

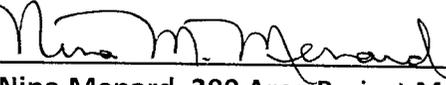
Meeting Minutes Transmittal/Approval  
Project Managers' Meeting  
200 Area Groundwater and Source Operable Units  
November 19, 2009

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APPROVAL:  DATE: 11/19/09  
Al Farabee, 200 Area Project Manager, DOE/RL

APPROVAL:  DATE: 11/19/09  
Briant Charboneau, 200 Area Unit Manager, DOE/RL

APPROVAL:  DATE: 11/19/09  
Craig Cameron, 200 Area Project Manager, EPA

APPROVAL:  DATE: 11/19/09  
Nina Menard, 200 Area Project Manager, Ecology

HFFACO Action Plan Section 4.1 requires signature of agreements and commitments made during the Project Manager Meeting. Approval of these minutes documents approval of agreements and commitments documented in Attachment 4 to these minutes. Approval does not apply to any other attachments, which are included in these minutes for informational purposes.

**RECEIVED**  
DEC 03 2009  
EDMC

Minutes of the 200 Area Project Managers' Meeting of November 19, 2009 are attached. Minutes are comprised of the following.

<b>Attachment 1</b>	<b>Attendance Record</b>
<b>Attachment 2</b>	<b>Agreements and Issues List</b>
<b>Attachment 3</b>	<b>Action Item List</b>
<b>Attachment 4</b>	<b>Operable Units and Facilities Status</b>
<b>Attachment 5</b>	<b>TPA-CN-297</b>
<b>Attachment 6</b>	<b>TPA-CN-308</b>
<b>Attachment 7</b>	<b>TPA-CN-309</b>
<b>Attachment 8</b>	<b>IC's at U Plant</b>

200 Area Project Managers' Status Meeting  
November 19, 2009

Please print clearly and use black ink

PRINTED NAME	ORGANIZATION	O.U. ROLE	TELEPHONE
Allan Danielson	WDOH		727-0645
Steuwéy Simon	ODOE		(541) 963-0853
DL Foss	CHPRC		5095544703
JD Williams	CHPRC		372 3553
Emy Laja	EPA		376-4919
Craig Cameron	EPA		376-8665
Doug Chyan	DOE-RL-0040		(509)373-9396
Chris Cuzzoffi	EPA		376-9529
Nina Monard	Ecology		372-7941
Arlene Tortosa	DOE-RL		372-9631
Nancy Huff	DOE-RL		372-5527
Frank Zaddy	DOE RL		372-0945
AL Farabee	" "		376-8087
RD Hildebrand	DOE-RL		373-9626
Rod Labos	EPA		376-3749
Brian Charbonneau	DOE		373-6137



**200 Area Project Managers' Meeting  
Agreements and Issues List  
November 19, 2009**

**Agreement:** TPA-CN-297

**Agreement:** TPA-CN-308

**Agreement:** TPA-CN-309

**Agreement:** No 200A PMM will be held in December 2009

**Issue:** None identified.

**Delegations for November 19, 2009 PMM meeting:**

EPA	Craig Cameron
Ecology	Nina Menard
DOE/RL	Briant Charboneau Al Farabee

# 200 AREA PROJECT NOVEMBER STATUS UPDATES

November 19, 2009

## Central Plateau Geographic Remediation

### **Key Facility Negotiations** (RL: Al Farabee) – (Tina Crane)

- The agreement in principle for negotiation of Central Plateau Facility disposition activities was signed by Tri-Parties August 13, 2008. Technical discussions began October 30, 2008.
- Strategy and TPA change proposals delivered to RL September 28, 2009 and October 19, 2009 respectively.
- HAB workshop held on October 29, 2009.

**Schedule Status:** Timeline has been extended to coincide with the Central Plateau Clean-up Strategy Negotiations.

Regulator Comments

### **CP MIS Utilization** (RL: Briant Charboneau/Frank Roddy) – (Dave Chojnacki)

- The haul road is completed. Contract has been issued for the excavation of the pond site. Waste profile development is in process. Sampling to ensure that ERDF waste acceptance criteria are met is underway. It has been determined the ERDF cans will be utilized for waste removal due to the anticipated levels of contamination. Projected start date for the excavation is scheduled for January 8.

**Schedule Status:** On schedule.

Regulator Comments

**U-Zone Remediation**

**221-U Disposition** (RL: Wade Woolery) – (Tina Crane)

- Loading of cell 4 with equipment was completed November 6, 2009.
- Loading of cell 7 on schedule for completion the week of November 17, 2009.
- Reactivation of the railroad tunnel is 95% complete.  
On November 19, 2009, RL met with EPA and Ecology to discuss the disposition of Cell 30 Tank.

**Schedule Status:** Canyon work activities on schedule.

Regulator Comments
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**U-Ancillary Facilities** (RL: Wade Woolery) – (Tina Crane)

- D&D operations are ongoing. Demolition preparation, such as application of fixative, and asbestos removal activities continue in 224-U/UA.

**Schedule Status:** U Plant Ancillary Facilities work activities on schedule.

Regulator Comments
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**200-UW-1**

- 200-UW-1 is part of the U-Zone remediation and is reported on later in this presentation.

**200 North Remediation**

**212-N, P, R** (RL: Wade Woolery) – (Tina Crane)

- Basin demolition, which includes removal of meter of soil beneath the basins and disposal of the soil and debris was completed at 212-N/P/R on November 14, 2009.

- Samples and radiological surveys of the remaining soil beneath the basins are to be completed the week of November 30, 2009.

**Schedule Status:** 212-N, P, R Demolition project on schedule.

Regulator Comments

**200-CW-3 Waste Sites (RL: Wade Woolery) – (Tina Crane)**

- Waste site sampling is complete. Verification packages for CS/NFA sites are complete and comments have been incorporated; one of four (Package for 600-285-PL, 600-286-PL, and 600-287-PL pipelines) has been approved by EPA;; remaining three are in transmittal process with completion anticipated the week of November 16. Sampling summary reports for the three RTD sites have been completed and sent to RL. Site contouring and backfilling activities for CS/NFA sites are ongoing with project completion expected in January 2010.  
TPA changes notices for RAWP and SAP to incorporate verification sampling at 216-N-1, 216-N-4 and 216-N-6 sites are under review at RL.

**Schedule Status:** On schedule.

Regulator Comments

**Rail Car Disposition Options Study (RL: Frank Roddy) – (Tina Crane)**

- Details of regulatory path forward for disposition being identified and addressed.
- Regulatory path forward is for a new EE/CA similar to the 200 North EE/CA, but with plug-ins for additional railcars.

**Schedule Status:** TBD.

Regulator Comments

**200-BC Control Area (BCCA) Ecology Lead** (RL: Doug Chapin) – (Bo Wier)

- Soil removal activities in Zone A were continued, using three super dump trucks in service. Procurement of more super dump trucks (four to six) was continued. To date, approximately 8,700 cumulative tons of soil have been excavated and disposed of at ERDF.
- CHPRC is scheduled to present the results of late September 2009 – early October 2009 helicopter aerial survey to DOE on November 30, 2009.

