

## **Importing and Exporting Radioactive Materials and Waste for Treatment, Processing and Recycling - 10575**

James Lieberman and John T. Greeves  
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### **ABSTRACT**

The paper will address an overview of the licensing process, requirements, and experience for importing radioactive waste and metals from international sources and processing and return or recycling. Items to be discussed center on obtaining regulatory approval for importing radioactive materials for example metals into the U.S. for recycling. The paper also discusses the NRC proposed changes to Part 110, litigation over EnergySolutions proposed import of Italian waste, and summaries of recent licenses issued to companies importing radioactive materials into the U.S. for recycling.

### **INTRODUCTION**

This paper is a supplement to the paper the authors presented at Waste Management 07 under the same title.<sup>1</sup> The paper addresses the importation to and exportation from the United States of radioactive material and focuses primarily on radioactively contaminated material. The non radioactive component of material with radioactive contamination, as well as, the radioactive component may have market value. Firms in the United States have the experience in processing imported material to effectively recover and recycle materials. This paper describes the current regulatory process that has opened up the global market for beneficial reuse of contaminated material that would otherwise just be treated as unwanted waste. It also describes current developments that may severely limit the importation of such material for processing in the United States.

By radioactive material we are referring to source, byproduct, and special nuclear material as those terms are used in the Atomic Energy Act of 1954, as amended. Importing and exporting such radioactive material in the United States is governed primarily by the Atomic Energy Act and the regulations of the United States Nuclear Regulatory Commission (NRC).<sup>2</sup> These regulations are found at 10 CFR Part 110. NRC's regulations which form the basis for NRC import and export licensing are fully consistent with the International Atomic Agency (IAEA) Code of Practice on the International Transboundary Movement of Radioactive Material and the IAEA Code of Conduct on the Safety and Security of Radioactive Sources.

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<sup>1</sup> John Greeves and James Lieberman, "Importing and Exporting Radioactive Materials and Waste for Treatment, Processing and Recycling," paper presented at Waste Management Conference - Phoenix, AZ, and February 25-March 1, 2007. The authors also presented "International Radioactive Material Recycling Challenges" at the 11<sup>th</sup> International Conference on Environmental Remediation and Radioactive Waste Management - Bruges, Belgium, September 2-6, 2007.

<sup>2</sup> There are also regulations issued by the U.S. Departments of Commerce, Energy, and State that address export restrictions and controls for certain radioactive materials.

The IAEA Code of Practice arose out of international concerns about the potential for improper transfer and disposal of radioactive material. A basic principle of the Code which the United States approved in 1990 was that international movements of radioactive material should take place with the prior notification and consent of the sending, receiving, and transit countries. No receiving country should permit the receipt of radioactive waste for management or disposal unless it has the technical and administrative capacity and regulatory structure to manage and dispose of the waste in a manner consistent with international standards. The regulations in Part 110 were amended in 1995 to reflect these considerations.

In the United States a key function of the regulatory process for importation contaminated material is to ensure that an appropriate facility has agreed to accept the waste for management or disposal. In other words, NRC must find that there is a “home” for any material that needs to be disposed of.

## **CURRENT LICENSING**

To possess or use radioactive material in the United States a license is required from either the NRC or an Agreement State if the material is to be used or possessed in an Agreement State. An Agreement State is a state to which the NRC has relinquished its federal authority for the regulation of certain radioactive material thereby allowing the state to regulate the material under its own authority subject to the oversight of the NRC. It is important to emphasize that a license to possess, use, and process radioactive material in the United States whether issued by the NRC or an Agreement State does not authorize the import or export of radioactive material. A separate license is required from the NRC for the import or export of radioactive material.

