

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 10



Hanford Project Office
Federal Building, Rm. 178
P.O. Box 550, A7-70
Richland, Washington 99352

February 26, 1990



REPLY TO
ATTN OF:

A7-70



START

K. Michael Thompson
Unit Manager

Robert K. Stewart
Unit Manager
U. S. Department of Energy
P. O. Box 550, A6-95
Richland, Washington 99352

Re: Review of RI/FS Work Plan for the 300-FF-5 Operable Unit
Draft B and 300-FF-1 Operable Unit Draft Revision 3

Dear Mr. Thompson and Mr. Stewart:

The U. S. Environmental Protection Agency has completed its review of the RI/FS Work Plan for the 300-FF-5 Operable Unit, Draft B, and the proposed RI/FS schedule for the 300-FF-1 Operable Unit. Comments on the work plan are enclosed.

Review of the schedules has revealed several deficiencies.

1. The DOE has proposed to defer the major field activities associated with the RI/FS's until FY 91. The DOE has reported that it does not have sufficient funds in its Environmental Restoration budget to meet all of the commitments for FY 90 as specified in the Tri-Party Agreement Work Schedule (Appendix D). The DOE has not utilized the procedures which are specified in paragraph 143 of the Tri-Party Agreement, but rather has made a unilateral decision to continue those projects for which near-term interim milestones have been established. The EPA holds the position that if DOE wishes to demonstrate that adequate funding is not available to meet the Work Schedule commitments, all three parties need to work together to resolve the issue, in accordance with paragraph 143.
2. The DOE has refused to commit to a firm schedule with enforceable milestones for completion of the RI/FS at the 300-FF-1 operable unit. The DOE's proposed work plan schedule states that all activities after submittal of the FS Phases I and II Report are "tentative", thereby avoiding a commitment for completion. The EPA holds the position

K. M. Thompson
R. K. Stewart

-2-

February 26, 1990

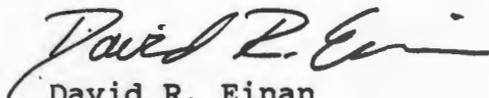
that the DOE must commit to an enforceable schedule for the RI/FS to meet the statutory requirement (Section 120[e][1]) of CERCLA and to provide a high assurance for obtaining adequate funding for and completion of this RI/FS.

3. No target dates or milestones are specified in the schedules as required by Section 11.1 of the Tri-Party Agreement Action Plan.
4. No critical path is shown on the 300-FF-1 schedule.

Resolution of the technical issues can and should proceed independently of the schedule issues. The schedule issues must be resolved prior to offering the documents for public comments.

If you have any questions on the above or enclosed comments, please do not hesitate to call me. I can be reached at (509) 376-3883 or FTS 444-3883.

Sincerely,



David R. Einan
Unit Manager

Enclosure

cc: (w/enclosure)
S. Wisness, DOE
C. Cline, Ecology
L. Goldstein, Ecology
Administrative Record File (300-FF-1, 300-FF-5)

J. Waite, WHC
W. Staubitz, USGS
D. Lacombe, PRC



HANFORD SITE 300-FF-5 OPERABLE UNIT
RICHLAND, WASHINGTON
DRAFT B RI/FS WORK PLAN
REVIEW OF COMMENT INCORPORATION

Comment 13. Figures 4 and 5, pp. 28 & 29

Recommendation - The coordinates in Figures 4 and 5 are called out as "Hanford Coordinates." Indicate how those coordinates relate to the Lambert Coordinates in Figures 2 and 3. This information will help in locating the operable units in Figures 4 and 5.

SECTION 2.2.3.2, p. 45:

Deficiency - Comment 75 was not fully addressed.

Recommendation - The description of ground-water withdrawals from wells 399-4-12 and 399-4-8, contained in the response to comment 75, should be included in the work plan in the last paragraph of Section 2.2.3.2 on page 45. Also, the withdrawal of drinking water from the Columbia River downstream of the 316-1 south process pond should be noted in Section 2.2.4. A preferable alternate would be to include a short section entitled "Water Use" and include the information mentioned above.

Comment 26. SECTION 2.2.6.1, p. 54

Recommendation - The statement in the DOE response, "The 300-FF-5 Operable Unit is not considered unique in flora and fauna that inhabit the area," should be included in the text.

Comment 40. SECTION 3.1.3.2.2, pg. 85

Recommendation - This modification is acceptable only if the exceptions (chromium, 60 µg/L and iron, 300 µg/L) are also included in the text.

SECTION 3.1.3.2.2, p. 89:

Deficiency - In the first paragraph on page 89, nitrate is noted to be associated with 316-5. However, the contours shown in Figure 27 in no way support this statement; nitrate concentrations are no higher near or downgradient of 316-5 (and actually appear to be less) than elsewhere in the operable unit. The comparison of Figure 27 and 28 also does not strongly support the contention that nitrate concentrations in the 300-FF-5 ground water have decreased substantially.

Recommendation - Re-evaluate and either improve Figure 27 to support the discussion on page 89 or change the discussion on page 89.

SECTION 5.3.3, p. 157:

Deficiency - The soil investigation largely duplicates work proposed for the 300-FF-1 operable unit. Base line or background concentrations of vadose-zone soils are proposed for 5 locations in the 300-FF-1 operable unit and should be sufficient for the purposes of the 300-FF-5 operable unit. Also, soil samples are being collected in the vadose and saturated sediments directly below waste-management units in 300-FF-1. These samples should represent the most contaminated sediments within the 300-FF-5 operable unit and should be used to determine the leachability of contaminants.