**Schedule Status:** On Schedule.

Regulator Comments

**Central Plateau Groundwater and Source Operable Units****200-UP-1 Ecology Lead** (RL: Naomi Hake) – (Curtis Wittreich)  
**(M-15-17A, 9/30/10, Combined Remedial Investigation/Feasibility Study Report, and Proposed Plan)**

- Preparation of the combined RI/FS report continues on schedule.
- The Draft A of Revision 3 to the 200-UP-1 OU Groundwater Remedial Design/Remedial Action Work Plan (DOE/RL-97-36, Rev 3) is remains under regulator review. Ecology requested a 30-day extension with a new submittal date of November 2, 2009. Received comments from Ecology on November 12, 2009.
- 200-UP-1 interim action pump-and-treat system in the vicinity of U was shutdown October 15 due to accommodate an ETF outage, which is expected to last for several weeks.

**Schedule Status:** On schedule.

Regulator Comments:

**200-ZP-1 EPA Lead (RL: Arlene Tortoso) – (Mark Byrnes)  
(M-16, -124, 8/31/10, Submit 200 ZP-1 Remedial Design Report)**

**Remediation Treatment Status:**

- ARRA: 12 of the 14 groundwater extraction wells are on line pumping water at a rate of approximately 295 gpm. Extraction wells 299-W15-34 is offline due to electrical problems. Extraction well 299-W15-36 will be kept offline due to very low flow rates.
- ARRA: Extraction wells 299-W11-45 and 299-W11-46 are currently off line due to the drier breakdown at ETF. These two wells will remain off line until repairs are complete or until temperatures drop significantly and freezing of pipelines become an issue.
- ARRA: Continuing work on 90% design of 200 West Area Groundwater Treatment Facility and balance of plant.
- ARRA: Drilling, sampling, and construction of new ZP-1 extraction well EW-4 (299-W14-74, C7024), and EW-5 (299-W12-2, C7027) is complete.
- ARRA: Drilling and sampling of new ZP-1 extraction well EW-19 (299-W12-4, C7029), EW-15 (299-W14-21, C7494), EW-18 (299-W12-3, C7028) is complete. Construction activities for these three wells continue.
- ARRA: Drilling and sampling of new ZP-1 extraction well EW-8 (299-W11-93, C7026) is currently at a depth of 452 ft.
- ARRA: Currently merging the CERCLA Integrated Monitoring Plan with the Performance Monitoring Plan. Meeting with RL, EPA, and Ecology occurred November 3, 2009.
- ARRA: Continuing to preparing sample authorization forms, other sampling paperwork, and running analytical tests in support of ARRA drilling.
- Drilling, sampling, and construction of new ZP-1 extraction well EW-2 (299-W14-20, C7018) is complete.
- Engineering design is near complete for connecting extraction well 299-W15-225 (EW-1) to the ZP-1 interim treatment facility. A task order is currently in place for Construction Forces to implement the work. Materials will be ordered shortly.
- Resin testing is ongoing at the Corvallis laboratory to determine the amount of carbon tetrachloride that the Purolite A530E and SIR 1200 resins will uptake.
- Work on the Operations and Maintenance Plan for the 200-West Area Groundwater Treatment Facility continues.
- A literature search is currently being performed on using GAC to remove Tc-99 from groundwater. Treatability testing may follow.

**Schedule Status:** On schedule.

Regulator Comments

**200-PW-1, 200-PW-3, & 200-PW-6 EPA Lead** (RL: Arlene Tortoso) – (Kathy Davis, Mark Byrnes, Virginia Rohay PW-1 SVE)

- Held an issue discussion meeting with EPA and Ecology to discuss contaminant screening and COC identification, and the inclusion of pipelines associated with disposal sites for the 200-PW-1/3/6 FS. A schedule for submittal of the Rev 0 FS, to include resolution of the new comments, will be developed after final comment resolution.
- EPA has sent a letter to RL requesting additional actions specified in the letter to resolve remaining comments on the 200-PW-1,3,6 FS, and inclusion of the pipelines in the FS. DOE is preparing responses to these comments and will updating the schedule for completing the FS and PP.
- DOE and EPA have agreed on a path forward to issue the combined Proposed Plan with the CW-5 Operable Unit.

Soil Vapor Extraction System (SVE):

- Monthly monitoring results for October 2009 for the soil vapor probes and wells were consistent with the results from previous monitoring.
- The two new SVE units have been shut down for the winter, as scheduled.
- The monitoring plan for October 2009 through March 2010 was approved by the RL and EPA Project Managers on 09/30/09. The signed plan was attached to the Project Managers' Meeting minutes for transmittal to the Administrative Record.

**Schedule Status:** A revised schedule is under development to resolve new comments in the PW-1/3/6 Feasibility Study and a combined Proposed Plan (combined with 200-CW-5).

Regulator Comments

**Deep Vadose Treatability Test M-15-53** (RL: John Morse) – (Glen Chronister)

**(M-15-54, 1/31/2010, Submit report on Reactive Gas testing for sequestration of Uranium that will support remedial action decision making)**

- Desiccation Pilot Test:
  - An RFP for procurement of the dry air injection system is being prepared following comment incorporation from the DVZTT project team and

engineering. Engineering for the instrumentation and monitoring systems, as well as power distribution continue and procurement of instrument monitoring has been initiated. Another RFP should be issued in mid to late November to support the drilling and instrumenting of 20 additional boreholes at the BC Cribs and Trenches site to support the Desiccation Pilot Test.

- Characterization Testing:
  - A comprehensive test report on soil characterization and permeability was informally transmitted to DOE-RL this week for review and comment. This report compiles the results of the borehole analysis, permeameter results, laboratory desiccation tests and modeling, and characterization field test results. It is anticipated that DOE-RL will complete their review prior to Thanksgiving and return the document to CHPRC for comment inclusion by the end of the month. Once those comments are incorporated, it will undergo a final tech edit, followed by CHPRC review and approval, and then be transmitted to DOE-RL as a Test Report for their approval before the associated PI due date of January 30, 2010 (anticipated completion date to send the final report to DOE is December 17, 2009).
- Desiccation Lab Testing (PNNL):
  - FY09 Laboratory experiments supporting pilot test design are complete. Tests focused on tracer gas use, evaluation of desiccation in heterogeneous media, and incorporation of results into flow and transport modeling. The associated report has been written and was transmitted from PNNL to CHPRC at the end of September. Additional testing will be performed in FY10 that will investigate re-wetting as a result of recharge and water vapor transport.
- Uranium Sequestration Testing (PNNL):
  - PNNL has prepared additional large scale soil test columns for additional testing and modeling support in FY10 that will be used as the basis for adaptation to a field scale test scheduled for FY11. Additionally, a test report has been drafted and reviewed by CHPRC and is now in tech editing. PNNL anticipated sending this back to CHPRC by the end of this week. Upon receipt, we will informally transmit this document to RL for review and comment. This document will ultimately be submitted to DOE-RL to satisfy TPA-015-54 due January 31, 2010 (anticipated completion date to send the final report to DOE is January 11, 2010).
- Soil Flushing (PNNL):
  - PNNL continues to prepare a Test Plan to evaluate soil flushing as a mechanism to contact targeted contamination in the vadose zone with a leaching solution. The laboratory will be performing these tests to evaluate kinetics and stability of solubilization of Tc-99 and uranium, transport properties of the solubilized Tc-99 and uranium, and impact of vadose zone sediment properties on leaching solution processes. Additional modeling will also be performed to assess distribution,

location, and stratigraphic factors that control the distribution of vadose contaminants and movement of injected fluids.

