



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF RADIATION CONTROL
Rusty Lundberg
Director

February 24, 2011

CERTIFIED MAIL
RETURN RECEIPT REQUIRED

Dan Shrum, Vice President of Permitting & Compliance
EnergySolutions, LLC.
423 West 300 South, Suite 200
Salt Lake City, Utah 84101

RE: Radioactive Material License (RML) Number UT 2300249: Non-Conforming Waste Disposal Notification

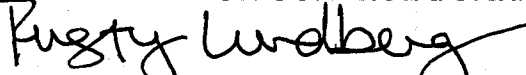
Dear Mr. Shrum:

In a letter (CD10-0358) dated December 13, 2010, EnergySolutions notified the Utah Division of Radiation Control (DRC) of a non-compliance issue at the EnergySolutions Low-Level Radioactive Waste Disposal Facility in Clive, Utah. The purpose of the letter was to inform the Executive Secretary of the Utah Radiation Control Board of multiple shipments with waste containers exceeding Class A waste limits that were accepted and disposed at the Clive facility.

The DRC reviewed the letter and other documents received from EnergySolutions as they relate to compliance with the Utah Radiation Control Rules and the conditions of the facility's radioactive materials license. It was noted that not all of EnergySolutions' activities were conducted in compliance with RML UT 2300249. Accordingly, a Notice of Violation and Notice of Proposed Imposition of Civil Penalties (NOV/NPICP) is enclosed. The particular violations are described in the enclosed NOV/NPICP.

Please give this NOV/NPICP your immediate attention. A written response is required after receipt of this NOV/NPICP. This NOV/NPICP is fully enforceable unless appealed in writing, as described in the contesting this NOV/NPICP section of this NOV/NPICP.

UTAH RADIATION CONTROL BOARD


Rusty Lundberg, Executive Secretary

RL/RJ:rj

Enclosure

Cc: Sean McCandless, Director of Permitting & Compliance

**UTAH RADIATION CONTROL BOARD
NOTICE OF VIOLATION
AND
NOTICE OF PROPOSED IMPOSITION OF CIVIL PENALTY**

EnergySolutions, LLC.

License Number UT 2300249

STATUTORY AUTHORITY

This **NOTICE OF VIOLATION and NOTICE OF PROPOSED IMPOSITION OF CIVIL PENALTY (NOV/NPICP)** is issued by the UTAH RADIATION CONTROL BOARD (the **BOARD**) under the Utah Radiation Control Act, as amended, Utah Code Ann. §§ 19-3-101 to 19-3-113 (the **ACT**), including Utah Code Ann. §§ 19-3-103.5, 19-3-108, and 19-3-109. This **NOV/NPICP** is also issued in accordance with the Utah Administrative Procedures Act, Utah Code Ann. §§ 63G-4-101 through 63G-4-601. The **BOARD** has authorized the Executive Secretary of the **BOARD (EXECUTIVE SECRETARY)** to issue such **NOV/NPICPs** in accordance with § 19-3-108 of the Utah Code.

A. Summary of Violation and Proposed Penalties

Based on a review of the documents and as otherwise described and under the authority of Utah Code Ann. § 19-3-109, the Executive Secretary has determined that two violations have occurred and proposes imposition of a civil penalty of \$80,000.00 in accordance with Utah Admin. Code R313-14. The violations and proposed penalties are set forth as follows:

B. Management of Class B and C Waste Violations

EnergySolutions operates a low-level radioactive waste disposal facility at Clive, Utah under Radioactive Materials License (RML) UT 2300249.

Utah Admin. Code R.313-15-1009 describes the classification and characteristics of low-level radioactive waste (LLRW), including Class A LLRW. EnergySolutions RML UT 2300249 License Conditions 6, 7 and 8 allow EnergySolutions to receive and dispose of Class A LLRW; under Condition 9.B EnergySolutions may not receive Class B or Class C LLRW.

Utah Code Ann. § 19-3-105(2) states: "The provisions of this section are subject to the prohibition under Section 19-3-103.7." Section 19-3-103.7 states: "No entity may accept in the state or apply for a license to accept in the state for commercial storage, decay in storage, treatment, incineration, or disposal: (1) class B or class C low-level radioactive waste."

In violation of the above requirements, EnergySolutions accepted and disposed of 23 containers of waste, received in a total of 15 shipments, which exceeded Class A waste criteria.

1. EnergySolutions provided written notification to the Division of Radiation Control (DRC) (CD10-0358), dated December 13, 2010, that it accepted and disposed of multiple shipments of low-level radioactive waste with containers containing waste exceeding Class A waste limits at the Clive facility. The notification described the number of shipments, shipment dates and other information.

