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Confederated Tribes and Bands
of the Yakama Nation

Established by the
Treaty of June 9, 1855

July 13, 2010

David A. Brockman, Manager
U.S. Department of Energy, Richland Operations Office
P.O. Box 550 (A7-75)
Richland, Washington 99352

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Douglas H. Chapin, NEPA Document Manager
NRDWL/SWL EA
U.S. Department of Energy
P.O. Box 550 (A5-11)
Richland, Washington 99352

Subject: Review of the "Interim Action Environmental Assessment for Closures of the Non-Radioactive Dangerous Waste Landfill and Solid Waste Landfill, DOE/EA-1707D"

Dear Mr. Brockman and Mr. Chapin,

The Yakama Nation ERWM Program appreciates the opportunity to review and provide comments on the "Interim Action Environmental Assessment for Closures of the Non-Radioactive Dangerous Waste Landfill and Solid Waste Landfill, DOE/EA-1707D"

The Confederated Tribes and Bands of the Yakama Nation is a federally recognized sovereign pursuant of the Treaty of June 9, 1855 made with the United States of America (12 Stat. 951). The U.S. Department of Energy's Hanford site was developed on land ceded by the Yakama Nation under the 1855 Treaty with the United States. The Yakama Nation retains reserved rights to this land under the Treaty.

In our review of the Interim Action Environmental Assessment (EA) for Closures of the Non-Radioactive Dangerous Waste Landfill (NRDWL) and Solid Waste Landfill (SWL), DOE/EA-1707D, the Yakama Nation ERWM Program has identified the following areas of concern and requests clarification and discussion:

- **Treaty rights:** Background information implies the grouping of the Yakama Nation within the group of 'evicted landowners.' **As stated above, the Yakama Nation retains reserved rights to this land under the Treaty and requests rewording of this section to reflect properly our roll on the Hanford site.**

- **Amended Memorandum of Agreement:** The Signatory Parties listing status has been altered and remains an issue of disagreement. Previous MOA conditions have been altered. Therefore, prior agreements are considered null and void. ***The Yakama Nation ERWM Program requests clarification on how these issues are to be resolved.***

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- **Purpose and Need for Agency Action:** There has been recent discussion of construction of a new Solid Waste Landfill in the Central Plateau Area of the Hanford site. Closure of the Solid Waste Landfill (SWL) seems impractical and in conflict with DOE obligations to reduce waste and its environmental liability. ***The Yakama Nation ERWM Program requests clarification on this issue.***

- ***Over-reliance on the Draft TC&WM EIS:*** While the EA indicates that the proposed actions analyzed are "within the scope of the *Draft Tank Closure and Waste Management Environmental Impact Statement for the Hanford Site, Richland, Washington* (TC&WM EIS), the TC&WM EIS does not evaluate these currently proposed actions in sufficient detail. The EA should contain sufficient information to make a finding (i.e. Finding of No Significant Impact, or a Finding of Significant Impact) regarding the specific impacts of this proposal. ***The Yakama Nation ERWM Program requests additional information is provided in Draft B of this EA.***

- ***Incomplete cover design:*** Information provided in Figure 3-1 and Page 3-2 is a gross over-simplification, and at best, considered a basis of design. The following issues were discussed during a briefing to Tribal governments. ***The Yakama Nation ERWM Program requests clarification on how each of these concerns will be addressed.***
    a. Monofill Evapotranspiration (ET) Barriers currently under consideration are said to demonstrate effectiveness in arid and semiarid climates and at relatively low costs. These statements are not supported by the existing facts (see reference noted below).
    b. Potential for subsidence is minimized; proposed ET Barrier is thought to accommodate moderate differential subsidence or subsidence with no detrimental effects. Current design does not include additional mitigation measures (i.e., redundancy of multiple hydrologic barriers).
    c. Thickness, and thus water storage capacity and durability of proposed ET barrier seem to be at or near the minimum of ET barriers installed elsewhere.
    d. It has not been demonstrated how the proposed barrier is capable of being in compliance with WAC 173-303-665(6)(a)(v) requirements of having a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present. Use of an "equivalent evapo-transpiration permeability" approach is not acceptable. Declaration that Borrow Area C soils have the required low permeability to meet the RCRA Subtitle C cover standards has not been demonstrated.
    e. Use of the HELP model to predict landfill cover performance of proposed ET barrier has not been validated.
    f. "Fringe-effects" and creation of ephemeral wetlands not considered.
    g. Compliance with Dangerous Waste Closure requirements and suggestion of future possible installation of equipment "as appropriate in accordance with final closure plan requirements" is insufficient detail to meet EA needs to provide an analytical basis for determining choice of alternatives.
    h. Potential cumulative impacts associated with the proposed action are said to be attributed to the Nonradioactive Dangerous Waste Landfill (NRDWL) rather than both landfills. Inventory for the Solid Waste Landfill (SWL) is uncertain at best and historical data (Westinghouse assessment of central landfill), noted

significant releases of volatile organics (including carbon tetrachloride) in down-gradient wells.

Reference: "Alternative Covers: Enhanced Soil Water Storage and Evapotranspiration in the Source Zone." W.H. Albright, W.J. Waugh, and C.H. Benson, May 2007.