- Grouting (PNNL):
  - PNNL is preparing a Test Plan to evaluate grouting as a mechanism to contact targeted contamination in the vadose zone to react, stabilize, or isolate the contaminants. The laboratory will also use these results to model the grouting lab work to assess the distribution, location, and stratigraphic factors that control the distribution of vadose zone contaminants.

**Schedule Status:** On schedule to meet TPA milestone.

Regulator comments:

**200-CS-1 Ecology Lead** (RL: Greg Sinton) – (Ron Brunke)

Discussions are on-going concerning incorporation of most of the CS-1 waste sites into an outer area ROD (all except 216-B-63 and 216-A-29).

**Schedule Status:** No near term milestone, other than for M-16-00.

Regulator Comments

**200-CW-5 EPA Lead** (RL: Greg Sinton) – (Kathy Davis)

- DOE and EPA have agreed on a path forward to issue the combined Proposed Plan with the PW-1/3/6 Operable Unit. The CW-5 Feasibility Study will be updated to increase comparability with the PW-1/3/6 Feasibility Study to better support public meetings.

**Schedule Status:** A revised schedule is under development to support the production of a revised Feasibility Study for CW-5 and a combined Proposed Plan (combined with 200-PW 1/3/6).

Regulator Comments

**200-CW-1 Ecology Lead (RL: Greg Sinton) – (Ron Brunke)**  
**(M-015-38B, 11/30/2010, Feasibility Study/Proposed Plan)**

- Discussions are on-going about including most of the CW-1 sites in a new “Outer Area” ROD (all but 216-T-4B and 216-U-10).
- Remaining CW-1 supplemental characterization sampling is now anticipated to be accomplished in January 2010.

**Schedule Status:** The M-15-08-07 TPA change package was signed August 11, 2009 and maintains the M-15-38B FS/PP due date of November 30, 2010. The change package issued for public comment had a proposed due date of September 30, 2011, but this was revised to the original date (November 30, 2010), with a scope change to limit the scope to the outer area waste sites.

Regulator Comments

**200-BC-1 EPA Lead (RL: Greg Sinton) - (Mike Hickey)**  
**(M-15-51, 9/30/10, Feasibility Study/Proposed Plan)**

- Issued `Data Quality Assessment report.
- Received EPA comments on the draft excavation based treatability test report. Draft responses were provided to EPA for review November 12. Expect formal transmittal of responses to EPA by November 23.
- RESRAD analysis complete. Updating risk assessment portion of the FS.

**Schedule Status:** On schedule.

Regulator Comments

**200-SC-1 EPA Lead (RL: Greg Sinton) – (Mike Hickey)**  
**(M-15-40E, 12/31/10, Feasibility Study/ Proposed Plan for 200-SC-1)**

- The project safe store report was finalized and this project is in safe store.

**Schedule Status:** The project activities funded for this OU in FY09 are related to completing FY08 field activities and consolidating project information and actions to date. A change package that addresses the 200 SC-1 schedule is planned to be prepared by December 31, 2009, as specified in the M-15-40E interim milestone.

Regulator Comments

**200-UW-1 Ecology Lead** (RL: Kevin Leary) – (Marty Doombos)

- Prepared responses to review comments on 200-UW-1 OU remedial action goals (RAGs) modeling methodology documents (DOE/RL-2007-34, Rev. 0; and DOE/RL-2007-35, Rev. 0). Began preparation of the Rev. 1 versions of these documents, incorporating those text changes agreed upon at the second comment resolution meeting on October 26. Unresolved issues are being addressed through information exchanges between the Tri-Parties, and the results of these discussions will also be incorporated into the Rev. 1 versions.
- DQOs and SAPs to support future field characterization work at the 216-U-8 and 216-U-12 Cribs are currently undergoing internal review.
- The Proposed Plan for 200-UW-1 has been revised and is undergoing internal review.
- The revision of the Draft On-Scene Coordinator Report for the Time-Critical Removal Action at 200-W-42 is nearing completion.

**Schedule Status:** Preparation of the revised 200-UW-1 Proposed Plan is on schedule to be delivered to Ecology by March 31, 2010.

Regulator Comments

**200-IS-1 Ecology Lead** (RL: Kevin Leary) – (Greg Berlin)  
**(M-13-27, 6/30/07, RI/FS Work Plan)**

- 241-CX Tank System Closure Plan, Rev 0 was approved by DOE on October 1, 2009 and by Ecology on October 13, 2009.

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**Schedule Status:** Updates for the Hexone Tanks Closure Plan are underway.

Regulator Comments:

**200-PW-2 & 200-PW-4 Ecology Lead** (RL: Doug Hildebrand) – (Mike Hickey)  
**(M-15-43D, 12/31/10, Feasibility Study and Revised Recommended Remedy(ies))**

**216-B-12 and 216-C-1 Boreholes:** Field work planning complete. Drilling has commenced on 216-C-1. Borehole 216-B-12 will start once “L-well” is complete.

**Schedule Status:** Field work planning is complete for both boreholes.

Regulator Comments

**200-BP-5 EPA Lead** (RL: Doug Hildebrand) – (Curtis Wittreich)  
**(M-15-82, 12/31/10, Treatability Test Plan; M-15-21A, 12/31/2012, Feasibility Study/Proposed Plan)**

- Remedial Investigation:
  - Initiated drilling of the L well (C7514) adjacent to 216-C-1 Crib. Drilling of the K Well (C5860) adjacent to 216-B-6 is scheduled to start in November 2009.
  - Initiated the depth discrete groundwater sampling activity for 14 wells in the B Complex Area.
  - Initiated work on the Remedial Investigation (RI) Report that includes a data quality assessment (DQA) of groundwater data within the operable unit.

**Schedule Status:** The 200-BP-5 Conceptual Transport Model Report is expected to be finalized by early FY10. Drilling of the K, L and M wells was initiated and is expected to be completed by July 2010. The Draft A RI Report is scheduled to be completed by November 2010.

Milestone M-15-82 requires submittal of a treatability test plan for the U/Tc plume near WMA B/BX/BY by December 31, 2010 and is on schedule. Milestone M- M-15-21A requires submittal of the Draft A Feasibility Study and Proposed Plan by December 31, 2012.

Regulator Comments

**200-PO-1 Ecology Lead (RL: Doug Hildebrand) – (Curtis Wittreich)  
(M-15-73, 12/31/2011, Submit FS Report and PP for 200-PO-1)**

- Remedial Investigation (RI) Report:
  - Preparation of the RI report continues.

