0062879

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

04-AMCP-0452

OCT 4 2004

Mr. Nicholas Ceto, Program Manager
Office of Environmental Cleanup
Hanford Project Office
U.S. Environmental Protection Agency
712 Swift Boulevard, Suite 5
Richland, Washington 99352

Dear Mr. Ceto:

TRANSMITTAL OF THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) WORK PLAN FOR THE 200-ZP-1 GROUNDWATER OPERABLE UNIT, DOE/RL-2003-55, REVISION 0

This letter transmits the subject document to the U.S. Environmental Protection Agency (EPA) for approval (Attachment 1). This document is being submitted to EPA as a primary document under the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Action Plan, Section 9.0, "Documents and Records." Comments provided by EPA on the draft versions of the document have been incorporated into Revision 0, as appropriate. Responses to EPA comments are included for your information (Attachment 2).

Additionally, in accordance with the Tri-Party Agreement Action Plan, Section 11.6 "Other Work Plans and Supporting Schedules," RL is submitting the Tri-Party Agreement Change Request M-15-04-02 for your review and approval (Attachment 3). The change request proposes interim milestones for the submittal of the Remedial Investigation Report and the Feasibility Study/Proposed Plan which are major tasks specified in the work plan. As defined in the Tri-Party Agreement Action Plan, Section 12.0, "Changes to the Agreement," we request EPA to act on the proposed Tri-Party Agreement change form within 14 days following receipt of the attached signed change package.

We look forward to receiving your approval of these documents in the near future. If you have any questions, please contact me, or your staff may contact Matt McCormick, Assistant Manager for the Central Plateau, on (509) 373-9971, or Joel Hebdon, Office of Environmental Services, on (509) 376-6657 for regulatory issues.

Sincerely,

Keith A. Klein
Manager

AMCP:ACT

Attachments

cc: See page 2

cc w/attachs:
D. A. Faulk, EPA
J. A. Hedges, Ecology
J. J. Fiore, EM-43
J. B. Price, Ecology
Administrative Record (200-ZP-1 OU)

cc w/o attachs:
M. E. Byrnes, FHI
B. H. Ford, FHI
S. Harris, CTUIR
J. Hertzel, FHI
R. Jim, YN
T. Martin, HAB
E. J. Murphy-Fitch, FHI
L. Seelatsee, Wanapum
P. Sobotta, NPT
T. Stoops, ODOE
M. A. Wilson, Ecology

ATTACHMENT 2

COMMENT RESPONSES –
DOE/RL-2003-55, DRAFT A, 200-ZP-1 OPERABLE UNIT WORK PLAN

A meeting was held among FH, its subcontractor EQM, RL, EPA, and Ecology on March 29, 2004, to discuss resolution of EPA comments on the 200-ZP-1 work plan (under EPA oversight) and coordination with the 200-UP-1 work plan (under Ecology oversight). Attendees were Mark Byrnes, Dave Erb, and John Winterhalder (FH); Mitzi Miller, Al Robinson, and Nancy Welliver (EQM); Arlene Tortoso (RL); Dennis Faulk (EPA); and Zelma Jackson (Ecology). A second meeting was held April 19, 2004, with Dennis Faulk (EPA), Arlene Tortoso (RL), and Mark Byrnes (FH) to obtain EPA's input on latest comment resolutions.

Comments from Dennis Faulk (EPA)