The licensing requirements for importing special nuclear material, source material, and byproduct material (radioactive material) are set out in 10 CFR Part 110.<sup>3</sup> As provided in 10 CFR 110.1, the scope section of Part 110, the regulations in Part 110 apply to all persons in the United States importing radioactive material with the exception of persons importing certain munitions, deuterium, nuclear grade graphite, certain nuclear equipment, and in bond shipments passing through the United States. Pursuant to 10 CFR 110.5, 110.9, and 110.9a, importing and exporting of material contaminated with radioactive material into the United States require either a specific or general license issued by the NRC.

As more fully described below, a general license can be used to import and export radioactively contaminated material for recycle. However, under a general license such material can not be processed to remove its radioactivity prior to reuse such that a radioactive waste stream is developed. A specific license is required if the processing of the imported material creates a radioactive waste stream or if disposal of radioactive waste is involved. In addition, a specific license is required regardless of use if certain quantities of radioactivity are involved.

Radioactive waste is defined in the NRC regulations as any waste that contains or is contaminated with source, byproduct, or special nuclear material, including that which contains

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<sup>3</sup> An NRC license is not required for the importation of naturally-occurring radioactive material, other than source material and 11e(2) byproduct material, as such material is not subject to the Atomic Energy Act of 1954, as amended.

or is contaminated with “hazardous” waste as that term is used in the Solid Waste Disposal Act or RCRA as it is commonly called. However, radioactive waste does not include radioactive material that is:

- Contained in a sealed source or device containing a sealed source, being returned to any manufacturer qualified to receive & possess the sealed source or device containing a sealed source;
- A contaminant on service equipment (including service tools) used in nuclear facilities, if the service equipment is being shipped for use in another nuclear facility & not for waste management purposes or disposal; or
- Generated or used in a United States government waste research & development testing program under international arrangements

NRC has provided some flexibility for material that some might describe as waste because it recognized the need to encourage waste management practices being mindful that regulatory restrictions add to the already rising cost of waste disposal. In that regard, NRC has made special provisions for certain shipments intended for recycling or resource recovery by creating the concept of “incidental radioactive material” which is discussed further in this paper.

### **Requirements for a General License**

A general license is in effect as a result of the NRC regulations. It does not require an application nor does the NRC issue a document evidencing the issuance of a license. Other than the requirement to hold a separate license to possess and use the imported material, the only substantive requirements for a general license for import pertain to quantities of specified radioisotopes eligible for a general license and the importation of irradiated fuel. Utilization of a general license to export incidental radioactive material, discussed below, in a shipment that exceeds 100 kilograms in total weight requires the prior submission of NRC Form 7 which addresses the volume, classification (as defined in 10 CFR 61.55), physical and chemical characteristics, route of transit of the shipment, and ultimate disposition (including forms of management) of the waste.

### **Incidental Radioactive Material**

In the United States a general license is used for importing and exporting contaminated material only if the radioactive material is not considered to be waste. NRC describes this non-waste category as incidental to the use of the non-radioactive material. Material is incidental radioactive material when the radioactive material is contained in or a contaminant of, any non-radioactive material that:

- (1) is exported or imported for recycling or resource recovery of the non-radioactive component and (2) will not be processed for separation of the radioactive component before the recycling or resource recovery occurs or as part of the resource recovery process.

In addition incidental radioactive material can not contain "hazardous waste" as defined in section 1004(5) of the Solid Waste Disposal Act, 42 U.S.C. 6903(5).

Incidental radioactive material is an important concept for those interested in importing contaminated material into the United States for processing. A good example for applying the concept of incidental radioactive material and using a general license is for importing contaminated metal for purposes of melting it into shield blocks. This would require that the imported metal not be decontaminated prior to or during the metal processing.

There is controversy in applying the concept of incidental radioactive material. Questions have been raised as to whether the importer when recycling the imported material is generating waste being incidental to that recycling. If the imported material is processed first to remove the radioactive component as part of the resource recovery process, the contaminates cannot be considered to be incidental radioactive material. On the other hand, secondary waste from recycling, such as contaminates in filters, floor sweepings, slag from melting might be considered incidental to the reprocessing.

