-N-61:4
- Phase II in-situ bioremediation mobilization and system testing scheduled to begin in mid-October 2012
- Continued preparation of closure documents and conducting verification sampling

618-10 Trench Remediation

- Continued loadout of soil waste to ERDF
- Continued excavation of trench

- Continue excavation, loadout, and shipment of concrete drums
- Sent 42 drums of uranium chips and oil to Permafix for treatment
- Execute repairs and troubleshooting of DPF #1

100-IU-2/6

- All field work has been completed for this fiscal year, re-start target = Jan 2013.

2

Attachment 3

Activity ID	Activity Name	% Cmpl	RD	Start	Finish	Qtr 4, 2012			Qtr 1, 2013			PR
						Oct	Nov	Dec	Jan	Feb	Mar	
600-298												
Excavation												
IU2210	Excavation (White Bluffs Review 9 Sites) 600-298	75%	2.0	13-Feb-12 A	17-Jan-13							
Loadout												
IU2220	Loadout (White Bluffs Review 9 Sites) 600-298	75%	2.0	13-Feb-12 A	17-Jan-13							
Closeout Sampling & Docs												
IU2280	Closure Sampling 600-298	15%	26.0	17-Apr-12 A	27-Mar-13							
Final Project Closeout												
IU2290	Prepare Closure Document 600-298	0%	93.0	28-Mar-13	11-Sep-13							
600-299												
Excavation												
IU222410	Excavation (White Bluffs Review 5 Sites) 600-299	98%	2.0	16-Apr-12 A	22-Jan-13							
IU22100	Excavation (Shoreline Review 1 Site) 600-299	98%	2.0	08-May-12 A	22-Jan-13							
Loadout												
IU222420	Loadout (White Bluffs Review 5 Sites) 600-299	98%	2.0	16-Apr-12 A	22-Jan-13							
IU22110	Loadout (Shoreline Review 1 Site) 600-299	98%	2.0	08-May-12 A	22-Jan-13							
Closeout Sampling & Docs												
IU22170	Closure Sampling 600-299	60%	26.0	17-Feb-12 A	27-Mar-13							
Final Project Closeout												
IU22180	Prepare Closure Document 600-299	0%	93.0	28-Mar-13	11-Sep-13							
600-300												
Excavation												
IU22210	Excavation (White Bluffs Review 12 Sites) 600-300	98%	2.0	08-Mar-12 A	24-Jan-13							
Loadout												
IU22220	Loadout (White Bluffs Review 12 Sites) 600-300	98%	2.0	08-Mar-12 A	24-Jan-13							
Closeout Sampling & Docs												
IU22280	Closure Sampling 600-300	20%	26.0	28-Feb-12 A	01-Apr-13							
Final Project Closeout												
IU22290	Prepare Closure Document 600-300	0%	93.0	02-Apr-13	16-Sep-13							
600-303												
Excavation												
IU222530	Excavation 600-303	0%	3.0	28-Jan-13*	30-Jan-13							
Loadout												

Current Bar Labels % Complete ◆ ◆

Activity ID	Activity Name	% Cmpl	RD	Start	Finish	Qtr 4, 2012			Qtr 1, 2013			3
						Oct	Nov	Dec	Jan	Feb	Mar	
IU222540	Loadout 600-303	0%	3.0	31-Jan-13*	05-Feb-13							
Closeout Sampling & Docs												
IU222600	Closure Sampling 600-303	0%	26.0	21-Feb-13	08-Apr-13							
600-305												
Final Project Closeout												
IU22400	Prepare Closure Document 600-305	95%	10.0	25-Jun-12 A	23-Oct-12	<input type="checkbox"/>						
IU22420	RL/Reg Signature Rev.0 Closure Document 600-305	0%	4.0	15-Oct-12*	18-Oct-12	<input type="checkbox"/>						
600-308												
Final Project Closeout												
IU22730	Prepare Closure Document 600-308	95%	10.0	25-Jun-12 A	23-Oct-12	<input type="checkbox"/>						
IU22750	RL/Reg Signature Rev.0 Closure Document 600-308	0%	4.0	15-Oct-12*	18-Oct-12	<input type="checkbox"/>						
600-309												
Final Project Closeout												
IU22840	Prepare Closure Document 600-309	95%	10.0	25-Jun-12 A	23-Oct-12	<input type="checkbox"/>						
IU22860	RL/Reg Signature Rev.0 Closure Document 600-309	0%	4.0	15-Oct-12*	18-Oct-12	<input type="checkbox"/>						
600-310												
Final Project Closeout												
IU22950	Prepare Closure Document 600-310	95%	10.0	25-Jun-12 A	23-Oct-12	<input type="checkbox"/>						
IU22970	RL/Reg Signature Rev.0 Closure Document 600-310	0%	4.0	15-Oct-12*	18-Oct-12	<input type="checkbox"/>						
600-311												
Final Project Closeout												
IU221060	Prepare Closure Document 600-311	95%	10.0	25-Jun-12 A	23-Oct-12	<input type="checkbox"/>						
IU221080	RL/Reg Signature Rev.0 Closure Document 600-311	0%	4.0	15-Oct-12*	18-Oct-12	<input type="checkbox"/>						
600-312												
Final Project Closeout												
IU221170	Prepare Closure Document 600-312	95%	10.0	25-Jun-12 A	23-Oct-12	<input type="checkbox"/>						
IU221190	RL/Reg Signature Rev.0 Closure Document 600-312	0%	4.0	15-Oct-12*	18-Oct-12	<input type="checkbox"/>						
600-313												
Final Project Closeout												
IU221260	Prepare Closure Document 600-313	95%	10.0	25-Jun-12 A	23-Oct-12	<input type="checkbox"/>						
IU221280	RL/Reg Signature Rev.0 Closure Document 600-313	0%	4.0	15-Oct-12*	18-Oct-12	<input type="checkbox"/>						
600-314												
Final Project Closeout												

Activity ID	Activity Name	% Cmpl	RD	Start	Finish	Qtr 4, 2012			Qtr 1, 2013			13
						Oct	Nov	Dec	Jan	Feb	Mar	
IU221390	Prepare Closure Document 600-314	95%	10.0	25-Jun-12 A	23-Oct-12							
IU221410	RL/Reg Signature Rev.0 Closure Document 600-314	0%	4.0	15-Oct-12*	18-Oct-12							
600-316												
Excavation												
IU221420	Excavation (Farmstead Review 6 Sites) 600-316	98%	2.0	03-May-12 A	04-Feb-13							
Loadout												
IU221430	Loadout (Farmstead Review 6 Sites) 600-316 (68 tons)	98%	2.0	03-May-12 A	04-Feb-13							
Closeout Sampling & Docs												
IU221490	Closure Sampling 600-316	5%	26.0	23-May-12 A	03-Apr-13							
Final Project Closeout												
IU221500	Prepare Closure Document 600-316	0%	93.0	04-Apr-13	18-Sep-13							
600-317												
Final Project Closeout												
IU221610	Prepare Closure Document 600-317	95%	10.0	25-Jun-12 A	23-Oct-12							
IU221630	RL/Reg Signature Rev.0 Closure Document 600-317	0%	4.0	15-Oct-12*	18-Oct-12							
600-318												
Excavation												
IU222430	Excavation (Farmstead Review 3 Sites) 600-318	70%	1.0	05-Mar-12 A	05-Feb-13							
Loadout												
IU222440	Loadout (Farmstead Review 3 Sites) 600-318 (114 tons)	70%	1.0	30-Apr-12 A	05-Feb-13							
Closeout Sampling & Docs												
IU221710	Closure Sampling 600-318	50%	26.0	01-May-12 A	04-Apr-13							
600-319												
Final Project Closeout												
IU221830	Prepare Closure Document 600-319	95%	10.0	25-Jun-12 A	23-Oct-12							
IU221850	RL/Reg Signature Rev.0 Closure Document 600-319	0%	4.0	15-Oct-12*	18-Oct-12							
600-320												
Excavation												
IU222470	Excavation (Farmstead Review 7 Sites) 600-320	98%	1.0	16-Jan-12 A	06-Feb-13							
IU222480	Excavation (Shoreline Review 1 Site) 600-320	98%	1.0	16-May-12 A	06-Feb-13							
Loadout												
IU222490	Loadout (Farmstead Review 7 Sites) 600-320 (766 tons)	98%	1.0	16-Jan-12 A	06-Feb-13							
IU222500	Loadout (Shoreline Review 1 Site) 600-320 (tons)	98%	1.0	16-May-12 A	06-Feb-13							

Current Bar Labels % Complete

Activity ID	Activity Name	% Cmpl	RD	Start	Finish	Qtr 4, 2012			Qtr 1, 2013			pr
						Oct	Nov	Dec	Jan	Feb	Mar	
Closeout Sampling & Docs												
IU221930	Closure Sampling 600-320	40%	26.0	14-May-12 A	08-Apr-13							
600-321												
Excavation												
IU222510	Excavation (Farmstead Review 1 Site) 600-321	50%	1.0	24-May-12 A	07-Feb-13							
Loadout												
IU222520	Loadout (Farmstead Review 1 Site) 600-321 (177 tons)	50%	1.0	24-May-12 A	07-Feb-13							
Closeout Sampling & Docs												
IU222040	Closure Sampling 600-321	5%	26.0	24-May-12 A	09-Apr-13							
600-324												
Final Project Closeout												
IU222160	Prepare Closure Document 600-324	95%	10.0	25-Jun-12 A	23-Oct-12							
IU222180	RL/Reg Signature Rev.0 Closure Document 600-324	0%	4.0	15-Oct-12*	18-Oct-12							
600-326												
Excavation												
IU222640	Excavation 600-326	0%	3.0	11-Feb-13*	13-Feb-13							
Loadout												
IU222650	Loadout 600-326 (2 tons)	0%	3.0	14-Feb-13*	20-Feb-13							
Closeout Sampling & Docs												
IU222710	Closure Sampling 600-326	0%	26.0	07-Mar-13	22-Apr-13							
600-328												
Closeout Sampling & Docs												
IU222370	Closure Sampling 600-328	5%	26.0	01-May-12 A	09-Apr-13							

Attachment 4

Activity ID	Activity Name	TPA	% Cmpl	RD	Start	Finish	Delta from Last Week	O	N	D	J	F	M
CPP 100-D - Current - After FR468													
Excavation													
100D100A343	Excavate 100-D-100: Tier 3 Phase 1 (84,000 BCM)		0%	17	08-Jan-13*	05-Feb-13	0						
100D100A311A	Excavate 100-D-100: Tier 3 Phase 2 (178,000 BCM)		0%	59	06-Feb-13	21-May-13	0						
CBB0534A	Excavate 100-D-81 (2,417 BCM)		0%	4	20-Feb-13	26-Feb-13	-3						
Loadout													
100D100A312	Loadout 100-D-100 Tier 3 (Truck & Pup - 183,693 tons)		0%	92	04-Apr-13	17-Sep-13	-3						
100D100A313	Loadout 100-D-100 Tier 3 (ERDF Container - 20,039 tons)		0%	20	04-Apr-13	08-May-13	-3						
Backfill													
CBC0606C	Backfill - 118-D-3 (96,961 BCM)	Y	34%	8	02-Oct-12 A	19-Oct-12	9						
CBB0403C	Backfill - 100-D-56 (8,632 BCM)	N	0%	2	12-Oct-12*	16-Oct-12	-3						
CBB0506C	Backfill - 116-D-5 (3,821 BCM)	Y	0%	1	16-Oct-12	17-Oct-12	-3						
RD10D81400	Backfill - 100-D-8 (4 DAYS RE-CONTOURING)	Y	0%	4	17-Oct-12	24-Oct-12	-3						
CBC0605C	Backfill - 118-D-2 (54,396 BCM)	Y	0%	10	22-Oct-12*	07-Nov-12	0						
100D14A030	Backfill - 100-D-14	N	0%	1	24-Oct-12	25-Oct-12	-3						
100D76A030	Backfill - 100-D-76 (1,421 BCM)		0%	1	05-Dec-12	07-Dec-12	-1						
CBB0515C	Backfill - 100-D-50:4/8 (6,910 BCM)	N	0%	2	26-Dec-12	31-Dec-12	0						
RD67D1400	Backfill - 1607-D1 (3,709 BCM)	N	0%	1	31-Dec-12*	02-Jan-13	0						
CBB0508C	Backfill - 118-D-6 (9,167 BCM)	N	0%	2	02-Jan-13	07-Jan-13	0						
CBB0507C	Backfill - 116-DR-5 (3,627 BCM)	N	0%	1	07-Jan-13	08-Jan-13	0						
RD1D65400	Backfill - 100-D-65 (1,705 BCM)	N	0%	1	08-Jan-13	09-Jan-13	0						
100D73A030	Backfill - 100-D-73		0%	4	14-Jan-13*	18-Jan-13	0						
RD1D66400	Backfill - 100-D-66 (1,366 BCM)	N	0%	1	31-Jan-13	04-Feb-13	6						
CBC0501C	Backfill - 100-D-58		0%	2	01-Mar-13*	05-Mar-13	0						
RD67D51400	Backfill - 1607-D5 (710 BCM)		0%	1	06-Mar-13*	07-Mar-13	0						
RD05509120	Backfill - 100-D-50:9 (3,590 BCM)	N	0%	1	11-Mar-13*	12-Mar-13	0						
RD132D400	Backfill - 132-D-1 (7,077 BCM)	N	0%	1	13-Mar-13*	14-Mar-13	0						
RD1506400	Backfill - 100-D-50:6 (42,427 BCM)	N	0%	4	21-Mar-13*	28-Mar-13	-2						
CBC0507C	Backfill - 100-D-28:1 - (862 BCM)	N	0%	1	28-Mar-13*	01-Apr-13	-2						
Revegetation													
DMSR12	2012 100-D Reveg Campaign		0%	0	12-Nov-12*		0						
CBC0505E	Revegetation - 116-DR-10		0%	1	12-Nov-12	12-Nov-12	0						
CBC0608E	Reveg - Rem BG - 118-D-5		0%	1	12-Nov-12	12-Nov-12	0						
CBC0609E	Revegetation - Rem BG - 118-DR-1		0%	1	12-Nov-12	12-Nov-12	0						
CBC0606E	Revegetation - 118-D-3		0%	1	12-Nov-12	12-Nov-12*	0						
CBC0607E	Revegetation - Rem BG - 118-D-4		0%	1	12-Nov-12*	12-Nov-12	0						
CBC0602E	Revegetation - Rem BG - 100-D-43		0%	1	12-Nov-12	12-Nov-12	0						
CBB0502E	Revegetation - 100-D-3		0%	1	12-Nov-12*	12-Nov-12	0						
CBB0503E	Revegetation - Rem Wst Site - 100-D-42		0%	2	12-Nov-12*	13-Nov-12	0						

 SPIF Bar
 Remaining Work
 Critical Remaining Work
 Actual Work
 Actual Critical Work
 Remaining Level of Effort

Data Date: 08-Oct-12

CPP 100-D - Current - After FR468...

Activity ID	Activity Name	TPA	% Cmpl	RD	Start	Finish	Delta from Last Week	O	N	D	J	F	M
CBB0506E	Revegetation - 116-D-5		0%	1	12-Nov-12*	12-Nov-12	0						
CBC0603E	Revegetation - Rem BG - 100-D-47		0%	1	13-Nov-12	13-Nov-12	0						
CBC0604E	Revegetation - Rem BG - 118-D-1		0%	5	14-Nov-12	26-Nov-12	0						
CBB0505E	Revegetation - 100-D-61		0%	1	14-Nov-12	14-Nov-12	0						
CBB0403E	Revegetation - 100-D-56:2	N	0%	1	15-Nov-12*	15-Nov-12	0						
RD10D81500	Revegetation - 100-D-8	Y	0%	2	15-Nov-12*	19-Nov-12	0						
CBB0533E	Reveg - Rem Liq Wst Site - 100-D-80:2		0%	1	15-Nov-12*	15-Nov-12	0						
CBB0404E	Reveg - Rem Liq Wst Site - 120-D-2		0%	1	19-Nov-12*	19-Nov-12	0						
CBC0610E	Reveg - Rem BG - 126-DR-1 - Does not need Reveg'd		0%	4	27-Nov-12	03-Dec-12	0						
CBC0605E	Revegetation - 118-D-2		0%	1	27-Nov-12	27-Nov-12*	0						
100D14A280	Revegetation - 100-D-14		0%	1	03-Dec-12*	03-Dec-12	0						
CBB0601E	Revegetation - Rem BG - 100-D-32		0%	1	04-Dec-12	04-Dec-12	0						
CBB0602E	Revegetation - 100-D-33		0%	1	05-Dec-12	05-Dec-12	0						
CBB0603E	Revegetation - Rem BG - 100-D-35		0%	1	06-Dec-12	06-Dec-12	0						
100D76A280	Reveg 100-D-76 (? acres)		0%	4	10-Dec-12	13-Dec-12	-1						
CBB0604E	Revegetation - 100-D-41		0%	1	10-Dec-12	10-Dec-12	0						
CBB0605E	Revegetation - Rem BG - 100-D-45		0%	1	11-Dec-12	11-Dec-12	0						
CBB0606E	Reveg - Rem BG - 126-D-2, 3.16 acres		0%	1	12-Dec-12	12-Dec-12	0						
CBC0502E	Revegetation - 116-D-8		0%	2	13-Dec-12	17-Dec-12	0						
CBB0508E	Revegetation - 118-D-6		0%	2	07-Jan-13*	09-Jan-13	0						
CBB0507E	Revegetation - 116-DR-5		0%	1	08-Jan-13*	09-Jan-13	0						
CBB0513E	Revegetation - 1607-D2:2		0%	1	09-Jan-13*	10-Jan-13	0						
CBB0515E	Revegetation - 100-D-50: 4/8		0%	1	10-Jan-13*	14-Jan-13	0						
RD1D65500	Revegetation - 100-D-65		0%	1	14-Jan-13	15-Jan-13	4						
100D73A280	Reveg 100-D-73 (? acres)		0%	4	21-Jan-13	24-Jan-13	0						
RD1D66500	Revegetation - 100-D-66		0%	1	04-Feb-13	05-Feb-13	-12						
RD1506500	Reveg- Rem Wst Site - 100-D-50:6		0%	1	05-Feb-13	06-Feb-13	-12						
RD05507140	Reveg- Rem Wst Site - 100-D-50:7 - 5.74 acreas		0%	2	06-Feb-13	11-Feb-13	-12						
DMS060	100-D Reveg Window Closed		0%	0		14-Feb-13*	0						
CBC0501E	Reveg - 100-D-58		0%	2	05-Mar-13	07-Mar-13	0						
RD05509140	Reveg- Rem Wst Site - 100-D-50:9 -2.41 acrea		0%	2	12-Mar-13	14-Mar-13	0						
CBC0401E	Revegetation - 116-DR-3 (no action)		0%	1	14-Mar-13	18-Mar-13	0						
RD132D500	Reveg- Rem Wst Site - 132-D-1		0%	1	14-Mar-13*	18-Mar-13	0						
RD67D1500	Reveg- Rem Wst Site - 1607-D1		0%	1	18-Mar-13	19-Mar-13	0						
CBC0507E	Revegetation - Rem Wst Site - 100-D-28:1		0%	1	01-Apr-13	02-Apr-13	-1						
in-process sampling													
100D100A343A	In-Process Samp 100-D-100 Tier 3		0%	117	08-Jan-13	05-Aug-13	-3						
Procurement													
RD11DX4080	Subcontractor Procurement - Award Subcontract	N	0%	0		15-Oct-12*	0						
Utilities (Electrical)													

■ SPIF Bar
■ Remaining Work
■ Critical Remaining Work
■ Actual Work
■ Actual Critical Work
■ Remaining Level of Effort

Data Date: 08-Oct-12

CPP 100-D - Current - After FR468...