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2. The DRC reviewed the December 13, 2010 notification, interviewed the Clive facility Director of Health Physics and Director of Waste Acceptance, and collected information during those interviews.

The above violation has been characterized as Severity Level III. The base penalty for this Severity Level III is \$2,500. Furthermore, Utah Admin. Code R313-14-15(2) (b)(iii)(E) states: "The civil penalty may be increased as much as 50% where multiple examples of a particular violation are identified during the inspection period."

Each container received by EnergySolutions constitutes a violation. The proposed civil penalty, calculated for 23 containers of waste at \$2,500 per container, is \$57,500. Because of the multiple examples of this violation, the proposed civil penalty is increased 50% or by \$28,750.

Therefore, a civil penalty of \$86,250 is proposed.

C. Reporting Violations

RML UT 2300249 License Condition 68 states: "The Licensee shall immediately notify the Executive Secretary or the Division's on-site representative of any waste shipment where there may be a possible violation of applicable rules or license conditions."

In violation of the above requirement, the DRC inspectors identified two separate instances where EnergySolutions failed to notify the DRC of possible violations.

1. EnergySolutions uses the Electronic Waste Information System (EWIS) computer program to classify incoming waste shipments. In an EnergySolutions condition report (CR09-112) dated October 30, 2009, EnergySolutions identified a waste classification calculating error in the EWIS computer program. The EWIS program was making these waste classification calculations using the gross weight or volume of the shipping container and waste instead of the net weight or volume of the waste. This error had the potential to designate Class B or Class C waste as Class A waste, which would be a violation of License Condition 9B.
2. In February and March of 2010 violations to License Condition 9B occurred due to the calculating error in the EWIS computer program.
3. In June and July of 2010, EnergySolutions ran a verification of the corrections made to the EWIS program. The verification program recalculated all of the manifests that Licensee had ever received. During this process EnergySolutions identified 66 containers that possibly violated License Condition 9B.

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4. Documentation provided by EnergySolutions shows that EnergySolutions started notifying waste generators of shipment non-compliance in August of 2010 but did not notify the DRC.
5. Further review by EnergySolutions of the 66 containers reduced the number of containers that violated License Condition 9B to 23 containers.
6. On October 28, 2010, EnergySolutions verbally notified the Executive Secretary of the EWIS waste classification calculating error. The verbal notification was followed by an email on December 6, 2010.
7. On December 7, 2010 representatives from EnergySolutions met with the DRC. During that meeting EnergySolutions representatives verbally notified the DRC of the 23 containers exceeding Class A waste criteria that were accepted and disposed at the Clive Facility due to the EWIS waste classification calculating error. The DRC did not receive written notification from EnergySolutions about the 23 containers until December 13, 2010.
8. The verbal notification was almost a year from the initial condition report (CR09-112) and the discovery of the EWIS waste classification calculating error as well as over two months from the discovery of 66 containers that possibly violated License Condition 9B.

The above violation is of significant concern to the DRC and has been characterized as Severity Level III. The base penalty for this Severity Level is \$2,500. Furthermore, R313-14-15(2)(b)(iii)(E) states "The civil penalty may be increased as much as 50% where multiple examples of a particular violation are identified during the inspection period." As described above, multiple examples of the violation occurred. In addition, this is a repeat violation. EnergySolutions was found to have previously violated License condition 68 in a Notice of Violation dated October 19, 2010. In accordance with Utah Admin Code R313-14-15(2)(c), "In the event a violation is repeated within five years, the scheduled amount of the civil penalty may be increased 25%; and for repeat violations of Severity Levels II and III, the penalty may not be avoided by compliance."

Therefore, the proposed civil penalty is calculated for one violation at \$2,500. Because of the multiple examples of the violation, the proposed civil penalty is increased 50% or by \$1,250. Due to this being a repeat violation the total will be increased again by 25% or by \$937.00.

A civil penalty of \$4,687 for this violation is proposed.

A total civil penalty for Violations 1 and 2 is \$90,937 is proposed.

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D. Self-Identified Violations and Reduction in Proposed Penalty

Although EnergySolutions did not provide timely written notification of the violations, the Executive Secretary acknowledges that these are self-identified violations with some corrective actions that have been implemented by the Licensee. Utah Code Ann. R.313-14-15(2)(b)(iii) allows the Executive Secretary to modify the civil penalty being assessed. Therefore, the Executive Secretary has decreased the civil penalty by \$10,937.