NRC in examining the incidental radioactive material question may look behind the licensee's statements to see if the waste is really incidental to recycling and recovering or whether in reality waste processing is occurring. For example, importing contaminated combustible material for incineration is clearly waste processing assuming no use for the ash. However, it could be considered resource recovery if the energy from the incineration process was captured for use such as making steam, or if the ash was recovered for use. Another question might be whether the contamination in shipping containers of contaminated metals intended for recycle into contaminated shield blocks is considered incidental to the recycling process.

Recent examples of incidental radioactive material have included:

- 1) Importing contaminated clothing for reuse from Mexico
- 2) Exporting contaminated shipping containers for reuse
- 3) Importing contaminated refueling equipment for refurbishing and reuse
- 4) Exporting contaminated refueling equipment for reuse
- 5) Importing contaminated metals for processing to produce shielding blocks for accelerators
- 6) Exporting shield blocks for accelerators

Given the controversy over the waste associated with incidental radioactive material, it is appropriate to consider obtaining a specific license to avoid the potential for non compliances with 10 CFR Part 110.

### **Specific License**

A specific license is needed when the primary purpose of the import or export is to decontaminate material and dispose of the waste. A specific license is required when waste is being imported or exported for the purpose of disposal. Thus, if radioactive material is defined as radioactive waste (i.e., not as incidental radioactive material), it is required to be imported and exported under a specific license. The definition of radioactive waste includes material, e.g., metal, which is contaminated by radionuclides such that the material needs to be processed for separation of the radioactive component before the recycling or resource recovery of the material

occurs. It also includes material where separation of the radioactive component occurs as part of the resource recovery process. In both of these cases the radioactive component of the import is considered a waste stream necessitating a specific license.

### **Requirements for a Specific License**

A specific license requires the submission of a written application with a licensee fee. Upon approval of the application, the NRC issues a document evidencing the issuance of the license. In accordance with 10 CFR 110.70, the NRC publishes notice of applications for specific licenses for importing radioactive waste in the Federal Register. The application is public as provided for by 10 CFR 110.72 and an opportunity for both submitting comments and a hearing is provided by 10 CFR 110.81 and 110.82. In deciding whether to grant a hearing, the Commission in accordance with 10 CFR 110.84 will seek the views of the United States Department of State on the application. The hearing process is governed by the provisions in 10 CFR Part 110, Subparts H and I. Ordinarily the presiding officer for the hearing is the full Commission itself as provided for in 10 CFR 110.104.

### **Import Licenses**

An application for import requires submission of the following information described in 10 CFR 110.32:

- 1) The volume, classification (as defined in 10 CFR 61.55), physical and chemical characteristics, route of transit of the shipment, and ultimate disposition (including forms of management) of the waste;
- 2) The process used for the generation of the waste, and the status of the arrangements for disposition, e.g., any agreement by a low-level waste compact or State to accept the material for management purposes or disposal; and
- 3) The description of the end uses by all consignees in sufficient detail to permit evaluation of the justification for the proposed export or import, including the need for shipment by the dates specified.

In reviewing an import application, the NRC may consult with the State Department. The standards for NRC issuing a specific license to import radioactive waste include:

- 1) The proposed import is not inimical to the common defense and security;
- 2) The proposed import does not constitute an unreasonable risk to the public health and safety; and
- 3) An appropriate facility has agreed to accept the waste for management or disposal.

In essence, this last provision requires that the person agreeing to accept the radioactive waste be licensed by either the NRC or an Agreement State for the disposal of such material. While not stated in the regulations, the Statements of Considerations for Part 110 provides that the NRC will consult during the licensing process with the appropriate Federal and State agencies including Low-level Waste Compacts. The NRC has stated that it will not grant an import license for waste intended for disposal unless it is clear that the waste will be accepted by a

disposal facility, host state, and compact (where applicable) or any waste from processing will be returned to the originating country. These consultations will be part of the determination regarding the appropriateness of the facility that has agreed to accept the waste for management or disposal.