- ***Significance of Impacts:*** DOE has determined that proposed excavation activities at Borrow Area C will result in an adverse effect to a National Register of Historic Places-eligible traditional cultural property (*Laliik)*. The proposed stipulations in the amended Memorandum of Agreement (MOA) are insufficient to mitigate the additional adverse effects of enlarging the area to be used for sediment mining. Quadrupling the impacted area within a culturally sensitive site would appear to raise the impact to the level of a 'significant' impact and therefore warrant the preparation of an Environmental Impact Statement. ***The Yakama Nation ERWM Program requests clarification whether there will be a stand-alone EIS prepared.***

  Furthermore, continued excavation of the Borrow Area C site will have an adverse impact within the Rattlesnake Mountain Traditional Cultural Property (TCP). This initiated a review of the National Historic Preservation Act (NHPA) Section 106 process. ***The Yakama Nation ERWM Program requests clarification on DOE's resolution of how this cultural impact will be addressed.***

- ***Mitigation of Impacts:*** Neither the proposed "mitigation measures" included in the proposed Memorandum of Agreement, nor the EA itself, documents that DOE has adequately evaluated alternative measures (including the Hanford barrier or a RCRA Subtitle C cover) that would avoid or minimize the identified adverse impacts. Alternatives that would avoid the increased disturbance to Borrow Area C and the associated cultural impacts should have be thoroughly evaluated and documented in this EA and were not. ***The Yakama Nation ERWM Program requests clarification on how each of the following concerns will be addressed.***

  a. Impacts are characterized as "small", "minimal," or "not substantial," but are rarely quantified. Impacts to water quality are not thoroughly evaluated since they "were considered in the cumulative impacts addressed in the TC&WM EIS." Past historical groundwater monitoring data indicated the presence of multiple volatile organic constituents at concentrations in excess of applicable groundwater protection standards.

  b. In some cases, the threshold used for evaluating potential significant impacts for proposed actions in this EA is whether the actions have the " potential to contribute significantly to cumulative impacts" in the TC&WM EIS. The significance of the direct impacts of proposed actions should be considered within the context of this EA.

  c. In other cases, specifically regarding ecological resources, the minimal evaluation included in the TW&WM EIS is ignored. The EIS indicates that four state-listed species may be present within Borrow Area C, while the EA does not address potential impacts to any state-listed species.

  d. Army Loop Road evaluation determined it is not eligible as a contributing property to the Manhattan Project/Cold War Era Historic District. It is stated that project activities will result in an adverse effect to this property. Upgrades will expand the road for bi-directional hauling traffic. There is no discussion of

any existing or proposed cultural surveys over these areas. Therefore, these activities present the opportunity for disruption of ecological resources that have become established in the interim, or for the discovery of cultural sites that were previously unrecognized.

e. Consideration of Alternatives and their environmental impacts are not provided at the needed level of detail. Reference to submitted, yet unapproved, closure plans to Ecology is not a defensible reason for limited evaluations.

- **Cost Estimates (Table 5-1):** As stipulated in DOE guidance, a certified, validated cost estimate is not provided or referenced. Furthermore, in November 1990, Ecology informed DOE of their preference for clean closure of NRDWL (with removal of all waste material). **The Yakama Nation ERWM Program recognizes complete removal of wastes from SWL is not necessary, but we support the removal, treat, and disposal of the dangerous chemical wastes from the NRDWL site.**

- ***Compliance with Other Laws:*** The EA makes the statement that Ecology has determined a closure path (via a Closure Plan) for the Nonradioactive Dangerous Waste Landfill and the Solid Waste Landfill that supports proposed actions in this EA. It is presumptuous on DOE's part to assume approval of closure plans prior to completion of the public involvement and permit modification process. Prior to any permitting actions, a State Environmental Policy Act (SEPA) checklist must be submitted, reviewed, a determination made. It does not appear that information currently provided in this EA will suffice as a basis for a SEPA determination. ***The Yakama Nation ERWM Program requests clarification on how this concern will be addressed.***

Hanford Advisory Board (HAB) Advise #174 (Considerations for Barrier Application) notes "engineered barriers should not be considered permanent. Risk assessments should examine the magnitude of barrier failure, the likelihood of failed Institutional Controls, and the resulting consequences to human health and the environment." While risk assessment is not required, the Yakama Nation ERWM Program supports a more conventional and mature approach to remediating subsurface contamination which permanently removes contamination from the site and does not require long term maintenance or monitoring or use of institutional controls for extended periods (i.e. over 100 years). **We recommend DOE consider the use of Partial Remove Treat and Dispose Alternative and RCRA Subtitle C barrier.**

The Yakama Nation ERWM Program looks forward to dialog on these concerns and comments. If you have any questions please contact Russell Jim at (509) 945-6741, or Wade Riggsbee (509) 945-6756 or (509) 967-5375.

Sincerely,

Russell Jim
Yakama Nation
ERWM Program Manager

cc: Mr. Matthew McCormick
Briant Charboneau, DOE/RL
Dennis Faulk, UPEPA
Jane Hedges, WA Ecology
Ken Niles, Oregon Dept of Energy
Stuart Harris, CTUIR
Gabriel Bohnee, NPT
Marlene Shavehead, Yakama Nation ERWM
Dave Rowland, Yakama Nation ERWM
Jean Vanni, Yakama Nation ERWM
John Beckstrom, Yakama Nation ERWM
Administrative Record