



U.S. Department of Energy

~~OFFICE OF ENVIRONMENTAL PROTECTION~~

P.O. Box 450  
Richland, Washington 99352

OCT 21 2003

03-ED-144

Mr. Todd Martin, Chair  
Hanford Advisory Board  
1933 Jadwin, Suite 135  
Richland, Washington 99352

Dear Mr. Martin:


HANFORD ADVISORY BOARD (HAB) CONSENSUS ADVICE #144: TANK WASTE  
RETRIEVAL AND CLOSURE ENVIRONMENTAL IMPACT STATEMENT (EIS) SCOPING

- References:
1. HAB letter from T. Martin to M. E. Burandt, ORP, "Tank Waste Retrieval and Closure EIS Scoping," dated February 7, 2002.
  2. ORP letter from M. E. Burandt to T. Martin, HAB, "Hanford Advisory Board (HAB) Consensus Advice #144: Tank Waste Retrieval and Closure Environmental Impact Statement (EIS) Scoping," dated March 12, 2003.

In response to Reference 2, we promised you continuing dialogue on the issues raised in the advice. Since that time, we have made significant progress in preparation of the draft Tank Closure EIS. Prior to release of the draft Tank Closure EIS, I wanted to update you about how we dealt with the previous advice. The attachment updates our response to each item identified in your February 7, 2002, advice letter.

If you have any questions, please contact me, or Mary E. Burandt, Environmental Division, (509) 372-7770.

Sincerely,

  
Roy J. Schepens  
Manager

ED:MEB

Attachment

cc: See page 2

Mr. T. Martin  
03-ED-144

-2-

cc w/attach:

J. E. Loving, EH-42  
M. S. Crossland, EM-11  
T. Fitzsimmons, Ecology  
M. A. Wilson, Ecology  
P. Mabrie, EnviroIssues  
M. Gearhard, EPA  
J. Iani, EPA, Region 10  
M. K. Marvin, RL  
S. L. Waisley, RW-2E  
D. Stock, SAIC

U.S. Senators (OR)

Gordon H. Smith  
Ron Wyden

U.S. Senators (WA)

Maria Cantwell  
Patty Murray

State Senators (WA)

Pat Hale  
Mike Hewitt

U.S. Representatives (OR)

Earl Blumenauer  
Peter DeFazio  
Darlene Hooley  
Greg Walden

U.S. Representatives (WA)

Brian Baird  
Norm Dicks  
Jennifer Dunn  
Jay Inslee  
Richard Hastings  
Rick Larsen  
Jim McDermott  
George Nethercutt  
Adam Smith

State Representatives (WA)

Jerome Delvin  
Shirley Hankins

**INFORMATION RELATED TO TANK CLOSURE ENVIRONMENTAL IMPACT  
STATEMENT (EIS) AND HANFORD ADVISORY BOARD (HAB) ADVICE #144**

**1. Item:** The HAB would like to emphasize that all alternatives should be considered carefully, and the preferred alternative chosen on the basis of the analyses in the EIS.

**Response:** The U.S. Department of Energy (DOE), Office of River Protection (ORP) accepts the advice. ORP has constructed each alternative based on feedback from internal scoping and, as a result of the public scoping process, has made changes. ORP management will make their programmatic decisions in the Record of Decision based on the EIS analyses of each alternative. These will be decisions within the framework of the EIS' alternatives.

**2. Item:** The EIS should analyze short- and long-term impacts to the environment, including groundwater, of not removing technetium-99 from the Low-Activity Waste (LAW).

**Response:** ORP accepts the advice. The alternatives in the EIS are defined to analyze the short- and long-term impacts to the environment from both removing technetium-99 from the LAW, as well as leaving the technetium-99 in the LAW.

**3. Item:** Include analysis of Immobilized Low Activity Waste (ILAW) disposal and any other waste streams that arise in the retrieval, treatment, and disposal of Tank Waste.

**Response:** ORP accepts the advice. The EIS will analyze the environmental impacts of ILAW and other supplemental waste streams that arise in retrieval, treatment, and disposal of Tank Waste.

**4. Item:** The vadose zone is not identified in the current Notice of Intent (NOI) as an important item within the scope of this EIS. It should be. The EIS needs to assess options for remediating the vadose zone.