The intent of the NRC requirements is to provide a clear disposal path to ensure that importation of radioactive waste does not become an unfunded public responsibility. In that regard, NRC may second guess the importer's determination that the imported material is not waste. In one case, an importer sought to import depleted uranium arguing it was a valuable commodity. NRC disagreed on the basis that the person had significant quantities of the material without a foreseeable use and, therefore, NRC concluded that any additional importation of depleted uranium under the circumstances would be considered importation of waste requiring assurance in advance that there was path for waste disposal.

There maybe additional requirements depending on the nature of the material. For example, for most material an environmental assessment is not needed for importing radioactive waste pursuant to 10 CFR 51.21 and 51.22(c)(15) before a license is granted pursuant to 10 CFR 110.43 (c) and 110.45(b). If depleted uranium is involved associated with munitions, certain State Department regulations may be applicable. It should be noted that as provided in 10 CFR 110.19 (a) issuance of an NRC license does not relieve the importer from compliance with applicable Environmental Protection Agency requirements for waste that contains or is contaminated with hazardous material, i.e., involves mixed waste.

Since 1995, NRC has considered 26 import applications involving waste material and issued 14 licenses. As of December 31, 2009, three applications for new imports are pending. The principal sources of waste coming into the United States are Canada, Mexico, Germany, United Kingdom, and Taiwan. Table I. lists examples of issued import licenses.

Table I. Examples of NRC Waste Import Licenses

<b>APPLICANT</b>	<b>Material type</b>	<b>END USE</b>	<b>Country of Origin</b>
Allied Technology Group	Contaminated condenser tubes	Decontamination and recovery of the metal for recycling.	Taiwan
Philotechnics Ltd	Depleted uranium	Recycled and if necessary, disposal	United Kingdom
Starmmet CMI, Inc	Depleted uranium turnings, solid cylindrical pieces & contaminated oil	DU recycled; oil processed and reused	United Kingdom

Framatome ANP	Combustible material contaminated	Incinerated into ash. Ash will be sold and exported for uranium recovery	Germany
Diversified Scientific Services	Class A mixed waste containing Tritium, C14 and mixed fission products radionuclides	Processing, incineration, and return residue to Canada	Canada
Eastern Technologies	Class A waste (Co-60, C0-58, and Mn-54)	Laundrying and decontamination of clothing and related products	Mexico
Duratek	Class A Radioactive Waste consisting of source, special nuclear and byproduct materials in varying combinations as surface or volumetric contaminants	Recycling for beneficial reuse; free release, or conditionally released to authorized RCRA Subtitle D landfills; nonconforming material or waste not released or processed in accordance with the Tennessee license to be returned to Canada.	Canada
Diversified Scientific Services	Radioactive waste in form of liquid products	Processing into solid waste & return to Canada	Canada
AREVA NP Inc.	Class A radioactive waste in the form of protective clothing, rags, metal shavings and rejected parts contaminated with Cobalt- 60, Cobalt-58, Iron-59 and Manganese-54	Processing for incineration	France
Westinghouse Electric Company LLC	Uranium 235 (processed from decontaminating Hematite steel)	Disposal	Canada
Perma-Fix Northwest, Inc.	Class A radioactive waste including various materials (e.g., wood, metal, paper, cloth, concrete, rubber, plastic, liquids, aqueous-organic fluids, animal carcasses, and human-animal waste) contaminated with radionuclides during licensed activities; e.g., routine operations, maintenance, equipment use, decontamination, remediation, and decommissioning	Recycling for beneficial reuse and processing for volume reduction via thermal and non-thermal treatment; liquids to be recycled; and non-conforming materials and/or radioactive waste that are attributed to Canadian supplier will be returned to Canada.	Canada

## Export License

An export application requires essentially the same information as a specific import license with the exception of the description of the process to generate the waste and the status of arrangements for disposition. It is also a public document which is noticed in the Federal Register. A hearing may be requested as provided in 10 CFR 10.82. In addition, the NRC consults with the State Department before authorizing an export involving radioactive waste. The standards for NRC issuing a specific license to export radioactive waste include:

- 1) The proposed export is not inimical to the common defense and security;
- 2) The receiving country finds it has the administrative and technical capacity and regulatory capability to manage and dispose of the waste and consents to the receipt of the waste.

