UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MEMORANDUM

SUBJECT: National Remedy Review Board Recommendations for the Hanford Superfund Site Interim Remedial Action for Spent Nuclear Fuel "K Basins"

FROM: Bruce K. Means, Chair
National Remedy Review Board

TO: Michael F. Gearheard, Acting Director
Office of Environmental Cleanup
EPA Region 10

Purpose

The National Remedy Review Board (NRRB) has completed its review of the proposed remedial action for the Hanford Superfund Site interim remedial action for spent nuclear fuel "K basins" in Richland, WA. This memorandum documents the NRRB's advisory recommendations.

Context for NRRB Review

As you recall, the Administrator announced the NRRB as one of the October 1995 Superfund Administrative Reforms to help control response costs and promote consistent and cost-effective decisions. The NRRB furthers these goals by providing a cross-regional, management-level, "real time" review of high cost proposed response actions. The board reviews all proposed cleanup actions that exceed its established cost based review criteria.

The NRRB review evaluates the proposed actions for consistency with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and relevant Superfund policy and guidance. It focuses on the nature and complexity of the site; health and environmental risks; the range of alternatives that address site risks; the quality and reasonableness of the cost estimates for alternatives; regional, state/tribal, and other stakeholder opinions on the proposed actions, and any other relevant factors.

Generally, the NRRB makes "advisory recommendations" to the appropriate regional decision maker before the region issues the proposed response action for public comment. The region will then include these recommendations in the Administrative Record for the site. While the region is expected to give the board's recommendations substantial weight, other important factors, such as subsequent public comment or technical analyses of response options, may influence the final regional decision. It is important to remember that the NRRB does not change the Agency's current delegations or alter in any way the public's role in site decisions.

NRRB Advisory Recommendations

The NRRB reviewed the informational package for the proposed interim remedial action to address the spent nuclear fuel "K basins" at Hanford on January 12, 1999. Based on this review and discussion, the NRRB offers the following comments.

- The board supports the region's position that the "K basins" pose serious threats to human health and the environment and should be addressed expeditiously. The board also supports the region's remedial action objectives, which rely on CERCLA authority to mitigate actual and threatened releases to nearby surface water and groundwater by removing hazardous substances (i.e., spent nuclear fuel, sludge and other materials) from the basins.

- The information presented to the board did not adequately describe the estimated cost or the expected performance data for the sludge treatment alternatives. As presented, the preferred alternative for treatment of sludge is characterized by high unit costs; but as the region indicated, alternative treatment approaches have the potential to reduce overall remedy costs and should be more fully evaluated.

- The board acknowledges that contaminated sludge treatment options are limited by the storage/disposal endpoints currently available for the treated sludge. That is, there are currently no facilities in the U. S. that will accept the high level waste expected to be generated from this action, and there is continuing uncertainty about whether treatment residuals will pass waste acceptance criteria that planned facilities may require. The board also acknowledges that studies of sludge treatment technologies will continue after remedy selection to investigate lower cost options. For these reasons, the board recommends that the region consider developing specific performance objectives for sludge treatment that tie directly to reasonably anticipated waste management options for residuals in order to clarify how the range of sludge treatment alternatives will be evaluated once ongoing treatability studies are completed. In identifying the most appropriate sludge treatment alternative, the region should take the ultimate disposition of the treated sludge, as well as total project, or life cycle, costs into consideration. More complete information on the range of sludge treatment options considered (or alternatively, specific performance objectives for their later evaluation) should be presented in the proposed plan.

- Considering the projected life cycle costs of this action, the board recommends that DOE, in concert with the region, continue to optimize cost elements as the basin actions proceed, and more is learned about the nature of the wastes and the cost effectiveness of treatment options from ongoing studies.

- Based on the material provided, the board is concerned that the costs for DOE-specific program management, project management, and overhead may be excessive. Further, the board believes it is not appropriate to include facility overhead costs (e.g., for maintaining the basins without cleanup action) in cleanup cost estimates for actions to be taken under CERCLA. Such accounting makes it difficult for decision makers and other stakeholders to consider proposed actions based on their own merits and implications. The board recommends that DOE remove non-CERCLA costs from their cost estimates.

The NRRB appreciates the region's efforts to work closely with the DOE, the state and community groups at this site. The board members also express their appreciation to the region and state for their participation in the review process. We encourage Region 10 management and staff to work with their regional NRRB representative and the Region 4/10 Accelerated Response Center in the Office of Emergency and Remedial Response to discuss any appropriate follow-up actions.

Please do not hesitate to give me a call if you have any questions at 703-603-8815.

cc: S. Luftig
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