



State of Utah

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DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL
Scott T. Anderson
Director

May 27, 2016

John Tappert, Director
Division of Decommissioning, Uranium Recovery and Waste Programs
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Mail Stop T8 F5
Washington, DC 20555-0001

RE: NRC Branch Technical Position clarification regarding averaging of low-level radioactive wastes with transuranic wastes

Dear Mr. Tappert:

In the spring of 2015, Nuclear Regulatory Commission (NRC) staff provided training to the staff of the Division of Radiation Control (now the Division of Waste Management and Radiation Control) regarding the 2015 revision to the Concentration-Averaging and Encapsulation Branch Technical Position (BTP). We again express our appreciation to the NRC staff for providing that training. While the Division is aware of and appreciates the benefits of the 2015 BTP to the low-level waste management program, we would like to clarify a potential issue that could arise with one of our licensed facilities.

With this letter, the Division is requesting NRC clarification regarding averaging of low-level radioactive wastes with potential transuranic (TRU) wastes.

Specifically we would like to know:

- 1) Does the BTP allow for averaging of TRU waste below the threshold of 100 nanocuries per gram with Class A, low-level waste? We understand that any TRU waste exhibiting alpha emitting isotopes with a concentration above 100 nanocuries per gram with half-lives greater than 20 years cannot be considered as a low-level radioactive waste. We also understand that wastes with different physical characteristics (e.g., solid/liquid/gas), or even significantly different particle sizes, cannot be averaged.

(Over)

- 2) Does the BTP allow for averaging of TRU wastes in heels of cylinders (notwithstanding certain hot spots above the 100 nanocuries per gram threshold), if a methodology can be established to ascertain a reasonable representation of TRU waste concentrations spatially within the heel?

We appreciate your consideration and response to our questions. Thank you for any insight you may be able to share. If you have any questions, please call Helge Gabert at (801) 536-0215.

Sincerely,



Scott T. Anderson, Director
Division of Waste Management and Radiation Control

STA/HG/jr

- c: Jeff Coombs, EHS, Health Officer, Tooele County Health Department
Bryan Slade, Environmental Health Director, Tooele County Health Department
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