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Department of Energy
Richland Operations Office
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NOV 28 1995

Mr. Steve M. Alexander
Perimeter Areas Section Manager
Nuclear Waste Program
State of Washington
Department of Ecology
1315 W. Fourth Avenue
Kennewick, Washington 99336-6018

Mr. Douglas R. Sherwood
Hanford Project Manager
U.S. Environmental Protection Agency
712 Swift Boulevard, Suite 5
Richland, Washington 99352-0539

Dear Messrs. Alexander and Sherwood:

TRANSMITTAL OF LIMITED FIELD INVESTIGATION FOR THE 200-UP-2 OPERABLE UNIT,
DOE/RL-95-13, REV. 0

Attached are copies of the subject document (Attachment 1) for your information. This document incorporates comments received from the State of Washington, Department of Ecology, as identified in the attached responses to comments (Attachment 2). No comments were received from the U.S. Environmental Protection Agency. This transmittal meets a portion of the December 31, 1996, Hanford Federal Facility Agreement and Consent Order interim Milestone M-15-15E, 13 months ahead of schedule. Submittal of the final 200-UP-2 Focused Feasibility Study and Proposed Plan will complete this milestone.

If you have any questions, please contact Mr. B. L. Foley at 376-7087.

Sincerely,

Paul F. X. Dunigan, Jr.

P.F.X. Dunigan, Jr., Administrator
Hanford Tri-Party Agreement

RAP:BLF

Attachments: As stated

cc w/attachs:
D. R. Einan, EPA
G. H. Freeman, Ecology
R. L. Person, EM-442

cc w/o attachs:
G. R. Eidam, ERC
M. E. Todd, ERC
J. G. Woolard, ERC



Page 4-11, section 4.3.1.1.3, second to last sentence:

Please cite any studies which support the 1 rad/day aquatic limits applicability to a terrestrial scenario.

Response: This information is discussed in HSRAM Appendix E.

Page 4-11, section 4.3.1.2.2, first paragraph, second sentence:

Request that analysis include ingestion of soil from grooming and inhalation of contaminated dust from digging.

Response: See response to first comment.

Page 4-12, section 4.3.1.2.3, third paragraph, first sentence:

See comment on section 4.3.1.1.3

Response: See response to previous comment.

Page 4-12, section 4.3.1.2.5, second sentence:

The screening should also include the direct pathway of soil to pocket mouse (e.g., ingestion of contaminants from grooming and inhalation during digging).

Response: See response to first comment.

Page 4-13, section 4.3.2, first paragraph:

Please clarify where the EHQ limits came from to rank relative risk. Who established these values?

Response: These limits were developed to provide relative ranking of ecological risks developed under the qualitative risk methodology. Because of the qualitative nature of the risk evaluation, absolute numbers may be misleading. Therefore, a relative ranking scenario was established. Specific guidance on appropriate EHQ limits is not readily available; therefore, the relative limits were developed by the risk assessors based on the site characteristics and circumstances. All the sites evaluated remained on the IRM pathway because of potential human health risks; human health is the driver for continued IRM evaluation. The ecological risk will be considered in the evaluation of alternatives in the FFS.

**Responses to Ecology Comments on the *Limited Field Investigation*
for the 200-UP-2 Operable Unit,
DOE/RL-95-13, Draft A
September 11, 1995**

General Comments

Given the receptor for the ecological risk assessment is the Great Basin Pocket Mouse (a burrowing animal), the risk assessment must consider a direct contaminant uptake pathway from soil to pocket mouse (e.g., inhalation during digging and ingestion during grooming). Exposure to contaminated dust is a factor. A conservative approach to ecological risk is not being taken if this previously mentioned pathway is excluded from evaluation.

Response: The QRA is based on the methodology defined in *Hanford Site Risk Assessment Methodology* (HSRAM) which identifies the food ingestion pathway as most significant. See responses to specific comments.

Specific Comments

Page 4-9, section 4.3.1.1.1, first paragraph, last sentence:

Please provide studies which could support the assumption made in this sentence. A conservative approach is not being taken for the ecological risk evaluation if a direct pathway of soil to pocket mouse is not included for inhalation and ingestion of contaminants. Request this pathway be included in the ecological risk assessment.

Response: Based on the HSRAM, the food pathway is assumed to be the major exposure route for the Great Basin Pocket Mouse. The HSRAM acknowledges that this may result in an underestimation of risk. The other QRAs for the Hanford Site used this same assumption as stated in the HSRAM. Because the QRA supports the decision-making process for interim remedial actions, the more qualitative risk evaluation is appropriate; when a baseline risk assessment is conducted to determine final actions (as outlined in the *Hanford Past-Practice Strategy* (HPPS), then all pathways will be included. Also, because the waste sites in the operable unit have significant human health risk aspects, the sites remain on the IRM pathway.

Page 4-10, section 4.3.1.1.2, last paragraph, first sentence:

Request a statement within the parenthesis read "e.g., internal dose rate from consumption of food and ingestion of contaminated dust during grooming, and inhalation of contaminated dust during digging."

Response: See previous response.