		Document Location	Comment	Proposed Resolution
1.	EPA	Section 1.0, page 1-3, 3rd paragraph	This paragraph says that the DNAPL investigation is outside the scope of this work plan. This is incorrect. This work is an integral part of the RI/FS and should be described as such. This work should also be included in the schedule.	Section 1.0 and Section 5.1.8 text has been changed as follows: "The presence or absence of dense nonaqueous phase liquids (DNAPLs) in the 200-ZP-1 OU and its three-dimensional distribution within the OU is recognized as a data gap that needs to be filled to support the CERCLA RI/FS process. The DNAPL investigations in the vadose zone and groundwater in the vicinity of the 216-Z-9 Trench are currently being addressed by DOE/RL-2003-41, Rev. 0, *Sampling and Analysis Plan for Investigation of Dense Nonaqueous Phase Liquid Carbon Tetrachloride at the 216-Z-9 Trench.* A separate sampling and analysis plan will be prepared to address the remainder of the DNAPL characterization strategy identified in Section 6.5 of DOE/RL-2001-01, Rev. 0, *Plutonium/Organic-Rich Process Condensate/Process Waste Group Operable Unit RI/FS Work Plan: Includes the 200-PW-1, 200-PW-3, and 200-PW-6 Operable Units.* This DNAPL characterization data shall be available to support the CERCLA RI/FS project schedule identified in Figure 6-1 of this work plan. RL is committed to complete DNAPL investigations in the timeframe specified in Figure 6-1 and DOE/RL-2001-01, Rev. 0." Figure 6-1 has been updated to note that DNAPL characterization will be performed from October 1, 2004, through March 31, 2007. Tri-Party Agreement Milestone M-015-00C (December 31, 2008) has also been added to Figure 6-1 to note when all CERCLA RI/FS documents (through the proposed plan) need to be completed.

		Document Location	Comment	Proposed Resolution
2.	EPA	Section 1.1, page 1-3, 1st paragraph	The text should state that the listing of potential remedies is not all-inclusive.	Section 1.1 has been modified to the point that the comment no longer applies. Section 5.4 text has been modified as follows: "General response actions will be developed that may include, but are not limited to, the following: • No action • Institutional controls • Monitoring natural attenuation • Permeable or impermeable containment • Air sparging • Pump-and-treat." Section 5.4 text has also been expanded to provide a general description of each of the above response actions.
3.	EPA	Section 1.1, page 1-4, 1st paragraph, last sentence	Change **wells** to **investigations**.	Change made as requested.
4.	EPA	Section 5.1.2, 1st paragraph	This paragraph discusses groundwater sampling. A discussion should be added on how new data may be used. For example, new information indicates that the pump-and-treat needs to be expanded to capture the high-concentration carbon tetrachloride plume. Decision logic should be provided in this or another section to account for the need for early action prior to completion of the RI/FS process.	The following text has been added to the end of Section 5.1.2: "If future characterization activities identify areas of high concentration (e.g., above the 2,000 to 3,000 ppb action level specified in the interim ROD), then RL and EPA shall discuss expansion of the treatment system."

		Document Location	Comment	Proposed Resolution
5.	EPA	Section 5.1.3, page 5-2	This section should be expanded to provide the rationale for additional COCs. In addition, change **closing** to **decision making**.	The first paragraph of Section 5.1.3 has been completely rewritten for clarification as follows: **5.1.3 Additional Contaminants of Concern** "During the preparation of the 200-ZP-1 DQO summary report (FH 2003b), a number of historical documents were researched for the purpose of identifying a comprehensive list of COPCs that should be taken into consideration when going through the CERCLA RI/FS process. A number of these COPCs were able to be eliminated after reviewing historical analytical data, radioactive half-life, soil adsorption, and toxicity. Those COPCs that were retained became the COCs that are undergoing evaluation in this work plan. The DQO summary report (FH 2003b), Appendix D contains a list of all COPCs and the rationale for their inclusion or exclusion as COCs. The implementation strategy to obtain information regarding these additional COCs is to sample specific wells in high concentration areas of the plumes and/or at wells immediately downgradient from selected waste sites. Two rounds of sampling are scheduled: the first in FY04, and the second in FY06. The results of the two initial sampling and analysis events will be evaluated and, if one or more of these additional COCs are detected above the target action levels as specified in Table A1-7 (Appendix A), the supporting SAP will be updated to add these COCs to the routine sampling program. If the additional COCs are not detected above these levels during the first two sampling events, they will not be considered further in the RI/FS process. Table A3-3 in the SAP (Appendix A) presents the wells that have been chosen for this additional sampling. These wells will be analyzed for the COCs listed in Table A2-1 (Appendix A) according to the listed methods."
6.	EPA	Section 5.1.4, page 5-3	Be clear that this section is specific to carbon tetrachloride.	Changes have been made to this section to clarify that the purpose is broader than simply addressing the carbon tetrachloride plume; and that modeling input parameters from wells "C," "H," and 299-W15-46 are anticipated to be adequate to support the 200-ZP-1 RI/FS process. Section 5.1.4 text has been modified as follows:

