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May 6, 1992



Steven H. Wisness
Hanford Project Manager
U.S. Department of Energy
P.O. Box 550, A5-19
Richland, Washington 99352

Re: Comments on "A Methodology for Assessing Impacts to
Groundwater from Disposal of Liquid Effluent to the Soil at
the Hanford Site"

Dear Mr. Wisness:

The U.S. Environmental Protection Agency (EPA) has completed its review of Hanford Federal Facility Agreement and Consent Order Interim Milestone M-17-13, "A Methodology for Assessing the Soil at the Hanford Site", (WHC-SD-EN-EV-008). Overall, EPA considers the methodology to be a well written, succinct presentation of the approach to be used for the assessment of continued soil column discharge at Hanford. In addition, the approach allows the flexibility to concentrate on those liquid effluents and receiving sites with the greatest potential for impact from continued discharge.

EPA is prepared to approve the methodology in its present form, without revision, upon resolution of the attached comments. The attached comments deal primarily with the specifics of how the methodology is applied to individual waste streams and receiving sites and not to the methodology itself. EPA believes these concerns can be worked out in the near-term without delaying production and submittal of a schedule for completion of the assessments.

Of primary concern to EPA is the development of the conceptual model for each receiving site and the associated effluent stream. EPA would prefer that the U.S. Department of Energy (DOE) and Westinghouse Hanford Company (WHC) meet with the Washington State Department of Ecology (Ecology), EPA, and their contractors to discuss the preliminary conceptual model for each receiving site prior to proceeding with the impact assessment. This preliminary review will provide all parties with the assurance that the input data required to perform the assessment is technically defensible.

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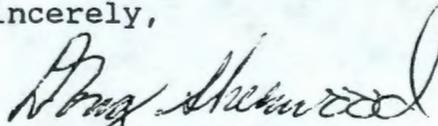
Steven H. Wisness

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Upon receipt of Ecology comments, a meeting should be scheduled to discuss any unresolved issues or any potential inconsistencies between the two sets of comments. Please feel free to call me at (509) 376-9529 if you have any questions about our comments.

Sincerely,



Douglas R. Sherwood
Environmental Engineer

Enclosure

cc: Dave Jansen/Toby Michelena, Ecology
Tony Knepp, WHC
Jim Mecca, DOE
Dave Nylander, Ecology
Ward Staubitz, USGS
Jonathan Williams, EPA
Tim Veneziano, WHC

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A METHODOLOGY FOR ASSESSING IMPACTS TO GROUNDWATER
FROM DISPOSAL OF LIQUID EFFLUENT TO THE SOIL AT THE
HANFORD SITE - WHC-SD-EN-EV-008

COMMENTS

1. Table ES-1, page ES-3

Comment: Table ES-1 is somewhat inconsistent with the current language in Interim Milestone 17-13A. The language in the interim milestone identifies 14 receiving sites requiring impact assessments, but that list includes the 216-B-63 Ditch and does not include the 300 Area Process Trenches. On the other hand, Table ES-1 does not include the 216-B-63 Ditch and does include the 300 Area Process Trenches. EPA will consider the need for any additional assessment for the 300 Area Process Trenches after completion of the ongoing work related to the finalization of the Expedited Response Action Completion Report. In addition, EPA requests that DOE and WHC verify the status of the 216-B-63 Ditch.

2. Section 2.2, Scope, page 2

Comment: EPA has not reviewed this methodology against the requirements of WAC-173-216 or WAC-173-218.

3. Section 2.4, Assumptions, page 3

Comment: In assumption #5, DOE has asserted that the purge water management strategy has resulted in severe limitations on the use of aquifer testing. The strategy allows for exceptions to the storage requirements on a case-by-case basis. DOE has not requested an exemption of any aquifer testing. EPA does not accept this assertion and will examine the need for information on aquifer properties as needed.

4. Section 4.1, Rationale, page 6

Comment: EPA considers the input data described in this section to be the key to development of a technically sound impact assessment. A review of the input data and its incorporation into a receiving site conceptual model would be valuable. In addition, the conceptual model development will also serve to verify whether the existing data supports the predetermined categorization of the assessment level for each receiving site. If the available data (existing and/or new) does not support the identified assessment level a change in approach may be required. At this point, it would also be valuable to identify the specifics of the impact assessment approach including; identification of analytical, numerical, or computer model to be used, contaminants to be addressed in the assessment, and adjacent facilities to be

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examined for influence of continued discharge, if appropriate.

Such an effort would help to ensure that the expectations of the regulatory agencies are being met.

5. Section 4.2, Impact Assessment Criteria, pages 7-10

Comment: EPA will accept 1/25 the Derived Concentration Guide as the screening criteria for radiological constituents, but it should be understood that these concentrations are inconsistent with the National Primary Drinking Water Standards. Independent of these screening levels, a more important criteria may be a best available treatment approach. EPA does not advocate a change to the screening criteria.

6. Table 5-1, page 16

Comment: EPA is concerned that the available data may not be sufficient to proceed with an impact assessment based on existing data. Of primary concern is the category assigned to 216-T-1 Ditch and 216-T-4-2 Ditch for which little data is available. Reevaluation of this assignment may be needed based on a review of the conceptual model and its input data. Similarly, EPA is not convinced that a reduction in flow to 2 gallons/minute at 1325-N eliminates the need to perform a detailed assessment at this receiving site. Such an assessment may be necessary to evaluate whether 2 gallons/minute is an appropriate flow restriction. All other receiving sites appear to be assigned appropriately, but a review of the preliminary conceptual model would help to confirm that assumption.

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SUBJECT: COMMENTS ON "A METHODOLOGY FOR ASSESSING IMPACTS TO GROUNDWATER FOR DISPOSAL OF LIQUID EFFLUENT TO THE SOIL AT THE HANFORD SITE"

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