**Response:** ORP accepts the advice. The EIS will analyze impacts to the vadose zone as influenced by the various closure scenarios being proposed (landfill closure, with and without some tanks and ancillary equipment being removed and clean closure which is removal of all the tanks, ancillary equipment and contaminated soil).

**5. Item:** The EIS, as proposed in the NOI, will not analyze all "reasonable alternatives." Some examples of additional alternatives that should be analyzed (including long-term, full life cycle costs) are:

- different melter technologies
- different glass formulations
- removal of tanks to achieve "clean closure"
- treatment of all retrieved tank waste as High Level Waste (HLW) and disposal at the HLW repository

**Response:** ORP accepts the advice to analyze “clean closure” and treatment of all retrieved tank waste as HLW. With regard to analysis of melter technologies and glass formulations, DOE does not accept analysis of different melter technologies and waste forms. ORP is committed to constructing and operating the Waste Treatment and Immobilization Plant as currently designed, using current technology and glass formulations. We believe it is important to remain focused on delivering the current treatment commitment. It is not to say, however, that ORP will not evaluate opportunities as we learn from process implementation, like at the first melter change out.

**6. Item:** Environmental impacts need to be assessed for the time frame necessary for them to achieve their peak value (e.g., >100 years, >1000 years, >10,000 years).

**Response:** ORP accepts the advice. The EIS will analyze the environmental and health impacts for a range of pathways (e.g., inhalation, ingestion, etc.) that could impact a variety of end state future site land users over a wide variety of timeframes (i.e., 100, 500, 1000, peak risk, and 10,000 years).

**7. Item:** The EIS should address retrieval and closure of the Double Shell Tanks (DST).

**Response:** The EIS will address retrieval and closure of the DST insofar as it is necessary to understand all connected actions associated with the cumulative impacts of retrieval and closure of the single-shell tanks. The NOI clearly stated, “closure of the DST and closure of the WTP are not part of the proposed action because they are active facilities needed to complete waste treatment.” All active facilities will be evaluated later, likely when analyzing their closure.

**8. Item:** Provide a life cycle cost to site closure for each of the alternatives considered. Per prior Board Advice (#8), uncertain costs associated with a national repository should be entirely segregated.

**Response:** ORP accepts the advice. Total costs will be presented for each alternative and repository costs will be identified.

**9. Item:** For each alternative, evaluate the environmental impacts, human and environmental risks, and costs. Analyses should be carried out in sufficient depth and detail to provide objective and quantitative comparisons of alternatives. In addition, these analyses should include the full time span over which hazards may persist.

**Response:** ORP accepts the advice.

**10. Item:** Impacts on and costs for community services.

**Response:** ORP accepts the advice. Socioeconomic impacts will be addressed for each alternative.

**11. Item:** Provide a primer for the reader that identifies the various types of waste, their treatment methods, and disposal requirements for each waste classification. This EIS should contain, in language understandable to the public, a listing of the specific decisions supported by this EIS and how this EIS will be used in making those decisions.

**Response:** ORP accepts the advice. ORP developed the primer to support the public scoping meetings and that primer is available on the OPR website. ORP is committed to making this complex subject as clear as we can to the public. As we discussed during scoping, Chapter One will address decisions this EIS will enable. Over the last six months, we have continued to have members of the HAB and stakeholders review various presentation materials and have welcomed continued support and suggestions for improvement.

**12. Item:** The various Retrieval, Treatment, and Disposal options and closure options need to be presented in a matrix format to allow the “best” combination of actions to be chosen to achieve the optimal balance of technical approach, cost and schedule impact, and risk reduction.

**Response:** ORP accepts the advice. Inherent in the alternatives structure a matrix will be included, however, combining all processes and alternatives in a matrix will not imply the ability to select at will from a “menu” of technical options because not all retrieval, treatment, disposal, and closure options are technically consistent. For example, 90 percent retrieval of wastes from tanks is not consistent with clean closure of tank systems.

**13. Item:** A clear statement of the relationships between this EIS, the previous Tank Waste Remediation System EIS, and the Hanford Solid Waste EIS should be included.