Activity ID	Activity Name	TPA	% Cmpl	RD	Start	Finish	Delta from Last Week	O	N	D	J	F	M	A
100D100A369	230 kV Construction	N	0%	63	15-Oct-12*	16-Dec-12	0							
100D100A333	Power Pole Relocation (Field Work)	N	0%	85	15-Oct-12*	07-Jan-13	0							
100D100A368	13.8 kV Construction	N	0%	21	16-Oct-12*	05-Nov-12	0							
100D100A370	13.8 kV Outage	N	0%	4	06-Nov-12*	09-Nov-12	0							
100D100A371	230 kV Outage	N	0%	4	10-Dec-12*	13-Dec-12	0							
Utility Isolations														
100D100A363	Well Decommissioning @ 100-D (REA-184) 8 wells	N	0%	11	05-Nov-12*	26-Nov-12	-4							
100D100A373	Well Replacement @ 100-D (REA-184) 4 wells		0%	49	02-Jan-13*	28-Mar-13	0							

 SPIF Bar
  Remaining Work
  Critical Remaining Work
 Actual Work
  Actual Critical Work
  Remaining Level of Effort

Data Date: 08-Oct-12

CPP 100-D - Current - After FR468...

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Attachment 5

Activity ID	Activity Name	TPA	% Cmpl	RD	Start	Finish	Delta from Last Week	O	N	D	J	F	M
CPP 100-H - Current													
Special Projects													
HB512A7	Reroute Pump & Treat Lines (100-H REA 138)	N	0%	90	02-Jan-13*	11-Jun-13	0						
HB512A1	Power Line Relocation (100-H REA 138)	N	0%	48	02-Jan-13*	27-Mar-13	0						
HB512A2	Reroute Export Water Line (100-H REA 138)	N	0%	90	02-Jan-13*	11-Jun-13	0						
HB512A3	Well Decommissioning (100-H REA 138)	N	0%	36	02-Jan-13*	06-Mar-13	0						
Excavation													
HB511A013	Excavate 100-H-28:2 Phase 2 - Section A - Under Power Lines (45,966 BCMs) **RAD**		0%	30	07-Jan-13*	27-Feb-13	0						
HB512A	Excavate 100-H-28:3 Section A - Export Water Line (5,000 BCM)		0%	2	28-Feb-13*	04-Mar-13	0						
HB511A04	Excavate 100-H-28:2 Phase 2 - Section B - All Else (137,898 BCMs)		0%	65	28-Feb-13	24-Jun-13	0						
HB512A5	Excavate 100-H-28:3 Section B - Power Line (12,500 BCM)		0%	5	05-Mar-13*	12-Mar-13	0						
HB512A6	Excavate 100-H-28:3 Section C - All Else (30,612 BCM)		0%	12	13-Mar-13*	02-Apr-13	0						
Backfill													
HC505C	Backfill - 1607-H1 (1,873 BCM)	N	95%	1	14-Nov-11 A	16-Nov-12	0						
HB524C	Backfill 100-H-49:1		0%	1	08-Oct-12	09-Oct-12	0						
HC504C	Backfill - 128-H-1 (24,262 BCM)	Y	0%	5	15-Oct-12*	23-Oct-12	0						
HB506C	Backfill - 126-H-2 (34,000 BCM)	Y	0%	4	23-Oct-12	30-Oct-12	0						
HB504C1	Backfill - 118-H-6:4 (~1,300 BCM, 20%)		0%	1	30-Oct-12	31-Oct-12	0						
HB5045C	Backfill - 118-H-6:5 (2,180 BCM)		0%	1	31-Oct-12	01-Nov-12	0						
HB510C1	Backfill - 132-H-3 (17,652 BCM)	Y	0%	3	01-Nov-12	07-Nov-12	0						
HB503C	Backfill - 116-H-5 (2,857 BCM)		0%	2	01-Nov-12*	06-Nov-12	0						
HB503C10	Backfill - 116-H-5 (15,349 BCM)		0%	6	06-Nov-12*	15-Nov-12	0						
HB505C1	Backfill - 100H Mud Dauber (3 Days Recontouring)	N	0%	3	15-Nov-12*	20-Nov-12	0						
Revegetation													
HC504E2	Revegetation - 128-H-1 (6.78 acres)		0%	3	23-Oct-12	29-Oct-12	0						
HB506E2	Revegetation - 126-H-2 (2.1 acres)	Y	0%	1	30-Oct-12	31-Oct-12	0						
HB502E	Revegetation - Rem Wst Site - 100-H-31		0%	5	12-Nov-12*	19-Nov-12	0						
HB501E	Revegetation - Rem Wst Site - 100-H-14		0%	5	12-Nov-12*	19-Nov-12	0						
HC604E20	Revegetation - 118-H-4 (0.22 acres)		0%	1	15-Nov-12*	15-Nov-12	0						
HB404E20	Revegetation - 116-H-9 (0.41 acres)		0%	1	15-Nov-12*	15-Nov-12	0						
HB507E2	Revegetation - 1607-H3 (2.76 acres)		0%	1	15-Nov-12*	15-Nov-12	0						
HB900F1	100-H-3 Reveg (.3 acres)		0%	1	15-Nov-12*	15-Nov-12	0						
HB910F1	100-H-4 Reveg (1.2 acres)		0%	4	15-Nov-12*	26-Nov-12	0						
HB503E20	Revegetation - 116-H-5 (10.0 acres)		0%	1	15-Nov-12*	19-Nov-12	0						
HC505E2	Revegetation - 1607-H1 (0.83 acres)		0%	1	19-Nov-12	19-Nov-12	0						
HB505E20	Revegetation - 100H Mud Dauber (25.00 acres)		0%	6	04-Dec-12	12-Dec-12	-4						
HB510E1	132-H-3 Revegetation		0%	8	04-Dec-12	17-Dec-12	-4						
HB5045E20	Revegetation - 118-H-6:5 (2.0 acres)		0%	1	06-Dec-12	06-Dec-12	-2						
HB504E20	Revegetation - 118-H-6:4 (1.0 acre)		0%	1	06-Dec-12	06-Dec-12	-2						

 SPIF Bar
 Remaining Work
 Critical Remaining Work
 Actual Work
 Actual Critical Work
 Remaining Level of Effort

Data Date: 08-Oct-12

CPP 100-D - Current - After FR468...

5-

Attachment 6

100 Area D4/ISS Status

October 11, 2012

100-N

River Structures: Re-contouring of the benches to a 4:1 slope (between the ordinary high and low water marks), as previously agreed with agencies, to begin this week.

105-N/109-N Reactor/Heat Exchanger Buildings (ISS): Pourback over fast cart tunnel complete. DOE/RL notified Ecology on October 9 that Tri-Party Agreement Milestone M-093-020 "Complete 105-N Reactor Interim Safe Storage" is complete.

1904-N Sanitary Sewer Lagoon and Lift Station No. 1 – Working with Ecology to develop closure plan. Working with MSA to begin de-watering the facility.

1904-NB and 1904-NC Sanitary Sewer Lift Stations – Residual water has been removed from facilities. Demolition has been temporarily placed on hold to facilitate other activities that support FR work activities.

100-N Miscellaneous Items – Continuing with removal and excessing of miscellaneous materials and equipment from around the site. Also continuing to excavate and remove a remaining section of a 36-inch pipeline associated with WIDS 100-N-63:2 between the 105-N lift station and 1908-N outfall.

100-D

183-D Water Treatment Plant – Continuing with the preparation of an asbestos inspection report and summary that outlines the asbestos abatement and demolition plans for the facility. Scheduled to begin hazmat removal soon. "Exit" signs containing tritium successfully recovered and removed from the facility.

1902-D Water Tower – Below grade demolition and load out complete.

90

Attachment 7

^WCH Document Control

From: Winterhalder, John A
Sent: Thursday, October 04, 2012 1:51 PM
To: ^WCH Document Control
Cc: Winterhalder, John A; Saueressig, Daniel G
Subject: FW: REQUEST FOR APPROVAL CERCLA WASTE CONTAINER STORAGE AREAS AT 100-D, 100-H AND BORROW PIT 23

Attachments: 100D Waste Cont Storage Area.pdf; 100H Waste Cont Storage Area.pdf; Borrow Pit 23 Google.JPG

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

Thank you!

From: Kapell, Arthur (ECY) [<mailto:akap461@ECY.WA.GOV>]
Sent: Thursday, October 04, 2012 9:26 AM
To: Winterhalder, John A
Cc: Saueressig, Daniel G; Harrison, Robert P; Boyd, Alicia; Post, Thomas C
Subject: RE: REQUEST FOR APPROVAL CERCLA WASTE CONTAINER STORAGE AREAS AT 100-D, 100-H AND BORROW PIT 23

John,

This email is to approve your request to establish three container storage areas at the 100-D and 100-H areas as described in your email. The locations are described in your email as follows:

The 100-D container storage area would be established very near the shippers trailer and packaging tent at the Container Transfer Area. The 100-H waste container storage area would be situated a short distance west of the packaging tent, across the road from the Container Transfer Area. The Pit 23 waste container storage area would be located within the footprint of the borrow pit. The first two areas are depicted in the following aerial photographs. Please provide either an aerial photograph depicting the location of the third area within the Pit 23 boundary or the coordinates.



100D Waste Cont
Storage Area.p...



100H Waste Cont
Storage Area.p...



Borrow Pit 23
Google.JPG (716 ...)

Each of the areas may operate for up to one year from the date(s) that the first drums are stored there. There is the possibility of an extension for up to one year with the approval of Ecology. Please provide notification as to when storage has begun at each of these areas.

You may store no more than ten (10) 55-gallon drums of waste at each of these container storage areas at any one time. The waste may consist of spill cleanup material (hydraulic fluids and fuels combined with soil), personal protective equipment from verification and confirmatory sampling, oils and/or water drained from pipelines, and lead and other anomalous materials collected during remediation of waste sites.

Please note that containerized waste that has been taken from a staging pile to a container storage area must reach its final disposal location (such as ERDF) before the expiration date for that staging pile.

The container storage area must be managed in compliance with the Washington Administrative Code container management requirements, including WAC 173-303-630. The following is a summary of these requirements. Please refer to the regulations for the complete requirements.

WAC 173-303-630 (Use and Management of Containers)

- Identification of containers

- Label identifying major risk(s) associated with the container.
- Management
 - The containers must always be closed except when adding or removing waste.
- Inspections
 - At least weekly, the owner/operator must inspect the areas where containers are stored, and must keep an inspection log including the date and time of inspection, name and signature of inspector.
- Containment
 - There must be a containment system that is:
 - Capable of holding leaks and spills
 - Includes a base underlying the containers
 - Can contain ten percent of the volume of all containers of free liquids or the volume of the largest container, whichever is greater
 - Is sloped or otherwise designed to drain and remove liquids unless the containers are elevated or otherwise protected from contact with accumulated liquids.
 - Container storage areas that do not contain free liquids and do not exhibit either the characteristic of ignitability or reactivity need not have a containment system provided that:
 - The storage area is sloped or designed and operated to drain and remove liquid resulting from precipitation, or
 - The containers are elevated or protected from contact with accumulated liquids.
- Closure
 - At closure, all dangerous waste and residues must be removed from the containment system. Remaining containers and soil containing or contaminated with dangerous waste or dangerous waste residues must be decontaminated or removed.

Artie Kapell
 Nuclear Waste Program
 Washington State Department of Ecology
 (509) 372-7895 Office
 (509) 372-7971 Fax



100-D Project Area

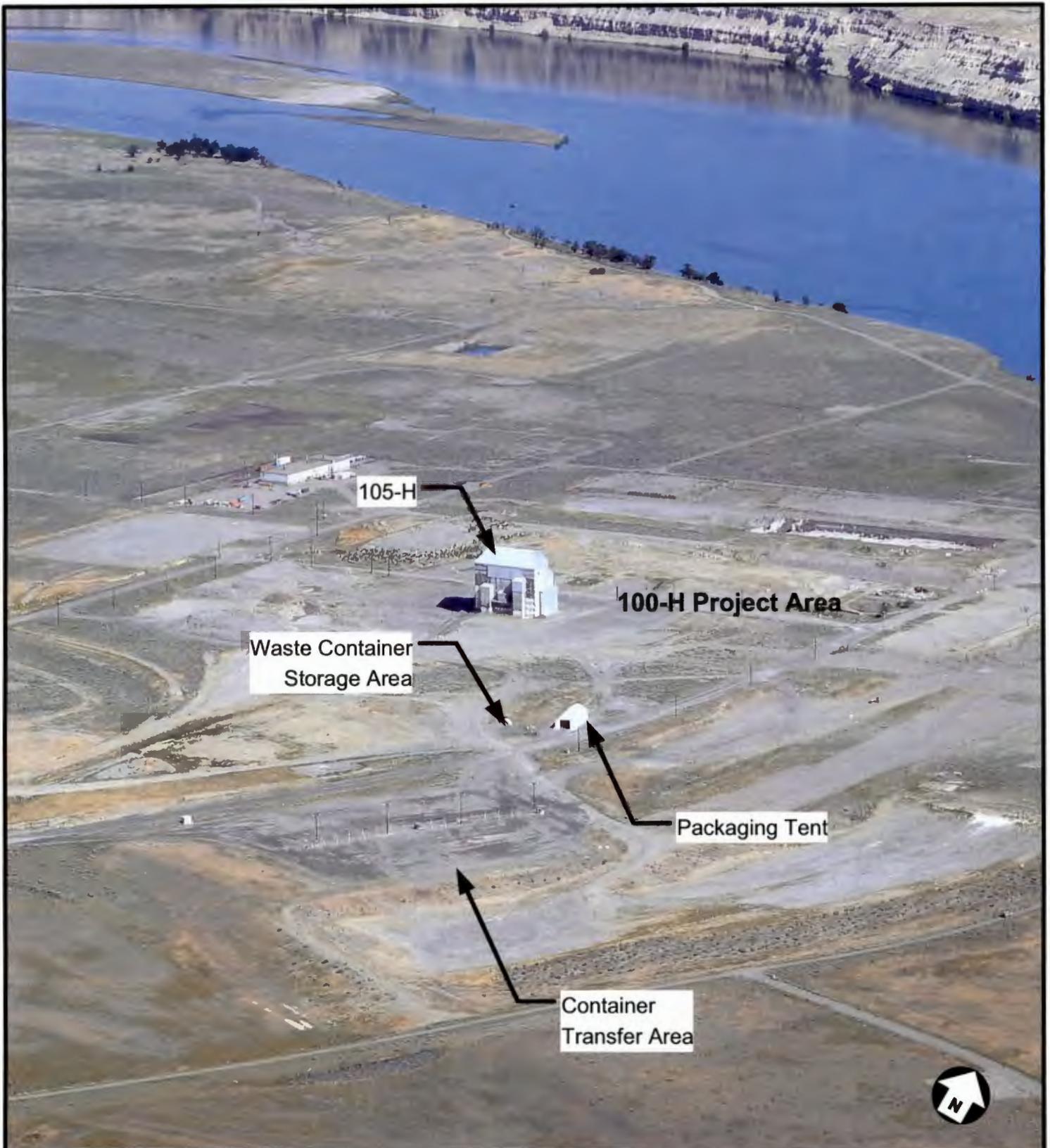
105-DR

**Container
Transfer Area**

**Waste Container
Storage Area**

Packaging Tent

Location of the Waste Container Storage Area for the 100-D Area.



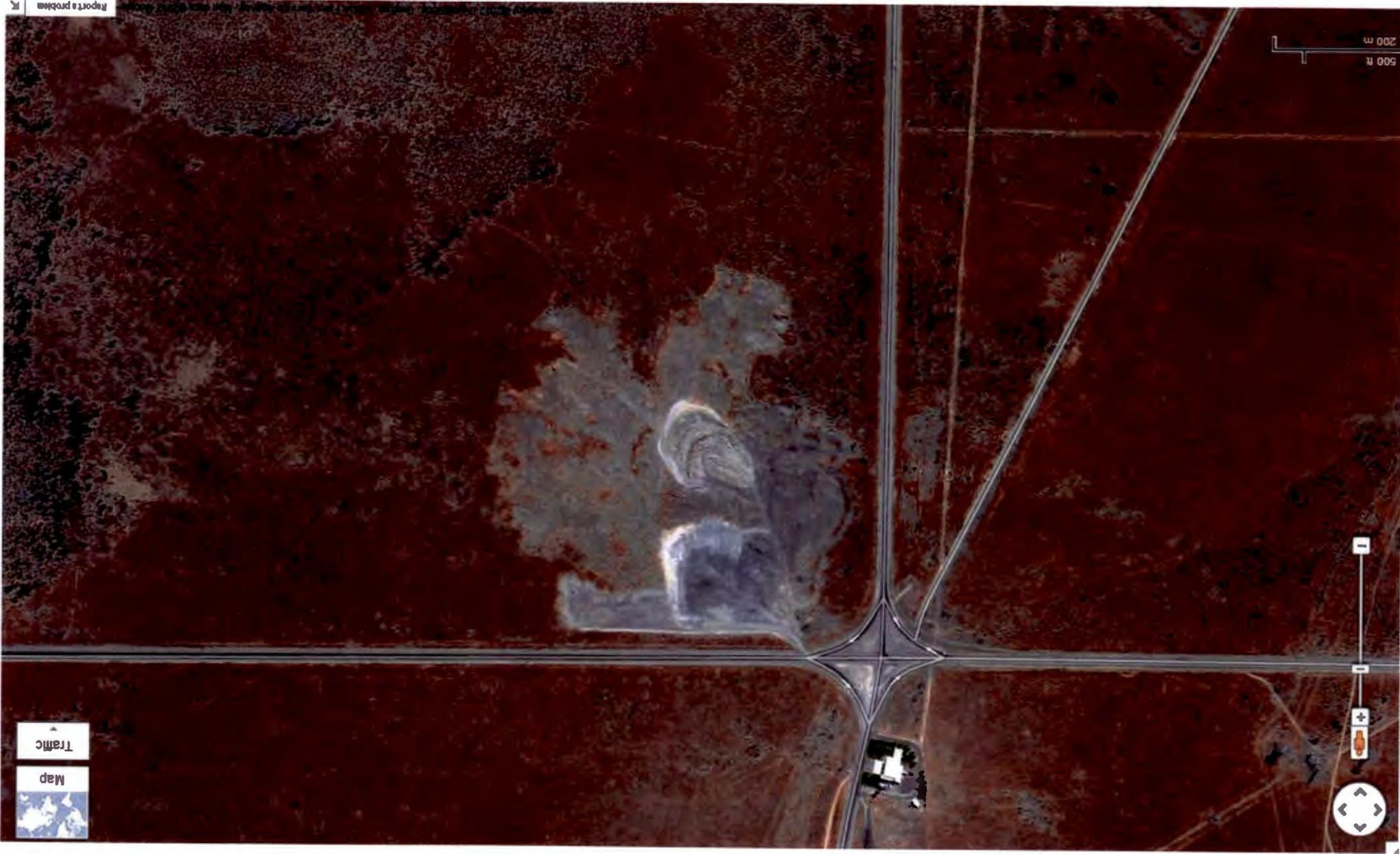
Location of the Waste Container Storage Area for the 100-H Area.