		Document Location	Comment	Proposed Resolution
				5.1.4 Modeling Input Parameters "Specific modeling input parameters have been identified as being needed to support the modeling of the carbon tetrachloride and a variety of other contaminant plumes within the 200-ZP-1 OU. Modeling input parameters (e.g., K_d, hydraulic conductivity, particle size, and cation exchange capacity) are needed to adequately model potential contaminant movement in the saturated zone. The saturated zone sediments in the 200-ZP-1 OU have been extensively characterized in the past, and this historical data will be used to support modeling activities. However, the DQO (FH 2003b) supporting this work plan identified the need for additional modeling inputs (see Appendix A, Tables A1-6 and A2-2). These inputs will be collected from the saturated zone of three selected wells (new wells "C," "H," and 299-W15-46) within the 200-ZP-1 OU as they are being installed, or will be collected from these selected wells following well installation (e.g., well development and aquifer testing). These three wells were selected based on professional judgment to be representative of the 218-W-4B/218-W-2 Burial Grounds, T Plant, and Z Plant, respectively. The approximate locations for new wells "C," "H," and 299-W15-46 are shown on the plate map found in Appendix C. All three of the selected wells are located within multiple contaminant plumes and were selected to fulfill multiple data needs as noted in Table A1-6. While the initial purpose for selecting new wells C and 299-W15-46 was to provide missing data related to the carbon tetrachloride plume, these locations will also be representative of a variety of other contaminants that may be originating from the 218-W-4B/ 218-W-2 Burial Grounds and Z Plant, respectively. New well "H" is positioned near the center of multiple plumes (including uranium, iodine, tritium, TCE, and nitrate) to assist in characterizing the three dimensional distribution of these contaminants in the vicinity of T Plant. It is anticipated that the data obtained from these wells will supplement existing data and allow modeling of the movement of contaminants in the 200-ZP-1 groundwater that is adequate to support the RI process." (The last two paragraphs of this section remain unchanged)

		Document Location	Comment	Proposed Resolution
7.	EPA	Section 5.1.9, page 5-5	It appears that several of these research questions are critical to the decision-making processing. The information should be stated as such.	The title of this section was misleading and has been changed from "5.1.9 Sampling Design for Hanford Science and Technology Research Support" to "5.1.9 Sampling Design for Microscopic and Geochemical Analyses." You are correct that the retardation analyses, sorption studies, and microscopic analyses will be very useful in supporting risk calculations and understanding contaminant movement at the microscopic level.
8.	EPA	Section 5.3, page 5-7, 1st paragraph	This section talks about modeling but fails to mention that one of the purposes of data collection is to reduce uncertainty in the model predictions.	Section 5.3 will be changed as follows: **5.3 Groundwater Models and Risk Assessment** "In order to calculate cleanup levels and predict contaminant migration rates in the vadose zone and groundwater, an integrated modeling system is required that is capable of predicting the movement of contaminants through the vadose zone to the groundwater, and subsequently on to the Columbia River. Several of the decision statements (DSs) and decision rules (DRs) in Tables A1-3 and A1-4 (Appendix A) require the application of professional judgment regarding the adequacy of current information to predict future movement of the COCs from the vadose zone into the groundwater. These decisions will likely be based on iterations of System Assessment Capability (SAC) using the Sitewide groundwater model and/or other Hanford Site and area-specific modeling tools (Kincaid et al. 1998, Bryce et al. 2002). Since these models are critical to the RI decision-making process, it is important to reduce the uncertainty in the model predictions as much as possible. The data gathering effort described in Sections 5.1.1 through 5.1.9 above is anticipated to reduce uncertainty in model predictions by using actual field condition input data as opposed to data obtained from literature. The SAC framework uses accepted models for specific portions of the process of COC movement from waste site, to the vadose zone, to the groundwater. For example, vadose zone transport of COCs to the groundwater is modeled using the Subsurface Transport Over Multiple Phases (STOMP) code; groundwater transport to the river uses the Coupled Fluid, Energy, and Soluble Transport (CFEST) code. Because the SAC is a framework, upgrades and different models could be accommodated in the future to refine the estimates of COC movement in a specific location or media."

