

Department of Energy

Richland Operations Office P.O. Box 550 Richland, Washington 99352

DEC 0 2 2011

12-HAB-0003

Ms. S. L. Leckband, Chair Hanford Advisory Board Enviroissues Hanford Project Office 713 Jadwin, Suite 4 Richland, Washington 99352

Dear Ms. Leckband:

RESPONSE TO HANFORD ADVISORY BOARD (HAB) SEPTEMBER 9, 2011, CONSENSUS ADVICE #249, "DRAFT HANFORD SITE THIRD CERCLA FIVE YEAR REVIEW REPORT"

Thank you for your letter conveying Hanford Advisory Board (HAB) consensus advice #249 "Draft Hanford Site Third CERCLA Five Year Review Report." We appreciate the HAB's continued interest and feedback on this process.

As discussed with the River and Plateau committee and the HAB, the purpose of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Five-Year Review is to evaluate the implementation and performance of remedies selected to remediate contaminant releases that pose or have a potential to pose a threat to human health or the environment. This is distinct from the selection of remedy process, which is done through the CERCLA engineering evaluation/cost analysis and/or remedial investigation/feasibility study decision processes. The CERCLA Five-Year Review process determines if the remedy is, or will be, protective of human health and the environment when the cleanup work required by the Record of Decision is done. The methods, findings, and conclusions of the CERCLA Five-Year Reviews are documented in the Hanford Site Five-Year Review Report (Report) that also identifies issues and associated actions to address them.

Below are responses to your advice:

Advice Point #1: The Board advises DOE to thoroughly evaluate whether all chosen remedies are effective, and are protective of human health and the environment.

Response: The U.S. Department of Energy (DOE) evaluated all the selected remedies to determine whether they are effective and protective of human health and the environment based on the U.S. Environmental Protection Agency (EPA), "Comprehensive Five-Year Review Guidance - EPA 540-R-01-007" (http://www.epa.gov/superfund/accomp/5year/guidance.pdf). DOE followed DOE and EPA guidance in developing the protectiveness statements for evaluating the protectiveness of remedies. Consistent with the DOE and EPA guidance, some protectiveness determinations were deferred due to a lack of sufficient factual information upon which to base a determination.

Advice Point #2: The Board advises DOE to clearly articulate the methodology it used to reach its protectiveness determinations. This should include information used to support its conclusions, such as soil and groundwater monitoring and sampling data, by location, for each operable unit.

Response: The methodology used to reach its protectiveness determinations is articulated and well-described in the Report. In addition, the "Hanford Site Third Five-Year Report" contains hyperlinks and references to detailed information in those documents used to support the protectiveness determinations. This enables anyone reading the report to have access to the indepth background information on which the reviews and conclusions are based.

Advice Point #3: The Board advises DOE and regulators to agree on additional sampling needed to evaluate protectiveness, and to include the results in the Five-Year Review report.

Response: There is general agreement between DOE and the regulatory agencies on the sampling necessary to evaluate protectiveness. The results of the evaluation are summarized in the text of the report. More detailed sampling information is provided in several of the referenced documents accessed through live links found in the text of the Report. Data from implementation of the selected remedies, including data from cleanup verification sampling and ongoing monitoring data, were considered in the five-year review effort.

Advice Point #4: The Board advises DOE that, as cleanup progresses, members of the public may rely on the Five-Year Review reports to determine whether cleanup is effectively protecting human health and the environment. It is important that the Third report and future Five-Year Review reports clearly demonstrate the ongoing effectiveness of all remedial actions.

Response: Members of the public can rely on the Five-Year Review Reports for information on whether the selected cleanup remedies are effectively protecting human health and the environment. Based on prior HAB feedback, this Report was developed with early and frequent input from the regulatory agencies. EPA and the State of Washington Department of Ecology (Ecology) representatives participated as members of DOE's integrated project team who conducted the review.

As previously stated, this third Five-Year Review followed the EPA and DOE guidance for conducting five-year reviews. The Report presents the Five-Year Review of CERCLA response actions at the Hanford Site where the completed remedial action will result in hazardous substances, pollutants, or contaminants remaining onsite either above levels that allow for unlimited use and unrestricted exposure, or that will require five or more years to allow for unlimited use and unrestricted exposure

Advice Point #5: The Board incorporates by reference the values and recommendations regarding institutional controls and inclusion of new information articulated in Advice #190, and advises DOE not to rely on institutional controls to determine long term protectiveness of a performed remediation action.

Response: The CERCLA process applies evaluation criteria in selecting each final remedy. The criteria include overall protection of human health and the environment, compliance with requirements, long-term effectiveness and permanence, reduction in toxicity, mobility and volume, implementability, and cost, among others. Technical solutions that permanently address threats to human health or the environment are preferred whenever possible. However, institutional controls (ICs) are an essential part of CERCLA removal and remedial actions when there are no technical cleanup actions that can completely resolve a threat to human health or the environment and during the period that cleanup actions are being implemented. Per CERCLA regulations, ICs can be and have been selected as a component of Hanford cleanup remedies to prevent or limit exposure to hazardous substances during and after implementation of remedies. Based on the selected remedies, different ICs may be needed during a particular stage of the remediation. When the remedial action includes ICs, the Five-Year Review considers the implementation status of those controls to ensure the durability of the controls.

Thank you again for your advice and continued involvement in the CERCLA Five-Year Review process. If you have any questions, please contact Paula Call at (509) 376-2048.

Sincerely,

Manager

HAB:PKC

Enclosure

cc: See page 4

Ms. S. L. Leckband 12-HAB-0003

cc w/encl:

C. Brennan, EM-42

S. L. Charboneau, ORP-DDFO

D. A. Faulk, EPA

T. Gilley, Enviroissues

S. Hayman, Enviroissues

J. A. Hedges, Ecology

S. S. Patel, EM-51

S. L. Samuelson, ORP

T. L. Sturdevant, Ecology

S. G. Van Camp, EM-51

C. D. West, EM-51

M. Zhu, EM-51

Administrative Record

Environmental Portal

The Oregon and Washington

Congressional Delegations

U.S. Senators (OR)

J. Merkley

R. Wyden

U.S. Senators (WA)

M. Cantwell

P. Murray

U.S. Representatives (WA)

N. Dicks

R. Hastings

J. Herrera Beutler

J. Inslee

R. Larsen

J. McDermott

C. McMorris Rodgers

D. Reichert

A. Smith

State Senators (WA)

J. Delvin

M. Hewitt

State Representatives (WA)

L. Haler

B. Klippert