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Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

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02-WMD-044

NOV 21 2001

Mr. Bob Wilson, Compliance Inspector
Nuclear Waste Program
State of Washington
Department of Ecology
1315 W. 4th Avenue
Kennewick, Washington 99336

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Dear Mr. Wilson:

STABILIZATION OPTION FOR HEXONE TANKS

Reference is made to the your letter to K. A. Klein, RL, and M. C. Hughes, BHI, "Notice of Correction for Stabilization of the Hexone Storage and Treatment Facility USDOE Docket Number 00NWPKM005," dated May 26, 2000.

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The U.S. Department of Energy, Richland Operations Office (RL) would like to describe the conclusions and basis for our recommendation regarding the alternatives evaluated within the "Evaluation of Alternatives for the Interim Stabilization of the Hexone Tanks, BHI-01521 (Evaluation), July 2001, Draft B."

The preferred alternative of void-filling the tanks in place addresses the safety concern of a potential accumulation of flammable gas within the tank void if the present nitrogen purge is lost and no action is taken. Void-fill also meets the "Notice of Correction for Stabilization of the Hexone Storage and Treatment Facility, May 26, 2000," and provides appropriate environmental protection. The void-fill alternative provides a \$2M cost savings over the other alternatives. This does not preclude any out-year plans or associated cleanup requirements that may be required surrounding the immediate area (200-IS-1 operable unit) at a later date.

Background

The evaluation determined the best approach for of the 276-S-141/142 Hexone Tanks, which are both 24,500 gallon capacity tanks. The tanks are located within the fence boundary of the REDOX facility. There are a number of contaminated sites within and outside the REDOX facility. The Hexone Tanks are also located within the perimeter of the 233-S Plutonium Concentration Facility CERCLA remediation "onsite" area.

Each tank contains a 130 gallon "heel" that can be described primarily as a mildly acidic, phosphate tar. Current maintenance includes providing a nitrogen purge to the tanks to prevent a potential buildup of flammable gas mixture within the tanks over time.

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Regulatory and schedule integration within the immediate area of the tanks is important to consider. Any near-term stabilization or remediation of the tanks should be coordinated to avoid impacts with the 233-S decommissioning operations. The 200-IS-1, operable unit cleanup planning and related decisions are scheduled for the 2008-2013 timeframe.

Schedule Integration

Several options were reviewed in depth. The preferred option is void-filling the tanks in place. The void-fill option eliminates the potential flammable gas accumulation on loss of the nitrogen purge and supports schedule integration. This option will not prevent or preclude disposition of the tanks (including removal) at the appropriate time.

The future options for final closure of the Hexone Tanks will be evaluated at the appropriate time and will include:

Void-fill Alternatives	Basis for Savings
1. Leave in place permanently with long-term monitoring.	<ul style="list-style-type: none"> • Long-term monitoring will be required for other facilities within the REDOX complex. • Costs of monitoring Hexone Tanks over time are incremental.
2. Leave in place permanently with cap covering Hexone Tanks and REDOX complex.	<ul style="list-style-type: none"> • Save removal costs, • No incremental cost for cap, which will cover this area.
3. Remove later consistent with 200-IS-1.	<ul style="list-style-type: none"> • Cost of enclosure is spread over multiple facilities versus only the Hexone Tanks. • Exhumation and handling costs are spread over multiple tanks (economies of scale.)

Conclusion

The decision to void-fill provides a stabilization approach which is protective of human health, worker safety, and the environment. This option is cost-effective, and allows for sensible coordination within the 200-IS-1 Operable Unit and the REDOX Facility as a whole. A draft time/duration schedule to implement the preferred alternative is (attached) for your review and comment.

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We appreciate your willingness to work in partnership to implement a solution for the Hexone Tanks that is protective, expedient, and cost effective. If there are any questions, please contact me on (509) 373-9971, or your staff may contact Bryan Foley, Waste Management Division, on (509) 376-7087.