		Document Location	Comment	Proposed Resolution
				(The last paragraph of Section 5.3 remains the same. Several pages of additional text has been added to provide specific details on the SAC model.)
9.	EPA	Section 5.4, page 5-10, 1st paragraph	This paragraph contains the statement "...address agreed-upon risks." What does this statement mean?	This section has been completely rewritten and expanded to provide more details on what will be addressed in the feasibility study and details on the preliminary list of response actions that will be considered. This comment no longer applies to the new section.
10.	EPA	Section 6.0, page 6-1	This section on schedule should provide the rationale for why a 4-year RI/FS schedule is warranted. In addition, the final schedule will need to include agreed-to milestones for the RI report and the FS/proposed plan.	Text has been added to Section 6.0 to note that "Due to the complexity of completing the DNAPL characterization within the 200-ZP-1 OU, 4 years is required to complete this CERCLA RI/FS process as opposed to the typical 3-year period that is commonly used for other Hanford RI/FS processes."
11.	EPA	Table A1-7, page A-15	The target levels for the core zone are not appropriate. These levels will be set once the points of compliance are established.	As agreed in a March 29, 2004, meeting between EPA, Ecology, RL, FH, and EQM, the specific values in the column headed "Core Zone Target Action Levels" will be labeled "TBD" and discussion inserted in the table to indicate that the core zone target action levels will be estimated during the RI report. The basis of decision for a given plume inside the core zone will be modeling. If one or more target action levels are exceeded at a "point of calculation." then some form of remedial action may be required. Text in Section A1.3.10 has been modified as follows: **A1.3.10 Preliminary Target Action Levels** "Table A1-7 identifies the basis for establishing the preliminary target action level for each of the COCs. As discussed in the RI/FS DQO summary report (FH 2003b), preliminary target action levels were provided for two zones: the groundwater inside the core zone, and the groundwater outside the core zone. Outside core zone preliminary target action limits were chosen to reflect an unrestricted-use scenario. Typically, the preliminary target action limits outside the core zone were assumed to be primary or secondary drinking water limits, or WAC 173-340 limits. Inside the core zone, it was assumed in general that if groundwater COC concentrations were more than 10 times the preliminary target action levels outside the core zone, remedial action may be considered. Subsequent to the DQO process, a more systematic and rigorous approach was agreed to between RL and EPA. It was determined

