



March 1, 2011

CD11-0046

Ms. Margaret Doane
Director
Office of International Programs
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Subject: Applications for Revisions to the Expiration Dates of Export License
XW010 and Import License IW017

Dear Ms. Doane:

The purpose of this letter is to provide additional information regarding Duratek's (a subsidiary of EnergySolutions) applications of December 17, 2009 to extend the expiration dates on the subject import and export licenses.

On November 9, 2010, the U.S. Court of Appeals for the Tenth Circuit reversed a lower court's ruling and ruled that the Northwest Interstate Compact (NWIC) has authority over the Clive Disposal Facility. This is of particular relevance to the subject applications because the NWIC has not authorized the importation of foreign-generated low level radioactive waste (LLW) into the Northwest Compact region. Nonetheless, the NWIC recognizes that the processing of LLW results in the generation of residual waste that is commingled and should be attributed to the processor. This interpretation is consistent with the NRC's definition of residual waste in 10 CFR 20 Appendix G.

EnergySolutions has worked with the NWIC and the State of Utah to define more clearly what may be considered residual waste from incineration of foreign-generated wastes. The attached document identifies and describes these wastes. EnergySolutions has committed to send no wastes arising from the incineration of foreign-generated LLW for disposal at Clive that are not specified as residual wastes in the attachment. NWIC and the State of Utah have agreed that in so doing, EnergySolutions will meet the existing restrictions on the disposal of foreign-generated waste at the Clive facility imposed by the NWIC as stated in NWIC's *Resolution Clarifying the Third Amended Resolution and Order*.

This represents a change from our past practice prior to the decision of the Court of Appeals. If the NRC and or the NWIC believe that this restriction should be included by the NRC on the subject licenses, EnergySolutions has no objection.

If you have any questions or need additional information, please contact me at (240) 565-6148 or temagette@energysolutions.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas Magette". The signature is fluid and cursive, with a large, stylized initial "T" and "M".

Thomas E. Magette, P.E.
Senior Vice President
Nuclear Regulatory Strategy

Residual Low-Level Radioactive Wastes from Incineration

In processing foreign waste imported into the United States, it is EnergySolutions practice to incinerate the waste in batches, or campaigns, and return the primary hearth ash to the host country. Containers in which foreign LLRW is shipped would also be returned to the host country unless reused or recycled as described later in this document. This is necessary in order to conform to the restrictions on the disposal of foreign-generated waste at the Clive facility imposed by the Northwest Interstate Compact (NWIC) as stated in NWIC's *Resolution Clarifying the Third Amended Resolution and Order*. Defined below are the wastes resulting from incineration that NWIC approves for disposal at the Clive facility.

Waste Attributable to Processor – Prior to initiating a dedicated campaign, extensive manual cleanout of the continuous-feed incinerator at EnergySolutions' Bear Creek facility must be conducted in order to minimize the likelihood of cross contamination from wastes burned in the previous incineration cycle. Cleanout efforts and some other facility activities generate small quantities of material over an extended time period. These materials contain radioactivity commingled as a result of working with wastes from multiple generators. As a result, radioactivity from some waste streams that are incinerated cannot be attributed to a single generator. A comprehensive list of waste streams that cannot be attributed to a single generator and may be attributed to EnergySolutions and are permitted for disposal at the Clive facility by the NWIC is contained in Table 1.

Empty Packaging – Empty packaging from inbound international shipments will be reused for return of customer ash or other material, reused within the EnergySolutions facility, or released for unrestricted use if not contaminated. Metal packaging also may be recycled into metal products for reuse within the nuclear industry.

Large Campaigns – It is possible that in some instances, portions of the wastes listed above may be attributed to and returned to the original generator. The attribution requirements in EnergySolutions' Tennessee Radioactive Materials licenses acknowledge that large incineration campaigns (typically >100,000 pounds) of a single generator's materials can render more of the residual wastes attributable to that generator. EnergySolutions will collect and return such waste when practical; however, all of the wastes described above are acceptable for disposal at EnergySolutions' Clive facility.

Regulatory Basis – Considerations related to attribution of waste generated through the waste preparation and incineration processes as described above are explicitly addressed in EnergySolutions' Tennessee Radioactive Materials Licenses and are derived from information and guidance contained in Schedule RHS 8-33 of Tennessee Regulation 1200-2-5. This rule is the Tennessee equivalent to NRC Regulation 10 CFR 20 Appendix G. Residual waste is defined by both regulators as:

'Residual Waste' means low-level radioactive waste resulting from processing or decontamination activities that cannot be easily separated into distinct batches attributable to specific waste generators. This waste is attributable to the processor or decontamination facility, as applicable.

Table 1. Waste Attributable to Processor

Item	Description
Mops and rags from process area, equipment, and sorting table decontamination	General material handling, waste inspection or sorting prior to incineration inevitably results in the need to periodically decontaminate the waste sorting table, the conveyor belts, rollers and floor areas.
Floor sweepings	Floor sweepings from contaminated process areas are generally collected in small quantities over an extended time.
Incinerator off-gas system wastes: boiler ash, fly ash, bag house bags, HEPA filters, scrubber salts	These systems cannot be effectively decontaminated for a campaign and have service lives that exceed the length of a dedicated campaign.
Replacement parts for the incinerator: thermocouples, flow meters, pH probes, gaskets, augers, and refractory linings	Parts that become contaminated over long periods of time and must be replaced upon failure
Reusable personal protective equipment: laundered cloth coveralls, hoods, rubber and cut-resistant gloves, respirators, and respirator filters	Most PPE is suitable for multiple uses until wear or slow buildup of contamination renders them waste
Health physics and laboratory wastes	Commingled swipes and process samples: scrubber brine, ash, and refractory
Maintenance and support equipment: reusable contaminated pumps, valves, hoses, hand tools, test and inspection hardware, jacks, hoists, and rebuilt spare parts	Long-life tools and components or support equipment are an integral part of equipment operation.