**Schedule Status:** The Draft A RI Report is scheduled to be completed by Spring 2010. Milestone M-15-73 requires submittal of the Draft A Feasibility Study and Proposed Plan by December 31, 2011.

Regulator Comments

**200-SW-1 Ecology Lead (RL: Kevin Leary) – (Ron Brunke)**

- The NRDWL and SWL closure plans were submitted to Ecology on November 2, 2009. In the transmittal letter RL proposes a meeting within 30 days to chart a realistic path forward to make use of available American Recovery and Reinvestment Act funding for the closure of these landfills prior to October 2011.

**200-SW-2 Ecology Lead (RL: Frank Roddy) – (Greg Berlin)**

- RI/FS Work Plan (Rev 0) was approved by RL and Ecology on December 22, 2008.
- Geophysical investigations have been performed at 218-E-10, 218-E-12B, 218-W-4B, and 218-W-4C to support procedural closure of unused TSD landfill areas; final report preparation is underway. Passive organic vapor samplers (~350 total) have been installed in 200 East and West Area landfills, removed and shipped for lab analyses; the investigation report should be completed by December 2009.

**Schedule Status:** Non-intrusive characterization tasks (i.e., surface geophysics and passive organic vapor sampling) are now funded using ARRA support. Field activities began in August and continue into FY2010.

Regulator Comments

**200-MW-1 EPA Lead** (RL: Frank Roddy) – (Mike Hickey)  
**(M-15-44B, 2/28/2010, Feasibility Study, M-015-44C, 02/28/2011, Submit Proposed Plan)**

- Transmitted the decisional draft FS and PP to RL for review and comment.

**Schedule Status:** On schedule to meet modified TPA interim milestone M-015-44B. February 28, 2010.

Regulator Comments

**200-MG-1/200-MG-2 Model Group 1 Sites** (RL: Frank Roddy) – (Greg Berlin)  
**(M-15-49a, 12/31/08, MG-1 EE/CA) Ecology Lead**  
**(M-15-49B, 12/31/08, MG-2 EE/CA) EPA Lead**

- The 200-MG-1 EE/CA (Rev. 0, 194 waste sites) was published in June 2009.
- The 200-MG-1 AM (Rev. 0, 11 Outer Zone waste sites) was approved and published in July 2009.
- The 200-MG-1 SAP (Rev. 0, 11 Outer Zone waste sites) was published in September 2009.
- A draft 200-MG-1 RAWP (11 Outer Zone waste sites) Rev 0 is in transmittal process.
- The 200-MG-2 EE/CA (Rev. 0, 34 waste sites) was published in May 2009.
- A draft 200-MG-2 AM (Rev 0, 34 waste sites) is in the transmittal process.

- The 200-MG-1 AM (Draft A, 37 waste sites) has been forwarded to RL for approval and transmittal to Ecology.

**Schedule Status:** On schedule.

Regulator Comments
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**200-LW-1/200-LW-2 Ecology Lead** (RL: Frank Roddy) – (Mike Hickey)  
**(M-15-46B, 12/31/11, Feasibility Study/Recommended Remedy) Ecology**

**216-B-6 Borehole C5860:**

- Field work planning complete. Mobilization is underway.

**Schedule Status:** Other than the C5860 borehole (above), the project activities funded for this OU in FY09 are related to completing FY08 field activities and consolidating project information and actions to date. A change package that addresses the 200-LW-1/2 schedule is planned to be prepared by December 31, 2009 as specified in the proposed M-15-446B interim milestone. Obtain samples at the 216-B-6 (“K-well”) borehole November 2009-June 2010.

Regulator Comments
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**Ecological Risk Assessment** (RL: James Hansen) – (John Lowe)

Work continues on the revisions to the Central Plateau Ecological Risk Assessment Report. Work has begun to more fully document and improve the transparency of the ecological risk assessment data, with the assistance of Neptune and Company. Key areas being addressed in the revision of the CP ERA report include:

- 1) A more detailed presentation of sampling and analytical data showing how the data link to the various investigation phases;
- 2) A more transparent presentation of the methods used in the CP ERA, especially the use of MIS and reference areas;
- 3) A more detailed description of the process for identifying waste sites where ecological exposure pathways were analyzed;

- 4) A more detailed description of the selection process for contaminants of potential ecological concern (COPECs);
  - 5) A discussion of the potential for exposure from biointrusion; and
  - 6) A more detailed discussion of the uncertainties associated with various analysis methods, including identification of potential data needs to address those uncertainties.
- Activities associated with the CP ERA are being coordinated with the RI/FS for sites in OUs that are located in the proposed "Outer Area" of the Central Plateau. Ecological risk conclusions will not be presented in the revised CP ERA report, but will be incorporated into the risk assessments supporting the Outer and Inner Area decision documents

**Schedule Status:** The schedule for the ecological risk assessment will support proposed plans for the Outer and Inner Areas. A revised draft report is scheduled to be provided to DOE in March 2010, and provided to the agencies in June 2010.

Regulator Comments

**Well Decommissioning Status:** (RL: Frank Roddy) - (Chris Wright)

- Initial screening of candidates for decommissioning being performed with groundwater and source OU leads, DOE, and Ecology.
- Funding from ARRA for 350 wells.

**Schedule Status:** Decommissioning field work planned to begin in December 2009.

Regulator Comments

**200-TW-1 & 200-PW-5 EPA Lead** (RL: Arlene Tortoso) – (Mike Hickey)  
**M-15-42D, 12/31/11, Feasibility Study/Proposed Plan for TW-1 & PW-5)**

**Schedule Status:** No FY09 activities are scheduled for this OU. A change package that addresses the 200-TW-1 & PW-5 schedule is planned to be prepared by December 31, 2009 as specified in the proposed M-15-42D interim milestone.

Regulator Comments

**200-TW-2 Ecology Lead** (RL: Arlene Tortoso) – (Mike Hickey)  
**(M-15-42E, 12/31/11, Feasibility Study/Revised Recommended Remedy(ies) for TW-2)**

**Schedule Status:** No FY2009 activities are scheduled for this OU. A change package that addresses the 200-TW-2 schedule is planned to be prepared by December 31, 2009 as specified in the proposed M-15-42E interim milestone.

Regulator Comments

**200-UR-1 Ecology Lead** (RL: Frank Roddy) – (Ron Brunke)

- The DQO process identified additional data collection to support refinement of the conceptual site model (CSM), to determine distribution of chemical and radionuclide constituents in soil, salts, and water, and to determine if constituents above background are naturally concentrated by the evaporative process or due to past disposal activities.
- The West Lake SAP includes sampling of salt, salt-soil mixtures, sediment, surface water, and groundwater with testing for radionuclides, metals, polychlorinated biphenyls (PCBs) (solid matrices only), and general chemistry parameters.

**Scheduled Status:** RL Review of Decisional Draft: December 2009; Transmit Draft A/SAP to Ecology: Late January.

Ecology Review: February-June 2010; SAP Approved: June 2010; Field Sampling: June 2010; FSR / DQA Reports: October 2010.

