



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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2008I-125

October 3, 2007

Ms. Susan Leckband, Chair
Hanford Advisory Board
713 Jadwin, Suite 4
Richland, Washington 99352

Re: Hanford Advisory Board Consensus Advice #201 – S-102 Tank Spill Investigation

Dear Ms. Leckband:

Thank you for your letter of 9/7/07, regarding your concerns about the release of high-level nuclear waste at the S-102 tank on July 27, 2007. We initiated an investigation into the event, meeting with the U.S. Department of Energy and CH2M Hill Hanford Group, Inc. staff on August 2, 2007. We reviewed the actions that took place before and after the event. We focused on the root causes of the event and the subsequent identification of a release, notification, and response.

Issues we reviewed included:

- The adequacy of CH2M procedures to address high radiation of unknown origin.
- The lag in time between when the CH2M investigative planning began and when the investigative survey was performed. We looked at worker availability and any compounding issues that delayed the survey.
- Whether the design of the retrieval system met Tri-Party Agreement established requirements in place to prevent releases, protect the workers, the public, and the environment. Those requirements include *S-102 Initial Waste Retrieval Functions and Requirements* (RPP-10901, Rev 2) and *Technical Safety Requirements* (HNF-SD-WM-TSR-006). RPP-10901 is a Tri-Party Agreement primary document.
- Whether the design and review of the retrieval system met the requirements of Washington Administrative Code 173-303-640(3) to prevent releases, protect the workers, the public, and the environment.
- The assumptions made regarding the quantities of waste released.

We also looked at the response to the event and the conditions in the area, such as inadequate lighting, at the time of the release. We reviewed assumptions made before identification of a release that may have led to unnecessary worker exposures.

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The "lessons learned from previous incidents" documents appear to have been lost. It is a program that is a key part of the Integrated Safety Management System that all U.S. Department of Energy (USDOE) Hanford contractors are required to have in place. We hope USDOE will investigate and develop processes to address that issue.

When our investigation is final, we will provide the investigation findings to USDOE. When completed, the official report and findings will be made available to the Hanford Advisory Board and the public.

If you have any questions, please contact Cheryl Whalen at 509-273-7927 or Eric Van Mason at 509-372-7929. They are with Ecology's Nuclear Waste Program in Richland.

Sincerely,



Jay J. Manning
Director

cc: Washington Congressional Delegation
Oregon Congressional Delegation
Elin D. Miller, EPA
Nick Ceto, EPA
Doug Frost, USDOE-HQ
Shirley Olinger, USDOE-ORP
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