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Department of Energy

Washington, DC 20585

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CONFIDENTIAL

By electronic mail and USPS

The Honorable Lawrence G. Wasden
Attorney General
State of Idaho
700 W. Jefferson Street, Suite 210
Boise, ID 83720-8071

Dear Attorney General Wasden,

During our October 7, meeting, you asked us to provide you with answers to the following questions:

1) Does the Department of Energy's ("DOE") Office of Environmental Management have access to or sufficient simulant to continue its timely testing of the Integrated Waste Treatment Unit ("IWTU")?

   Answer: Yes. To the extent that additional simulant is needed for any particular or unplanned reason, a shipment of simulant can be obtained within only a few days of placing an order.

2) Can transuranic waste drums be sent to the Waste Control Specialists ("WCS") facility located in Andrews, Texas?

   Answer: While WCS is licensed to temporarily store TRU wastes the duration of such storage cannot exceed 365 days. Because of the logistics, technical, and other difficulties associated with the storage of and eventual removal such wastes from WCS, the Department has been unable to meet this 365-day storage limit for the TRU wastes currently at WCS. In the absence of a clear and defined process for the storage and removal of such wastes from WCS, it would be imprudent for the Department to ship more TRU waste to WCS.

3) Please describe the tank integrity program applied to the tanks storing the sodium-bearing wastes at the Idaho National Laboratory. Are there any additional actions that can be applied to this program that can assure tank integrity?

Answer: A tank has never leaked. A fitness-for-service analysis of the last four tanks, performed in 2002 by an independent engineering company, concluded that a minimum tank life would be 2050. This was based on corrosion coupon measurements, visual examination and lab studies, using the most conservative, Level 1 methods of the American Petroleum Institute's Practice 579 (API RP 579).

Each tank sits in a concrete vault and each vault has a sump. If liquid is detected in a sump, an alarm is triggered and the liquid is pumped to the Process Waste Evaporator (PWE). The transfer lines from the sump to the PWE have radiation monitors.

Also, each tank contains a radio frequency ("RF") monitor and a bubble probe. The RF monitor is mounted in the top of the tank above the liquid and measures the liquid level using radio waves similar to the way radar works. The bubble probe uses differential pressure to determine liquid levels. The level monitors are read every day.

All metallic components of waste transfer and off-gas systems that contact the soil are protected from external corrosion by the cathodic protection system. The system protects all the tanks and associated piping, and utilizes a system of electrical rectifiers and anodes to prevent oxidation and corrosion. The cathodic protection system is actively maintained through bimonthly monitoring and an annual survey of the system to ensure functionality. A quarterly report is submitted to the State of Idaho containing leak monitoring results and documenting the condition of the tanks.

In addition to the existing tank integrity reporting and program activities, DOE could pull and examine more coupons; each such activity would take approximately 5 months to complete. While DOE would do everything it could to minimize the additional radiation dose to workers, the workers would incur some additional dose; however, their annual exposure would be managed to as low as reasonable achievable and within the applicable administrative and regulatory dose limits. This additional activity would entail opening the top of each tank, pulling the shield blocks, retrieving the coupons (that are actually in the waste), decontaminating the coupons, and sending them to an off-site laboratory for analysis. CWI, the Idaho Cleanup Project contractor, has estimated the cost of this activity to be approximately $822,000. This estimate involves all of the activities associated with pulling 8 coupons from each of the three tanks that contain waste.

4) Can DOE provide to Idaho Attorney General periodic briefings on the progress of constructing and operating the IWTU? Would DOE be willing to share an analysis involving alternative technologies to the IWTU?

Answer: As we have provided such briefings in the past, DOE is willing to continue such briefings on a quarterly basis. DOE is also willing to share

information on the analysis of alternative technologies to the IWTU that might be under consideration.

If you have any questions regarding this matter, you can call me at 202-586-5281.

Sincerely,

Steven Croley/KRD

Steven P. Croley
General Counsel