Since 1995, NRC has considered 16 export applications involving waste material and issued 11 licenses. As of November 30, 2009 2006, three applications are pending. Exports of waste have been to Canada and Germany. Table II. lists examples of issued export licenses.

Table II. Examples of NRC Waste Export Licenses

Licensee	Material type	Importing Country
Diversified Scientific Services	Class A radioactive mixed waste (primarily mixed fission product radionuclides) contained in baghouse salts and ash	Canada
Framatome ANP	LEU, 5.0% in Class A radioactive waste (slightly contaminated non- combustibles)	Germany
Westinghouse	LEU as UO <sub>2</sub>	Canada
Framatome ANP	Zirconium tubing; molybdenum metal pieces contaminated with low-enriched uranium	Canada
Westinghouse	LEU in Class A Radwaste containing zirconium and Molybdenum scrap	Canada
Duratek	Imported Class A radioactive waste needed to be returned to Canadian generator for disposal that cannot be recycled for beneficial reuse, does not conform to import, it was processed for volume reduction, or it was residue from processing attributable to imported waste	Canada



Perma-Fix Northwest Inc.	Imported Class A radioactive waste needed to be returned to Canadian generator for disposal that does not conform to import and processed material attributable to imported waste	Canada
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### Modern Licenses

In the past most licenses for waste have been for the import of specific material from a particular supplier. In the past few years, NRC has issued what the authors call “modern licenses” which are broad scope licenses providing for importing material for processing based on the capabilities of the importer’s possession and use license. The application addresses imports from a given country and provide for at least one supplier from the exporting country. The application describes the import based on a percentage of the applicant’s possession limits and describes the processing based on its possession and use license. Disposal pathways and transportation provisions are addressed. The benefit of this approach is the NRC, the State department, and the involved compacts and states perform one review that covers the spectrum of potential regulatory issues. Once this import license and its associated export license is issued, additional suppliers added to the license become minor amendments with a lower license fee provided the proposed import is within the envelope of the license because the NRC has already performed the necessary reviews.

NRC has issued “modern licenses” to Duratek Services, Inc (IW 017 and XW 010) for material to be processed at its Bear Creek Tennessee facility from Canada and to Perma Fix Northwest, Inc (IW 022 and XW012) facility in Richland Washington for material to be processed from Canada.<sup>4</sup>

### PROPOSED RULEMAKING

On June 23, 2009, the NRC published a proposed rule (74 FR 29614) to amend 10 CFR Part 110. The proposed rule included, among other changes, a revision to the definition of “radioactive waste” and the elimination of the term “incidental radioactive material.” It also provides explicitly for the NRC to consult with host states and, if applicable, the appropriate low-level waste compacts to confirm that an appropriate facility has agreed to accept and is authorized to possess the waste for management or disposal. The proposed rule also addresses other aspects of importing and exporting radioactive material.

In explaining the need for the revision to the definition of waste, the NRC stated:

The definition of radioactive waste in 10 CFR Part 110 is confusing and inconsistent with how the term is used domestically. Likewise, the term “incidental radioactive material” (IRM), as defined in 10 CFR Part 110, is unclear with regard to its scope, applicability, and relationship to radioactive waste. In particular, the meaning of the phrase “recycling

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<sup>4</sup> The NRC licenses are available on the NRC document management system called “ADAMS.”

or resource recovery" in the definition of IRM is unclear and difficult to apply because the concept of IRM is limited to 10 CFR Part 110. 74 FR at 29615.