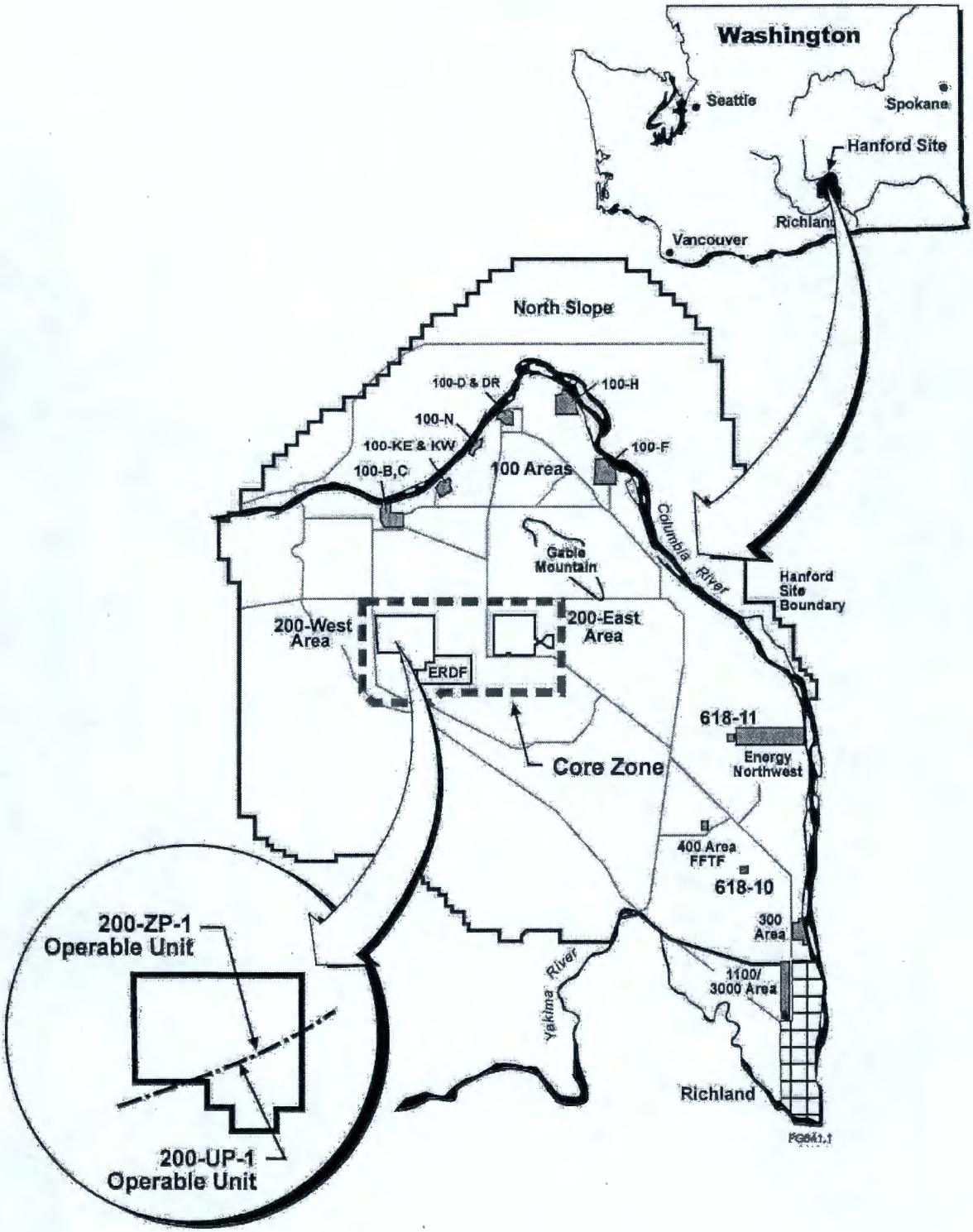
		Document Location	Comment	Proposed Resolution
				that points of calculation would be established inside and outside of the core zone. Outside the core zone, the preliminary target action levels would be the lower of primary and secondary drinking water standards, or WAC 173-340 levels. Inside the core zone, the preliminary target action levels for a specific plume and COC would be a level predicted by modeling such that the preliminary target action levels outside of the core zone would not exceed the levels provided in Table A1-7. The four points of calculation that will be used when performing risk assessments include the Columbia River, Central Plateau boundary, four corners of the 200 West Area, and the center of the largest groundwater contamination plume. Numerical values provided in Table A1-7 are important in order to obtain appropriate analytical support and to provide an initial level against which preliminary decisions can be made as to the importance of a given COC and potential remediation needs. The numerical values for the final regulatory action levels both inside and outside the core zone at the various points of calculation will be established in the feasibility study and the final Record of Decision, and will supersede the values in Table A1-7." (Note: Current Table A1-7 will be replaced with the one in the format of the 200-UP-1 work plan [DOE/RL-92-76, Rev. 1, Draft B]. This format shows the supporting regulatory limits and other information used to determine the preliminary target action levels.)