Hanford's River Corridor Closure Project

Washington Closure Hanford

Aerial Photograph: WCH, June 28, 2012



200 m
500 ft



Map
Traffic

Report a problem

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1

Attachment 8

Activity ID	Activity Name	% Cmpl	RD	Start	Finish	October 2012				November 2012				December 2012				2013
						01	08	15	22	29	05	12	19	26	03	10	17	24
FY10-11 CPP 100-N AREA CURRENT FR-455/460																		
Excavation																		
NB578A10	Excavation - 100-N-63 (30,140 BCMs)	90%	12	03-Feb-11 A	25-Oct-12													
NB540A10	Plume Excavation - 128-N-1 (500 BCMs)	90%	1	01-Oct-12 A	08-Oct-12													
NB525A31	Excavtn -100-N-61:4 (CDD) (25K BCM)	1%	21	08-Oct-12 A	12-Nov-12													
NB537A	Excavation - 124-N-3 (0 BCMs)	0%	9	08-Oct-12	22-Oct-12													
NB521D53	100-N-57 Plume Excavation	0%	4	08-Oct-12*	11-Oct-12													
NB507A10	Plume Excavation - 100-N-23 (500 BCMs)	0%	2	08-Oct-12*	09-Oct-12													
NB517A	Excavation - 100-N-36 (11 BCMs)	0%	9	08-Oct-12	22-Oct-12													
NB568A10	Plume Excavation - UPR-100-N-36 (500 BCM)	0%	2	08-Oct-12*	09-Oct-12													
NB532A10	Plume Excavation - 120-N-3 (500 BCMs)	0%	2	08-Oct-12*	09-Oct-12													
NB552D20	Plume Excavation - UPR-100-N-18 and UPR-100-N-20	0%	50	08-Oct-12*	09-Jan-13													
NB548A	Excavation - UPR-100-N-12 (0 BCMs)	0%	9	08-Oct-12	22-Oct-12													
NB529D037	116-N-4 Plume Excavation	0%	2	08-Oct-12*	09-Oct-12													
NB575A	Excavation - UPR-100-N-7 (0 BCMs)	0%	1	08-Oct-12*	08-Oct-12													
NB546A	Excavation - UPR-100-N-10 (0 BCMs)	0%	9	08-Oct-12*	22-Oct-12													
NB553A10	Plume Excavation - UPR-100-N-19 (500 BCMs)	0%	2	08-Oct-12*	09-Oct-12													
NB563A	Excavation - UPR-100-N-3 (0 BCMs)	0%	9	08-Oct-12	22-Oct-12													
NB534A	Excavation - 124-N-1 (11 BCMs)	0%	1	15-Oct-12*	15-Oct-12													
R120N17	Excavation - 120-N-7 (10 BCMs)	0%	1	17-Oct-12*	17-Oct-12													
NB539A	Excavation - 124-N-9 (23 BCMs)	0%	1	17-Oct-12*	17-Oct-12													
NB578A20	100-N-63:2 Plume Excavation	0%	40	05-Nov-12*	21-Jan-13													
NB567A	Excavation - UPR-100-N-35 (741 BCMs)	0%	2	05-Nov-12*	06-Nov-12													
NB541A10	Plum Excavation - 130-N-1 (30,000 BCMs)	0%	25	15-Nov-12*	07-Jan-13													
NB5A7A	Excavation - 100-N-35	0%	4	04-Dec-12	10-Dec-12													
Loadout																		
NB578B30	Loadout - 100-N-63 CDD	90%	12	21-Feb-12 A	25-Oct-12													
NB540B10	Plum Loadout - 128-N-1 (1000 USTs)	90%	1	02-Oct-12 A	08-Oct-12													
NB525B21	Loadout - 100-N-61:4 (CDD) (40K TONS)	1%	40	08-Oct-12 A	18-Dec-12													
NB537B	Loadout - 124-N-3 (0 USTs)	0%	9	08-Oct-12	22-Oct-12													
NB521D33	100-N-57 Plume Loadout	0%	4	08-Oct-12	11-Oct-12													
NB578B60	Loadout - 100-N-63 AUW Quantities FY12	0%	42	08-Oct-12*	20-Dec-12													
NB517B	Loadout - 100-N-36 (11 USTs)	0%	9	08-Oct-12	22-Oct-12													
NB548B	Loadout - UPR-100-N-12 (0 USTs)	0%	9	08-Oct-12	22-Oct-12													
NB529D017	116-N-4 Plume Loadout	0%	2	08-Oct-12	09-Oct-12													
NB575B	Loadout - UPR-100-N-7 (0 USTs)	0%	1	08-Oct-12*	08-Oct-12													
NB546B	Loadout - UPR-100-N-10 (0 USTs)	0%	9	08-Oct-12	22-Oct-12													
NB563B	Loadout - UPR-100-N-3 (0 USTs)	0%	9	08-Oct-12	22-Oct-12													
NB507B10	Plume Loadout - 100-N-23 (1000 USTs)	0%	2	10-Oct-12	11-Oct-12													

Actual Work
 Milestone
 Actual Milestone
 Remaining Work
 % Complete

Data Date: 08-Oct-12

Activity ID	Activity Name	% Cmpl	RD	Start	Finish	October 2012				November 2012				December 2012				2013
						01	08	15	22	29	05	12	19	26	03	10	17	24
NB568B20	Plume Loadout - UPR-100-N-36 (1000 USTs)	0%	2	10-Oct-12	11-Oct-12													
NB532B20	Plume Loadout - 120-N-3 (1000 USTs)	0%	2	10-Oct-12*	11-Oct-12													
NB553B10	Plume Loadout - UPR-100-N-19 (1,000 USTs)	0%	2	10-Oct-12*	11-Oct-12													
NB534B	Loadout - 124-N-1 (0 USTs)	0%	1	15-Oct-12*	15-Oct-12													
R120N27	Loadout - 120-N-7 (0 USTs)	0%	1	17-Oct-12*	17-Oct-12													
NB539B	Loadout - 124-N-9 (0 USTs)	0%	1	18-Oct-12	18-Oct-12													
NB578A30	100-N-63:2 Plume Loadout	0%	45	05-Nov-12	29-Jan-13													
NB567B	Loadout - UPR-100-N-35 (407 USTs)	0%	2	07-Nov-12*	08-Nov-12													
NB5A7B	Loadout - 100-N-35	0%	4	04-Dec-12	10-Dec-12													
NB552D10	Plume Loadout - UPR-100-N-18 and UPR-100-N-20	0%	50	10-Dec-12*	12-Mar-13													
Backfill																		
NB510C	Backfill - 100-N-26 (276 BCMs)	0%	1	15-Oct-12*	15-Oct-12													
NB516C	Backfill - 100-N-34 (13,131 BCMs)	0%	2	22-Oct-12*	23-Oct-12													
NB504C	Backfill - 100-N-17 (0 BCMs)	0%	2	22-Oct-12*	23-Oct-12													
NB501C	Backfill - 100-N-13 (822 BCMs)	0%	1	22-Oct-12*	22-Oct-12													
NB502C	Backfill - 100-N-14 (0 BCMs)	0%	2	22-Oct-12*	23-Oct-12													
NB544C	Backfill - 600-35 (1,752 BCMs)	0%	1	22-Oct-12*	22-Oct-12													
NB505C	Backfill - 100-N-18 (174 BCMs)	0%	1	29-Oct-12*	29-Oct-12													
NB515C	Backfill - 100-N-33 (221 BCMs)	0%	1	05-Nov-12*	05-Nov-12													
NB520C	Backfill - 100-N-47 (9776 BCMs)	0%	1	05-Nov-12*	05-Nov-12													
NB538C	Backfill - 124-N-4 (26,809 BCMs)	0%	4	12-Nov-12*	15-Nov-12													
NB542C	Backfill - 1908-N (1,732 BCMs)	0%	1	12-Nov-12*	12-Nov-12													
NB506C	Backfill - 100-N-22 (41 BCMs)	0%	1	26-Nov-12	26-Nov-12													
Revegetation																		
NB501E	Revegetation - 100-N-13 (0.2 acres)	0%	1	01-Nov-12*	01-Nov-12													
NB505E	Revegetation - 100-N-18 (0.05 acres)	0%	1	05-Nov-12*	05-Nov-12													
NB510E	Revegetation - 100-N-26 (0.05 acres)	0%	1	07-Nov-12*	07-Nov-12													
NB515E	Revegetation - 100-N-33 (.12 acres)	0%	1	08-Nov-12*	08-Nov-12													
NB516E	Revegetation - 100-N-34 (2 acres)	0%	1	08-Nov-12*	08-Nov-12													
NB504E	Revegetation - 100-N-17 (0 acres)	0%	1	08-Nov-12	08-Nov-12													
NB520E	Revegetation - 100-N-47 (1.29 acres)	0%	1	08-Nov-12	08-Nov-12													
NB502E	Revegetation - 100-N-14 (0 acres)	0%	1	08-Nov-12	08-Nov-12													
NB544E	Revegetation - 600-35 (0.57 acres)	0%	1	15-Nov-12*	15-Nov-12													
NB547E	Revegetation - UPR-100-N-11 (1.1 acres)	0%	1	19-Nov-12*	19-Nov-12													
NB538E	Revegetation - 124-N-4 (1.25 acres)	0%	1	19-Nov-12*	19-Nov-12													
NB506E	Revegetation - 100-N-22 (0 acres)	0%	1	27-Nov-12*	27-Nov-12													

 Actual Work
 Milestone
 Actual Milestone
 Remaining Work
 % Complete

Data Date: 08-Oct-12

8

Attachment 9

^WCH Document Control

From: Saueressig, Daniel G
Sent: Monday, September 24, 2012 11:14 AM
To: ^WCH Document Control
Subject: FW: REQUEST FOR CERCLA CONTAINER STORAGE AREA AT 100-N

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

Thanks,

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

From: Elliott, Wanda (ECY) [<mailto:wel461@ECY.WA.GOV>]
Sent: Monday, September 24, 2012 8:33 AM
To: Saueressig, Daniel G
Cc: Chance, Joanne C; Winterhalder, John A
Subject: RE: REQUEST FOR CERCLA CONTAINER STORAGE AREA AT 100-N

I concur.

Wanda Elliott
(509) 372-7904
Environmental Scientist
Nuclear Waste Program
Washington State Department of Ecology

From: Saueressig, Daniel G [<mailto:dgsauere@wch-rcc.com>]
Sent: Thursday, September 20, 2012 1:40 PM
To: Elliott, Wanda (ECY)
Cc: Chance, Joanne C; Winterhalder, John A
Subject: REQUEST FOR CERCLA CONTAINER STORAGE AREA AT 100-N

Wanda, I'd like to request your approval to set up a CERCLA container storage area at 100-N. The attached aerial photo shows the proposed location of the storage area, which will be set up in the southwest corner of the 100-N equipment storage area near the survey tent. This area could operate for up to 1 year and I estimate up to 10 55 gallons of waste could be stored there at any one time. Examples of types of waste that we expect to store there include spill cleanup material (hydraulic fluids and fuels combined with soil), personal protective clothing from confirmatory and verification sampling, oils and/or water drained from pipelines and potentially lead or other anomalous material encountered during remediation of various waste sites. The container storage area will be managed in compliance with the substantive Washington Administrative Code container management requirements, including WAC 173-303-630 and -646(7).

Let me know if you concur and give me a call if you have any questions.

Thanks,

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

<< File: Waste Container storage area 100N.JPG >>

15

Attachment 10

^WCH Document Control

From: Saueressig, Daniel G
Sent: Monday, September 17, 2012 3:59 PM
To: ^WCH Document Control
Subject: FW: UPR-100-N-6 statistical sample locations

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

Thanks,

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

From: Elliott, Wanda (ECY) [mailto:well461@ECY.WA.GOV]
Sent: Monday, September 17, 2012 3:32 PM
To: Saueressig, Daniel G; Howell, Theresa Q
Cc: Chance, Joanne C; Boyd, Alicia
Subject: UPR-100-N-6 statistical sample locations

I reviewed the proposed changes for 2 of the statistical sample locations (EX-3 and EX-4) and approve of the new locations. Can you please make sure that a new figure showing alternate sample locations/coordinates and a short explanation of sample location deviation are in the RSVP?

Thanks,

Wanda Elliott
(509) 372-7904
Environmental Scientist
Nuclear Waste Program
Washington State Department of Ecology

10

Attachment 11

168094

^WCH Document Control

From: Saueressig, Daniel G
Sent: Thursday, October 11, 2012 11:57 AM
To: ^WCH Document Control
Subject: FW: PAH/Asphalt Agreement

Thanks,

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

From: Capron, Jason M
Sent: Wednesday, October 10, 2012 9:49 AM
To: ^WCH Document Control
Cc: Saueressig, Daniel G
Subject: FW: PAH/Asphalt Agreement

This constitutes a regulatory agreement. Would you please chronicle and provide a CCN number to me and Dan when you have a chance? Thanks,

Jason

From: Chance, Joanne C [mailto:joanne.chance@rl.gov]
Sent: Wednesday, October 10, 2012 8:48 AM
To: Capron, Jason M
Subject: RE: PAH/Asphalt Agreement

Hi Jason,

I concur with Wanda's changes (in blue below). Thanks.

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

From: Elliott, Wanda (ECY) [mailto:well461@ECY.WA.GOV]
Sent: Wednesday, October 10, 2012 8:08 AM
To: Capron, Jason M
Cc: Boyd, Alicia; Chance, Joanne C; Saueressig, Daniel G; Jakubek, Joshua E
Subject: RE: PAH/Asphalt Agreement

10/11/2012

Jason,

The write-up looks good. Please see minor additions below. Let me know if you have any issues with the additions. Once we have an agreement it can be included in the UMM.

Thanks,

Wanda Elliott
(509) 372-7904
Environmental Scientist
Nuclear Waste Program
Washington State Department of Ecology

From: Capron, Jason M [<mailto:jmcapron@wch-rcc.com>]
Sent: Tuesday, October 09, 2012 8:33 AM
To: Elliott, Wanda (ECY)
Cc: Boyd, Alicia (ECY); Chance, Joanne C; Saueressig, Daniel G; Jakubek, Joshua E
Subject: PAH/Asphalt Agreement

Wanda-

Per our meeting last week, I attempted to draft some general text for inclusion in this week's UMM. Would you please let me know if this is acceptable to you or if you have any changes?

Polycyclic aromatic hydrocarbons (PAHs) have been detected above soil RAGs in verification samples from multiple waste sites in the 100-N Area, including sites that were not associated with any disposal or release of potential PAH-containing materials. Based on review of the available information on a site-by-site basis, Ecology and DOE-RL agree that PAH results for the 120-N-3, UPR-100-N-36/100-N-55, 100-N-57/UPR-100-N-1/UPR-100-N-2/UPR-100-N-29/UPR-100-N-30/UPR-100-N-32, and UPR-100-N-19/UPR-100-N-21/UPR-100-N-22/UPR-100-N-23/UPR-100-N-43 sites are most likely attributable to cross-contamination from structural asphaltic materials. Residual structural asphaltic features and debris are present throughout the 100-N Area, and often asphalt at the edge of an excavation is observed to result in small asphaltic particles migrating down the slope of the excavations. Attempts to attain PAH soil RAGs at locations like this by additional excavation has resulted in asphaltic materials being introduced to deeper and deeper levels of soil. Ecology considers additional excavation for these materials to be more hazardous to human health and the environment than leaving the material in place. Therefore, no further remediation will be performed for exceedances of PAH soil RAGs at these waste sites.

Thanks again for taking a look at all of these as well,

Jason

11

4
1

Attachment 12

168093**^WCH Document Control**

From: Saueressig, Daniel G
Sent: Thursday, October 11, 2012 11:53 AM
To: ^WCH Document Control
Subject: FW: 116-N-4 additional remediation proposal
Attachments: 116-N-4 additional remediation and resampling writeup.doc; ESRFRM110128BC.pdf; ESRFRM110128GC.pdf

Please provide a chron number (and include the attachments). This email documents a regulatory agreement.

Thanks,

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

From: Elliott, Wanda (ECY) [mailto:well461@ECY.WA.GOV]
Sent: Thursday, October 11, 2012 9:46 AM
To: Jakubek, Joshua E
Cc: Capron, Jason M; Saueressig, Daniel G; Buckmaster, Mark A; Nielson, Renee J; Chance, Joanne C; Howell, Theresa Q
Subject: 116-N-4 additional remediation proposal

I am amenable to the proposed additional remedial actions for 116-N-4.

Wanda Elliott
(509) 372-7904
Environmental Scientist
Nuclear Waste Program
Washington State Department of Ecology

From: Jakubek, Joshua E [mailto:jjakube@wch-rcc.com]
Sent: Wednesday, October 10, 2012 7:58 AM
To: Elliott, Wanda (ECY); Chance, Joanne C
Cc: Capron, Jason M; Saueressig, Daniel G; Buckmaster, Mark A; Nielson, Renee J; Howell, Theresa Q
Subject: 100-N Plume Chase Requests:

Wanda & Joanne-

Attached are the other plume chase requests for additional remediation and resampling at 100-N (Finally!). My apologies for this taking so long!

Would you please let me know if the proposed approaches will be acceptable for these sites and please feel free to call with any questions you may have.

10/11/2012

<< File: 116-N-4 additional remediation and resampling writeup.doc >> << File: 128-N-1 additional remediation and resampling writeup.doc >> << File: 100-N-23 additional remediation and resampling writeup.doc >> << File: 100-N-60 additional remediation and resampling writeup.doc >>

Thanks,

Josh Jakubek
Washington Closure Hanford
Resident Engineer
509-942-4703

116-N-4 Waste Site Additional Remediation and Resampling Request

Background Information

Remedial action at the 116-N-4 waste site was performed between March 21 and June 29, 2011, resulting in an excavation approximately 8 m (26 ft) deep. Verification sampling was conducted on January 16 and 23, 2012 as per the approved verification work instruction. One decision unit was identified for the 116-N-4 waste site and includes the excavation. Twelve statistical samples plus quality assurance/quality control (QA/QC) were collected from the decision unit.

Three sample locations exceeded a direct exposure remedial action goal (RAG). EXC-3 failed for strontium-90 and EXC-5 and EXC-8 failed for cobalt-60.

Recommendation for Path Forward

Washington Closure Hanford proposes additional soil to be removed from the 116-N-4 waste site at locations EXC-3, EXC-5, and EXC-8 for disposal at the Environmental Restoration Disposal Facility. To be conservative, generally, half the distance between the failed verification sample location and the nearest passing verification sample location is used as the boundary for additional soil removal (Figure 1). The depth of additional soil removal will be between 1 to 2 meters depending on observations in the field (e.g., discolored or stained soil, debris, etc.).

Following additional soil removal, replacement samples will be collected at EXC-3, EXC-5, and EXC-8. The replacement samples will be analyzed for the failing analyte(s) only. A summary of the replacement samples, including sample locations and requested analyses is provided in Table 1.

