



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 HANFORD/INL PROJECT OFFICE
309 Bradley Boulevard, Suite 115
Richland, Washington 99352

2005I-409

RECEIVED

JUL 14 2005

July 13, 2005

Mr. Todd Martin, Chair
Hanford Advisory Board
712 Jadwin, Suite 4
Richland, Washington 99352

Re: Hanford Advisory Board Advice #174 – Considerations for Barrier Application

Dear Mr. Martin:

The U.S. Environmental Protection Agency (EPA) appreciates the thought and effort that resulted in this advice that expands on the value-based decision-making tool (Advice #173). We believe that EPA's principles are consistent with this advice (e.g., barriers should only be used where the characterization and evaluation support the decision; remedies that include barriers are subject to periodic reviews for a very long time; and, remedies that include barriers represent a long-term stewardship commitment). The combination of these principles and the Board's advice (#173 and #174) will ensure that technically sound remedy decisions that reflect our common goal of a protective cleanup for the Hanford Site are made.

If you have any questions, please contact me at (509) 376-9529.

Sincerely,

Nicholas Ceto, Program Manager
Hanford Project Office

cc: Keith Klein, DOE
Mike Wilson, Ecology



STATE OF WASHINGTON
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2005I-494

September 2, 2005

Mr. Todd Martin
Hanford Advisory Board
713 Jadwin Avenue, #4
Richland, WA 99352-4248

Reference: HAB Advice #174, Barrier Applications

Dear Mr. ^{Todd} Martin:

Thank you for the Hanford Advisory Board's recent letter regarding considerations for burial application.

Ecology shares the Board's ideal for remedial action. We are committed to the principle that the characterization, retrieval, treatment, and disposal approach should always be considered before any other options.

Additionally, we believe that the regulatory criteria Department of Ecology (Ecology) follows is consistent with the specific points of the Board's advice:

- **Barriers should not be considered permanent.** Washington Administrative Code Chapter 173-340-360(3)(b) requires Ecology to give preference to permanent solutions to the maximum extent practicable. Our criteria "to determine whether a cleanup action uses permanent solutions to the maximum extent practicable [is] the disproportionate cost analysis specified in (e)" of that same chapter.
- **Risk assessments should consider the potential impact to human health and the environment in the event of barrier failure or failed institutional controls.** This is Ecology's standard approach to conducting risk assessments for the Hanford Site and we will continue this practice in accordance with our regulatory requirements.
- **The ability for future waste retrieval in instances where the engineered barrier will not be protective for the life span of the hazards.** Ecology is not aware of regulatory decisions anywhere that require this ability. This ability would be an additional remedial alternative that could be considered on a case-by-case basis, as appropriate.



- **Monitoring of performance criteria should be required for engineered barriers, and further advised that “a site with engineered barriers must be monitored more closely than an engineered landfill facility ...”** Ecology agrees and expects to require submittal of a site-specific remedial design for barriers -- including post-construction monitoring plans.
- **There should be a public review process for barriers.** Ecology expects that the elements described in the advice would be addressed in the draft decision documents. Those documents undergo a public review and comment period in accordance with applicable regulatory requirements and the Hanford Community Relations Plan.
- **Post-closure care requirements.** Ecology agrees that regulatory decision documents must describe the institutional controls. Additionally, Ecology will require submittal of a site-specific remedial design for barriers that includes a plan for post-closure care.
- **A need for periodic review of the protectiveness of the barrier.** The Board advice suggested that the periodic review should include “research, development, and future application” of new technologies. Ecology agrees that there should be periodic review of the barriers in accordance with regulatory requirements and that it is appropriate for the periodic reviews to consider new and emerging technologies.

Again, thank you for the Board's input. I look forward to continued success as we work together on these important issues.

Sincerely,



Jay J. Manning
Director

Mr. Michael A. Wilson
05-AMCP-0387

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