



Oregon

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Mr. David Brockman, Manager
U.S. Department of Energy, Richland Operations Office
P.O. Box 550, MSIN A7-50
Richland, WA 99352

Dear Mr. Brockman:

On January 6, 2010, the U.S. Department of Energy (DOE) provided Oregon staff with a briefing on DOE's plans for conducting the third CERCLA Five-Year Review for the Hanford Site. The briefing was led by Cliff Clark of DOE and Digambar (Raja) Ramade from the Mission Support Alliance, with Paula Call also participating for DOE. As part of the briefing, Cliff explained that DOE anticipates doing the third five-year review much like the second five-year review completed in 2006. Cliff also noted that DOE anticipates a reduced public review and comment process for this review.

Our discussion during the briefing focused on some of Oregon's concerns with approaches used in the previous review and on our surprise at the reduced level of public participation proposed for this review. Based on our experience with the 2006 review and the January 6 discussion, we recommend and anticipate several things in the upcoming review:

1. An open and transparent process

Public review meetings are perhaps not necessary, but a well-publicized opportunity for adequate stakeholder review and comment on a draft report is essential. A kick-off workshop with stakeholders proved very useful for the 2006 review, and should again be useful for framing the review process and identifying stakeholder issues. Public review by all stakeholders might not be required as part of the five year review process, but pullback from the precedents set with review of the 2006 document and with the broad review process used for most DOE-RL documents would be poorly regarded by stakeholders. It would also seem to run contrary to recent proclamations from the Obama Administration calling for more openness in government and encouraging public involvement.

2. A comprehensive assessment

The review should assess all operable units (OUs) with an interim or final Record of Decision (ROD) and should explicitly consider and discuss all contaminants that are present in concentrations that exceed numeric criteria and/or that have been identified in risk-based analysis as (potentially) requiring remedial action. The 2006 review virtually ignored secondary contaminants¹ in assessing protectiveness. Also, a comprehensive analysis needs to consider “where the contaminants have come to reside” so that processes such as contaminant upwelling in the Columbia River (i.e., outside of the decision unit, but with plumes originating from locations like the 100-B/C-5 groundwater OU) are recognized and assessed.

3. An assessment that is systematic and conducted at an appropriate scale

Consistent with EPA guidance, assessment of protectiveness needs to be done on an OU by OU basis.

4. A critical self-assessment of remedies

Though it may be acceptable from a narrow regulatory perspective to claim protectiveness of a remedy on the basis of institutional controls, or on consideration that work is still in progress in a particular OU with the expectation that it will be effective upon completion, such a claim says little about the actual protectiveness of the remedy and can be misleading in evaluating actual protectiveness. It is far more important to critically evaluate whether the remedy is truly working (are concentrations of contaminants decreasing or have they dropped below the remedial objective) and if there is additional information that calls for a reassessment of whether the remedy might not continue to function in the future, or might not achieve Remedial Action Objectives (RAOs). As an example of the reason for our concern, we refer to item #3 in our June 13, 2006 comment letter on the Second Five-Year review, which discussed conditions at the 100-B/C Area. If there is new information, DOE should not be reluctant to acknowledge new understandings or new data. Stakeholders are likely to be far less critical of an honest self-examination that brings bad news than of a review that is perceived to be superficial or incomplete.

¹ By secondary contaminants, we refer to contaminants such as tritium, carbon-14, uranium (in the 100 Area), strontium (in the river corridor, except at 100- N), trichloroethylene, and nitrate, that were reported in the draft five-year review to be present in concentrations above a numeric standard (e.g., drinking water) at one or more locations in the river corridor, but that were never discussed in the context of assessing protectiveness.

5. A review that evaluates remedies in a broad context

Responding to comments from participants in the kick-off workshop for the last review in December 2005, DOE comment responses noted in several instances that “A five year review is by intent retrospective, not proactive.” We well understand that the purpose of a five year review is to assess the effectiveness of a remedy, but we believe the review needs to look at the remedy in a broad context. If a remedy is working as designed, but there is reason to suspect the remedy is (or may be) inadequate to actually correct the long-term problem (e.g., because standards have changed, underlying assumptions turn out to be incorrect, new data have come to light that change the understanding of plume dimensions or source, RAOs in the final ROD are likely to be more restrictive than those in an interim ROD), it is ultimately not sufficient simply to determine that the remedy is working as planned. Ideally, the three protectiveness questions should capture new information, but we believe many of the analyses in the previous five year review were done in a very narrow context that sometimes missed the big picture.

6. A review that does not assert protectiveness when there is not a basis for such a claim

The 2006 draft review asserted protectiveness of human health and the environment for OUs in the river corridor prior to completion of human health and ecological risk assessments. Risk assessments are still not completed for the river corridor, the Columbia River, or the Central Plateau. Until these are completed, claims of protectiveness are premature.

7. Clear statements of all assumptions, limiting conditions, estimates, etc, that are embedded in assessments of protectiveness

This applies to the wide variety of factors used for setting and evaluating risk and for setting cleanup criteria, such as identification and applicability of MTCA criteria and other ARARs, modeling assumptions, land use criteria, exposure assumptions and risk criteria, applicability of the two-fold dilution factor used in setting groundwater RAOs, etc. Recognizing and evaluating the influence of assumptions is especially important in the context of the potential for interim RODs to morph into final RODs. If a remedy is adequate for an interim ROD, but there is reason to believe (or know) that a tighter standard will be applied in the final ROD, protectiveness should be judged not only on criteria in the interim ROD, but also on likely criteria for the final RODs.

We thank DOE, specifically Cliff, Raja, and Paula, for their time and effort in briefing Oregon on plans for conducting the third CERCLA five-year review at Hanford. As cleanup proceeds at Hanford, especially as we near closure for sites in the river corridor, the five-year review will be important for assessing the status of cleanup and the effectiveness of remedies. We look forward

to working with DOE and its contractors to develop and conduct a comprehensive, effective review of work on the Hanford Site. If you have questions or would like to discuss any of our comments please call me, or Paul Shaffer of my staff, at your convenience.

Sincerely,

Ken Niles
Assistant Director

Cc: Dennis Faulk, U.S. Environmental Protection Agency
Jane Hedges, Washington Department of Ecology
Paula Call, U.S. Department of Energy, Richland Field Office
Cliff Clark, U.S. Department of Energy
Stuart Harris, Confederated Tribes of the Umatilla Indian Reservation
Russell Jim, Yakama Indian Nation
Gabriel Bohnee, Nez Perce Tribe
Hanford Natural Resources Trustee Council