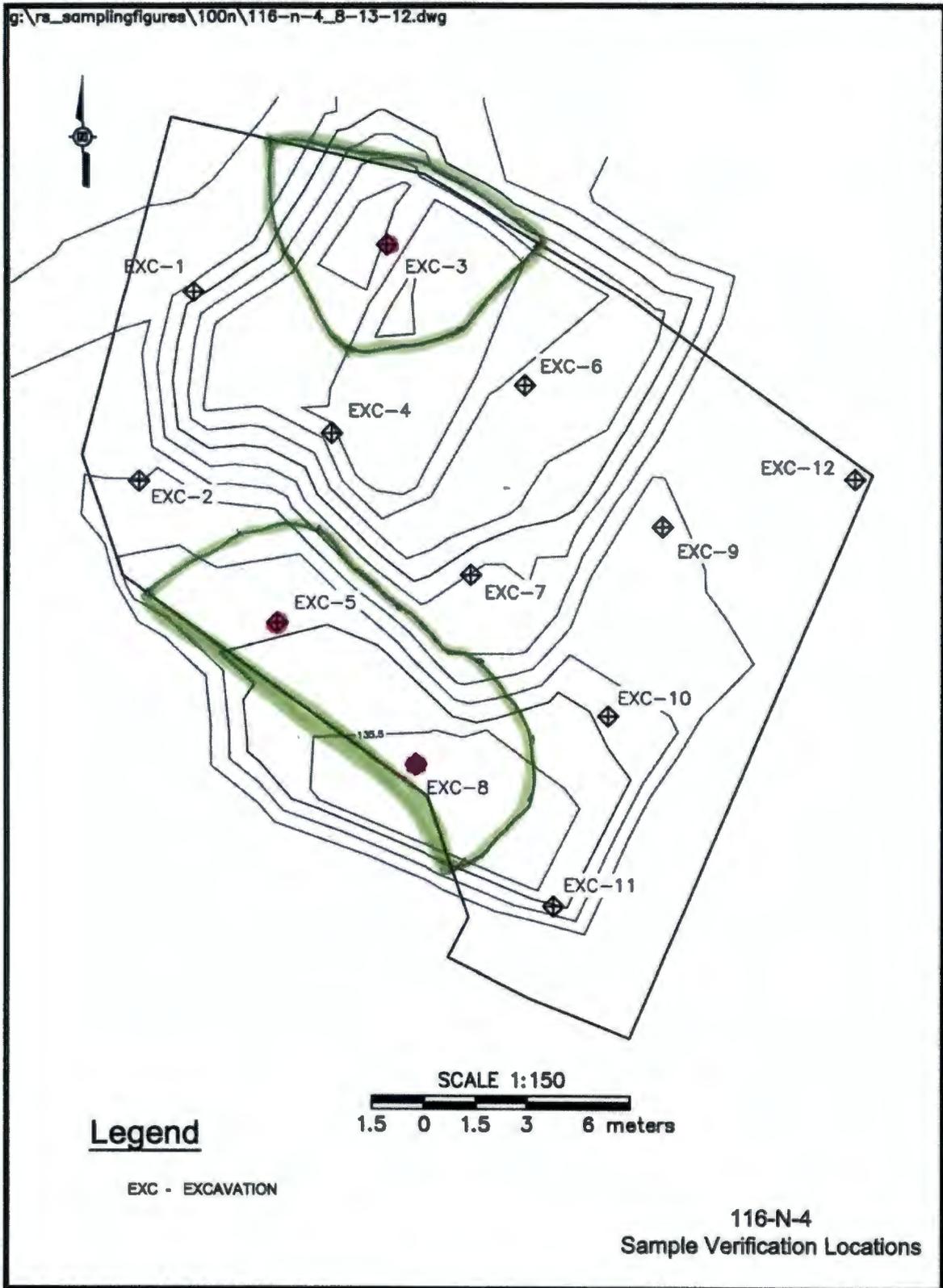
Table 1. 116-N-4 Waste Site Replacement Sample Summary.

Sample Location	HEIS Sample Number	Washington State Plane Coordinates		Sample Analysis
		Northing	Easting	
EXC-3	TBD	149503.5	571102.6	Strontium-90
EXC-5	TBD	149484.6	571097.2	Cobalt-60 (GEA)
EXC-8	TBD	149477.6	571104.0	Cobalt-60 (GEA)

HEIS = Hanford Environmental Information System

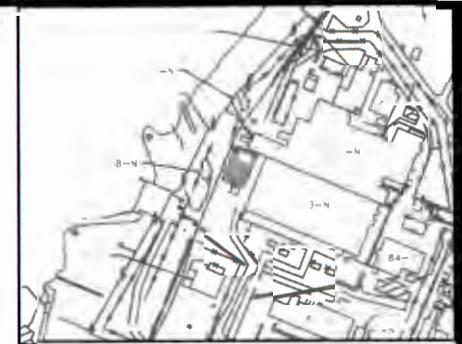
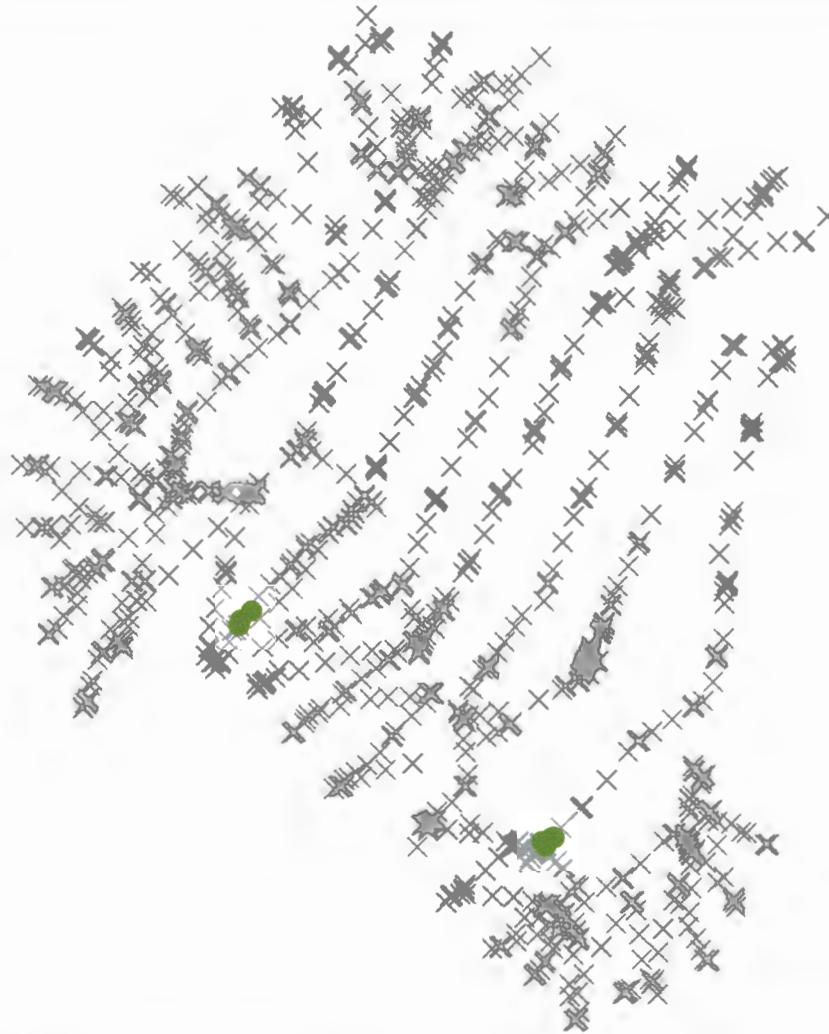
TBD = to be determined

Figure 1. 116-N-4 Waste Site Additional Remediation Sketch.





Bkg Location 485 cpm — □



Site View

Copy

Legend

- × <727
- 727 - 5000
- 5000 - 10000
- 10000 - 25000
- 25000

Summary Statistics

Coverage File: N154C,D
 Number of Data Pnts: 2326
 Type of Survey: beta
 Max GCPM: 2150
 Avg Bkg CPM: 485
 Survey Date: 6/3/2011
 Area Surveyed: 459 m²
 Project File: ESRFRM110126B
 Pdf File: ESRFRM110126BC

100N Field Remediation 116-N-4 GPERS Radiological Survey Beta Track Map

0 1 2 3 4 5

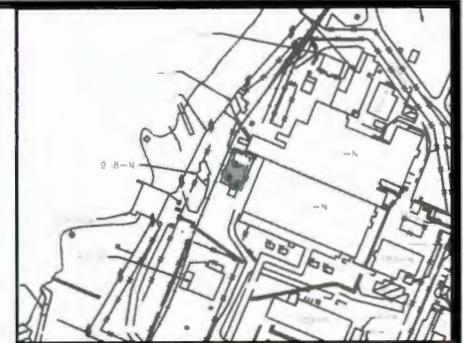
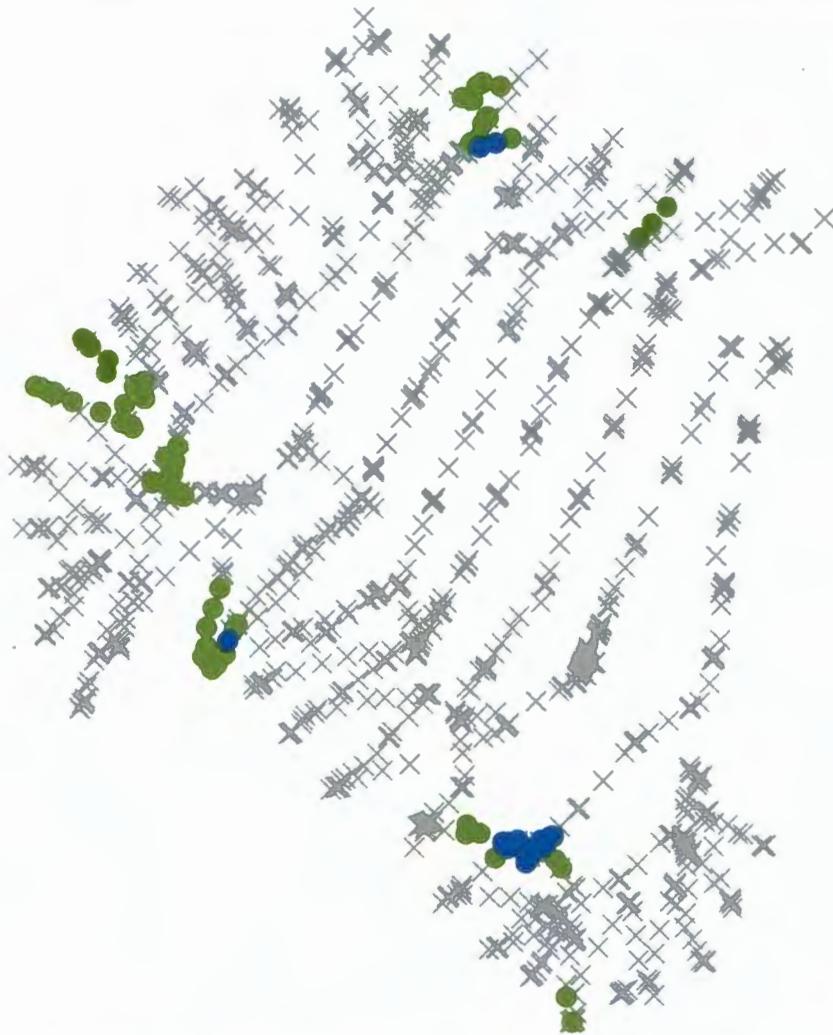
Meters



Survey Map Prepared By Bruce Coomer, ESI



Bkg Location 1584 cpm — □



Site View

Copy

Legend

NET CPM

- × <2376
- 2376 - 5000
- 5000 - 10000
- 10000 - 25000
- 25000

Summary Statistics

Coverage File: N154C,D
 Number of Data Pnts: 2326
 Type of Survey: gamma
 Max GCPM: 10227
 Avg Bkg CPM: 1584
 Survey Date: 6/3/2011
 Area Surveyed: 459 m²
 Project File: ESRFRM110126G
 Pdf File: ESRFRM110126G

**100N Field Remediation
 116-N-4
 GPERs Radiological Survey
 Gamma Track Map**

0 1 2 3 4 5



**EBERLINE
SERVICES
HANFORD, INC.**

Survey Map Prepared By Bruce Coomer, ESI

(2)

Attachment 13

168092

^WCH Document Control

From: Saueressig, Daniel G
Sent: Thursday, October 11, 2012 11:35 AM
To: ^WCH Document Control
Subject: FW: 100-N-60 additional remediation proposal
Attachments: 100-N-60 additional remediation and resampling writeup.doc

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: Elliott, Wanda (ECY) [mailto:well461@ECY.WA.GOV]
Sent: Thursday, October 11, 2012 11:28 AM
To: Jakubek, Joshua E; Chance, Joanne C
Cc: Capron, Jason M; Saueressig, Daniel G; Buckmaster, Mark A; Nielson, Renee J; Howell, Theresa Q
Subject: 100-N-60 additional remediation proposal

I concur with the proposed pathway for the additional remediation for the 100-N-60 waste site.

Wanda Elliott
(509) 372-7904
Environmental Scientist
Nuclear Waste Program
Washington State Department of Ecology

From: Jakubek, Joshua E [mailto:jejakube@wch-rcc.com]
Sent: Wednesday, October 10, 2012 7:58 AM
To: Elliott, Wanda (ECY); Chance, Joanne C
Cc: Capron, Jason M; Saueressig, Daniel G; Buckmaster, Mark A; Nielson, Renee J; Howell, Theresa Q
Subject: 100-N Plume Chase Requests:

Wanda & Joanne-

Attached are the other plume chase requests for additional remediation and resampling at 100-N (Finally!). My apologies for this taking so long!

Would you please let me know if the proposed approaches will be acceptable for these sites and please feel free to call with any questions you may have.

<< File: 116-N-4 additional remediation and resampling writeup.doc >> << File: 128-N-1 additional remediation and resampling writeup.doc >> << File: 100-N-23 additional remediation and resampling writeup.doc >> << File: 100-N-60 additional remediation and resampling writeup.doc >>

10/11/2012

Thanks,

Josh Jakubek
Washington Closure Hanford
Resident Engineer
509-942-4703

100-N-60 Grouping of Waste Sites Additional Remediation and Resampling Request

Background Information

The 100-N-60 grouping of waste sites includes the 100-N-60, UPR-100-N-13, and UPR-100-N-26. Remedial action at the 100-N-60 grouping of waste sites was performed between September 21 and November 14, 2011, continuing to an approximate maximum depth of 4.5 m (15 ft).

Verification sampling was conducted on August 13, 2012 as per the approved verification work instruction. One decision unit was identified for the 100-N-60 grouping of waste sites and includes the excavation only. Twelve statistical samples plus quality assurance/quality control (QA/QC) samples and two focused samples were collected from the decision unit.

Two sample locations within the 100-N-60 grouping of waste sites exceeded direct exposure remedial action goals (RAGs). Sample location FS-1 failed the direct exposure RAG for cobalt-60 and FS-2 failed the direct exposure RAGs for polycyclic aromatic hydrocarbons (PAH) and total petroleum hydrocarbons (TPH). However, FS-1 is the only location that will require additional remediation and resampling. The verification work instruction indicates that the sample collected at FS-2 will be collected for information purposes only and will not be used for site closure.

Recommendation for Path Forward

Washington Closure Hanford proposes additional soil to be removed from the 100-N-60 grouping of waste sites excavation at FS-1 location for disposal at the Environmental Restoration Disposal Facility. To be conservative, generally, half the distance between the failed verification sample location and the nearest passing verification sample location is used as the boundary for additional soil removal (Figure 1). The depth of additional soil removal will be between 1 to 2 meters depending on observations in the field (e.g., discolored or stained soil, debris, etc.).

Following additional soil removal, a replacement sample will be collected at FS-1. The replacement sample will be analyzed for the failing analyte only. A sample summary including sample location and requested analyses is provided in Table 1.

**Table 1. 100-N-60, UPR-100-N-13, UPR-100-N-26
Waste Site Replacement Sample Summary.**

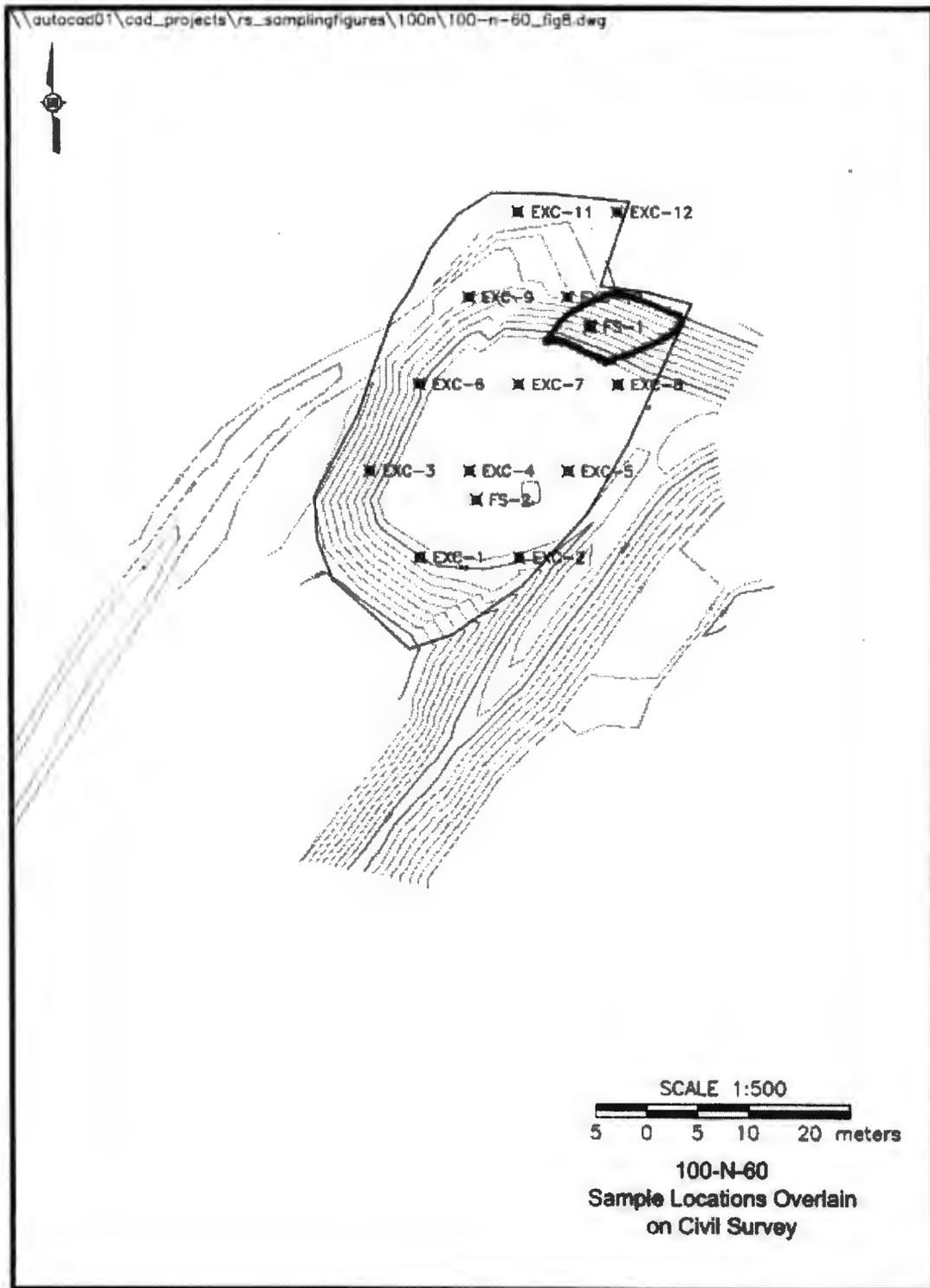
Sample Location	HEIS Sample Number	WSP Coordinates (m)		Sample Analysis
		Northing	Easting	
FS-1	TBD	149738.4	571248.9	Cobalt-60 (GEA)

GEA = gamma energy analysis

HEIS = Hanford Environmental Information System

WSP = Washington State Plane

Figure 1. 100-N-60 Group Additional Remediation Sketch.



