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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 HANFORD PROJECT OFFICE
712 SWIFT BOULEVARD, SUITE 5
RICHLAND, WASHINGTON 99352

March 1, 1995

Jeffrey Bruggeman
U.S. Department of Energy
P.O. Box 550, H4-83
Richland, Washington 99352

Re: 100-FR-1 Limited Field Investigation Report and the
Qualitative Risk Assessment Report Comments

Dear Mr. Bruggeman;

Enclosed are the comments submitted by the U.S.
Environmental Protection Agency (EPA) and the State of Washington
Department of Ecology (Ecology) for the 100-FR-1 Limited Field
Investigation Report and the Qualitative Risk Assessment Report.

Please contact me at (509) 376-6623 or Keith Holliday at
(509) 736-3036 to schedule a mutually convenient time to address
these comments.

Sincerely,

Kevin J. Oates
Operable Unit Manager

Enclosure

cc: Keith Holliday, Ecology
Allen Krug, ERC
Jeff Ayres, ERC
Administrative Record



GENERAL COMMENTS

Overall, the 100-FR-1 qualitative risk assessment (QRA) follows appropriate guidance; no significant deficiencies were noted. It also appears that the QRA has been adequately incorporated within the text of the 100-FR-1 limited field investigation (LFI).

In several instances in the LFI the text states that no monitoring wells are positioned sufficiently close to the site to accurately assess its impact on groundwater. The LFI also states that no monitoring well is sufficiently close to this site to be considered an upgradient well (see the specific comment on Section 3.1.6). Data in Hanford groundwater background documents should be considered before it is concluded that impacts to groundwater from a site cannot be determined.

Throughout this LFI the RCRA Remedial Investigation/Feasibility Study Work Plan for the 100-FR-1 Operable Unit (DOE-RL 1992a) is referenced. However, according to the Tri-Party Agreement and the Work Plan (Rev. 0), 100-FR-1 is a CERCLA Past-Practice Operable Unit.

SPECIFIC COMMENTS

Section 1.0, page 1-2, fourth paragraph. The third bullet states that certain activities would be more efficient to implement at the 100 Area aggregate or Hanford Site scale rather than the operable unit scale, please provide some examples.

Section 1.3, page 1-6, first paragraph. Replace "RCRA facility investigation/corrective measures study" with "CERCLA remedial investigation/feasibility study."

Section 3.1.6, page 3-7, first paragraph. The text states that since no upgradient values were available, impacts on groundwater from the 116-F-1 site could not be determined. Figure 3-4, however, shows that wells 199-F7-1 and 199-F7-3 are both upgradient. It is unclear why groundwater quality data collected from these wells were not used for determining impacts to groundwater from contaminants present at the 116-F-1 site. Water from the downgradient well 199-F7-2 should be compared to water from upgradient wells, or the reason for omitting such a comparison should be explained.

Section 3.2.2.3, page 3-8, third paragraph. The second sentence in this paragraph states that no chromium was detected. Table 3-4 indicates that chromium was detected. Suggest adding "hexavalent" between "no" and "chromium." This error has been repeated in other sections of this document.

Section 3.3, page 3-10, fourth paragraph. The work plan (DOE/RL 1992) states that a borehole is proposed for the 116-F-3 fuel storage basin. The LFI, on the other hand, indicates that one test pit was dug from which samples were collected from the bucket of a backhoe; there is no indication that a borehole was drilled. This variance from the work plan should be explained.

Section 3.5.4, page 3-18, first paragraph. The text states that the concentration of chromium in samples collected from within the upgradient well were not appreciably different from those values found in samples collected from within the downgradient well. The text should more clearly define what is meant by "appreciably different," and should identify chromium concentrations in upgradient and downgradient wells, indicating the well location with the higher chromium concentration.

Section 3.6.3, page 3-20, first paragraph. The work plan (DOE/RL 1992) does not include a proposal for installation of a test pit at the 116-F-9 site, while the LFI indicates that a test pit was excavated. This variance from the work plan should be explained.

Section 3.4, page 3-13, third paragraph. According to the work plan (DOE/RL 1992), the 116-F-4 pluto crib was to be evaluated as an interim remedial measures (IRM) candidate using analogous soil data from the B and D areas. Instead, intrusive soil samples were collected. This variance from the work plan should be explained.

Section 3.8.1, page 3-27, first paragraph. The work plan (DOE/RL 1992) proposes drilling of one borehole for the 108-F French drain, while the LFI indicates that only one hand-excavated sample was collected. This variance from the work plan should be explained.

Section 3.9.3, page 3-30, first paragraph; and Section 5.2.9, page 5-5, first paragraph. The decision to exclude the 116-F-5 ball washer crib from further IRM consideration is based on one sample from Dorian and Richards data from 1978. Because this is evaluated as a high-priority site, its exclusion should be explained in detail.

Section 3.12.3, page 3-34, first paragraph; and Section 5.2.12, page 5-6, first paragraph. The text states that site 116-D-6 is analogous to the 116-F-11 drain, except that 116-D-6 operated for 6 years, while 116-F-11 was in operation for 12 years. For this reason, the radionuclide inventory for site 116-F-11 could potentially be greater. The site is eliminated as an IRM site based on these "analogous data." Since site 116-F-11 was in operation twice as long, the potential for increased risk should be considered or, the reason this site is considered to be analogous to 116-F-11 should be explained.

Section 3.20, page 3-43, sixth and seventh paragraph. Chemical-specific ARAR don't appear to be complete. For example, identify

the potential federal chemical-specific ARAR for PCBs in soil from the current list. Also, location-specific ARAR don't appear to be complete either. With six archaeological sites recorded on ceded land, it would be expected to see some of the various laws protecting Native American culture and property.

Section 5.2, page 5.3, first paragraph. The first bullet refers to a 100 Area Environmental Impact Statement. What happened to the Hanford Remedial Action Environmental Impact Statement? When did the DOE issue a notice of intent to prepare this EIS? When is the record of decision scheduled?

REFERENCE

DOE/RL 1992. Remedial Investigation/Feasibility Study Work Plan for the 100-FR-1 Operable Unit, Hanford Site, Richland, Washington. U.S. Department of Energy. DOE/RL-90-33, Rev.0. *22549*
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