ENERGYSOLUTIONS

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December 10, 2010

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CD10-0356

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Mr. Rusty Lundberg Executive Secretary Utah Radiation Control Board 195 North 1950 West Salt Lake City, UT 84114-4850

DNWS

Mr. Blair Spitzberg
Chief of the Repository and Spent Fuel Storage Branch
Division of Nuclear Material Safety
U.S. Nuclear Regulatory Commission Region IV
611 Ryan Plaza Drive
Suite 400
Arlington, TX 76011-4125

Re: Written Notification of Exceedance at the Clive Low-Level Radioactive Waste Disposal Facility, Radioactive Material License UT 2300249 for Generator/shipment number 9069-01-0006, GSAP 0112001205.

Dear Sirs:

This letter provides written notification and follow up to the Utah Division of Radiation Control (UDRC) and the U.S. Nuclear Regulatory Commission (NRC) Region IV of a non-compliance at the EnergySolutions Low-Level Radioactive Waste Disposal Facility (Clive) in Clive, Utah. This written notification was preceded by an e-mail notification sent Monday December 6, 2010 from Curtis Kirk, EnergySolutions Quality Assurance Manager - Clive, to:

Mr. Rusty Lundberg, Utah Division of Radiation Control

Verbal notifications were made on December 7, 2010 by Rick Chalk, EnergySolutions Director of Health Physics to:

Mr. Blair Spitzberg, U.S. Nuclear Regulatory Commission Region IV

On Friday, December 3, 2010, shipment 9069-01-0006 arrived at the Energy *Solutions* Clive facility. This shipment consisted of 3-85 gallon drums. Upon review of the manifest three issues were identified. 1. Pu-239 and Pu-240 were listed on the Uniform



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Low-Level Radioactive Waste Manifest (manifest) and were listed in Block 1 (Special Nuclear Material) of the Form 541 but the manifest was not accompanied by the appropriate Special Nuclear Material Exemption Certification required by the Clive Radioactive Materials License (RML). 2. The U-238 and U-235 manifested concentrations exceeded the Waste Profile Record for this waste stream. 3. The U-235 concentrations listed on the manifest exceeded the limits authorized by the Clive RML in all three drums within this shipment.

Upon discovery of these issues, this shipment was rejected upon receipt. The generator was contacted initially on Friday, December 3 and informed that the shipment was being rejected. Discussions resumed on Monday, December 6, 2010 at which time the generator confirmed that the waste manifest was indeed accurate and exceeded the Clive RML requirements. The Utah Radioactive Material License Number UT 2300249 license condition that was exceeded is listed below.

1. **License Condition 13.A.** – "Concentrations of SNM in individual waste containers must not exceed the values listed in Table 13-A at the time of receipt." Only the U-235 concentration is listed below.

U-235 – 1,190 pCi/g (for uranium at or above 10 percent enrichment and a maximum of 20 percent of the weight of the waste of materials listed in License Condition 13 B)

Non-Compliance

Contrary to the above license condition, the U-235 manifested concentrations in the three drums that made up this shipment were 1,441 pCi/g, 5,455 pCi/g, and 2,057 pCi/g.

2. License Condition 13.F. – At Receipt... EnergySolutions shall require generators of SNM waste to provide a written certification with each waste manifest that states the SNM concentrations reported on the manifest do not exceed the limits in condition 13 A, that the measurement uncertainty does not exceed the uncertainty value in Condition 13 A, and that the waste meets Conditions 13 B through 13 D.

Non-Compliance

Contrary to the above license condition, the generator failed to provide the SNM exemption certification for this shipment.

License Condition 13.H. – "Energy Solutions shall notify the NRC, Region IV office within 24 hours if any of the above conditions are violated, including if a batch during



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treatment process exceeds the SNM concentration in License Condition 13.A. A written notification of the event must be provided within 7 days."

This letter and the phone notifications referenced above meet this license condition.

In summary, the waste shipment manifest no. 9069-01-0006 contained SNM concentrations (U-235) that exceeded the Clive RML. The generator also failed to provide the SNM Exemption Certification required by the Clive RML. In accordance with the Energy Solutions Quality Assurance Program, Condition Report CRSD10-053 was initiated requiring a corrective action plan to include cause of occurrence, immediate corrective actions, and subsequent actions to prevent recurrence.

Please call with any questions or concerns at (801) 649-2179.

Sincerely

Rick Chalk

Director of Health Physics - Clive, UT.

Cc: Mr. Scott Anderson, Utah DSHW

Mr. John Hultquist, Utah DRC