(3)

Attachment 14

168091

^WCH Document Control

From: Saueressig, Daniel G
Sent: Thursday, October 11, 2012 11:21 AM
To: ^WCH Document Control
Subject: FW: 128-N-1 additional remediation proposal
Attachments: 128-N-1 additional remediation proposal_10-10-2012.doc

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

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

From: Elliott, Wanda (ECY) [mailto:well461@ECY.WA.GOV]
Sent: Thursday, October 11, 2012 11:20 AM
To: Jakubek, Joshua E
Cc: Capron, Jason M; Saueressig, Daniel G; Buckmaster, Mark A; Chance, Joanne C
Subject: 128-N-1 additional remediation proposal

I concur with the proposed pathway (attached) for the additional remediation for the 128-N-1 waste site. We need make sure that this write-up gets into the RSVP.

10/11/2012

128-N-1 Grouping of Waste Sites Additional Remediation and Resampling Request

Background Information

The 128-N-1 grouping of waste sites includes the 128-N-1, 100-N-6, 100-N-16, and 100-N-98 sites. Remedial action at the 128-N-1 grouping of waste sites was performed between August 2, 2010 and November 28, 2011, continuing to an approximate maximum depth of 3.5 m (11.5 ft). Verification sampling was conducted July 25, 2012 as per the approved verification work instruction. Two decision units were identified for the 128-N-1 grouping which includes the excavation and staging pile areas. (The staging pile area has not yet been verification sampled due to still needing the final scrape of the area after waste was removed). Twelve statistical samples plus quality assurance/quality control (QA/QC) samples and four focused sample were collected from the excavation decision unit.

Three sample locations, EXC-9 (sample J1PW14), EXC-13 (sample J1PW18) and FS-4 (sample J1PW37), failed direct exposure remedial action goals (RAGs). Locations EXC-9 and FS-4 failed for polycyclic aromatic hydrocarbons (PAHs) and the EXC-13 location failed for semivolatile organic analysis (SVOA).

Recommendation for Path Forward

Washington Closure Hanford proposes additional soil to be removed from the 128-N-1 grouping of waste sites excavation at the EXC-9, EXC-13, and FS-4 locations for disposal at the Environmental Restoration Disposal Facility. To be conservative, generally, half the distance between the failed verification sample location and the nearest passing verification sample location is used as the boundary for additional soil removal (Figure 1). The depth of additional soil removal will be between 1 to 2 meters depending on observations in the field (e.g., discolored or stained soil, debris, etc.).

Following additional soil removal, replacement samples will be collected at EXC-9, EXC-13, and FS-4. The replacement samples will be analyzed for the failing analyte(s) only. A summary of replacement samples, including sample location and requested analyses, is provided in Table 1.

Table 1. 128-N-1, 100-N-6, 100-N-16, 100-N-98

Waste Site Replacement Sample Summary.

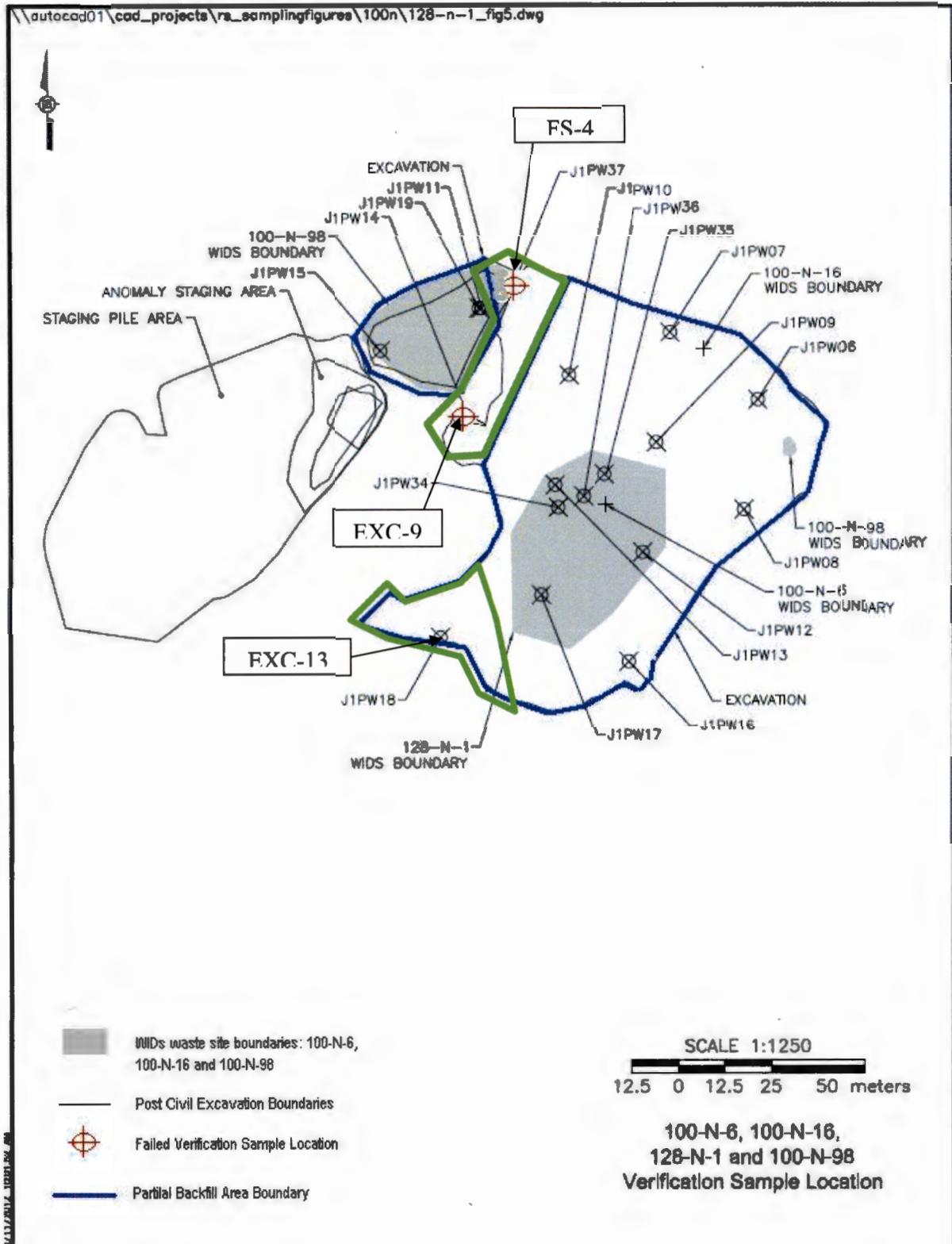
Sample Location	HEIS Sample Number	Washington State Plane Coordinates		Sample Analysis
		Northing	Easting	
EXC-9	TBD	149208.1	572088.0	PAH
EXC-13	TBD	149149.3	572080.4	SVOA
FS-4	TBD	149243.3	572100.2	PAH

HEIS = Hanford Environmental Information System

PAH = polycyclic aromatic hydrocarbons

SVOA = semivolatile organic analysis

Figure 1. 128-N-1 Group Additional Remediation Sketch.



14

Attachment 15

168085

^WCH Document Control

From: Saueressig, Daniel G
Sent: Thursday, October 11, 2012 9:11 AM
To: ^WCH Document Control
Subject: FW: UPR-100-N-19 Plume Chase Write-up
Attachments: UPR-100-N-19 Additional Remediation and Resampling Request.doc

Please provide a chron number, this email documents a regulatory approval.

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

From: Jakubek, Joshua E
Sent: Wednesday, October 10, 2012 3:32 PM
To: Elliott, Wanda; Chance, Joanne C
Cc: Capron, Jason M; Saueressig, Daniel G; Buckmaster, Mark A; Nielson, Renee J; Howell, Theresa Q
Subject: RE: UPR-100-N-19 Plume Chase Write-up

Thanks Wanda! Yes, the plan is to decommission the well since it is non-compliant. Wendy Thompson is working on the request to CHPRC to have this done. Once that is complete, we will be able to chase the plume.

Thanks,
Josh Jakubek
Washington Closure Hanford
Resident Engineer
509-942-4703

From: Elliott, Wanda (ECY) [mailto:well461@ECY.WA.GOV]
Sent: Wednesday, October 10, 2012 3:17 PM
To: Jakubek, Joshua E; Chance, Joanne C
Cc: Capron, Jason M; Saueressig, Daniel G; Buckmaster, Mark A; Nielson, Renee J; Howell, Theresa Q
Subject: RE: UPR-100-N-19 Plume Chase Write-up

I am amenable to the proposal for this site. The only concern that I have is: will this action affect well 199-N-16? We talked about this well last week and how it is in the pathway for remediation. Are you planning to decommission it?

From: Jakubek, Joshua E [jjakube@wch-rcc.com]
Sent: Wednesday, October 10, 2012 7:50 AM
To: Elliott, Wanda (ECY); Chance, Joanne C
Cc: Capron, Jason M; Saueressig, Daniel G; Buckmaster, Mark A; Nielson, Renee J; Howell, Theresa Q
Subject: UPR-100-N-19 Plume Chase Write-up

Wanda & Joanne-

Please see the attached request for additional remediation and resampling at the UPR-100-N-19 waste site group. If you are in agreement with the proposal described, I would appreciate your concurrence with

10/11/2012

this e-mail as an addendum to the remediation design and verification sampling work instruction.

The request also contains a discussion on PAH exceedences similar to what you've seen from Jason for other sites. Would you please let me know if that approach will also be acceptable for this site, and/or let me know on any questions.

Thanks again,

Josh Jakubek
Washington Closure Hanford
Resident Engineer
509-942-4703

UPR-100-N-19 Waste Site Grouping Additional Remediation/Resampling Request and Discussion of PAH Results

Background Information

The UPR-100-N-19, UPR-100-N-21, UPR-100-N-22, UPR-100-N-23, and UPR-100-N-43 waste sites were created to address unplanned diesel oil releases from the 184-N day tanks. Remedial action was performed between June and December, 2011, resulting in a combined excavation approximately 5 m (16.4 ft) deep. Verification sampling was conducted on June 14, 2012 per the approved verification work instruction. One decision unit was identified for the UPR-100-N-19 waste site grouping and includes the shallow zone excavation (sidewalls) only. The floor of the excavation is considered the UPR-100-N-42 waste site and will be addressed separately.

Twelve primary statistical samples, one duplicate, one split, and one focused sample were collected from the decision unit, with locations shown in Figure 1. Total petroleum hydrocarbons (TPH) were detected above the soil RAG in SZ-10, and individual polycyclic aromatic hydrocarbons were detected above direct exposure RAGs in SZ-3, SZ-4, SZ-5, SZ-7, SZ-9, SZ-10, and SZ-12.

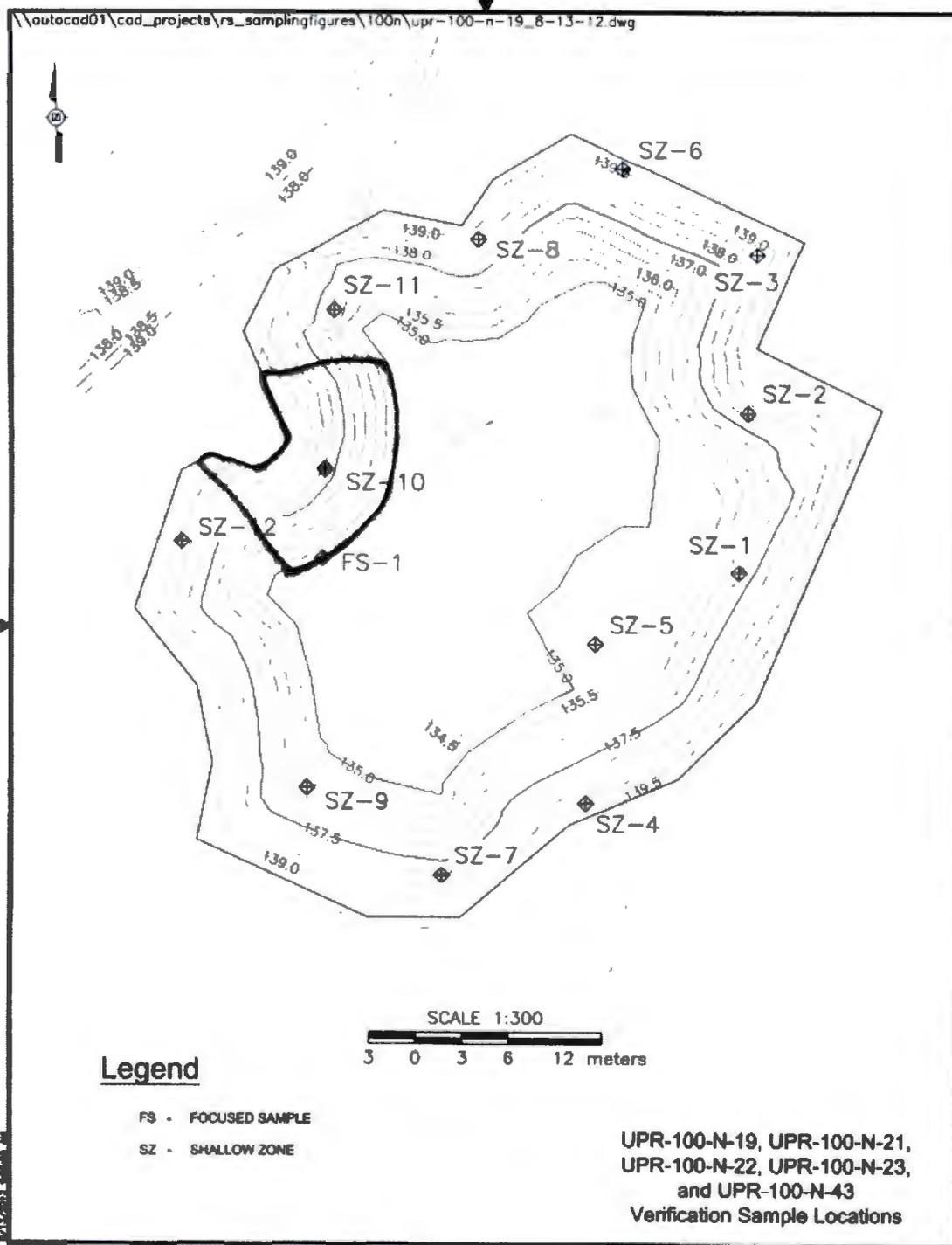
Additional Remediation and Resampling at SZ-10

Washington Closure Hanford proposes additional soil remediation around Location SZ-10. Soil will be removed within boundaries approximately halfway between SZ-10 and surrounding verification samples (Figure 1) to a depth of 1 to 2 meters. Following soil removal, a replacement sample will be collected from SZ-10 and analyzed for TPH and PAHs (Method 8310) only. This data will be combined with the metals and PCB data collected for the initial SZ-10 sample for use in the overall statistical verification data set.

Draft evaluation of verification data for polycyclic aromatic hydrocarbons (PAHs) and total petroleum hydrocarbons (TPH):

Per approaches discussed for other sites, PAH exceedances in the UPR-100-N-19 site grouping verification samples may be largely attributable to cross-contamination with structural asphalt, with a similar draft discussion provided below. The PAHs detected in the sample collected from Location SZ-10 do not appear to be consistent with previous samples with structural asphalt contamination. Most notably, benzo(a)anthracene, benzo(b)fluoranthene, and phenanthrene were not detected at SZ-10. These compounds would have been expected, given the concentrations quantitated for benzo(a)pyrene and chrysene, for structural asphalt cross-contamination. Similarly, the concentration of fluoranthene quantitated was also notably low relative to what would be expected based on asphalt cross-contamination observed elsewhere. Combined with the TPH results above soil RAGs, this suggests that the contaminants observed at Location SZ-10 are more likely attributable to residual diesel oil contamination. (There is no consistent correlation between TPH and PAH results across this verification data set, irrespective of the sample from Location SZ-10.)

Figure 1. UPR-100-N-19 Waste Site Group Verification Sample Locations and Approximate Boundaries for Additional Remediation at Location SZ-10.



The PAH data from SZ-10 was not included in the evaluation presented below. The data collected following additional remediation will be included in the future evaluation and analysis.

Table 1. Comparison of Draft Statistical Values for PAHs to Soil RAGs for the UPR-100-N-19 Waste Site Group Remediation Footprint Verification Samples.

COPC	Statistical Result ^b (mg/kg)	Remedial Action Goals (mg/kg) ^a			Does the Result Exceed RAGs?	Do the Results Pass RESRAD Modeling?
		Direct Exposure	Soil Cleanup Level for Groundwater Protection	Soil Cleanup Level for River Protection		
Acenaphthene	0.35	4,800	96	129	No	--
Anthracene	0.42	24,000	240	1,920	No	--
Benzo(a)anthracene	4.7	1.37	0.015 ^c	0.015 ^c	Yes	Yes ^{d,e}
Benzo(a)pyrene	0.72	0.137	0.015 ^c	0.015 ^c	Yes	Yes ^{d,e}
Benzo(b)fluoranthene	1.04	1.37	0.015 ^c	0.015 ^c	Yes	Yes ^c
Benzo(g,h,i)perylene ^f	0.176	2,400	48	192	No	--
Benzo(k)fluoranthene	0.37	13.7	0.12	0.015 ^c	Yes	Yes ^c
Chrysene	1.26	137	1.2	0.1 ^c	Yes	Yes ^c
Dibenz(a,h)anthracene	0.014	0.137	0.03 ^c	0.03 ^c	No	--
Fluoranthene	2.1	3,200	64	18.0	No	--
Fluorene	0.25	3,200	64	260	No	--
Indeno(1,2,3-cd)pyrene	0.49	1.37	0.03 ^c	0.03 ^c	Yes	Yes ^c
Phenanthrene ^f	2.5	24,000	240	1,920	No	--
Pyrene	2.4	2,400	48	192	No	--

^a Cleanup levels and RAGs obtained from the 100-N Area RDR/RAWP.

^b 95% upper confidence limit or maximum value, depending on data censorship.

^c Where calculated cleanup levels are less than RDLs, cleanup levels default to RDLs (WAC 173-340-707(2) and RDR/RAWP).

^d PAH results were determined to be the result of cross-contamination from structural asphaltic material. Therefore, PAHs are not considered in attainment of direct exposure soil RAGs for the site.

^e Based on RESRAD modeling discussed in Appendix C of the RDR/RAWP (DOE-RL 2009b), the residual concentrations of PAHs are not predicted to migrate vertically within 1,000 years (based on the soil distribution coefficients), and are, therefore, protective of groundwater and the Columbia River.

^f Toxicity data for acenaphthylene, benzo(g,h,i)perylene, and phenanthrene are not available. Cleanup levels are based on acenaphthene, pyrene, and anthracene as surrogates, respectively.

-- = not applicable

COPC = contaminant of potential concern

PAH = polycyclic aromatic hydrocarbons

RAG = remedial action goal

RDL = required detection limit

RDR/RAWP = Remedial Design Report/Remedial Action Work Plan

RESRAD = RESidual RADioactivity (dose model)

WAC = Washington Administrative Code

Multiple PAHs were detected at concentrations above soil RAGs in verification samples. PAHs were associated with historic releases at this waste site, but soils contaminated by fuel oil releases are believed to have been remediated based on observation during remediation. The residual PAHs observed in verification samples are believed to be the result of cross-contamination from structural asphaltic material. Fragments of structural asphaltic material are visible throughout the excavation footprint (Figures 2 and 3) and the site is surrounded by former roadways and facilities (Figure 3). A comparison of the verification sample data set to a known asphalt sample also shows high correlation (Table 2). Average results from all detections in the statistical data set were used for the purposes of this comparison only, rather than the statistically determined values (as listed in Table 1). This approach was used because a lognormal distributional form was

selected for several of the constituents by MTCASat, which results in a conservative prediction of the 95% UCL value. This conservative prediction also skews the data significantly relative to PAH constituents where a lognormal distribution was not selected. Finally, while the concentrations of most individual PAHs were highest in the primary sample collected from Location SZ-5, the results for the duplicate sample collected at the location were predominantly non-detects. The results for the split sample collected at the location were predominantly detections near the practical quantitation limits and below direct exposure soil RAGs. This demonstrates a heterogeneity that is likely caused by pieces of asphalt debris.