RL Comments from Arlene Tortoso

		Document Location	Comment	Proposed Resolution
1.	RL	Page 1-2, Figure 1-1	Please revise figure to show the 200-ZP-1 Operable Unit.	The figure will be revised to show the dividing line that separates the 200-ZP-1 OU from the 200-UP-1 OU. The north-pointing arrow and foot/meter scale have been removed from the figure in order to avoid the document being designated as "Official Use Only." Attached is an example of how the new figure will appear.
2.	RL	Page 1-3, 2nd paragraph	The DNAPL remedial investigation associated with the 200-ZP-1 OU groundwater should be part of this work plan. Also, there is no funding for the Phase II DNAPL investigation from EM-50. Please revise the paragraph accordingly.	Text has been changed as follows: "The presence or absence of dense nonaqeous phase liquids (DNAPLs) in the 200-ZP-1 OU and its three-dimensional distribution within the OU is recognized as a data gap that needs to be filled to support the CERCLA RI/FS process. The DNAPL investigations in the vadose zone and groundwater in the vicinity of the 216-Z-9 Trench are currently being addressed by DOE/RL-2003-41, Rev. 0, *Sampling and Analysis Plan for Investigation of Dense Nonaqueous Phase Liquid Carbon Tetrachloride at the 216-Z-9 Trench.* A separate sampling and analysis plan will be prepared to address the remainder of the DNAPL characterization strategy identified in Section 6.5 of DOE/RL-2001-01, Rev. 0, *Plutonium/Organic-Rich Process Condensate/Process Waste Group Operable Unit RI/FS Work Plan: Includes the 200-PW-1, 200-PW-3, and 200-PW-6 Operable Units*. This DNAPL characterization data shall be available to support the CERCLA RI/FS project schedule identified in Figure 6-1 of this work plan. RL is committed to complete DNAPL investigations in the timeframe specified in Figure 6-1 and DOE/RL-2001-01, Rev. 0." Figure 6-1 has been updated to note that DNAPL characterization will be performed from October 1, 2004, through March 31, 2007. Tri-Party Agreement Milestone M-015-00C (December 31, 2008) has also been added to Figure 6-1 to note when all CERCLA RI/FS documents (through the proposed plan) need to be completed.

		Document Location	Comment	Proposed Resolution
3.	RL	Page 3-1, Section 3-1, 2nd paragraph	Although the various requirements associated with the IRM are not part of the scope of this work plan, the information provided by the IRM will be needed for evaluating the effectiveness, cost, etc., of the pump-and-treat system for the feasibility study process. Suggest revising the last sentence to address this.	Section 3.1 will be revised as follows: "It should be noted that an IRM was undertaken for the carbon tetrachloride plume in the 200-ZP-1 OU and, to date, no limited field investigation has been initiated. Although the various requirements associated with the IRM are not part of the scope of this work plan, the information provided by the IRM is needed to support decision making (i.e., evaluating the effectiveness, cost, etc., of the pump-and-treat system) in the feasibility study process.
4.	RL	Page 5-3, Section 5.1.4, 2nd paragraph	The last sentence should be corrected to refer to Table 5-2.	Section 5.1.4 will be corrected as follows: "...These samples shall be analyzed for the parameters identified in Table A2-2 (Appendix A) and Table 5-2."
5.	RL	Page 5-5, Section 5.1.8	The DNAPL characterization as it relates to a continuing source to groundwater needs to be discussed and included in this work plan. Please revise this section to remove the reference to the DNAPL characterization conducted as part of the Alternative Projects funded by DOE, Office of Science and to include how the work plan will address the DNAPL data gap.	Section 5.1.8 has been rewritten using the same text presented above in response to RL Comment #2.
6.	RL	Page A-1, Section A1.0	The sampling and analysis plan supports the RI/FS work plan. Suggest omitting the first three sentences or revising them to focus on the RI/FS process rather than groundwater monitoring.	The first three sentences have been deleted. The first paragraph of Section A1.0 will be changed to read as follows: "This sampling and analysis plan (SAP) identifies the type, quantity, and quality of the data needed to better characterize groundwater in support of the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA) remedial investigation/feasibility study (RI/FS) process. The SAP will rely on data from the current and planned groundwater monitoring well network for the 200 West Area 200-ZP-1 Groundwater Operable Unit (OU), as defined in the previous RI/FS data quality objectives (DQO) summary report (FH 2003b)."

		Document Location	Comment	Proposed Resolution
7.	RL	Page A-10, Section A1.3.	Suggest adding a subsection to address design and sampling to address data gaps to evaluate the nature and extent of contamination for the RI/FS process.	The following new text has been added to Section A1.3: "This section presents a summary of the supplemental data that was identified as being needed to address all of the CERCLA RI/FS decisions identified in the DQO summary report (FH 2003b). This supplemental data includes the installation of eight new monitoring wells to fill gaps identified in the groundwater monitoring network, and adding additional analyses to samples collected from a number of monitoring wells in the network. These supplemental analyses will determine if COCs identified in historical documents (which have not historically been tested for) are impacting groundwater quality. The supplemental data needs also include the collection of physical, geological, hydraulic, and geochemical property data and the collection of aquifer test data needed to support risk modeling calculations. Additional deep soil and groundwater characterization data is needed to define the three dimensional distribution of contamination within the aquifer, as well determine the presence or absence and three dimensional distribution of DNAPL."
8.	RL	Page A-33, Section A.3.2.1, 1st sentence	Suggest omitting the word "eventual" in the sentence.	Word "eventual" has been omitted from the sentences as requested.


