



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

1315 W. 4th Avenue • Kennewick, Washington 99336-6018 • (509) 735-7581

September 27, 2002

Mr. Kevin Bazzell
United States Department of Energy
Richland Operations Office
P.O. Box 550, MSIN: A3-04
Richland, Washington 99352

RECEIVED
OCT 08 2002

EDMC

Dear Mr. Bazzell:

Re: *Approval of Remedial Design Report/Remedial Action Work Plan for the 100-NR-1 Treatment, Storage, and Disposal Units, Rev. 2, DOE/RL-2000-16, Rev. 0*

The Washington State Department of Ecology (Ecology) had previously reviewed the *Remedial Design Report/Remedial Action Work Plan for the 100-NR-1 Treatment, Storage, and Disposal Units, Rev. 2*. Ecology withheld approval of the document pending distribution and review by the Hanford Natural Resources Trustees.

One set of comments was received from a trustee entity, the Nez Perce Tribe, in a letter dated May 17, 2002. Ecology concurs with the United States Department of Energy's (USDOE's) proposed responses to the Nez Perce Tribe comments. A set of those comment responses is enclosed. Therefore, Ecology approves the work plan.

If you have any questions, please feel free to contact me at (509) 736-3029.

Sincerely,

John B. Price, Environmental Restoration Project Manager
Nuclear Waste Program

sdb
Enclosure

cc: Nick Ceto, EPA
Larry Gadbois, EPA
Chris Smith, USDOE
Tom Zeilman, Chair, HNRT
Richard Gay, CTUIR

Pat Sobotta, NPT
Russell Jim, YN
Ken Niles, OOE
Administrative Record: 100-NR-1 Area

Responses to comments from Nez Perce Tribe Environmental Restoration & Waste Management to *Remedial Design Report/Remedial Action Work Plan for the 100-NR-1 Treatment, Storage, and Disposal Units*, DOE/RL-2000-16, Rev. 2

Thank you for your comments dated May 17, 2002. We appreciate the time you have taken in preparing them. Responses to your comments follow.

General Comment: We received the referenced document on April 23rd which did not give us enough time to meet your May 3rd deadline. It may have been sent to the NRTC for review, but that is not the appropriate way to get the Tribe involved, especially in a timely manner. Although we are part of the NRTC, these documents should be sent directly to the ERWM with a 30-60 day review period.

Response: We appreciate your timely response in this instance and apologize for the delay in distribution. For future document distribution, the applicable requirements include both Section 10.10 of the TPA Action Plan, and the CERCLA requirement to provide trustees the opportunity to comment on work plans. We note that Section 10.10 of the TPA states that "DOE will provide copies of key documents and other pertinent material to the tribes at the time they are provided to EPA and Ecology for review."

Comment: The ERWM continues to have reservations about the integrity of Institutional Controls, particularly when responsibility of those controls may be passed to a new owner through avenues such as deed restrictions. This RDR/RAWP recognizes that concern, as noted on page 2-12, second paragraph: "The other balancing factors suggest that the extent of remediation and associated costs be weighed against the reliability and cost of institutional controls." What guarantees do we have that passing responsibility of Institutional Controls on through Site release actions will be an effective way to maintain safety management? Should DOE be allowed to relinquish control of a site if the site still has waste in place that requires controls?

See 3rd bullet, same page - "In the event that DOE relinquishes full control of the site, deed restrictions will be applied as necessary to prohibit excavation and drilling below the 4.6 m (15-ft) level in those cases where contaminants meet the required groundwater/river protection cleanup goals, but exceed concentration that are protective for direct exposure."

And, again, page 3-17, 3.8 SITE RELEASE, second paragraph - "Access to the property will be controlled in the near term by periodic patrols by Hanford Site personnel (as long as the Site is under DOE jurisdiction). The property may also be controlled through deed restrictions if DOE sells or leases the property to others." The concern, once again, is reviewed in this question: What process or entity ensures that Institutional Controls (through deed restrictions, etc.) will be property regulated through time if DOE relinquishes responsibility for the site?

Response: Institutional controls (ICs) for the 100-NR-1 Operable Unit are specified on page 37 of the Interim Action Record of Decision (please note that the selected Remove/Dispose alternative refers back to the description of ICs under the Institutional Controls alternative preceding it). In addition, the Tri-Parties recently released a site-wide Institutional Controls Plan (DOL/RL-2001-41). The Tri-Parties will be assessing and reporting on the effectiveness of ICs on an annual basis, as required by this IC Plan. The IC Plan will be revised to mitigate any

deficiencies identified by annual assessments. We believe that this IC plan will provide for the long-term controls that you're requesting. For further information regarding this plan please contact Jim Daily at 376-7721.

Comment: In section 3, **Remedial Action Approach and Management**, the means to characterize and analyze soil from 116-N-1, 116-N_3, and UPR-100-N-31 is described as a "characterize-and-remediate-in-one-step" method. Though it is stated that the method relies on recorded historical process information, this method apparently relies heavily on using gamma probe devices to guide excavation and field screening. ERWM reminds the DOE that this approach has limitations of missing potential contaminants that don't readily associate with the gamma-emitters. To strengthen this observatory approach, ERWM suggests the following:

- an even stronger emphasis (at least as indicated) on historical analysis of inventory and likely compositions of the wastes;
- from this history, develop an analysis of what might be encountered;
- ensure that the work site has, in place, the capabilities to deal with the potential problems encountered;
- very careful exhumation, continually observing for the unexpected, and, of course, using the gamma probes.

Response: We agree with your comment, and believe that we are implementing it as follows. We have completed a robust historical analysis of potential inventory during the Corrective Measures Study. Later, additional research was conducted during the Data Quality Objectives process. To strengthen the observational approach field crews are using beta probes in addition to gamma probes. Excavation is proceeding on a careful basis, in part to minimize radiation dose to workers.

Comment: On page 3-4, in section 3.2.2.5 **Equipment Washing**, it is stated that collection of equipment wash water (from non-contaminated equipment) is not necessary. However, a concern is that if large volumes of wash water are produced through this process, that water can travel through the vadose zone and into the groundwater, it may come in contact with contaminants in the soils and carry them to the groundwater, and it can affect the local hydrology through mounding.

Response: Large volumes of wash water are not produced. Equipment is washed only on an "as needed" basis. Examples include: washing vehicles as part of preventative maintenance, and washing equipment to allow repair of components. Equipment washing is not allowed in or near contamination areas, underground radioactive material areas, or waste sites.