

## **Department of Energy**

Washington, DC 20585 October 24, 2011

Mr. Val J. Christensen Chief Executive Officer and President EnergySolutions, LLC 423 West 300 South Suite 200 Salt Lake City, Utah 84101

NEL-2011-03

Dear Mr. Christensen:

The Office of Health, Safety and Security's Office of Enforcement and Oversight conducted an evaluation of the radiological contamination event at the Separations Process Research Unit (SPRU) Building H2 Tank Farm Weather Enclosure located at the Knolls Atomic Power Laboratory in Niskayuna, New York. On February 17, 2011, URS Washington Group International, Inc. (URS), the U.S. Department of Energy (DOE) prime contractor, reported an assessment of this event in the Occurrence Reporting and Processing System report EM---WGI-G2H2-2011-0001, Higher Than Expected Contamination Levels Inside H2 Tank Farm Weather Enclosure.

On August 24, 2010, contaminated sludge leaked from two pumps inside the H2 Tank Farm Weather Enclosure after excessive pressure was applied to clear a clogged nozzle. The leak occurred during operation of the SPRU sludge process equipment, which was designed and operated by EnergySolutions, LLC (ES), a subcontractor to URS. The SPRU sludge process equipment, as designed by ES, did not include any pressure gauges or system pressure protection to ensure that the pumps were operated below the maximum pressure limits. The excessive pressure resulted in pump failure and the release of radioactive contamination, with maximum reported levels of 14,000 dpm/100 cm<sup>2</sup> alpha contamination and 562,000 dpm/100 cm<sup>2</sup> combined beta/gamma contamination in the spill area.

DOE considers this radiological contamination event to be of high safety significance. Although the actual consequences were limited, the potential consequences were significant. This event reflected programmatic breakdowns in the work processes used by ES to prevent exposure to radioactive materials. Based on a review of the evidence associated with this event, DOE finds that potential violations of 10 C.F.R. Part 830 Subpart A, *Quality Assurance Requirements*, occurred, including inadequate design, inadequate procedures, and inadequate work control. A Preliminary Notice of Violation has been issued to URS regarding these and other quality assurance and occupational radiation protection issues.

The Office of Enforcement and Oversight is aware that ES is no longer under contract with URS for operations at SPRU. In light of this, and also in consideration of the investigation, root cause analysis, and corrective actions performed by URS at SPRU, the Office of Enforcement and Oversight has elected to exercise its enforcement discretion and not pursue further enforcement activity against ES at this time.

No response to this letter is required. If you have questions, please contact me at (301) 903-2178, or your staff may contact Mr. Steven Simonson, Deputy Director for Enforcement, Office of Enforcement and Oversight, at (301) 903-7707.

Sincerely,

John S. Boulden III

Director

Office of Enforcement and Oversight Office of Health, Safety and Security

cc: Steven Feinberg, SPRU FO
David Hall, WGI
Michael Lempke, NRLFO
Richard Azzaro, DNFSB