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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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January 24, 1994

Mr. Steve Wisness
Hanford Project Manager
United States Department Of Energy
P. O. Box 550
Richland, WA 99352

Dear Mr. Wisness:

Re: Submittal of Comments for the 100-DR-2 Work Plan, Draft A ³²¹⁸⁵

The Washington State Department Of Ecology (Ecology) has completed its review of the RCRA Facility Investigation/Corrective Measures Study Work Plan for the 100-DR-2 Operable Unit, Hanford Site, Richland, Washington. Enclosed please find the comments.

Ecology, as the lead regulatory agency, has also included the Environmental Protection Agency (EPA) comments on the 100-DR-2 work plan.

If you have any questions or concerns, please contact me at (509) 736-3012.

Sincerely,

A handwritten signature in black ink that reads "Ted Wooley".

Ted Wooley
Unit Manager
Nuclear & Mixed Waste Management Program

TW:mf
Enclosure

cc: Glen Goldberg, USDOE
Paul Beaver, EPA
Administrative Record (100-DR-2 Operable Unit), w/Enc



COMMENTS FOR THE 100-DR-2 RFI\CMS WORK PLAN

DOE/RL-93-46 DRAFT A

GENERAL COMMENTS

1. Pursuant to the verbal agreement on combining the 100-DR-2 and 100-DR-3 operable units into a single OU, the scope of the 100-DR-2 work plan will have to be expanded to include 100-DR-3. The executive summary should identify this action. This work plan modification will, of course, be contingent on Tri-Party sign-off of the change package.
2. Some of the regulatory flow schemes do not reflect accurately what has been accomplished in the 100-DR-2 operable unit. The figure on page ESF-1 entitled "the RFI\CMS process" illustrates this. The result of streamlining 100-DR-2 has lead to some deviation from this process. It may be necessary to place a caveat within the executive summary stating that the diagram (and any similar ones) is in the work plan to illustrate the normal procedure for getting from initial scoping of the OU to implementation of a remedial action. However when opportunities come about to accomplish these tasks more efficiently, the Tri-Parties do what they can to recognize these opportunities and to act on them.
3. It will also be necessary to discuss the reformatting of the LFI (and QRA?) reports as an attachment to the work plan. This is requested only because pages ES-1 and ES-2 of the executive summary discuss the LFI report preparation and its contents. This is a legitimate opportunity to report to the public that document production for this OU has been reduced without reducing the quality or quantity of information required to make prudent decisions for the cleanup of the OU. It could be stated that this improvement was made through a more complete consolidating of information and a growing confidence in information provided from past aggregate area studies (e.g., 100-Area-FS).
4. There should also be discussion on the alleviation the 100-DR-3 OU limited field investigation and therefore, there will be very little new information to report for this OU. I am not completely certain if this should be announced in the executive summary and further expanded on in a different part of the work plan, or if there is a better way of doing business.
5. Review of the section on borehole soil sampling and logging indicates that USDOE has responded to recent comments on the problem of obtaining decent core barrel samples from the coarse sediments (primarily the cobbles of the Hanford Fm.). This section states that sampling will not be conducted for physical property testing where hard tools are used to advance the hole (i.e., where coarse sediments are encountered). This is reasonable; we have been wasting time and money on physical property testing of samples that do not reflect the natural materials. However, the statement that sampling will not be done where hard tools are used opens the door for hard tool use as an expediency.

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SPECIFIC COMMENTS

DEFICIENCY: Section 3.1.2.1, pages 3-2 and 3-3

This section discusses the quality of the radiological background soil data, indicating that they are of limited utility.

Recommendation:

The text should explain how the uncertainty associated with this data will impact the qualitative risk assessment, since the determination of contaminants of potential concern relies partly on a comparison of environmental data to background data.

DEFICIENCY: Section 3.3.2, pages 3-7 through 3-11

This section discusses the preliminary identification of contaminants of concern and presents a focused approach involving contaminant levels, quantity, hazard, and persistence.