Regulator comments

200 Area Project Managers' Meeting  
November 19, 2009

Attachment 3  
CHPRC-0900225.7

OPEN ACTION ITEM TRACKING

Action #	Action/Subject	Assigned To	Owed To	Assigned Date	Original Due Date	Adjusted Due Date	Status
117	DOE to provide a schedule for completing the ECO Risk Assessment.	RL- Jim Hansen	EPA/Ecology	1/15/09	2/19/09	11/19/09	CLOSED. Jim Hansen provided an overview and schedule at 11/19/2009 meeting.
124	Discuss IC's for U Area	RL-Doug Chapin	EPA	9/11/2009	10/15/2009	11/19/2009	CLOSED. See Attachment 8.
125	Provide the schedule for West Lake SAP characterization work.	RL-Frank Roddy	Ecology	10/15/2009	11/19/2009	11/19/2009	CLOSED. See text of meeting minutes.



Change Notice for Modifying Approved Documents/Workplans  
In Accordance with the Tri-Party Agreement Action Plan,  
Section 9.0, *Documentation and Records*

Change Number	Document Submitted Under Tri-Party Agreement Milestone	Date:													
TPA-CN-297	N/A	09/22/2009													
Document Number and Title: DOE/RL-2000-40, <i>Waste Management Plan for the Expedited Response Action for 200 West Area Carbon Tetrachloride Plume and the 200-ZP-1 and 200-PW-1 Operable Units</i> , Revision 8.		Date Document Last Issued: December, 2008													
Originator: J. Morse, RL		Phone: 509-376-0057													
Description of Change: Add seven additional extraction/injection wells.															
<p><u>B. L. Charboneau, RL</u>, and <u>E. Laija, U. S. Environmental Protection Agency</u>, the lead regulatory agency, agree that the proposed change modifies an approved work plan/document and will be processed in accordance with the Tri-Party Agreement Action Plan, Section 9.0, <i>Documentation and Records</i>, and not Chapter 12.0, <i>Changes to the Agreement</i>.</p> <p>The following changes are made to <i>DOE/RL-2000-40 (Revision 8, December, 2008)</i>:</p> <p>Seven additional extraction/injection wells are planned to be drilled during FY 2010. The wells are C7573 (299-W10-35), C7574 (299-W15-226), C7575 (299-W15-227), C7576 (299-W17-2), C7577 (200-W17-3) C7578 (699-45-67) and C7579 (699-43-67). Table A-2, page A-3, of DOE/RL-2000-40, Revision 8, is amended to include these wells.</p>															
<p>dded text is shown in gray shading on the attached affected page of DOE/RL-2000-40, Revision 8.</p>															
<p><b>Justification and Impacts of Change:</b></p> <p>Additional extraction and injection wells are planned to be drilled in FY2010. These will be used by the 200 West Pump and Treat Facility that is being designed for treatment of groundwater from the 200 West carbon tetrachloride plume. These changes will be included in the next revision to DOE/RL-2000-40, <i>Waste Management Plan for the Expedited Response Action for 200 West Area Carbon Tetrachloride Plume and the 200-ZP-1 and 200-PW-1 Operable Units</i>.</p>															
<p><b>Approvals:</b></p> <table border="1"> <tr> <td>  RL Project Manager                 </td> <td>                     10-01-09 Date                 </td> <td> <input checked="" type="checkbox"/> Approved                 </td> <td> <input type="checkbox"/> Disapproved                 </td> </tr> <tr> <td>  EPA Project Manager                 </td> <td>                     9/30/09 Date                 </td> <td> <input checked="" type="checkbox"/> Approved                 </td> <td> <input type="checkbox"/> Disapproved                 </td> </tr> <tr> <td></td> <td>                     _____ Date                 </td> <td> <input type="checkbox"/> Approved                 </td> <td> <input type="checkbox"/> Disapproved                 </td> </tr> </table>				 RL Project Manager	10-01-09 Date	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	 EPA Project Manager	9/30/09 Date	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved		_____ Date	<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved
 RL Project Manager	10-01-09 Date	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved												
 EPA Project Manager	9/30/09 Date	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved												
	_____ Date	<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved												

Table A-2. 200-ZP-1 Chemical Monitoring Well List. (2 sheets)

			LLWMA-17
			299-W10-34 <sup>a</sup>
			299-W11-94 <sup>a</sup>
			T8 <sup>a</sup>
			T9 <sup>a</sup>
			T11 <sup>a</sup>
			T12 <sup>a</sup>
			T13 <sup>a</sup>
			299-W15-225 <sup>b</sup>
			299-W14-20 <sup>b</sup>
			299-W14-21 <sup>b</sup>
			299-W14-73 <sup>b</sup>
			299-W14-74 <sup>b</sup>
			299-W12-2 <sup>b</sup>
			299-W11-49 <sup>b</sup>
			299-W11-50 <sup>b</sup>
			299-W11-90 <sup>b</sup>
			299-W11-91 <sup>b</sup>
			299-W11-92 <sup>b</sup>
			299-W11-93 <sup>b</sup>
			299-W12-3 <sup>b</sup>
			299-W12-4 <sup>b</sup>
			RPM <sup>i</sup>
			299-W10-35
			299-W15-226
			299-W15-227
			299-W17-2
			299-W17-3
			699-45-67
			699-43-67

NOTE: Shading indicates current changes.

<sup>a</sup> Wells added to support technetium-99 investigations by 241-T Tank Farm.

<sup>b</sup> Abandoned/decommissioned; replaced by well 299-W11-46.

<sup>c</sup> 200-ZP-1 new wells to be installed in vicinity of Old Laundry Facility and T Plant.

<sup>d</sup> Replacement for well C5101.

<sup>e</sup> Formerly well 699-51-60.

<sup>f</sup> Compliance monitoring.

<sup>g</sup> Detection monitoring.

<sup>h</sup> FY 2009 200-ZP-1 Extraction wells

<sup>i</sup> Remediation performance monitoring well located on east side of 200-W Area



**Change Notice for Modifying Approved Documents/Workplans  
In Accordance with the Tri-Party Agreement Action Plan,  
Section 9.0, Documentation and Records**