Recommendation - Utilize soil data being collected under the 300-FF-1 RI/FS. Limit soils, investigations in the 300-FF-5 RI/FS to saturated sediments downgradient of 300-FF-1 waste-management units.

SECTION 5.3.4.1.1, P. WP-160:

Deficiency - As stated in our original comment 43, there is very little information presented upon which to judge the adequacy of well placement for the identification of dense nonaqueous phase liquids. We believe that perchloroethene and trichloroethene are among the most important contaminants found in the 300-FF-5 operable unit and, therefore, should justify some discussion on the placement of the wells with respect to probable sources of contaminants, wells in which these constituents have been detected, and slope of the top of the M3 layer (shown in Figure 10) which may have an important influence in determining the contaminant flow direction. As shown in Figure 39, we see little justification for the location of the DNAPL wells, particularly well 1-10B.

Recommendation - As described above, give further justification for DNAPL well location. For instance, why is well 1-7B being installed next to well 1-20; a Westbay system. Doesn't well 1-20 have a sampling port at the bottom of the unconfined aquifer?

SECTION 5.3.4.1.1, p. 160:

Deficiency - The proposed locations of the nested wells 5ABC and 6ABC are within areas of known ground-water contamination or within areas with a high probability of ground-water contamination. Due to past problems with establishing and maintaining a good seal between nested wells at Hanford and at other facilities, it is generally recommended not to place nested wells in areas with a high probability of contaminated ground water.

Recommendation - Install cluster wells at sites 5ABC and 6ABC. Nested wells will be allowed at sites 1, 2, 3, 4, 7, and 8ABC because it is expected that these wells are located in areas with little or no ground-water contamination and should, therefore, have a low probability of providing a preferential flow path for contaminants should the well-seals fail. Nested wells 9AB will also be allowed, in that both wells are screened within the unconfined aquifer and do not penetrate a known confining unit.

Comment 90. SECTION 5.3.4.2, p. 165

Recommendation - The DOE response states that "The source of nitrate will be discussed separately." Indicate where the source of nitrate is discussed.

SECTION 5.3.4.5, p. 178:

SECTION 5.3.9.3, P. 202:

Deficiency - In the discussion of comment 96 in the December 14 unit managers meeting, it was agreed that the Hanford-wide codes and models would be used for performance and risk assessment and that nonstandard codes such as CFEST and VTT could be used as a planning tool to support aquifer tests and monitoring system design. However, this agreement is not reflected in appropriate changes in the work plan. The second paragraph of section 5.3.4.5., in referring to the nonstandard models, states that "the models will enable evaluation of the impact and effectiveness of various cleanup and closure scenarios on ground-water quality." The last paragraph of section 5.3.9.3 also states that ground-water transport calculations will be based on CFEST. These are performance and risk assessment tasks and, therefore, will require use of Hanford-wide codes such as PORFLO-3.

Recommendation - It should be understood that nonstandard models can be used as a planning tool as a convenience for the investigators, but that these models cannot be used to provide an analysis upon which a remediation decision will be made or one which will require review by the regulatory authorities. We have no interest in reviewing different models in each operable unit. Revise sections 5.3.4.5 and 5.3.9.3 to reflect this position.

SECTION 5.3.5.2, p. 181:

Recommendation - The quantity and quality of riverbank springs may be affected by bank storage of Columbia River water resulting from fluctuating river stage. The riverbank spring sampling design should take into account the influences of bank storage. Measurement of spring flow and collection of water-

quality samples should be conducted only after a period of stable low flows. Antecedent conditions of temperature, pH, and specific conductance should be monitored in the riverbank discharge to establish that the quality of spring water has stabilized and the influence of bank storage is minimized prior to sample collection.

FIGURE 43, p. 183:

Recommendation - The near-shore sampling locations shown in Figure 43 are rather arbitrary due to uncertainties in the mixing distance along the riverbank. We recommend conducting a simple dye tracer test prior to collecting the near-shore water samples. A small quantity (100-200 ml) of rhodamine dye should be added slowly to the river at the point of spring discharge and the trace of the dye plume should be noted. The plume should be allowed to dissipate, the near-shore water samples should be taken within the area of the previously noted plume trace, and the sampling location should be noted in an appropriate manner.

TABLE 1, SAP/FSP-4:

Deficiency - In the response to comment 75, it was noted that wells 399-4-12 and 399-4-8 will be monitored for contaminants, yet these wells do not appear on the proposed monitoring well list in Table 1.

Recommendation - Include these wells in Table 1.

Comment 132(1). SECTION 1.3.1, p. SAP/FSP-20

Recommendation - Add the reference to Figure 2.

Comment 137. SECTION 3.2.2., p. SAP/FSP-28

Recommendation - Table 6 of the work plan is a list of fish species found in the Hanford reach of the Columbia River. The text should be change to Table 7.

Table 3, p. SAP/QAPP-13-16

Recommendation - The reference to the Work Plans for 300-FF-2, 300-FF-2, and 300-FF-3 operable units in footnote "b" is vague and does not help the reader in finding the information on sampling and investigative procedures. A clearer reference could be used, such as: "Not in the scope of this investigation. To be conducted during investigation of source Operable Units 300-FF-1, 300-FF-2, and 300-FF-3."

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Subject REVIEW OF RI/FS WORK PLAN FOR THE 300-FF-5 OPERABLE UNIT DRAFT B AND 300-FF-1 OPERABLE UNIT DRAFT REVISION 3		

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