PAHs are nearly immobile in soil based on their high soil distribution coefficient values and do not pose a risk for migration to groundwater and the Columbia River. Because these PAHs are associated with asphaltic debris, they are not considered in evaluation of direct exposure soil RAGs. Ecology considers additional excavation more hazardous to human health and the environment than leaving the asphalt in place.

Figure 1. Asphaltic Debris in the UPR-100-N-19 Site Group Excavation.



Figure 2. Asphaltic Debris in the UPR-100-N-19 Site Group Excavation.



Figure 3. Overlay of UPR-100-N-19 Site Group Excavation Boundaries on 2008 Aerial Imagery.



Table 2. Comparison of UPR-100-N-19 Waste Site Group Polycyclic Aromatic Hydrocarbon Verification Data to Asphalt Data.

Analyte	Asphalt Sample Result (mg/kg)	Remediation Footprint Average Result ^a (mg/kg)	Ratio ^b (X 10 ⁻⁴)
Acenaphthylene	1,783	ND	--
Anthracene	3,699	0.23	6.22
Benzo(a)anthracene	5,792	0.41	7.08
Benzo(a)pyrene	5,533	0.27	4.88
Benzo(b)fluoranthene	4,619	0.28	6.06
Benzo(g,h,i)perylene	2,839	0.16	5.64
Benzo(k)fluoranthene	4,527	0.13	2.87
Chrysene	5,580	0.34	6.09
Dibenzo(a,h)anthracene	1,531	0.014	0.91
Fluoranthene	10,665	0.60	5.63
Fluorene	1,756	0.12	6.83
Indeno(1,2,3-cd) pyrene	2,751	0.18	6.54
Naphthalene	1,917	ND	--
Phenanthrene	10,975	0.50	4.57
Pyrene	10,205	0.66	6.47

^a Average value used rather than the statistically determined value due to varying predicted distributional forms.

^b Determined by dividing the verification value by the asphalt sample result. This known-asphalt-to-verification-data ratio provides a general comparative evaluation of the overall observed concentrations to a known asphalt sample. If the relative distribution of PAHs within the verification data were identical to the relative distribution of PAHs within the known asphalt sample, this ratio value would be the same number for all PAH constituents. Differences within these ratio values relative to each other provide an indication of the relative degree of comparability.

ND = not detected (in any verification sample)

-- = not applicable

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Attachment 16

168086**^WCH Document Control**

From: Saueressig, Daniel G
Sent: Thursday, October 11, 2012 9:35 AM
To: ^WCH Document Control
Subject: FW: TPH Microbial Assessment - PNNL - - - RL Response to Ecology's requests/questions
Please provide a chron number. This email documents a regulatory approval and supersedes CCN 167974.

Thanks,

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

From: Chance, Joanne C [mailto:joanne.chance@rl.gov]
Sent: Wednesday, October 10, 2012 3:47 PM
To: Menard, Nina; 'Welsch, Kim (ECY) (KIWE461@ECY.WA.GOV)'
Cc: Elliott, Wanda; Neath, John P; Saueressig, Daniel G; Thompson, Wendy S; Buckmaster, Mark A; Thompson, K M (Mike); Yasek, Donna M; Boyd, Alicia
Subject: FW: TPH Microbial Assessment - PNNL - - - RL Response to Ecology's requests/questions

Hi Nina and Kim,

Please see our affirmative responses (in red) below. Please advise if any further clarification is needed. Thanks.

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

From: Menard, Nina (ECY) [mailto:nmen461@ecy.wa.gov]
Sent: Monday, October 01, 2012 10:23 AM
To: Chance, Joanne C; Boyd, Alicia (ECY)
Cc: Elliott, Wanda (ECY); Neath, John P; Saueressig, Daniel G; Thompson, Wendy S; Buckmaster, Mark A; Thompson, K M (Mike); Welsch, Kim (ECY)
Subject: RE: TPH Microbial Assessment - PNNL - - - RL Response to Ecology's requests/questions

Joanne,

You requested an update on where we stand so I am replying to this e-mail.
First, Ecology agrees with DOE that turning on the bioventing system will satisfy the M-016-55 milestone due December 31, 2012. **Thank you.**

10/11/2012

Second, from your e-mail below everything looks in order. Just for verification, it appears that DOE is suggesting bacterial analyses of both archived borehole soil *and* shallow soil. Is this correct? **Yes**. Also from the third bullet there may still be some confusion. You stated that nutrient addition will be performed. The concern that Ecology has is determining whether nutrients speed up the process to the extent that should be required. To accurately determine this, some soil samples should be allowed to grow without nutrient addition and some with. Could you be sure that this is added. **Yes, this comparison will be made as the evaluation of a no-nutrient addition scenario is expected to be inherent in any proposed nutrient enhancement testing. As we refine this level of testing based on initial evaluations of bioactivity, we will work with the technical experts to ensure that any effects of nutrient additions are fully understood and documented relative to baseline activity levels.**

One last item that is not related to the information above. Beginning on Oct 9, 2012, I will be out of the office for about 5 weeks for surgery. Kim Welsch will be acting for me during this time frame. So please include him as a cc: on any e-mail where I am cc:.

Thanks a lot and if you have any questions, please don't hesitate to give me a call until Oct 9 and then give Kim a call after that. As always Alicia is available too.

Nina M. Menard
Environmental Restoration
WA Dept. of Ecology
509-372-7941 Office
509-420-6839 Cell

From: Chance, Joanne C [<mailto:joanne.chance@rl.gov>]
Sent: Friday, September 14, 2012 11:18 AM
To: Boyd, Alicia (ECY)
Cc: Elliott, Wanda (ECY); Menard, Nina (ECY); Neath, John P; Saueressig, Daniel G; Thompson, Wendy S; Buckmaster, Mark A; Thompson, K M (Mike)
Subject: RE: TPH Microbial Assessment - PNNL - - - RL Response to Ecology's requests/questions

Hi Alicia,

Please see below (in red) for RL's responses to your requests/questions regarding the In-situ Petroleum Bioremediation Project at 100-N. Please let me know if you would like to discuss further. Thanks.

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

From: Boyd, Alicia (ECY) [<mailto:aboy461@ecy.wa.gov>]
Sent: Wednesday, September 05, 2012 4:47 PM
To: Chance, Joanne C; Menard, Nina (ECY)
Cc: Elliott, Wanda (ECY)

10/11/2012

Subject: RE: TPH Microbial Assessment - PNNL

Joanne

My apologies for this response coming later than Ecology had intended. I'm trying to wrap up several pieces of feedback for the petroleum bioremediation into this one e-mail.

Ecology has reviewed the PNNL reports and appendices on the study of microbial degradation of petroleum at 100-N. We found these reports generally helpful in understanding more about the situation. We have several requests/questions:

- Ecology feels that a soil sample from an existing excavation near the deep petroleum spills has better potential for information than the archived borehole samples. These could be used for bench tests without the concern of "if the bugs don't grow is it just because they're old?". When mentioned in a recent meeting, Wendy Thompson (WCH) voiced concerns over whether such soil samples would yield the right data. At this time Ecology would rather use petroleum contaminated soil samples from an opportunistic excavation rather than relatively old archived samples. If the concerns still exist regarding the usefulness of data from such a source we would like to hear more detail on these concerns. **Response: RL will conduct bacterial analyses of soil samples from both the shallow zone as requested by Ecology (as described above) and from the deep vadose zone archived borehole soil samples.**
- Several times we have had DOE/contractors mention that the remedial timeframe estimate has been updated, or can be updated. Ecology would like to see that new timeframe estimate and the details of how it was determined. **Response: The estimated time frame will be reevaluated using MTCA 2007 clean up criteria and refined bulk densities and provided to Ecology at the end of October 2012.**
- Ecology still has concerns regarding the addition of nutrients. It was evident from the PNNL studies that nitrogen was added. Further tests should include investigating the effects of nitrogen addition. This should help conclude if nutrients will expedite the degradation timeframe or prove that nutrient addition would not enhance remediation. **Response: Nutrient addition will be performed in the laboratory to both the shallow and deep zone soil bacterial samples, if they are amenable to growth.**
- Ecology agrees with the conclusions reached in PNNL-18645, Rev. 1 that the plume is not well defined. We understand that money for multiple investigational boreholes does not exist at this time. However, boreholes/pits will eventually be required to verify closeout. This idea may have to be addressed in the RDR/RAWP after the issuance of the final ROD. **Response: Comment acknowledged.**
- Ecology agrees with the conclusions reached in PNNL-18645, Rev. 1 that due to the lack of sampling data, the conceptual model for the TPH contamination and remediation is incomplete. For example, because groundwater at wells 199-N-167, 199-N-169, 199-N-170, 199-N-171, and 199-N-172 has not been sampled since Phase I remediation, it is unknown if the groundwater concentrations of TPH remain reduced. Ecology requests these wells be sampled prior to implementation of Phase II testing. **Response: Sampling and analysis of the above wells is scheduled for the end of September to early October (prior to re-start of bioventing); the sampling plan was provided to Ecology for your review on September 11, 2012.**
- Ecology has some additional feedback on the Test/Performance Monitoring Plan Outline in its current form. The section/bullet listed as "System Shutdown and Confirmation of Cleanup" should be removed or edited. Ecology feels that details of conditions for system shutdown and confirmation of cleanup methods should not be outlined in detail in the T/PMP. This level of detail should belong either in the O&M Plan or in an update to the RDR/RAWP. It is very reasonable to include system responses or triggers for considering shutdown in the T/PMP, similar to those outlined for triggering the "optional early borehole". But details of what will be acceptable criteria for system shutdown are not necessarily required at this time (prior to system startup). **The purpose of the Operations and Maintenance Manual is to provide operators with the parameters and procedures necessary to effectively operate and maintain the bioventing system while it is in operation. One of the major purposes of the Test/Performance Monitoring Plan (T/TMP) is to assess the performance of the system, including the ultimate measure of performance which is achievement of bioremediation goals. It is inherently flawed planning to undertake a longer term project without at least a general understanding of what constitutes completion of the project. The T/PMP Outline/Criteria as agreed to between RL and Ecology and documented in the August 9, 2012 UMM Minutes outlines the general criteria and parameters that would trigger both additional evaluation and discussions with Ecology as to whether remediation goals have been met.**

Hence we concur with Ecology's preceding remark that: "It is very reasonable to include system responses or triggers for considering shutdown in the T/PMP...", and anticipate that the Draft T/PMP that will be provided to Ecology during the October/November 2012 time frame will strike the proper balance, providing guidance as to the trigger, but providing the flexibility required for deliberations and regulatory determinations in the future.

In summary, Ecology has several questions we would still like answered. We still feel that soil samples should be sent for microbial testing, although we feel that soil from opportunistic excavations may be more useful than archived borehole samples. Please let us know when DOE may be available to discuss these remaining concerns.

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

From: Chance, Joanne C [<mailto:joanne.chance@ri.gov>]
Sent: Tuesday, August 07, 2012 2:40 PM
To: Menard, Nina (ECY); Boyd, Alicia (ECY); Elliott, Wanda (ECY)
Cc: Thompson, Wendy S; Saueressig, Daniel G; Neath, John P
Subject: FW: TPH Microbial Assessment - PNNL

Hi everyone,

Below is a short summary of results of a PNNL study of microbial degradation of the petroleum plume and associated vadose zone soils at 100-N that recently came to our attention. Given the applicability of the test, RL requests that Ecology review the information and determine if the planned, agreed to testing of microbes from archived soils is still necessary in your opinion. I will forward the two Appendices in a following e-mails. Please let us know if you have questions. Thanks.

PNNL performed some TPH monitoring work for CHRPC back in 2009. The work included having WSU perform microbial testing to determine if diesel-degrading microorganisms are present at the 100-N TPH Plume and if so, to test the microorganisms ability to break down TPH. The samples contained diesel contamination and were collected during drilling of well 199-N-173, within the plume near the interceptor trench. The results of this study are very favorable.

- The test results indicate that bacteria, capable of using diesel as the sole carbon source are present in the soil. Since there are no other carbon sources, it was concluded that the bacteria are using the residual petroleum contamination as a food source.
- The bacteria produced rhamnolipids, which are natural surfactants that aid in the mobilization of organics and make organic compounds more readily available for biodegradation by the bacteria. Additionally, foamy water was observed during purging of the well and was believed to be due to the presence of the rhamnolipid producing bacteria.
- Slurry reactor tests were performed to determine the rate at which the bacteria could degrade diesel. The tests also looked at the results associated with the addition of nutrients (phosphate and ammonia). The results indicate that natural attenuation of the diesel by microbial activity is occurring within the soil and enhancement or stimulation of the degradation process with the addition of nutrients is not necessary.

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

Attachment 17

168076**^WCH Document Control**

From: Saueressig, Daniel G
Sent: Wednesday, October 10, 2012 2:31 PM
To: ^WCH Document Control
Subject: FW: LINERS FOR ERDF CANS -- 100-N RDR/RAWP Required TPA CN for Conformity with 100 Area RDR/RAWP

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

Thanks,

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

From: Chance, Joanne C [mailto:joanne.chance@rl.gov]
Sent: Wednesday, October 10, 2012 2:29 PM
To: Elliott, Wanda; Saueressig, Daniel G
Cc: Wilkinson, Stephen G; Landon, Roger J; Winterhalder, John A; Neath, John P
Subject: RE: LINERS FOR ERDF CANS -- 100-N RDR/RAWP Required TPA CN for Conformity with 100 Area RDR/RAWP

Hi Wanda and Dan,

I concur also with the understanding that the future TPA Change Notice for the 100-N RDR/RAWP that describes this change will incorporate the language and conditions as found in the 100 Area RDR/RAWP (DOE/RL-96-17), Rev. 6, Section 3.1.2, page 3-3, first and second bullets. Please document this agreement in the UMM Minutes and proceed with submittal of the TPA Change Notice as soon as possible. Thanks.

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

From: Elliott, Wanda (ECY) [mailto:well461@ecy.wa.gov]
Sent: Wednesday, October 10, 2012 7:41 AM
To: Saueressig, Daniel G; Chance, Joanne C
Cc: Wilkinson, Stephen G; Landon, Roger J; Winterhalder, John A
Subject: RE: LINERS FOR ERDF CANS

I concur.

10/10/2012

Wanda Elliott
(509) 372-7904
Environmental Scientist
Nuclear Waste Program
Washington State Department of Ecology

From: Saueressig, Daniel G [<mailto:dgsauere@wch-rcc.com>]
Sent: Wednesday, October 10, 2012 7:31 AM
To: Elliott, Wanda (ECY); Chance, Joanne C
Cc: Wilkinson, Stephen G; Landon, Roger J; Winterhalder, John A
Subject: LINERS FOR ERDF CANS

Wanda/Joanne, we found a discrepancy in the 100-N RDR (DOE/RL-2005-93, Rev. 0) compared to the 100 Area RDR (DOE/RL-96-17, Rev. 6) and I'd like to request your concurrence to conduct operations at 100-N consistent with the requirements in DOE/RL-96-17 until a TPA change request can be processed.

Section 3.1.2 (first bullet on page 3-2) of the 100-N RDR requires ALL roll-off containers (ERDF cans) to be lined prior to placing waste into the containers, regardless of whether the material is radiologically contaminated or not. Revision 6 of the 100 Area RDR, Section 3.1.2 (first and second bullets on page 3-3) differentiates liner requirements for radiologically contaminated waste and non-radiologically contaminated waste. Non-radiologically contaminated waste does not require a liner prior to placing waste into the container.

Since ERDF now has a dedicated supply of non-radiologically contaminated containers for the projects to use at non-radiological waste sites, we'd like to have the ability to not line cans for non-rad waste being loaded out at 100-N. Let me know if you concur with implementing this change at 100-N until a TPA change request can be processed and I'll document this agreement at the upcoming UMM.

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

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

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Attachment 18

100K Area Unit Managers Meeting Status

October 11, 2012

RL-0012 Sludge Treatment Project

TPA Milestone M-016-172, *Complete KOP Material Removal from 105-KW Fuel Storage Basin.*

- The milestone was completed on September 10, 2012, ahead of the milestone due date of September 30, 2012.

TPA Milestone M-016-173, *K Basin Sludge Treatment and Packaging Technology Selection.*

- The preliminary Phase 2 treatment and packaging site evaluation report was issued on September 27, 2012. The report compares treatment and packaging concept options for several brown field sites and a green field option. Evaluation of options and consideration of overarching policy issues leading to the preparation of a recommendation is not funded in FY2013.

TPA Milestone M-016-174, *Complete Final Design of Sludge Retrieval and Transfer System.*

- The ECRTS Final Design Report was issued on September 27, 2012.

TPA Milestone M-016-175, *Begin Sludge Removal from 105-KW Fuel Storage Basin.*

- Construction of the 105-KW Annex is in-progress. Preparation continues for the Integrated Process Optimization Demonstration at MASF.

TPA Milestone M-016-176, *Complete Sludge Removal from 105-KW Fuel Storage Basin.*

- No change in status.

TPA Milestone M-016-178, *Initiate Deactivation of 105-KW Fuel Storage Basin.*

- No change in status.

RL-0041 K Facility Demolition and Soil Remediation

Remedial Actions:

- The RSVP for Area AG Zone 2 is with EPA for review. This RSVP supports the closure of phase 1 waste sites 100-K-3 and 100-K-36 and phase 3 waste site 100-K-79 subsite 7 (partial) as well as the 1706-KE, 1706-KEL, 1706-KER building footprints.
- The RSVP for Area AG Zone 1 is with EPA for review. This RSVP supports the closure of phase 1 waste sites 100-K-3, 100-K-68, 100-K-69, 100-K-70, and 100-K-71 and phase 3 waste sites 100-K-47 (partial) and 100-K-56 (partial).
- Comments from DOE and EPA are being incorporated into the Verification Sampling Instruction for 100-K-106 and 182-K. Verification samples were collected in accordance with the plan. Results are being documented in a Removal Action Report for 182-K and an RSVP for 100-K-106.

Demolition:

- Field work for the 105-KE water tunnel demolition is complete. An 'As-Left Condition Report' was completed on October 1, 2012.
- The Removal Action Report to support closeout of 183.2 KE and 183.7 KE was approved by DOE.
- The Removal Action Report documenting the completion of the D&D of 190-KE and 190-KW was approved by DOE.

105-KE Interim Safe Storage:

- Work continues on construction of below-grade concrete pourbacks. To date, 31 of 34 pourbacks have been completed.
- Interior reactor cleanout work is on-going. Cleanout of the tool dolly room is complete, and cleanout of the RCT office is in progress. Lead removal from the 3x ballroom is complete. Asbestos abatement, cleanup, and repair activities in the 3x ballroom are nearing completion.