NRC proposed to amend the definition of radioactive material to read as follows:

Radioactive waste, for the purposes of this part, means any material that contains or is contaminated with source, byproduct, or special nuclear material that by its possession would require a specific radioactive material license in accordance with this Chapter and is imported or exported for the purposes of disposal in a land disposal facility as defined in 10 CFR Part 61, a disposal area as defined in Appendix A to 10 CFR Part 40, or an equivalent facility; or recycling, waste treatment or other waste management process that generates radioactive material for disposal in a land disposal facility as defined in 10 CFR Part 61, a disposal area as defined in Appendix A to 10 CFR Part 40, or an equivalent facility. Radioactive waste does not include radioactive material that is--

(1) Contained in a sealed source, or device containing a sealed source, that is being returned to a manufacturer, distributor or other entity which is authorized to receive and possess the sealed source or the device containing a sealed source;

(2) A contaminant on any non-radioactive material used in a nuclear facility (including service tools and protective clothing), if the material is being shipped for recovery and beneficial use of the non-radioactive material in a nuclear facility and not solely for waste management purposes or disposal.

(3) Exempted from regulation by the Nuclear Regulatory Commission or equivalent Agreement State regulations.

(4) Generated or used in a U.S. Government waste research and development testing program under international arrangements; or

(5) Being returned by or for the U.S. Government or military to a facility that is authorized to possess the material. (Emphasis added)

Although the intent of the NRC in developing this proposed rule was to clarify issues associated with incidental radioactive material, the proposed language contains several terms and phrases that may add unnecessary confusion. For example, the terms "recycling" and "recovery and beneficial reuse" are used to differentiate waste from non waste. In our view, there is no clear distinction between "recycling" and "recovery and beneficial reuse." There are also questions with the phrase "not solely for waste management purposes or disposal" as the import would never be solely for waste management or disposal if there was a "beneficial reuse." The intent of the language may be to clarify that while radioactive material imported for processing that has a waste stream is waste, it is not waste if the non-radioactive portion of the processed imported material has a beneficial reuse in a facility license by either an agreement state or the NRC and the import is primarily for that purpose. Comments have been submitted concerning this language by the State of Utah, Healthy Environmental Alliance of Utah, American Ecology & US Ecology subsidiaries, Magenta, Inc., and EnergySolutions. Given the issues raised by commenters, we would expect that this language will undergo modifications during the rulemaking process.

## LITIGATION

A paper on current NRC import and export issues would not be complete without a discussion of the litigation arising out of the applications of EnergySolutions to import (IW023) and export (XW019) waste from Italy. EnergySolutions sought to import 20,000 tons of waste from Italy of which about 1600 tons of waste would be disposed of at its Clive facility after processing the imported material. The Northwest Compact has taken the view that the Clive facility as a result of its location in Utah is under the jurisdiction of the Northwest Compact such that it cannot accept out-of-region low-level waste including foreign waste without prior approval of an arrangement by the Northwest Compact.<sup>5</sup> The Northwest Compact has also taken the view that waste that contains any foreign waste is foreign waste regardless of the attribution models approved by an Agreement State. Consequently, EnergySolutions would be required to obtain the Compact's approval before disposing the Italian waste at Clive. The State of Utah has also objected to this import and as a member of the Northwest Compact has voted against allowing this import. It also requested a hearing before the NRC on the application. While Utah recognizes that there is not a safety issue with the importation of the Italian waste and that the waste will only take up a very small fraction of the capacity of the Clive facility, it is concerned with the impact on the volume of waste at Clive and the future ability of the site to take domestic waste. The Compact has informed the NRC that EnergySolutions has no approval from the Compact for disposing this waste at Clive.