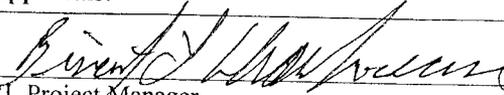
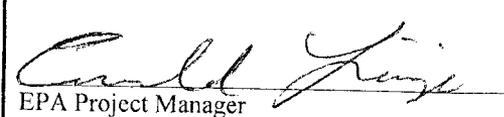
<b>Change Number</b>	<b>Document Submitted Under Tri-Party Agreement Milestone</b> N/A	<b>Date:</b>		
TPA-CN-308		October, 2009		
<b>Document Number and Title:</b> DOE/RL-2008-57, Revision 1, Sampling and Analysis Plan for the First Set of Remedial Action Wells in the 200-ZP-1 Operable Unit		<b>Date Document Last Issued:</b> August, 2009		
<b>Originator:</b> S. Simmons, CHPRC		<b>Phone:</b> 509-376-3509		
<b>Description of Change:</b> Delete requirement to collect samples for sediment carbon content and gamma energy analyses.				
<p>B. L. Charboneau, RL, and E. Lajja, U. S. Environmental Protection Agency, the lead regulatory agency, agree that the proposed change modifies an approved work plan/document and will be processed in accordance with the Tri-Party Agreement Action Plan, Section 9.0, <i>Documentation and Records</i>, and not Chapter 12.0, <i>Changes to the Agreement</i>.</p> <p>The following change is made to DOE/RL-2008-57 (Revision 1, August, 2009):</p> <p>Delete the requirement to collect samples for sediment carbon content and gamma energy analyses in extraction wells EW-4, EW-5, EW-8, EW-15, EW-18, and EW-19.</p> <p>Table 3-1, Well Sample Locations and Depth, of DOE/RL-2008-57, Revision 1, is amended to delete this sampling requirement.</p> <p>Deleted text is shown in <del>single line strike out</del> on the attached affected page of DOE/RL-2008-57, Revision 1.</p>				
<b>Justification and Impacts of Change:</b>				
<p>These samples were originally requested to be collected by PNNL. PNNL has since determined that these analyses are not needed.</p>				
<b>Approvals:</b>				
 RL Project Manager	10-20-09 Date	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	
 EPA Project Manager	10/21/09 Date	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	
	_____ Date	<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	

Table 3-1. Well Sample Measurement Locations and Depth.

Sampling Location	Aquifer Sampling Depth, Frequency, and Analysis (ft bgs)		
	Vadose Zone Sampling Depth, Frequency, and Analysis (ft bgs) <sup>a</sup>	Water Samples	Soil Samples (Sediment) Below Water Table <sup>a</sup>
EW-1, EW-2, and EW-3	<p>Ground surface to water table at each of the three wells:</p> <ul style="list-style-type: none"> <li>During drilling, archive <b>grab</b> samples will be collected every 5ft or where lithology changes occur in one pint jar from the drill cuttings.</li> <li>From 95 to 130 ft bgs at each of the three wells:</li> <li>Every 5 ft, <b>grab</b> one pint jar from drill cuttings per tank farm contractor characterization process (RPP-ENV-38838, 2008).</li> </ul> <p>Three samples at each extraction well (9 samples total) from <b>split-spoon</b>:</p> <ul style="list-style-type: none"> <li>2 to 5 ft above predicted Cold Creek unit, or in Cold Creek unit at a minimum: <ul style="list-style-type: none"> <li>Tier 1 (in accordance with Table 1-7)<sup>b</sup></li> </ul> </li> <li>10 ft above predicted water table: <ul style="list-style-type: none"> <li>Table 1-2 constituents (in accordance with Table 1-7)</li> <li>Tier 1 (in accordance with Table 1-7)<sup>b</sup></li> </ul> </li> <li>Water table (capillary fringe): <ul style="list-style-type: none"> <li>Table 1-2 constituents (in accordance with Table 1-7)</li> <li>Tier 1 (in accordance with Table 1-7)<sup>b</sup></li> </ul> </li> </ul>	<p>During drilling, water samples to be collected (in accordance with Section 3.5.6) at 20-ft intervals throughout aquifer, unless visual observation in aquifer material change by the field geologist calls for 10-ft intervals for further clarification:</p> <ul style="list-style-type: none"> <li>Carbon tetrachloride, Tc-99 and nitrate quick-turnaround samples<sup>c</sup></li> <li>Table 1-2 constituents at standard turnaround time (in accordance with Table 1-8)</li> <li>Field screening parameters (temperature, pH, dissolved oxygen, and NTU).</li> </ul>	<p>During drilling, soil samples to be collected:</p> <ul style="list-style-type: none"> <li>Every 5 ft, <b>grab</b> one pint jar from drill cuttings for geologic archive samples.</li> <li>Every 20 ft, in correlation with aquifer water samples, <b>grab</b> two composite samples in pint jars from drill cuttings over the 20 ft interval for field screening grain-size (sieve) analysis.</li> <li>Every 20 ft, in correlation with the aquifer water samples <b>grab</b> samples for sediment carbon content and gamma energy analysis but <u>ONLY</u> analyze the one sample collected from the carbon tetrachloride maximum water concentration, as determined by the groundwater remediation manager (1 <u>sediment sample per well</u>). Samples not used should be disposed in accordance with Section 3.6.</li> </ul>
EW-4, EW-5, EW-8, EW-15, EW-18, and EW-19	<p>Ground surface to water table at each of the six wells:</p> <ul style="list-style-type: none"> <li>During drilling, archive <b>grab</b> samples for geological purposes will be collected every 5ft and where lithology changes occur in one pint jar and a chip tray from the drill cuttings.</li> </ul> <p><b>Grab</b> one pint jar at each of three depths from each extraction well (18 samples total) from drill cuttings for geological archive purposes:</p> <ul style="list-style-type: none"> <li>2 to 5 ft above predicted Cold Creek unit, or in Cold Creek unit at a minimum</li> <li>10 ft above predicted water table</li> <li>Water table (capillary fringe)</li> </ul>	<p>During drilling, water samples to be collected (in accordance with Section 3.5.6) at 20-ft intervals throughout aquifer, unless visual observation in aquifer material change by the field geologist calls for 10-ft intervals for further clarification:</p> <ul style="list-style-type: none"> <li>Carbon tetrachloride, Tc-99 and nitrate quick-turnaround samples<sup>c</sup></li> <li>Table 1-2 constituents at standard turnaround time (in accordance with Table 1-8)</li> <li>Field screening parameters (temperature, pH, dissolved oxygen, and NTU).</li> </ul>	<p>During drilling, soil samples to be collected:</p> <ul style="list-style-type: none"> <li>Every 5 ft, <b>grab</b> archive samples will be collected and where lithology changes occur in one pint jar and a chip tray from the drill cuttings.</li> <li>Every 20 ft, in correlation with aquifer water samples, <b>grab</b> two composite soil samples in pint jars from drill cuttings over the 20 ft interval for field screening grain-size (sieve) analysis.</li> <li>Every 20 ft, in correlation with the aquifer water samples, <b>grab</b> soil samples for sediment carbon content and gamma energy analysis but <u>ONLY</u> analyze the one sample collected from the carbon tetrachloride maximum water concentration, as determined by the groundwater remediation</li> </ul>

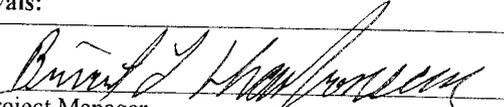
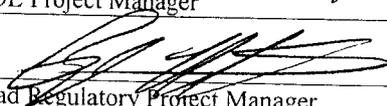
Table 3-1. Well Sample Measurement Locations and Depth.