Project	FY2014		FY2015		FY2016		FY2017		FY2018		FY2019		FY2020		FY2021		FY2022		Risk	
	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2		FQ3												
RL-0012/41 SNF Stabilization and Disposition/Nuclear Facility D&D River Corridor																				
M-016-175 Begin Sludge Removal From 105-KW Fuel Storage Basin																				
M-016-173 Select K Basin Sludge Trtmt and Pkg Tech and Propose New Interim M/S																				
M-016-174 Complete Final Design of Sludge Retrieval and Transfer System																				
M-016-176 Complete Sludge Removal from 105-KW Fuel Storage Basin																				
M-016-53 - Revegetation of Phase 1 Waste Sites																				
M-016-53 - Complete the Interim Response Actions for the Remaining 100K Waste Sites & Structures Phase 1																				
M-093-22 Pourbacks and Interior Clean Out																				
M-093-22 Complete 105KE Interim Safe Storage																				
M-016-178: Initiate Deactivation of 105-KW Fuel Storage Basin																				
M-093-26 Initiate 105-KW Reactor Interim Safe Storage																				

18

Attachment 19

Activity ID	Activity Name	% Cmpl	RD	Start	Finish	Qtr 4, 2012			Qtr 1, 2013			pr
						Oct	Nov	Dec	Jan	Feb	Mar	
600-29												
Backfill												
RK629C	Backfill - 600-29 (8,220 BCMs)	0%	1.0	05-Dec-12*	05-Dec-12							
Revegetation												
RK629E2	Revegetation - 600-29 (14.5 Acres)	0%	6.0	06-Dec-12*	17-Dec-12			▢				
128-K-2												
Backfill												
RK128C	Backfill - 128-K-2 (10,506 BCMs)	0%	3.0	06-Nov-12*	08-Nov-12			▢				
Revegetation												
RK128E2	Revegetation - 128-K-2 (14.5 Acres)	0%	6.0	12-Nov-12*	20-Nov-12			▢				
Final Project Closeout												
RK128D21	RL/Reg Sign Rev. 0 Closure Document for - 128-K-2	0%	8.0	08-Oct-12	18-Oct-12	▢						
RK128D22	Prepare Rev. 0 Letter/Signatures 128-K-2	0%	4.0	22-Oct-12*	25-Oct-12			▢				
RK128D23	Issue Rev. 0 Closure Document 128-K-2	0%	2.0	29-Oct-12	30-Oct-12			▢				
100-K-84 Red Soil Sw. of 118-K-1												
Excavation												
RK084A	Excavation - 100-K-84 (1,532 BCMs)	0%	19.0	27-Nov-12*	02-Jan-13			▢				
Loadout												
RK084B	Loadout -- 100-K-84 (3,371 USTs)	0%	19.0	27-Nov-12*	02-Jan-13			▢				
Closeout Sampling & Docs												
RK084DA	Field Input to SDCV - 100-K-84	0%	16.0	03-Jan-13*	30-Jan-13						▢	
RK084D1	Prepare Internal Draft Work Instruction - 100-K-84	0%	4.0	31-Jan-13	06-Feb-13						▢	
RK084D2	Format/Tech Edit W/I - 100-K-84	0%	1.0	07-Feb-13	07-Feb-13							
RK084D3	Internal Review W/I - 100-K-84	0%	2.0	11-Feb-13	12-Feb-13							
RK084D4	Incorporate Internal Review Comments W/I - 100-K-84	0%	1.0	13-Feb-13	13-Feb-13							
RK084D5	Final Format/Tech Edit/Internal Sigs W/I - 100-K-84	0%	1.0	14-Feb-13	14-Feb-13							
RK084D6	RL/Regulator Review Draft A Work Instruction for - 100-K-84	0%	26.0	19-Feb-13	03-Apr-13						▢	
RK084D7	Resolve Draft A Work Instruction Comments - 100-K-84	0%	8.0	04-Apr-13	17-Apr-13						▢	
100-K-86 - Stained Areas												
Excavation												
RK086A	Excavation - 100-K-86 (140 BCMs)	0%	4.0	03-Jan-13*	09-Jan-13						▢	
Loadout												
RK086B	Loadout -- 100-K-86 (307 USTs)	0%	4.0	03-Jan-13	09-Jan-13						▢	
Closeout Sampling & Docs												
RK086DA	Field Input to SDCV - 100-K-86	0%	16.0	10-Jan-13*	06-Feb-13						▢	

▢ Current Bar Labels % Complete ◆ ◆

Activity ID	Activity Name	% Cmpl	RD	Start	Finish	Qtr 4, 2012			Qtr 1, 2013		
						Oct	Nov	Dec	Jan	Feb	Mar
RK086D1	Prepare Internal Draft Work Instruction - 100-K-86	0%	4.0	07-Feb-13	13-Feb-13						
RK086D2	Format/Tech Edit W/I - 100-K-86	0%	1.0	14-Feb-13	14-Feb-13						
RK086D3	Internal Review W/I - 100-K-86	0%	2.0	19-Feb-13	20-Feb-13						
RK086D4	Incorporate Internal Review Comments W/I - 100-K-86	0%	1.0	21-Feb-13	21-Feb-13						
RK086D5	Final Format/Tech Edit/Internal Sigs W/I - 100-K-86	0%	1.0	25-Feb-13	25-Feb-13						
RK086D6	RL/Regulator Review Draft A Work Instruction for - 100-K-86	0%	26.0	26-Feb-13	10-Apr-13						

100-K-87 Asbestos

Excavation

RK087A	Excavation - 100-K-87 (0.5 BCMs)	0%	3.0	06-Nov-12*	08-Nov-12						
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Loadout

RK087B	Loadout -- 100-K-87 (1.1 USTs)	0%	3.0	06-Nov-12*	08-Nov-12						
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Closeout Sampling & Docs

RK087DA	Field Input to SDCV - 100-K-87	0%	16.0	12-Nov-12*	11-Dec-12						
RK087D1	Prepare Internal Draft Work Instruction - 100-K-87	0%	4.0	12-Dec-12	18-Dec-12						
RK087D2	Format/Tech Edit W/I - 100-K-87	0%	1.0	19-Dec-12	19-Dec-12						
RK087D3	Internal Review W/I - 100-K-87	0%	2.0	20-Dec-12	26-Dec-12						
RK087D4	Incorporate Internal Review Comments W/I - 100-K-87	0%	1.0	27-Dec-12	27-Dec-12						
RK087D5	Final Format/Tech Edit/Internal Sigs W/I - 100-K-87	0%	1.0	31-Dec-12	31-Dec-12						
RK087D6	RL/Regulator Review Draft A Work Instruction for - 100-K-87	0%	26.0	02-Jan-13	14-Feb-13						
RK087D7	Resolve Draft A Work Instruction Comments - 100-K-87	0%	8.0	19-Feb-13	04-Mar-13						
RK087D8	RL/Regulator Sign Rev. 0 Work Instruction for - 100-K-87	0%	1.0	05-Mar-13	05-Mar-13						
RK087D9	Prepare and Issue Rev. 0 Work Instrm - 100-K-87	0%	1.0	06-Mar-13	06-Mar-13						

Final Project Closeout

RK087D10	Verification Closeout Samples - 100-K-87	0%	16.0	07-Mar-13	03-Apr-13						
RK087D11	Lab Analysis 100-K-87	0%	26.0	04-Apr-13	20-May-13						

100-K-89 - Burn Site # 1

Backfill

RK089C	Backfill - 100-K-89 (29 BCMs)	0%	1.0	02-Nov-12*	05-Nov-12						
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100-K-91 - Battery

Excavation

RK091A	Excavation - 100-K-91 (0.5 BCMs)	0%	3.0	12-Nov-12*	14-Nov-12						
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Loadout

RK091B	Loadout -- 100-K-91 (1.1 USTs)	0%	3.0	12-Nov-12*	14-Nov-12						
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Closeout Sampling & Docs

RK091DA	Field Input to SDCV - 100-K-91	0%	16.0	15-Nov-12*	17-Dec-12						
RK091D1	Prepare Internal Draft Work Instruction - 100-K-91	0%	4.0	18-Dec-12	26-Dec-12						
RK091D2	Format/Tech Edit W/I - 100-K-91	0%	1.0	27-Dec-12	27-Dec-12						

Current Bar Labels % Complete

Activity ID	Activity Name	% Cmpl	RD	Start	Finish	Qtr 4, 2012			Qtr 1, 2013			pr
						Oct	Nov	Dec	Jan	Feb	Mar	
RK091D3	Internal Review W/I - 100-K-91	0%	2.0	31-Dec-12	02-Jan-13							
RK091D4	Incorporate Internal Review Comments W/I - 100-K-91	0%	1.0	03-Jan-13	03-Jan-13							
RK091D5	Final Format/Tech Edit/Internal Sigs W/I - 100-K-91	0%	1.0	07-Jan-13	07-Jan-13							
RK091D6	RL/Regulator Review Draft A Work Instruction for - 100-K-91	0%	26.0	08-Jan-13	21-Feb-13							
RK091D7	Resolve Draft A Work Instruction Comments - 100-K-91	0%	8.0	25-Feb-13	07-Mar-13							
RK091D8	RL/Regulator Sign Rev. 0 Work Instruction for - 100-K-91	0%	1.0	11-Mar-13	11-Mar-13							
RK091D9	Prepare and Issue Rev. 0 Work Instr - 100-K-91	0%	1.0	12-Mar-13	12-Mar-13							
Final Project Closeout												
RK091D10	Verification Closeout Samples - 100-K-91	0%	16.0	13-Mar-13	09-Apr-13							
100-K-92 - Reddish Stained Gravels												
Excavation												
RK092A	Excavation - 100-K-92 (7 BCMs)	0%	3.0	10-Jan-13*	15-Jan-13							
Loadout												
RK092B	Loadout - 100-K-92 (16 USTs)	0%	3.0	10-Jan-13*	15-Jan-13							
Closeout Sampling & Docs												
RK092DA	Field Input to SDCV - 100-K-92	0%	16.0	16-Jan-13*	12-Feb-13							
RK092D1	Prepare Internal Draft Work Instruction - 100-K-92	0%	4.0	13-Feb-13	20-Feb-13							
RK092D2	Format/Tech Edit W/I - 100-K-92	0%	1.0	21-Feb-13	21-Feb-13							
RK092D3	Internal Review W/I - 100-K-92	0%	2.0	25-Feb-13	26-Feb-13							
RK092D4	Incorporate Internal Review Comments W/I - 100-K-92	0%	1.0	27-Feb-13	27-Feb-13							
RK092D5	Final Format/Tech Edit/Internal Sigs W/I - 100-K-92	0%	1.0	28-Feb-13	28-Feb-13							
RK092D6	RL/Regulator Review Draft A Work Instruction for - 100-K-92	0%	26.0	04-Mar-13	16-Apr-13							
100-K-93 - Drum Remnant												
Excavation												
RK093A	Excavation - 100-K-93 (0.5 BCMs)	0%	3.0	31-Oct-12*	05-Nov-12							
Loadout												
RK093B	Loadout - 100-K-93 (1.1 USTs)	0%	3.0	31-Oct-12*	05-Nov-12							
Closeout Sampling & Docs												
RK093DA	Field Input to SDCV - 100-K-93	0%	16.0	06-Nov-12*	05-Dec-12							
RK093D1	Prepare Internal Draft Work Instruction - 100-K-93	0%	4.0	06-Dec-12	12-Dec-12							
RK093D2	Format/Tech Edit W/I - 100-K-93	0%	1.0	13-Dec-12	13-Dec-12							
RK093D3	Internal Review W/I - 100-K-93	0%	2.0	17-Dec-12	18-Dec-12							
RK093D4	Incorporate Internal Review Comments W/I - 100-K-93	0%	1.0	19-Dec-12	19-Dec-12							
RK093D5	Final Format/Tech Edit/Internal Sigs W/I - 100-K-93	0%	1.0	20-Dec-12	20-Dec-12							
RK093D6	RL/Regulator Review Draft A Work Instruction for - 100-K-93	0%	26.0	26-Dec-12	11-Feb-13							
RK093D7	Resolve Draft A Work Instruction Comments - 100-K-93	0%	8.0	12-Feb-13	26-Feb-13							
RK093D8	RL/Regulator Sign Rev. 0 Work Instruction for - 100-K-93	0%	1.0	27-Feb-13	27-Feb-13							
RK093D9	Prepare and Issue Rev. 0 Work Instr - 100-K-93	0%	1.0	28-Feb-13	28-Feb-13							

□ Current Bar Labels ■ % Complete ◆ ◆

Activity ID	Activity Name	% Cmpl	RD	Start	Finish	Qtr 4, 2012			Qtr 1, 2013			PF
						Oct	Nov	Dec	Jan	Feb	Mar	
Final Project Closeout												
RK093D10	Verification Closeout Samples - 100-K-93	0%	16.0	04-Mar-13	28-Mar-13							
RK093D11	Lab Analysis 100-K-93	0%	26.0	01-Apr-13	14-May-13							
100-K-95 - Tar Dump												
Excavation												
RK095A	Excavation - 100-K-95 (124 BCMs)	0%	4.0	15-Nov-12*	26-Nov-12							
Loadout												
RK095B	Loadout - 100-K-95 (273 USTs)	0%	4.0	19-Nov-12*	27-Nov-12							
Closeout Sampling & Docs												
RK095DA	Field Input to SDCV - 100-K-95	0%	16.0	28-Nov-12*	27-Dec-12							
RK095D1	Prepare Internal Draft Work Instruction - 100-K-95	0%	4.0	31-Dec-12	07-Jan-13							
RK095D2	Format/Tech Edit W/I - 100-K-95	0%	1.0	08-Jan-13	08-Jan-13							
RK095D3	Internal Review W/I - 100-K-95	0%	2.0	09-Jan-13	10-Jan-13							
RK095D4	Incorporate Internal Review Comments W/I - 100-K-95	0%	1.0	14-Jan-13	14-Jan-13							
RK095D5	Final Format/Tech Edit/Internal Sigs W/I - 100-K-95	0%	1.0	15-Jan-13	15-Jan-13							
RK095D6	RL/Regulator Review Draft A Work Instruction for - 100-K-95	0%	26.0	16-Jan-13	04-Mar-13							
RK095D7	Resolve Draft A Work Instruction Comments - 100-K-95	0%	8.0	05-Mar-13	18-Mar-13							
RK095D8	RL/Regulator Sign Rev. 0 Work Instruction for - 100-K-95	0%	1.0	19-Mar-13	19-Mar-13							
Final Project Closeout												
RK095D9	Prepare and Issue Rev. 0 Work Instrm - 100-K-95	0%	1.0	20-Mar-13	20-Mar-13							
RK095D10	Verification Closeout Samples - 100-K-95	0%	16.0	21-Mar-13	17-Apr-13							
118-K-1 Burial Ground												
Excavation												
RK18KA2	118-K-1 Excavation (56,815 BCM)	99%	4.0	15-Mar-10 A	11-Oct-12							
Backfill												
RK18K18035	Backfill 118-K-1 Trenches (Including Trench N)	0%	37.0	06-Dec-12*	13-Feb-13							
Closeout Sampling & Docs												
RKICP12155	Closure Sampling 118-K-1 BG	74%	15.0	11-Jun-12 A	31-Oct-12							
Final Project Closeout												
RK18K12030	Prepare Closure Document 118-K-1	0%	80.0	01-Nov-12*	01-Apr-13							
RK18K12062	RL/Reg Review Draft A Closure Document for - 118-K-1	0%	26.0	02-Jan-13	14-Feb-13							
RK18K12052	RL/Reg Sign Rev. 0 Closure Document for - 118-K-1	0%	4.0	19-Mar-13	25-Mar-13							
100-K Miscellaneous Items												
Loadout												
RKDPMFY50	100-K MR Sites Remediation	0%	7.0	22-Oct-12*	31-Oct-12							

Current Bar Labels % Complete

①

Attachment 20

167904

^WCH Document Control

From: Saueressig, Daniel G
Sent: Wednesday, September 26, 2012 2:42 PM
To: ^WCH Document Control
Subject: 118-K-1 Trench N Sample Location Adjustment
Attachments: 118K1_TN_DeepZone.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: Thompson, Wendy S
Sent: Wednesday, September 26, 2012 2:33 PM
To: Saueressig, Daniel G
Subject: FW: 118-K-1 Trench N Sample Location Adjustment

From: Zeisloft, Jamie [mailto:jamie.zeisloft@rl.gov]
Sent: Wednesday, September 26, 2012 2:25 PM
To: 'Christopher Guzzetti'; Thompson, Wendy S
Cc: Martinez, Charlene R; Strom, Dean N; Carman, Hans M; Capron, Jason M; Proctor, Megan L
Subject: RE: 118-K-1 Trench N Sample Location Adjustment

I also agree with the proposed changes to sample locations.

From: Christopher Guzzetti [mailto:Guzzetti.Christopher@epamail.epa.gov]
Sent: Wednesday, September 26, 2012 2:19 PM
To: Thompson, Wendy S
Cc: Martinez, Charlene R; Strom, Dean N; Carman, Hans M; Zeisloft, Jamie; Capron, Jason M; Proctor, Megan L
Subject: Re: 118-K-1 Trench N Sample Location Adjustment

I agree with the proposed changes.

Christopher J. Guzzetti
U.S. EPA Region 10
Hanford Project Office
Phone: (509) 376-9529
Fax: (509) 376-2396
Email: guzzetti.christopher@epa.gov

"Thompson, Wendy S" --09/26/2012 02:11:37 PM---Hi Jamie, Chris, All five focus soil samples

(located below the silos) were collected

From: "Thompson, Wendy S" <WSTHOMPS@wch-rcc.com>

To: "Zeisloft, Jamie" <jamie.zeisloft@rl.gov>, Christopher Guzzetti/R10/USEPA/US@EPA

Cc: "Carman, Hans M" <hmcarm@wch-rcc.com>, "Martinez, Charlene R" <cmartin@wch-rcc.com>, "Strom, Dean N" <dnstrom@wch-rcc.com>, "Capron, Jason M" <jmcapron@wch-rcc.com>, "Proctor, Megan L" <miprocto@wch-rcc.com>

Date: 09/26/2012 02:11 PM

Subject: 118-K-1 Trench N Sample Location Adjustment

Hi Jamie, Chris,

All five focus soil samples (located below the silos) were collected this morning.

One deep zone sample (A2) was collected; however, this sample had two of the four sample nodes located below the ramp area. Recall that each sample subunit is a composite sample of four nodes. Since the ramp consists of imported BCL material, the field made a decision to relocate the two sample nodes that fell within the ramp area. The attached figure shows where these two new samples are located. Please note that sample node 7 is located slightly outside the deep zone decision unit on the lower sidewall of the shallow zone decision unit.

Would you please review this field change information and let us know if this is acceptable to you? If not, we will cancel this sample for laboratory analyses and resample the A2 deep zone subunit.

