



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

JUN 21 1996

96-WDD-090

Mr. John T. Conway, Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Ave, N.W. Suite 700
Washington, D.C. 20004

Dear Mr. Conway:

TRANSMITTAL OF INFORMATION TO COMPLETE MILESTONE 5.4.3.5.A

Transmitted with this letter are the documents that constitute the information for completion of Milestone 5.4.3.5.A as specified in Revision 1 of the Recommendation 93-5 Implementation Plan. This milestone, scheduled for completion in June 1996, is described in the Implementation Plan as follows: "Report documenting analyses to determine if additional tanks have potential to exceed 25 percent of the lower flammability limit (LFL)."

In the Implementation Plan, the discussion for the Flammable Gas Safety Issue states that an evaluation was being conducted of all 177 tanks to determine their potential to generate and release flammable gas. This milestone was established to provide a summary of the results of that evaluation.

The evaluation of all tanks is encompassed in two reports issued by the Westinghouse Hanford Company. The first one provides a description of the methodology for performing the evaluations. This report is:

- "Methodology for Flammable Gas Evaluations," WHC-SD-WM-TI-724, Rev. 1, J. D. Hopkins, June 1996

The second report provides the results on a tank-by-tank basis, and it is:

- "Evaluation of Hanford Tanks for Trapped Gas," WHC-SD-WM-ER-526, Rev. 1, K. M. Hodgson, et.al., March 1996.

The evaluation indicated that 53 tanks appear to retain sufficient gas to be detectable by one of two methods based on surface level displacement measurements. These 53 tanks included those already under the Flammable Gas Unreviewed Safety Question, (USQ) and on the Flammable Gas Watch List (FGWL). Due to implied conditions outside the authorized operations basis, the additional tanks identified as having retained gas were included under the existing USQ. Questions raised about the methodology and data used in quantification required additional review before action on additions to the FGWL could be formally taken.

Mr. John T. Conway
96-WDD-090

-2-

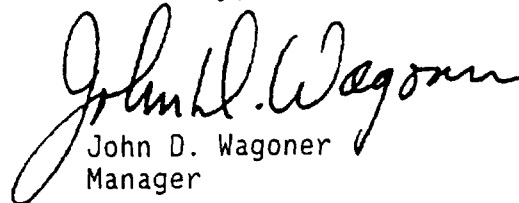
JUN 19 1996

A Special Review Team was established and led by Dr. Donald Vieth. The team examined the issues raised and addressed in detail the potential for the concentration of flammable gas in the tank headspace to exceed 25 percent of the LFL. A copy of the report from the Review Team is also included. The three enclosed reports meet the Milestone 5.4.3.5.A deliverable.

There are many aspects to this review and evaluation. We will be pleased to review this information with the Board members and the staff so that the basis and logic underlying the developing position can be examined in the fullest manner.

If you have any questions, please contact me or you may contact Donald Vieth on (509) 373-9189.

Sincerely,


John D. Wagoner
Manager

WDD:DLV

Enclosures (3)

cc w/encls:

A. Alm, EM-1
R. Guimond, EM-2
T. Tseng, EM-4
M. Hunemuller, EM-38
M. Mikolanis, S-3.1
M. Whitaker, S-3.1
S. Trine, RL DNFSB Liaison