Sampling Location	Vadose Zone Sampling Depth, Frequency, and Analysis (ft bgs) <sup>a</sup>	Aquifer Sampling Depth, Frequency, and Analysis (ft bgs)	Soil Samples (Sediment) Below Water Table <sup>b</sup>
		Water Samples	Soil Samples (1-sediment-sample-per well) <sup>c</sup>

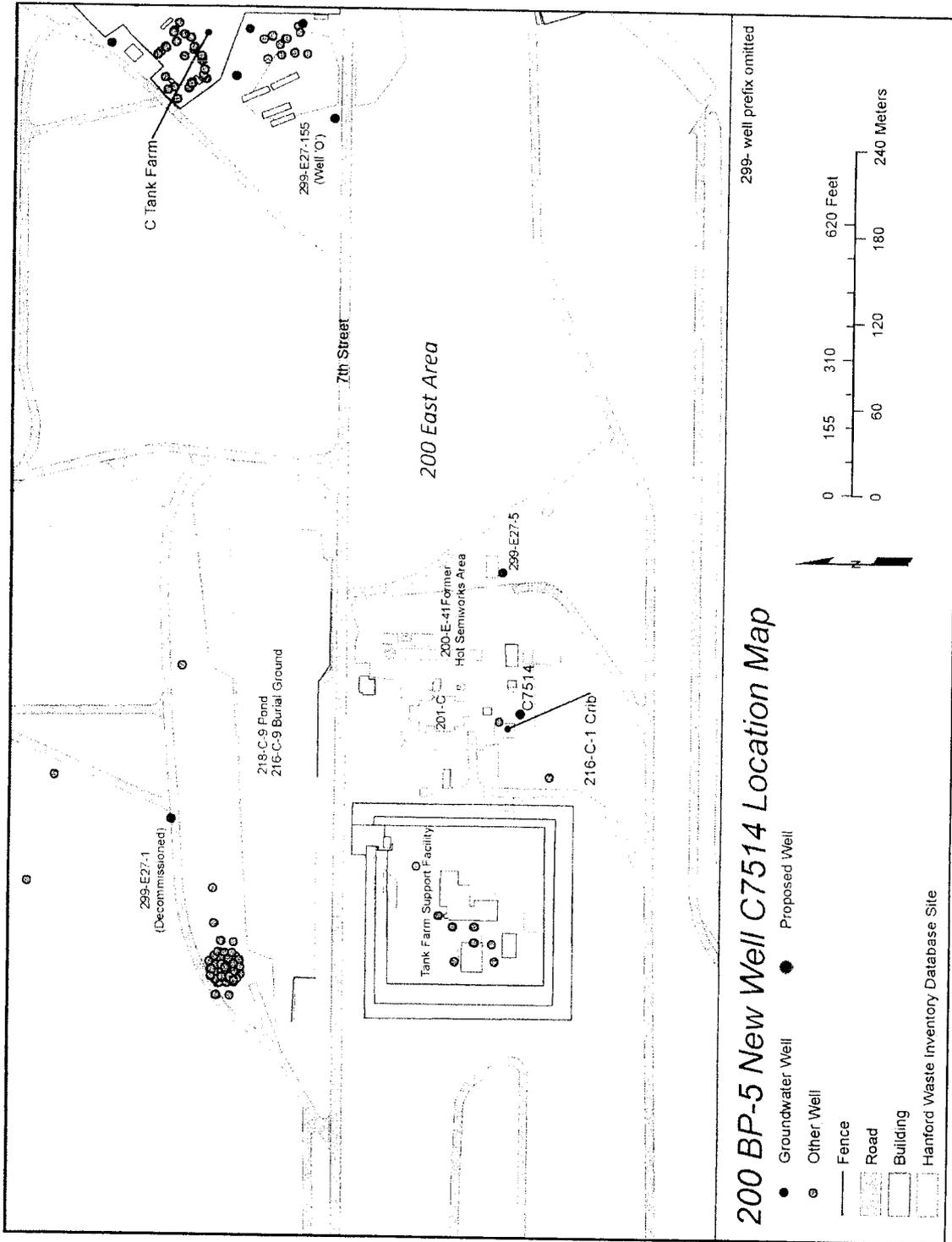
- <sup>a</sup> If field screening instruments indicate radiological contamination above background at a given interval, grab two additional pint jar samples. Send one pint jar for 24-hour turnaround gamma-energy analysis in accordance with Table 1-7 and one additional jar for testing based on the gamma-energy analysis results as determined by the groundwater remediation manager.
- <sup>b</sup> Tier 1 samples will be collected in the vadose zone only if onsite observations of unusual conditions and/or measurements (e.g., using field screening instruments) during drilling in the vadose zone indicate chemical or radiological contamination based on the judgment of the onsite observer (e.g., well site geologist) and/or the level of detection of the instruments used to test for contamination during drilling.
- <sup>c</sup> If samples have elevated organic concentrations, an "E" flagged may be applied to the data due to a lack of time for dilutions and re-runs on a quick-turnaround time. The standard turnaround time sample will account for dilutions and re-runs, as applicable.
- <sup>d</sup> Samples not used should be disposed in accordance with Section 3.6.
- bgs = below ground surface  
 EW = extraction wells  
 NTU = nephelometric turbidity unit



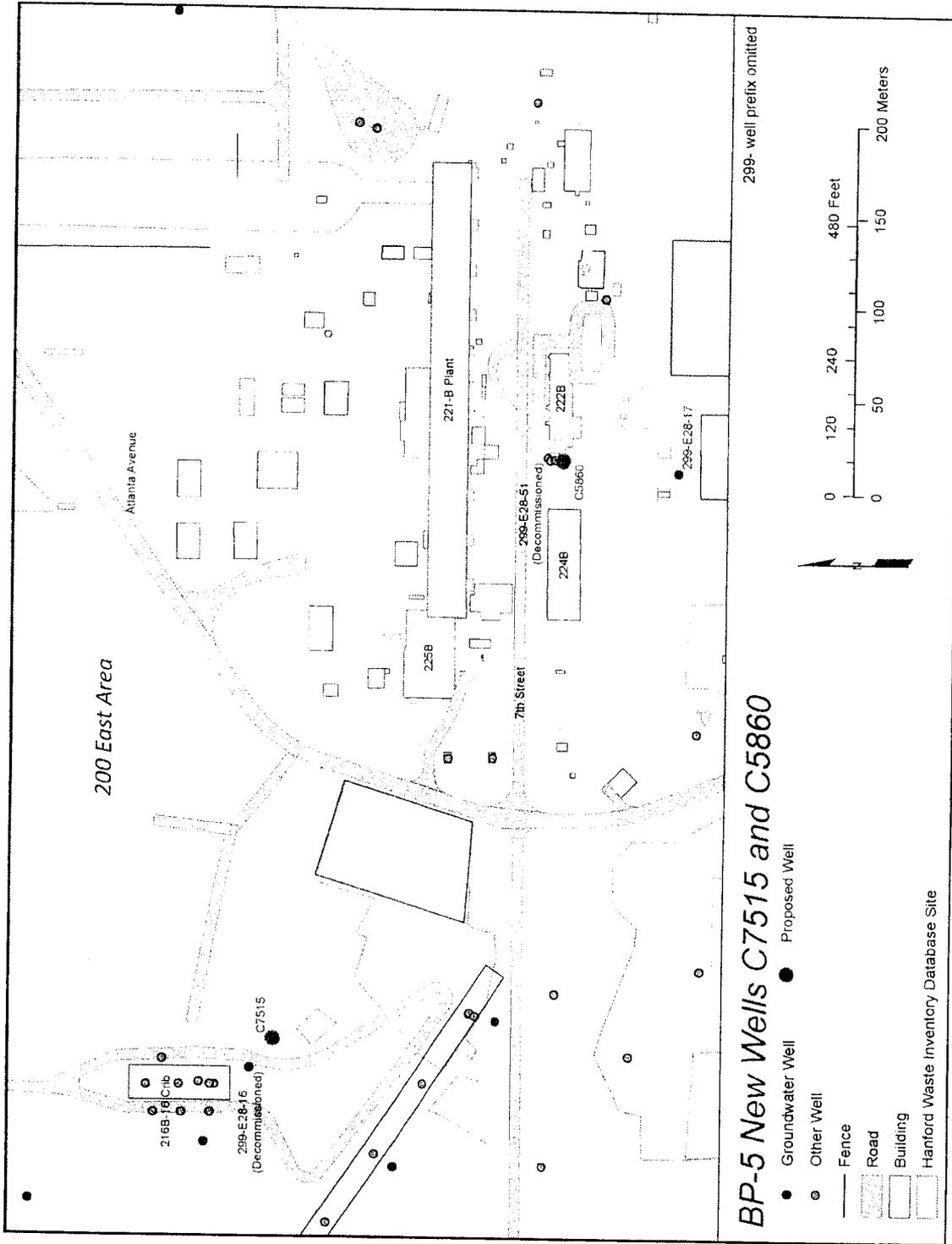
**Change Notice for Modifying Approved Documents/ Workplans  
In Accordance with the Tri-Party Agreement Action Plan,  
Section 9.0, Documentation and Records**