Washington
Seattle
Spokane
Hanford Site
Richland
Vancouver
North Slope
100-D & DR
100-H
100-N
100-KE & KW
100-F
100-B,C
100 Areas
Columbia River
Gable Mountain
Hanford Site Boundary
200-West Area
200-East Area
ERDF
618-11
Energy Northwest
Core Zone
400 Area FFTF
618-10
300 Area
1100/ 3000 Area
Yakima River
Richland
200-ZP-1 Operable Unit
200-UP-1 Operable Unit
FG041.1

Date:6-30-04

Subject: EPA comments on 200-ZP-1 Draft Work Plan, Meeting 6/22/04

Attendees:
Mark Byrnes, FH
Dennis Faulk, EPA
Arlene Tortoso, DOE
Al Robinson, EQM

EPA comments on the draft 200-ZP-1 Workplan were discussed. Al Robinson was asked by Mark Byrnes to draft the incorporation of comments and send a draft to the meeting participants. The comments and their draft resolution are listed below.

~~Draft~~ Resolution of 2nd Set of EPA comments ~~resolution from~~received during ~~6-22-04~~ Meeting, 200-ZP-1 Work Plan, DOE/RL-2003-55, Rev 0				
No.	**Comment Originator**	**Document Location**	**Comment**	**Proposed Resolution**
1.	EPA (D. Faulk)	Page ES-2	Remove "contract" from "contract detection limit" in the Executive Summary.	*Bullet now will read;* • Preliminary target action levels outside the core zone were determined for COCs based on the more stringent standard of maximum contaminant level values or *Model Toxic Control Act* (Washington Administrative Code 173-340) values. These values were modified as appropriate if the background levels or ~~contract required~~ detection limits were above the regulatory limits. For some contaminants, regulatory limits were unavailable, and other applicable or relevant and appropriate requirements may be used to determine appropriate target action levels.
2.	EPA (D. Faulk)	Page ES-3, second to last paragraph.	Remove reference to MSE work.	*Sentence removed.* It is anticipated that the SAC will help predict behavior of contaminants such as movement through various media, concentrations, locations, and effect on environmental receptors. ~~Work being performed by MSE Technology Applications may help understand uranium partitioning behavior and could be used to support analysis of remedial alternatives.~~
3.	EPA (D. Faulk)	Page 5-20, last paragraph	Remove the part of the sentence that discusses why the community relations plan will not be developed.	*Paragraph will now read;* The Tri-Parties conduct public involvement and information activities both cooperatively and independently. The community relations plan intends to fulfill applicable state and Federal laws regarding development of community involvement