Thank you,
Wendy

<<118K1_TN_DeepZone.pdf>> [attachment "118K1_TN_DeepZone.pdf" deleted by Christopher Guzzetti/R10/USEPA/US]

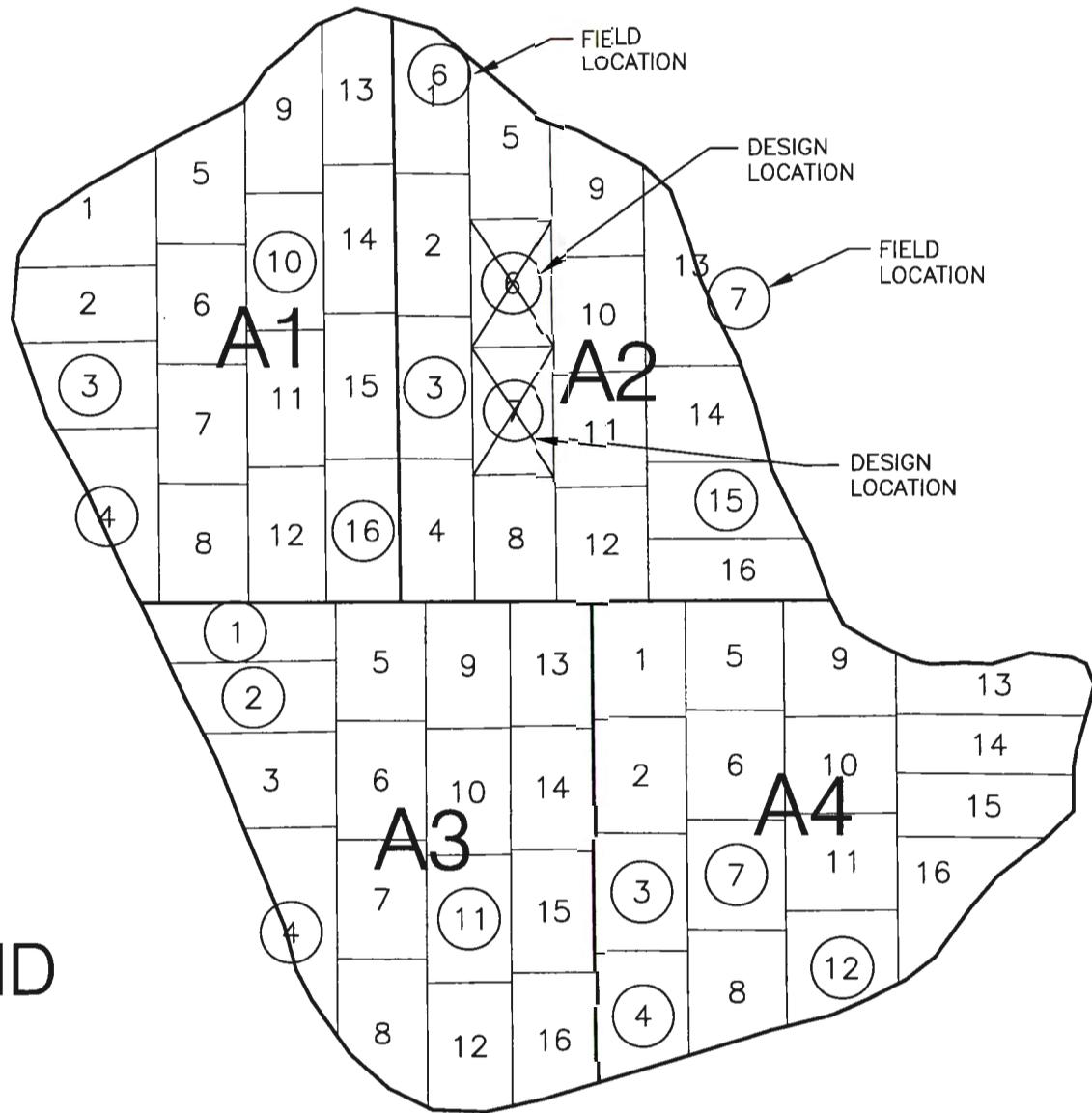


LEGEND

⑪ VERIFICATION SAMPLING NODE

A1 SAMPLING AREA

100-K AREA
118-K-1 BURIAL GROUND
TRENCH N
DEEP ZONE SAMPLE DESIGN



(20)

Attachment 21

Activity ID	Activity Name	% Cmpl	RD	Start	Finish	Qtr 4, 2012			Qtr 1, 2013			pr
						Oct	Nov	Dec	Jan	Feb	Mar	
100-C-7 Waste Site Remediation												
Excavation												
BC502A71	100-C-7:1 West Wall Add Excav (125,000 BCM)	1%	61.0	03-Oct-12 A	29-Jan-13	[Bar]			[Bar]			
Loadout												
BC502B91	100-C-7:1 Continued Stockpile Loadout (51,300 Tons)	1%	61.0	03-Oct-12 A	29-Jan-13	[Bar]			[Bar]			
BC502B41	100-C-7:1 West Wall Loadout (95,000 UST)	0%	56.0	16-Oct-12*	29-Jan-13	[Bar]			[Bar]			
Backfill												
BC502C11	100-C-7:1 Backfill (80,000 BCMs)	1%	61.0	03-Oct-12 A	29-Jan-13	[Bar]			[Bar]			
BC502C1	100-C-7 Backfill (352,000 BCMs)	0%	56.8	16-Oct-12*	29-Jan-13	[Bar]			[Bar]			
Closeout Sampling & Docs												
BC524G16	Prepare Work Instruction for 100-C-7:1 West Sidewall	0%	60.0	30-Jan-13*	15-May-13	[Bar]			[Bar]			
BC502D121	Closure Sampling & Analysis for 100-C-7:1 Stock Pile Areas	0%	42.0	30-Jan-13	15-Apr-13	[Bar]			[Bar]			
BC524G26	RL/Regulator Review Draft A Work Instruction for 100-C-7:1 West Sidewall	0%	26.0	14-Mar-13	29-Apr-13	[Bar]			[Bar]			
Powerpole Removal												
BC502G10A	100-C-7:1 Powerline Relocation	90%	21.0	13-Oct-11 A	12-Nov-12	[Bar]			[Bar]			

Attachment 22

Sinton, Gregory L

From: Laura Buelow <Buelow.Laura@epamail.epa.gov>
Sent: Wednesday, October 03, 2012 10:28 AM
To: Sinton, Gregory L
Subject: RE: Basis for 100-BC schedule proposed in Change Number M-15-12-03

I ran it by Dennis and he was fine with it. I concur.

Laura Buelow, Ph.D.
Project Manager
U.S. Environmental Protection Agency
Hanford Project Office
309 Bradley Blvd, Suite 115
Richland, WA 99352
Phone: 509 376-5466
Fax: 509 376-2396
E-mail: buelow.laura@epa.gov

▼ "Sinton, Gregory L" ---10/03/2012 10:12:24 AM---How I am actually hoping it will work is that we will provide drafts of the CN in January and we wil

From: "Sinton, Gregory L" <gregory.sinton@rl.gov>
To: Laura Buelow/R10/USEPA/US@EPA
Date: 10/03/2012 10:12 AM
Subject: RE: Basis for 100-BC schedule proposed in Change Number M-15-12-03

How I am actually hoping it will work is that we will provide drafts of the CN in January and we will not actually provide the final until it is ready for approval and I'll just hand carry around for signature per usual and it may be approved by January 31....but I thought I should put some reasonable timeframe (30 days) for approval after submittal, just in case there are more iterations.

From: Sinton, Gregory L
Sent: Wednesday, October 03, 2012 10:02 AM
To: buelow.laura@epamail.epa.gov
Cc: Sinton, Gregory L
Subject: Basis for 100-BC schedule proposed in Change Number M-15-12-03

For 100 PMM meeting minutes (provide this email and response as attachment).

This email is provided to document a common understanding between EPA and DOE project managers on the basis of the 100-BC milestone schedule proposed in TPA change number M-15-12-03. The schedule provided by the proposed milestones M-015-74, M-015-76, M-015-77, M-015-78, and M-015-79 is based on the assumption that the workplan and SAP revisions will be accomplished through the use of change notices. This should enable changes to be made quickly and allow field work to start as soon as possible to support the proposed enhanced monitoring. Assuming all planning activities are completed and change notices are submitted by January 31, 2013, as specified by the proposed M-015-74, it is anticipated that final approval of all change notices providing revisions to the workplan and SAP will be obtained by March 1, 2013 or sooner. If this is not the approach that is taken, and or the workplan and SAP revisions are not approved by that time, the proposed schedule will need to be re-evaluated based on a revised estimate of the approval dates for the workplan and SAP revisions.

Attachment 23

168001

^WCH Document Control

From: Capron, Jason M
Sent: Thursday, October 04, 2012 4:20 PM
To: ^WCH Document Control
Cc: Saueressig, Daniel G
Subject: FW: 100-C-7:1 Sidewall Sampling Approach

This documents a regulatory agreement. Please chronicle and provide the CCN when available. Thanks,

Jason

From: Post, Thomas C [mailto:thomas.post@rl.gov]
Sent: Thursday, October 04, 2012 4:17 PM
To: 'Laura Buelow'; Capron, Jason M
Cc: Saueressig, Daniel G; Strom, Dean N
Subject: RE: 100-C-7:1 Sidewall Sampling Approach

I concur Jason.

Thanks!

Tom

From: Laura Buelow [mailto:Buelow.Laura@epamail.epa.gov]
Sent: Thursday, October 04, 2012 1:06 PM
To: Capron, Jason M
Cc: Saueressig, Daniel G; Strom, Dean N; Post, Thomas C
Subject: Re: 100-C-7:1 Sidewall Sampling Approach

This is accurate. Thanks!

Laura Buelow, Ph.D.
 Project Manager
 U.S. Environmental Protection Agency
 Hanford Project Office
 309 Bradley Blvd, Suite 115
 Richland, WA 99352
 Phone: 509 376-5466
 Fax: 509 376-2396
 E-mail: buelow.laura@epa.gov

"Capron, Jason M" ---10/04/2012 12:28:12 PM---Tom & Laura- I apologize for not being available to join on this week's visit to B/C.

From: "Capron, Jason M" <jmcapron@wch-rcc.com>
 To: "Post, Thomas C" <thomas.post@rl.gov>, Laura Buelow/R10/USEPA/US@EPA
 Cc: "Strom, Dean N" <dnstrom@wch-rcc.com>, "Saueressig, Daniel G" <dqsauere@wch-rcc.com>
 Date: 10/04/2012 12:28 PM
 Subject: 100-C-7:1 Sidewall Sampling Approach

10/4/2012

Tom & Laura-

I apologize for not being available to join on this week's visit to B/C. Dean explained your discussion on the BCL sampling and verification approach to me, and we'd like to get it documented with next week's UMM, if you're both agreeable. Would you please let us know if the following language suffices:

During remediation of the 100-C-7:1 side wall, in-process sampling will generally be collected from 5-ft lifts of in situ material. Quick turn samples will be collected from zones of in situ material to support ACL vs BCL decisions. Material that is determined to be BCL will either be stockpiled or directly backfilled to the adjacent 100-C-7:1 excavation. Excess sample material from all samples determined to represent BCL material in a given day will be combined and sampled for full protocol analysis. All such full protocol samples will ultimately be used as the verification data set for the layback BCL material, and no further verification sampling of stockpiled or backfilled material will be performed to support interim site reclassification.

As always, please let me know if I've misrepresented anything or any further discussion is needed, and thanks,

Jason

10/4/2012

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Attachment 24

167967

^WCH Document Control

From: Saueressig, Daniel G
Sent: Tuesday, October 02, 2012 3:13 PM
To: ^WCH Document Control
Subject: FW: Status of 100-C-7:1 Cr(VI) investigation project
Please provide a chron number. This email documents a regulatory approval.

Thanks,

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

From: Biebrich, Ernest J
Sent: Tuesday, October 02, 2012 1:58 PM
To: Strom, Dean N; Saueressig, Daniel G; Carman, Hans M
Subject: FW: Status of 100-C-7:1 Cr(VI) investigation project

fyi

From: Laura Buelow [mailto:Buelow.Laura@epamail.epa.gov]
Sent: Monday, October 01, 2012 4:21 PM
To: Sinton, Gregory L
Cc: Wellman, Dawn M; Biebrich, Ernest J; Buckmaster, Mark A; Truex, Michael J; Post, Thomas C; Vermeul, Vince R
Subject: RE: Status of 100-C-7:1 Cr(VI) investigation project

I concur also.

Laura Buelow, Ph.D.
Project Manager
U.S. Environmental Protection Agency
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309 Bradley Blvd, Suite 115
Richland, WA 99352
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Fax: 509 376-2396
E-mail: buelow.laura@epa.gov

"Sinton, Gregory L" ---09/26/2012 11:59:40 AM---I concur with abandoning the aquifer tubes and associated tubing in place. I know WCH will be anxio

From: "Sinton, Gregory L" <gregory.sinton@rl.gov>
To: "Truex, Michael J" <mj.truex@pnnl.gov>, Laura Buelow/R10/USEPA/US@EPA, "Post, Thomas C" <thomas.post@rl.gov>
Cc: "Wellman, Dawn M" <Dawn.Wellman@pnnl.gov>, "Vermeul, V R (Vince)" <vince.vermeul@pnnl.gov>, "Buckmaster, Mark A" <MABUCKMA@wch-rcc.com>, "Biebrich, Ernest J" <ejbiebri@wch-rcc.com>
Date: 09/26/2012 11:59 AM
Subject: RE: Status of 100-C-7:1 Cr(VI) investigation project

I concur with abandoning the aquifer tubes and associated tubing in place. I know WCH will be anxious to know that we are "out of the way".

From: Truex, Michael J [<mailto:mj.truex@pnnl.gov>]

Sent: Wednesday, September 26, 2012 10:30 AM

To: Sinton, Gregory L; Buelow.Laura@epamail.epa.gov; Post, Thomas C

Cc: Wellman, Dawn M; Vermeul, V R (Vince); Buckmaster, Mark A; Biebrich, Ernest J

Subject: Status of 100-C-7:1 Cr(VI) investigation project

Greg/Laura/Tom,

The 100-C-7:1 Cr(VI) investigation report is progressing through PNNL clearance. Our intent is to provide you with a cleared draft report for your review in early October. We will then finalize the report after addressing your comments.

The temporary wells at the bottom of the entrance ramp have been decommissioned. However, as we discussed earlier, we propose to abandon the aquifer tubes and associated sample tubing that are on the excavation floor in place. These materials are not currently retrievable due to ponded water in the excavation and are not reusable or of intrinsic value. In this case, WCH would cover this material during backfill of the excavation.

Please let me know if you concur with abandoning the aquifer tubes and associated equipment on the excavation floor.

Mark/Ernie, please let us know if there are any logistical reasons why the aquifer tubes and associated sample tubing would need to be removed from the excavation floor.

Thanks,

Mike

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Attachment 25

300 Area Closure Project Status
October 11, 2012
100/300 Area Combined Unit Manager Meeting

Ongoing Activities

- 300-15 – Process sewer remediation north of Apple ongoing.
- 309 Reactor – Core drilling and lower reactor space interference removal ongoing.
- 340 Complex – Excavation of vault and transport ramp complete. Preparations for vault removal ongoing.
- 3730 – Continue hazardous material removal and hot-cell stabilization preparations.
- 308A – Preparing transport ramp and TRIGA reactor for removal.
- 323 – Below-grade demolition and tank removal initiated.
- 321 – Remediation excavation at design limits, plume continues to the south. Remediation of UPR-300-4 will resume following removal of 323 below-grade tanks.
- 329 – Initiated above-grade demolition.
- 310 – above-grade demolition complete, initiated below-grade demolition.
- 382 Complex – above-grade demolition ongoing.
- 324 – Preparing to replace steam coils as part of winterization. Initiated backfill of geo-probe excavation on north side of building.

Demolition & Remediation Preparation Activities

- 326 Building – characterization nearly complete, finalizing demolition approach.
- 331 Series – demolition preparations nearly complete.

60-Day Project Look Ahead

- Continue authorization reviews for asbestos abatement activities.
- Continue 340 Complex waste site remediation and preparations for vault removal.
- Prep and remove TRIGA reactor.
- Continue north of Apple process sewer (300-15) remediation.
- Continue 309 reactor removal activities.
- Complete 310 TEDF demolition.
- Complete above-grade 329 Building demolition.
- Complete 382 Complex demolition.
- Award last remediation procurement for waste sites south of Apple St.

Attachment 26

USE OF INERT RUBBLE AS BACKFILL

Issue

During the July 100/300 Area Unit Manager's Meeting, a question was raised regarding the use of inert rubble as backfill material during 300 Area CERCLA actions, specifically: Does placing inert demolition debris in excavations as backfill trigger any landfill closure requirements?

Discussion

The regulatory aspects associated with disposal of inert waste on the Hanford site was addressed several years ago. During discussions with the Benton-Franklin District Health Department (BFDHD) and the Washington State Department of Ecology (Ecology) in 1989, it was pointed out that the Revised Code of Washington (RCW) 70.95.240 allows a person to dispose of solid waste from his or her own activities at land owned by the person so long as the action does not violate statutes or ordinances or create a nuisance. Based on this statutory provision, the BFDHD concluded that the U.S. Department of Energy – Richland Operations (RL) could operate an inert/demolition landfill for waste generated on the Hanford site without having to obtain a permit. Ecology concurred with this interpretation, provided that the landfill complied with the provisions of WAC 173-304-461 (“Inert waste and demolition waste landfiling facility requirements”); demolition waste from commercial sources would not be accepted; and demolition waste generated off the Hanford site would not be accepted. Since the time of this determination, WAC 173-304 has been replaced with WAC 173-350 (“Solid Waste Handling Standards”); however, the exemption in RCW 70.95.240 remains unchanged.

In addition to the general statutory provision allowing on-site disposal, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Removal Action Work Plan (RAWP; DOE/RL-2004-77) for 300 Area facilities specifically allows use of clean rubble as backfill in waste sites. As stated in Section 2.6 of the RAWP: “After verification sampling of the site indicates that cleanup levels for both soils and any remaining below-grade structures (if present) have been met, the below-grade void spaces will be backfilled with nonhazardous/nonrecyclable material (e.g., clean concrete rubble and/or clean soil). Approximately the top 0.6 to 1 m (2 to 3.3 ft) will be backfilled with clean soil to facilitate future revegetation of the site.”

The 300 Area RAWP also specifically identifies WAC 173-350 with regard to management of solid waste: “Nondangerous solid waste will be managed in accordance with WAC 173-350, with an emphasis on recycling.” (See Section 4.2.3.4 of the RAWP.) WAC 173-350, like the predecessor solid waste regulations in WAC 173-340, establishes standards for inert solid waste landfills. The substantive closure requirements of these regulations could be considered applicable or relevant and appropriate requirements (ARARs) for use of clean rubble as backfill in 300 Area

CERCLA sites. The closure provisions of WAC 173-350-410(6) establish only one substantive requirement (two other provisions – notification to the health department 60 days prior to closure and deed recording with the county auditor – are administrative in nature):

- “Close the inert waste landfill unit by leveling the wastes to the extent practicable, or as appropriate for the proposed use, and fill all voids which could pose a physical threat for persons, or which provide disease vector harborage. The inert waste landfills shall be closed in a manner to control fugitive dust and protect the waters of the state”

The backfilling of 300 Area waste sites is performed in a manner that meets this standard.

Conclusion

Based on the exclusion in RCW 70.95.240, use of DOE-generated inert waste as backfill would not invoke inert landfill closure requirements. The 300 Area RAWP invokes WAC 173-350 standards for management of nondangerous waste. Use of inert material as backfill in accordance with the RAWP would satisfy the substantive requirement associated with closure of an inert waste landfill. As a consequence, the question of whether placing inert demolition debris in excavations as backfill triggers landfill closure requirements is rendered moot: The substantive closure requirement is met as an inherent part of performing the CERCLA work in any event.

Attachment 27

Environmental Protection Mission Completion Project

October 11, 2012

Long-Term Stewardship

- Continued drafting the 100-F turnover and transition package.

Remedial Investigation of Hanford Site Releases to the Columbia River

- An approval copy of the *Columbia River Component Risk Assessment: Volume II: Baseline Human Health Risk Assessment* (DOE/RL-2010-117, Rev. 0) has been delivered to DOE for routing for Tri-Party signatures. Production and distribution will occur after approvals have been obtained.

Document Review Look-Ahead

- None

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