



September 21, 2009

CD09-0241

Ms. Amanda Smith
Executive Director
Utah Department of Environmental Quality
P.O. Box 144850
Salt Lake City, UT 84114-4850

Re: Radioactive Material License Number UT 2300249 – Commitments Relating to Depleted Uranium Disposal

Dear Ms. Smith:

This letter summarizes commitments *EnergySolutions* made on July 14, 2009 to the Utah Radiation Control Board regarding disposal of depleted uranium. At that meeting, *EnergySolutions* presented its understanding of the current and likely future direction of the Nuclear Regulatory Commission (NRC) rulemaking on this subject and outlined actions the company has voluntarily undertaken to address concerns that have been raised regarding the disposal of depleted uranium. These actions take into account the findings of the NRC as described in the NRC's paper, *Response to Commission Order CLI-05-20 Regarding Depleted Uranium*, October 7, 2008, SECY-08-0147, and address the specific focus of the ongoing rulemaking that will establish requirements for site-specific performance assessments.

Consistent with commitments made to the Board, *EnergySolutions* is engaged in the following specific actions:

1. Disposal depth: The generic NRC evaluations of depleted uranium disposal suggest a disposal depth of at least 10 feet. Therefore, *EnergySolutions* will dispose of wastes with depleted uranium concentrations greater than 5 percent (by weight) a minimum of 10 feet below the top of cover. This commitment has been captured in License amendment 5 at condition 35.
2. Performance assessment: *EnergySolutions* has contracted with Neptune and Company, the industry recognized experts in the field of performance assessments, to provide an updated performance assessment for depleted uranium disposal. It might be helpful for you to know that Neptune and Company was selected by the DOE to complete the performance assessment for low-level radioactive waste disposal at the U.S. Department of Energy's Nevada Test Site. We anticipate that the performance assessment will be provided to your staff by December 2010.

This type of performance assessment is the subject of NRC's current rulemaking and the topic of workshops on depleted uranium disposal. While final criteria for the performance assessment have not yet been codified, we believe there is sufficient information in

existing NRC guidance to get started. Furthermore, our efforts are guided by the results of the first workshop held by NRC in Bethesda, Maryland on September 2-3, 2009. By initiating work on the performance assessment before NRC rulemaking is complete, the review cycle will be accelerated. Changes to input parameters based on Final NRC rules or guidance can be easily incorporated into the dynamic performance assessment.

3. Revised disposal embankment design: Results of the performance assessment will be used to implement any changes to disposal operations and cover design necessary to ensure compliance with the requirements of 10 CFR Part 61 or Utah Administrative Code R313. For example, we anticipate that depleted uranium will require greater depth of cover than other Class A low-level radioactive wastes and therefore adjusted our disposal depth accordingly. This potential re-design will consider wastes that have been disposed of previously, including depleted uranium received from the U.S. Department of Energy's Savannah River Site.

If, upon completion of the performance assessment, a revised cover design is required, then EnergySolutions will provide your staff with a revised design and construct the embankments accordingly. Similarly, if other barriers or disposal methods unique to depleted uranium are indicated, these will of course be adopted.

As mentioned above, our commitment described in item 1 is already captured in the License and we are already performing consistent with the commitments described above. If the Division of Radiation Control would like to make additional changes to our License to reflect the commitments described in items 2 and 3 we will certainly be accommodating.

Please feel free to contact me or Dan Shrum at your convenience if you have any questions regarding the foregoing. You can reach me directly at 801-580-5443. You can reach Dan at 801-649-2109.

Sincerely,



Val J. Christensen
President
EnergySolutions

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