			Note: Also remove from UP-1 Work Plant	and public participation plans. The plan also serves as one of the overall public participation plans guiding public involvement at the Hanford Site. Additional project-specific public participation plans are developed as needed at the Hanford Site. For the 200-ZP-1 Groundwater Project, a project-specific community relations plan is not planned. ~~to be developed because the project is not technically complex nor has it attracted sufficient public interest up to this point in time to warrant the development of a specific plan.~~
4.	EPA (D. Faulk)	Page 6-2, Project Schedule.	Need a change package for the RI Report and Feasibility Study/Proposed Plan, Need to show triangles for deliverables.	~~Action Item taken by Mark Byrnes.~~A Change Control Form is currently being prepared that will identify the milestone dates for the issuance of the draft Remedial Investigation Report and Feasibility Study/Proposed Plan. These dates are being added to Figure 6-1.
5.	EPA (D. Faulk)	Third bullet on page ES-2 and same words on Page A-16, bottom of second to last paragraph.	Need to revise wording so that it is clear that plumes not contained in the largest (CCl4) plume will also be evaluated using points of calculation.	*End of bullet and end of paragraph revised as below;* Inside the core zone, the preliminary target action levels for a specific plume and COC would be a level predicted by modeling such that the preliminary target action levels ~~outside of the core zone~~ would not exceed the levels provided in Table A1-7. The ~~four~~ points of calculation that will be used when performing risk assessments include the Columbia River, Central Plateau boundary, four corners of the operable unit boundary, ~~of the 200 West Area,~~ and ~~the~~ center of the largest groundwater contamination plume (carbon tetrachloride), as well as the center of any other contaminant plumes that are outside the overlay of the carbon tetrachloride plume (5 ug/L isopleths). For example, a well may be selected from within the high concentration area of a contaminant plume and modeled to determine the level of remediation necessary to return groundwater in the area to the preliminary target action levels provided in Table A1-7.
5.	EPA (D. Faulk)	Response to DOE/RL comment 2	EPA requested a reference in the TPA that required SW-846 methods.	*References to SW-846 Methods being required are found in the TPA Action Plan, Attachment 2. Section 6.5 requires the methods for RCRA cleanups and Section 7.8 dose the same for CERCLA. Response #2 to DOE/RL comments will be modified to read.* The Quality Assurance Project Plan, Section A2.1 of the SAP (Appendix A), addresses all of the applicable sections specified by EPA-QA/R5, EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations. EPA QA/R5

				requirements are met through use of HASQARD. HASQARD, a DOE-RL document, was written to comply with the DOE Order for QA. HASQARD was systematically crosswalked with EPA QA/R5 requirements in 1998. SW-846 methods are required by the Tri-Party Agreement (TPA Action Plan, Attachment 2, Sections 6.5 and 7.8).

ATTACHMENT 3

Change Number	Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.	Date:
M-15-04-02		September 15, 2004

Originator: Arlene Tortoso (RL)/Dale Jackson (RL) **Phone:** 373-9631/376-8086

Class of Change:

[ ] I - Signatories [X] II - Executive Manager [ ] III - Project Manager

Change Title: 200-ZP-1 CERCLA Remedial Investigation/Feasibility Study Process

Description/Justification of Change

The Tri-Party Agreement established milestones and dates for completing the waste site investigation effort for the 200 Area by December 31, 2008, (Tri-Party Agreement Milestone M-015-00C) and completing remediation of the 200 Area by September 30, 2024 (Tri-Party Agreement Milestone M-016-00).

The 200-ZP-1 OU CERCLA RI/FS Work Plan (DOE/RL-2003-55, Rev. 0) includes a project schedule with project milestones. Based on the CERCLA Work Plan schedule, the following interim milestones have been established for the 200-ZP-1 OU Remedial Investigation/Feasibility Study process:

- M-015-48A: Submit Draft A 200-ZP-1 CERCLA Remedial Investigation Report to EPA – May 31, 2006
- M-015-48B: Submit Draft A 200-ZP-1 CERCLA Feasibility Study/Proposed Plan to EPA – May 31, 2007

These interim milestone dates are consistent with the major Milestones M-015-00C and M-015-00 which require the completion of all 200 Area pre-Record of Decision site investigations under approved work plan schedules by December 31, 2008, and the completion of the RI/FS process for all operable units by December 31, 2008, respectively.

Impact of Change:

Establishes two Tri-Party Agreement Interim Milestones under the M-015 series milestones. Addition of interim milestones under M-015-40.

Affected Documents:

The Tri-Party Agreement, as amended, and Hanford Site internal planning, management, and budget documents (e.g., USDOE and USDOE contractor Baseline Change Control documents; Multi-Year Work Plan; Sitewide Systems Engineering Control Documents; Project Management Plans, and, if appropriate, LDR Report requirements). The 200-ZP-1 Operable Unit RI/FS Work Plan (DOE/RL-2003-55).

Approvals:

J. B. Hebdon, RL IAMIT Representative	9/28/2004 Date	X Approved	____ Disapproved	
N/A J. E. Rasmussen, ORP IAMIT Representative	____ Date	____ Approved	____ Disapproved	
N. Ceto, EPA IAMIT Representative	____ Date	____ Approved	____ Disapproved	
N/A M. A. Wilson, Ecology IAMIT Representative	____ Date	____ Approved	____ Disapproved	