RECOMMENDATION:

Mobility should also be included in this approach since groundwater contamination and migration of contaminants to the Columbia River are major concerns in the 100 area.

DEFICIENCY: Section 3.4.1, pages 3-13 and 3-14

The preliminary corrective action objectives presented in this section do not include preventing or mitigating further release of contaminants to surrounding environmental media.

RECOMMENDATION:

Expand the preliminary action objectives to include these topics.

DEFICIENCY: Section 3.4.4, page 3-16

One of the preliminary corrective actions listed in Section 3.4.4 is "alternatives emphasizing removal." Removal by itself would not be considered an acceptable remedial action.

RECOMMENDATION:

The action should be changed to "alternatives emphasizing removal, treatment, and disposal."

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DEFICIENCY: Section 4.1.2, page 4-4

This section indicates that minimum analytical detection limits were selected as one-tenth the 10^{-6} risk-based exposure level for ingestion of a particular contamination. The reason for selecting the detection limits using only carcinogenic risk-based concentrations is unclear. Also, the 10^{-6} target risk level is for human risk assessment and does not take into account ecological sensitivity.

The text does not address the ability of current analytical methods to achieve risk-based concentrations.

RECOMMENDATION:

The rationale for selecting detection limits in this manner should be provided and discuss analytical limitations (if any).

DEFICIENCY: Section 4.2.2, page 4-6, 2nd and last paragraphs

Table 4-3 is referred to on three occasions in which it appears that Table 4-2 is the correct reference.

RECOMMENDATION:

Revisit these references and make the necessary corrections.

DEFICIENCY: Section 4.2.3.1, page 4-8

This section indicates that analysis of target compound list (TCL) contaminants, which includes semi-volatiles, pesticides, and PCBs, will not be conducted unless field screening results indicate the presence of Volatile Organic Compounds (VOC).

RECOMMENDATION:

Present the rationale for not analyzing the sample for semi-volatiles, pesticides, and PCBs based on VOC screening data.

DEFICIENCY: Section 4.2.3.2, page 4-8 and appendix A

The purpose of the QAPjP in Appendix A is to provide all means of ensuring that proposed data quality objectives are met to fully support the project's objectives, as well as to provide all necessary quality control to evaluate data generated against the proposed objectives. Westinghouse Hanford Company has satisfied each fundamental aspect of quality control, as required by EPA (1980a) guidance. However, minor inconsistencies are evident between fundamental aspects of quality control within the overall project plan. For example, the QAPjP does not provide an accurate portrayal of analytical precision and accuracy. First, analytical methods cited in the QAPjP include EPA (1986) SW-846 guidance, but DQOs are specified for these methods from EPA (1990a,b) Contract Laboratory Guidance (CLP) guidance. EPA (1986) guidance may be

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used to generate data with a level of quality comparable to CLP, but this is not necessarily intrinsic. Second, Table QAPjP-1 defines DQOs for precision and accuracy individually for each target compound, ignoring the quality control protocol described elsewhere by the QAPjP that outlines quality control for measuring precision and accuracy in terms of matrix spike and matrix spike duplicate analyses, surrogate analyses (organic compounds only), blank spike analyses, and postdigestion spike analyses (inorganic compounds only). DQOs for analytical precision and accuracy should be proposed in terms of these QC mechanisms. Finally, CLP analytical methods are cited in Section 4.2.3.1, and Table 4-4 for proposed chemical analyses of borehole samples, but the QAPjP does not cite CLP methods.

RECOMMENDATION:

A coherent program for sample analyses and quality control and the precise level of data quality that will be provided should be specified.

DEFICIENCY: Section 5.1.1.5.5, Geophysical Borehole Logging

It is stated that gross gamma logging will be used "when spectral-gamma equipment is not available." The spectral-gamma tool is greatly preferred over the gross gamma tool for obtaining the best data.

RECOMMENDATION:

All efforts should be made to obtain spectral-gamma data where possible.

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