



EFCOG Waste Management Working Group

April 30, 2013

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Mr. Jay Rhoderick, Associate Deputy Assistant Secretary
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SUBJECT: Lessons Learned in Management of DOE Waste Incidental to Reprocessing

Dear Ms. Gelles, Mr. Rhoderick and Mr. Levitan,

Attached is the Energy Facility Contractors Group (EFCOG) Waste Management Working Group's team report that presents the lessons learned in the management of the U.S. Department of Energy (DOE's) Waste Incidental to Reprocessing program as discussed in a workshop and embedded track panel sessions and presentations held from February 25-28, 2013 at the WM2013 Symposium in Phoenix, Arizona. The workshop focused on three processes related to waste incidental to reprocessing:

- The citation process of DOE Manual 435.1-1, *Radioactive Waste Management Manual*;
- The evaluation process of DOE Manual 435.1-1; and
- The process for making waste determinations under Section 3116 of the *Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005*, commonly known as Section 3116.

The workshop and embedded track sessions were well attended by DOE and DOE contractor management and technical experts, the Nuclear Regulatory Commission (NRC), regulators from affected states, and other stakeholders. Others who were unable to attend, due to travel restrictions, were involved through conference phones that were located in the session rooms.

This report documents the many lessons learned from working for many years with the requirements from DOE Order 435.1 concerning Waste Incidental to Reprocessing and Section 3116 of the National Defense Authorization Act for Fiscal Year 2005, as DOE sites (in particular Savannah River Site, West Valley, Idaho National Laboratory, and the Hanford Site) have moved to safely treat and dispose of waste from the high-level waste (HLW) systems and worked to close tanks that have stored highly radioactive waste. The EFCOG Waste Management Working Group recommends that DOE move to take steps to understand and implement the lessons learned documented in this report. Also, even though each item listed in this report contains, we believe, useful information, we would like to provide the following specific overarching comments based on the workshop and other sessions:

- (1) the upcoming revision to DOE Order 435.1 include citation process requirements that are equivalent to the current requirements, which have served to minimize the costs for disposal of very low risk waste streams. The EFCOG further recommends that guidance for citation process implementation under DOE Order 435.1A address how to technically support using the citation process for wastes that may be incidental to reprocessing.
- (2) The DOE consider development of a strategy for vitrification melter shutdown near the end of melter life that balances production goals, costs, and disposal options.
- (3) DOE work with its contractors to develop and define the scope of consultation with the NRC for Section 3116-required consultation activities, with a guidance document based on a rigorous project management approach being prepared for this purpose and used as a basis for a memorandum of agreement with the NRC for these activities.
- (4) DOE and NRC explore methods to shorten the NRC consultation cycle without compromising safety or agency independence, in addition to holding scoping meetings which have been used effectively to this end.
- (5) DOE work with its contractors to develop and define the scope of Section 3116-required monitoring activities, with a guidance document based on a rigorous project management approach being prepared for this purpose and used as a basis for a memorandum of agreement with the NRC for these activities. The EFCOG further recommends that NRC and DOE jointly develop the monitoring process, including formally agreeing on the precise meaning of terms such as *noncompliance with performance objectives* and the different types of noncompliance to be used by NRC in its monitoring program.

As a result of the evaluations conducted and the discussions held during this lessons learned workshop, several recommendations were developed to improve future interactions and deliberations among DOE, its contractors, the NRC, State regulators, and other stakeholders. These suggestions are included for review and consideration by DOE. The team members are prepared to support future efforts, if requested, by conducting additional reviews, providing assistance in implementing selected recommendations, or other actions on a complex-wide basis. Please share this report with other individuals and organizations, as appropriate, and advise

me if follow-up actions are desired. Questions regarding this report should be directed to me, Scott Saunders, EFCOG HLW Subgroup Chair at Scott_Saunders@RL.gov and/or to the attention of the Workshop Lead Organizer, Ginger Dickert, at virginia.dickert@srs.gov.

Sincerely,



W. T. Goldston, Chair
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