To resolve the question of the jurisdiction of the Northwest Compact, EnergySolutions filed a suit against the Northwest Compact in the United State District Court for the District of Utah claiming, among other things, that the Northwest Compact does not have the authority to control foreign waste coming to the Clive facility. The District Court in 2009 ruled that the Clive facility is not a "regional disposal facility" and that the Northwest Compact's authority does not reach controlling out-of-region (compact) waste to facilities which are not "regional disposal facilities." *EnergySolutions, LLC v. Nw. Interstate Compact on Low-Level Radioactive Waste Mgmt.*, No. 2:08-CV-352, slip op. (D. Utah May 15, 2009). Thus, the Northwest Compact does not have the authority to control waste from out-of-region going to Clive. The Compact as well as the other defendants in this case, the State of Utah and the Rocky Mountain Compact, have appealed the decision to the Tenth Circuit Court of Appeals. Six other low-level waste compacts have filed Amici Curiae briefs in support of the Northwest Compact. The appeals are docketed under case Nos. 09-4122, 09-4123 and 09-4124.

As of December 31, 2009, the NRC has held the Italian import application in abeyance. This has also impacted other applications for importing radioactive material for processing if there is a domestic waste stream attributed to foreign waste as the NRC is not processing applications as long as the Northwest Compact continues to object to foreign waste going to Clive. From the NRC perspective, as long as the controversy concerning the authority of the Compact over the Clive site continues, there is not sufficient certainty that there is a home for the waste in the United States. Thus, a person considering the import of radioactive material needs to analyze carefully the processing steps to understand how waste streams are created and determine if the waste streams may be considered foreign or domestic waste. This determination impacts the disposal options which are central to the NRC licensing decision because of the views of the compacts towards disposal of foreign waste.

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<sup>5</sup> The Northwest Compact, as well as the other nine compacts, was established by legislation. 42 USC 2021d.

## **LEGISLATION**

The controversy over the Italian waste issue has spread beyond the issue of Italian waste. Congressman Gordon from Tennessee sponsored a bill, H.R. 515, in Congress addressing the import of foreign waste. This legislation would prohibit the importation of foreign waste for disposal in the United States with limited exceptions. The limitation would prohibit importing waste for processing in the United States and returning the processed waste to the original country. (See statement of Congressman Roe of Tennessee in the Congressional record at H13423- December 2, 2009). On November 2, 2009, the bill was reported out of Committee. On December 2, 2009, the bill passed by a vote of 309 to 112 in the House of Representatives. A companion bill S. 232 was submitted by Senator Lamar Alexander of Tennessee and was referred to the Senate Committee on Environment and Public Works where it was pending as of December 31, 2009.

If H.R. 515 is enacted into law, there will be limited imports of low-level radioactive waste. Absent presidential approval, LLW could not be imported unless (1) it was waste being returned to a United States Government or military facility which is authorized to possess the material; or (2) the waste resulted from the use in a foreign country of nuclear material obtained by the foreign user from an entity in the United States. Absent Presidential approval, if material to be imported for processing produces a waste stream that is attributed to a foreign source, the import would be prohibited. The bill adopts the definition of radioactive waste of the Low-Level Radioactive Waste Policy Act (LLRW Act)(42 U.S.C. 2021b). It includes any waste NRC may declare as “below regulatory concern” under section 10 of the LLRW Act. 42 USC 2021b.

In our view, if this bill is enacted into law, it may essentially end the processing of imported material even if the material was considered to be incidental radioactive material under the current Part 110 definition or not to be waste under the proposed Part 100 definition. This would be the case, even if the material and its waste was intended to be exported back to the original country, because there will always be some secondary waste in filters, floor sweepings, etc, that might be attributed to the foreign material. We would expect that if the waste import bill is enacted into law, NRC would need to amend its regulations in Part 110.

## **CONCLUSION**

The ability to import LLW into the United States is in a state of flux. NRC is in the process of clarifying its regulatory framework in 10 CFR Part 100 that provides for general and specific licenses that has opened up the global market for beneficial reuse of contaminated material that would otherwise just be treated as unwanted waste. There is pending litigation that may jeopardize the ability of waste streams containing foreign waste to be disposed of domestically. Most importantly, there is pending legislation that would prohibit the importation of waste that will likely end the global market for beneficial reuse of contaminated material.