<b>Change Number</b> TPA-CN-309	<b>Document Submitted Under Tri-Party Agreement Milestone</b>	<b>Date:</b> November, 2009	
<b>Document Number and Title:</b> DOE/RL-2003-30, Revision 3, Waste Control Plan for the 200-BP-5 Operable Unit		<b>Date Document Last Issued:</b> October, 2007	
<b>Originator:</b> D. Hildebrand		<b>Phone:</b> 372-2426	
<b>Description of Change:</b> Add "K", "L" and "M" wells to DOE/RL-2003-30, Revision 3, Waste Control Plan for the 200-BP-5 Operable Unit.			
<p>__ B. Charboneau __ and __ R. Lobos __ agree that the proposed change modifies an approved DOE <b>Lead Regulatory Agency</b></p> <p>workplan/document and will be processed in accordance with the Tri-Party Agreement Action Plan, Section 9.0, <i>Documentation and Records</i>, and not Chapter 12.0, <i>Changes to the Agreement</i>.</p> <p>The "K" well (C5860), the "L" well (C7514) and the "M" well (C7515) are added to DOE/RL-2003-30, Revision 3, Waste Control Plan for the 200-BP-5 Operable Unit. Location plats are attached.</p>			
Note: Include affected page number			
<b>Justification and Impacts of Change:</b>			
<p>The 200-BP-5 Waste Control Plan is being revised to include 11 new wells. Drilling of the first 3 wells, "K", "L" and "M" is scheduled to commence within the next two weeks, and it is expected that the review/approval cycle will not be completed in time to support waste management for the first 3 wells. A TPA change notice is needed to add the first three wells to the current waste control plan revision (revision 3) so that the drilling may commence while revision 4 of the waste control plan is finalized.</p>			
<b>Approvals:</b>			
 DOE Project Manager	<u>10-28-09</u> Date	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved
 Lead Regulatory Project Manager	<u>10-28-09</u> Date	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved

Once all the above steps have been completed, the originator sends a copy of the signed change notice to the FH TPAI organization (H8-12), the Administrative Record (H6-08) (refer to TPA Action Plan, Section 9.3), lead regulatory agency, affected Hanford contractor, DOE Project Manager, project/contractor Document Custodian, and others as appropriate. Maintain the original Change Notice per approved Records Management procedures.



**200-BP-5 OU New Well C7514 (299-E24-25) Site Location Map**



**BP-5 New Wells C7515 and C5860**

299- well prefix omitted

**200-BP-5 OU New Well C7515 (299-E28-30) and Well C5860 (299-E29-54) Site Location Map**

**Williams, Janice D**

---

**From:** Farabee, Oliver A (A)  
**Sent:** Thursday, November 19, 2009 9:32 AM  
**To:** Williams, Janice D  
**Cc:** Chapin, Douglas H; Walker, Curtis B; Hathaway, H B (Boyd)  
**Subject:** ICs sent to Craig  
**Attachments:** ICs at U Plant.htm

**From:** Crane, Tina M  
**Sent:** Wednesday, October 14, 2009 4:49 PM  
**To:** Walker, Curtis B  
**Subject:** ICs at U Plant

The following provides a summary and status of the institutional controls "required through the time of completion of remedy construction" per the U Plant ROD and the Sitewide IC Plan (DOE/RL-2001-41) ~

- *Access Control: visitors... are required to be badged and escorted...* The U Plant area lies inside the 200 West Area. Per Hanford site access control procedures, all personnel entering the 200 Areas must be obtain training and a badge. Entry to the U Plant is further controlled by contractor level procedures and programs that ensure hazards are identified and minimized, worker safety is ensured and personnel are properly trained, badged and escorted as applicable.
- *No intrusive work at 221-U without proper approvals.* The U Plant RD/RAWP (DOE/RL-2006-21) was approved by Ecology and EPA in February 2009. Regulatory approval of intrusive work at 221-U outside the scope of that already approved will be petitioned as appropriate.
- *Well drilling is prohibited (with listed exceptions).* Well drilling is appropriately controlled through established programs and procedures which, among other controls, ensures drilling activities are screened and released by technical authorities and controlling organizations.
- *Groundwater use is prohibited (with listed exceptions).* This IC is protected by infrastructure programs and procedures established which ensure adherence with applicable regulations and restrictions.
- *Post and maintain warning signs to inform of potential hazards from 221-U.* The posting and maintenance of warning and informational signs is mandated by numerous well-established programs and procedures including (though not limited to) the radiological control and hazard communication programs.
- *DOE shall report incidents of unauthorized access to Benton County Sheriff.* The 221-U is included in the security and patrol routines and procedures. Programs and procedures are well established to ensure personnel are informed and trained in notification requirements and protocols in response to abnormal and unlawful events.

The remaining ICs listed for U Plant are required after construction of the remedial action.

Tina Crane  
CHPRC Environmental & Waste Operations  
Office: 509-376-9789  
Cell: 509-438-9340  
Tina\_M\_Crane@rl.gov

**DISTRIBUTION  
PROJECT MANAGERS' MEETING,  
200 AREA GROUNDWATER SOURCE OPERABLE UNITS  
November 19, 2009**

DOE/RL  
(No hard copy distribution)

EPA  
Craig Cameron B1-46

Ecology  
Les Fort H0-57

CHPRC  
Janice Williams (original) E6-35

Administrative Record (2) H6-08  
Correspondence Control A3-01