**Response:** ORP accepts the advice.

**14. Item:** Under “Preliminary Identification of EIS Issues,” clarify what the statement “Short term uses of the environment vs. long-term productivity” means, and how it translates into the requirements of this EIS.

**Response:** ORP accepts the advice. The EIS will evaluate both long-term and short-term impacts related to the different alternatives.

E-STARS™ Report  
 Task Detail Report  
 10/21/2003 0308

TASK INFORMATION			
<b>Task#</b>	ORP-ED-2003-0157		
<b>Subject</b>	CONCUR:03-ED-144; HAB CONSENSUS ADVICE #144: TANK WASTE RETRIEVAL AND CLOSURE ENVIRONMENTAL IMPACT STATEMENT (EIS) SCOPING		
<b>Parent Task#</b>		<b>Status</b>	CLOSED
<b>Reference</b>	03-ED-144	<b>Due</b>	
<b>Originator</b>	Gano, Becky	<b>Priority</b>	None
<b>Originator Phone</b>	(509) 376-6004	<b>Category</b>	None
<b>Origination Date</b>	09/10/2003 0640	<b>Generic1</b>	
<b>Remote Task#</b>		<b>Generic2</b>	
<b>Deliverable</b>	None	<b>Generic3</b>	
<b>Class</b>	None	<b>View Permissions</b>	Normal
<b>Instructions</b>	Correspondence is being routed for concurrence via hard copy AND electronically. Once you receive the correspondence, please initial hard copy and approve or disapprove electronically via E-STARS and route to next person on the routing/concurrence list.  BCC: ED OFF FILE ED RDG FILE MGR RDG FILE M.E.BURANDT, ED J.E.RASMUSSEN, ED		
<b>ROUTING LISTS</b>			
1	Route List		Inactive
	<ul style="list-style-type: none"> <li>● Burandt, Mary E - Review - Concur - 10/21/2003 1504</li> <li>● Schepens, Roy J - Approve - Approved - 10/21/2003 1431</li> </ul>		
<b>ATTACHMENTS</b>			
Attachments	1. 03ed144.att.doc 2. 03ed144.meb.doc		
<b>COMMENTS</b>			
No Comments			
<b>TASK DUE DATE HISTORY</b>			
No Due Date History			
<b>SUB TASK HISTORY</b>			
No Subtasks			

-- end of report --

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E-STARS™ Report  
 Task Detail Report  
 09/10/2003 06:45

TASK INFORMATION			
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<b>Subject</b>	CONCUR:03-ED-144; HAB CONSENSUS ADVICE #144: TANK WASTE RETRIEVAL AND CLOSURE ENVIRONMENTAL IMPACT STATEMENT (EIS) SCOPING		
<b>Parent Task#</b>		<b>Status</b>	Open
<b>Reference</b>	03-ED-144	<b>Due</b>	
<b>Originator</b>	Gano, Becky	<b>Priority</b>	None
<b>Originator Phone</b>	(509) 376-6004	<b>Category</b>	None
<b>Origination Date</b>	09/10/2003 06:40	<b>Generic1</b>	
<b>Remote Task#</b>		<b>Generic2</b>	
<b>Deliverable</b>	None	<b>Generic3</b>	
<b>Class</b>	None	<b>View Permissions</b>	Normal
<b>Instructions</b>	Correspondence is being routed for concurrence via hard copy AND electronically. Once you receive the correspondence, please initial hard copy and approve or disapprove electronically via E-STARS and route to next person on the routing/concurrence list.  BCC: ED OFF FILE ED RDG FILE MGR RDG FILE M.E.BURANDT, ED J.E.RASMUSSEN, ED		
ROUTING LISTS			
1	Route List		Active
	<ul style="list-style-type: none"> <li>Burandt, Mary E - Review - Awaiting Response <i>9/16/03 MEB</i></li> <li>Schepens, Roy J - Approve - Awaiting Response <i>initial CP</i></li> </ul>		
	<i>HBC, 10/21/03</i>		
ATTACHMENTS			
Attachments	1. 03ed144.att.doc 2. 03ed144.meb.doc		
COMMENTS			
<i>No Comments</i>			
TASK DUE DATE HISTORY			
<i>No Due Date History</i>			
SUB TASK HISTORY			
<i>No Subtasks</i>			

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