The civil penalty was decreased based on the following corrective actions that have been implemented and have been proceduralized by February 14, 2011:

1. EnergySolutions has corrected the EWIS waste classification calculating error and validated that it is working correctly;
2. EnergySolutions has established an administrative control on incoming manifests. When a manifest indicates an isotope or isotopes that are at 75% of Class A limits, EnergySolutions' Director of Health Physics will review the manifest and approve it before acceptance of the waste; and
3. EnergySolutions will perform quarterly "constancy" checks of the EWIS waste classification algorithm to verify that it is working properly.

The DRC has reviewed these corrective measures for the storage of Class B and C waste violations and finds them to be appropriate and will inspect them at a later date to verify their effectiveness.

E. Request for Additional Information

The Executive Secretary requires additional information to be submitted for the storage of Class B and C waste violation to clarify and/or justify EnergySolutions' position of not removing the waste that exceeded Class A criteria from the Clive facility, as described in the letter dated December 13, 2010. This information shall include but not be limited to:

1. Dose estimates to radiation workers and the public if the waste is removed;
2. Calculations showing that the if the waste is left in place does not impact the performance assessment of the Clive facility;
3. A plan detailing how the waste will be found and removed if the State of Utah requires the wastes removal; and
4. A cost estimate and estimated timetable to remove the waste.

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Also, for the reporting violation, EnergySolutions shall submit corrective measures prior to this NOV being closed by the Executive Secretary.

Utah Admin. Code R313-14-15(5)(b) states "Enforcement Conferences are meetings held by the Executive Secretary with licensee, permittee or registrant management to discuss safety, public health, or environmental problems, compliance with regulatory requirements, proposed corrective measures, including schedules for implementation, and enforcement options available to the Executive Secretary." After EnergySolutions has submitted their corrective actions for both categories of violations, the Executive Secretary shall schedule an Enforcement Conference with EnergySolutions to discuss all details for final closure of this NOV, including a supplemental environmental project.

After these adjustments a total civil penalty for both of the violations of \$80,000.00 is proposed.

F. NOTICE

Compliance with the provisions of this Notice of Violation and Notice of Proposed Imposition of Civil Penalty (NOV/NPICP) is mandatory. Under Utah Admin. Code R313-14-15, the licensee's good faith efforts to comply with the NOV may impact the monetary penalty that would apply in a settlement. Providing false information may subject licensee to further civil penalties.

Utah Code Ann. § 19-3-109 provides that a violation of the ACT or a related order may be subject to a civil penalty of up to \$5,000 per violation.

G. CIVIL PENALTY

The licensee must pay the civil penalty or respond to this Notice of Agency Action imposing the civil penalties by filing a written answer. Utah Code Ann. §63G-4-201-(2)(vi). If the licensee chooses to pay the civil penalty, **payment shall be made within 30 working days of receipt of the NOV/NPICP.** Utah Admin. Code R313-14-15(2). An extension may be given when extenuating circumstances are shown to exist. Payment shall be made by check, payable to the Division of Radiation Control and mailed to the Division at the address below.

If the licensee chooses not to pay the civil penalties, it must follow the procedures for contesting the NOV/NPICP described below.

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H. CONTESTING THIS NOV/NPICP

This NOV/NPICP notice of agency action is effective immediately and shall become final unless responded to in writing within thirty (30) days after the date this NOV/NPICP was mailed. See Utah Code Ann. §63G-4-204 and 209(1)(c). Any further administrative proceedings in this case shall be conducted formally under Utah Code Ann. §§ 63G-4-201 to -601.

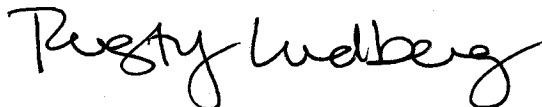
To contest this NOV/NPICO, you must respond in writing and must comply with the requirements of the Administrative Rules of the Radiation Control Board, found at Utah Admin. Code R. 313-17 and with the requirements of the Utah Administrative Procedures Act, including Utah Code Ann. § 63G-4-204. Those provisions of the Utah Administrative Procedures Act require, among other things, that you state your factual and legal reasons for disagreeing with the Notice of Violation, and that you state the action that you would like the agency to take (e.g., withdrawing the NOV/NPICP). A copy of Utah Code Ann. § 63G-4-204 is provided on the next page.

A response to this notice of agency action must be received by the Executive Secretary within 30 days of the date this NOV/NPICP was mailed.

Dated at Salt Lake City, Utah

This 24th day of February, 2011

UTAH RADIATION CONTROL BOARD



Rusty Lundberg, Executive Secretary