Sincerely,



Peter M. Knollmeyer, Assistant Manager
for the Central Plateau

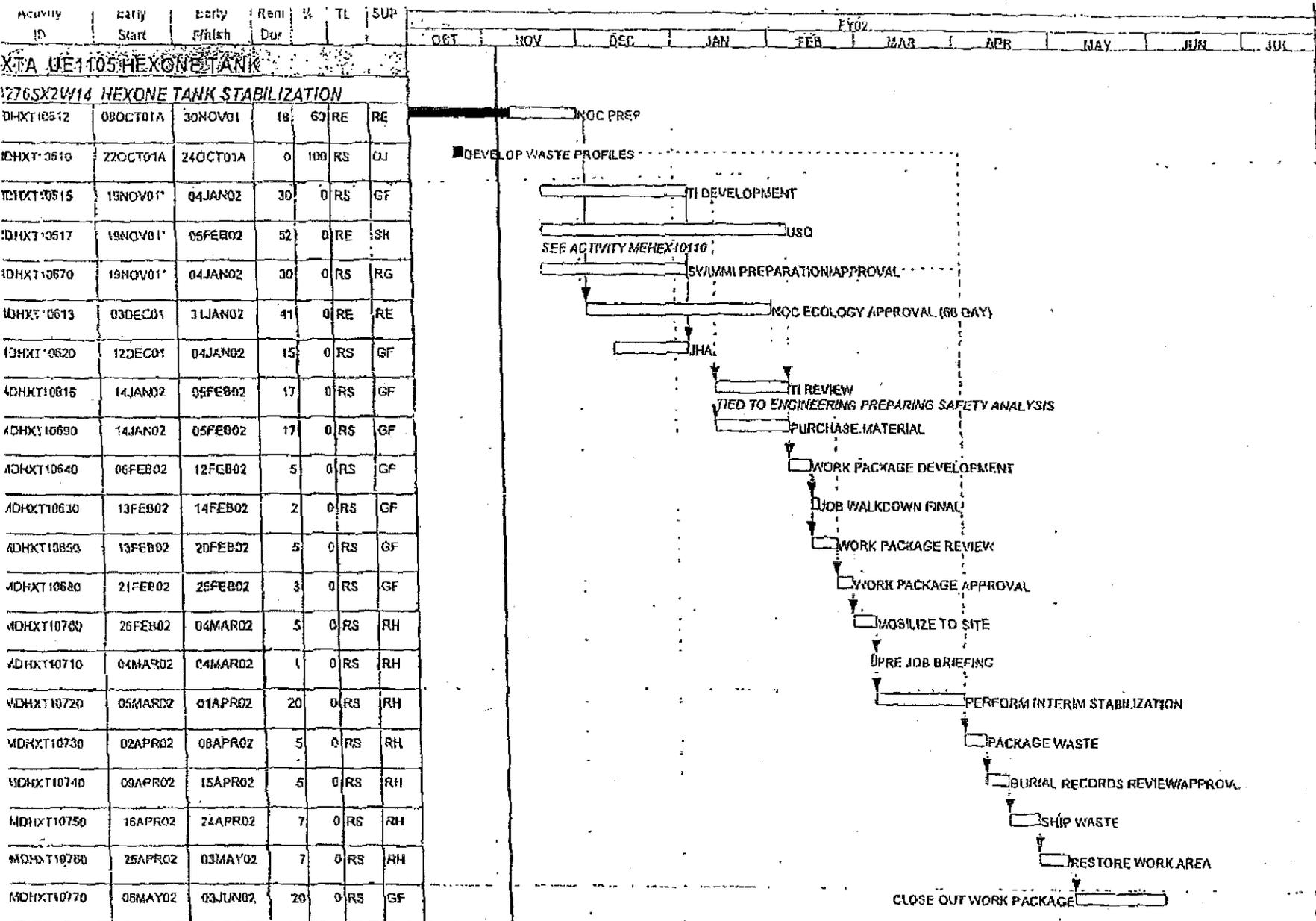
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Attachment

cc w/attach:

J. M. Atwood, FHI
C. E. Cameron, EPA
R. G. Egge, BHI
B. H. Ford, BHI
T. Z. Gao, Ecology
F. Jamison, Ecology
C. J. Kemp, BHI
J. J. McGuire, BHI
J. Price, Ecology
L. E. Ruud, Ecology
D. R. Sherwood, EPA
R. R. Skinnerland, Ecology
R. J. Woods, BHI

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Activity Start	01OCT01	PERFORMANCE	HTA
Activity Finish	03JUN02	Progress Bar	
Activity Date	03NOV01		
Activity ID	02ND001		

HEXONE TANK STABILIZATION

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