

December 13, 2007

The Honorable Joe Barton
Ranking Member, Committee
on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515

Dear Congressman Barton:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your November 19, 2007, letter regarding EnergySolutions' September 14, 2007, application to import approximately 20,000 tons of radioactive waste from Italy. Answers to your specific questions are provided in the enclosure to this letter.

NRC regulations ensure that licensees that import or export radioactive waste are authorized to do so and will handle the waste in a manner that will protect public health and safety. NRC's regulations and practices also provide for significant coordination among the public, States, and Low-Level Waste (LLW) Compacts, where the waste would be processed and/or disposed, and promotes transparency with the public concerning the proposed import or export.

More specifically, shortly after the NRC receives an application for the import and export of radioactive waste, the agency makes the application available to the public through the Agencywide Documents Access and Management System (ADAMS). The NRC publishes a notice in the Federal Register (FR) to provide the public an opportunity to comment on the application. The FR notice also provides an opportunity for a hearing.

The NRC reviews all import and export license applications against the criteria defined in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 110, "Export and Import of Nuclear Equipment and Material." In addition, the staff requests the U.S. Department of State to provide the Executive Branch's views on import/export licensing requests involving radioactive materials. The staff solicits the opinions of the affected States and LLW Compacts. The NRC also consults with the U.S. Environmental Protection Agency regarding applications that include mixed waste (i.e., radioactive and other hazardous wastes). The NRC makes these opinions publicly available in ADAMS.

The NRC determines whether or not to issue an import license for radioactive waste only after considering the opinions and comments of the public, Executive Branch, State, LLW Compacts (if applicable), and its own technical evaluation. The NRC bases its decisions on the following criteria found in 10 CFR Part 110: "The proposed import will not be inimical to the common defense and security; the proposed import will not constitute an unreasonable risk to the public health and safety; and, an appropriate facility has agreed to accept the waste for management or disposal."

In this instance, the applicant also requested an export license to address the possibility that any material that EnergySolutions wants to send back to Italy can be exported. Therefore, NRC will consider both the import and export license applications together. In making the licensing decision, the NRC must determine that the proposed export will not be inimical to the common defense and security. Also, the U.S. Department of State will ask the receiving country if it will accept the proposed export from the U.S. and requests confirmation that the designated consignee is authorized to receive the radioactive waste. If the material is subject to a peaceful nuclear cooperation agreement between the U.S. and the recipient Nation, the U.S. Department of State will also ask the government of the recipient Nation to provide assurances that the material will be maintained in accordance with the terms and conditions of that agreement.

Thank you for your interest in this issue, and please let me know if you have any additional questions.

Sincerely,

/RA/

Dale E. Klein

Enclosure:
List of Questions/Answers

cc: Representative Ed Whitfield
Representative John D. Dingell
Representative Bart Stupak

List of Questions/Answers

(1) Does NRC allow radioactive wastes to embark from a foreign country bound for the United States without a clear understanding of its exact type and composition? If so, what were the instances where this occurred?

(2) Does NRC grant an import license to applicants who cannot provide details regarding the exact origin of the waste or exactly who generated the waste? If so, what were the instances where this occurred?

Because questions 1 and 2 concern similar issues, both are addressed below:

No, the U.S. Nuclear Regulatory Commission (NRC) does not allow imports of radioactive waste into the country without a reasonable understanding of the type and composition of the material. In situations where the type or composition is not fully characterized prior to the import, the NRC allows applicants to provide, with appropriate justification, maximum bounding concentrations or activity levels anticipated in the shipment for NRC to consider in its deliberations. The NRC will not approve an import license until it ensures that the imported waste material will meet (1) the provisions of the Atomic Energy Act of 1954, as amended, (2) the license of the importer, and (3) the NRC's provisions for issuing a license to import waste contained in the agency's regulations (Title 10, Part 110, "Export and Import of Nuclear Equipment and Material," of the *Code of Federal Regulations* (10 CFR Part 110)). The existing facility license issued by the NRC or an Agreement State contains provisions to ensure that any radioactive material received from another person, whether in the United States or from a foreign country, will be handled safely. In its import license application, the applicant must identify the maximum quantity of radioactive material, its chemical and physical form, the volume, waste classification (as defined in 10 CFR 61.55, "Waste Classification"), physical and chemical characteristics, route of transit of shipment, and ultimate disposition (including forms of management). The applicant must also describe the industrial or other process responsible for generating the waste and the status of the arrangements for disposition (e.g., any agreement by a low-level waste (LLW) compact or State to accept the material for management purposes or disposal). As noted in response to question 3, some waste may be imported for processing for disposal and the ultimate disposal may be in the country of origin. In some cases, maximum values for the amounts of waste may be provided, and these values must not cause the licensee that receives the waste to exceed the limits or terms and conditions of its facility license. Descriptions of the waste must be sufficiently detailed for the NRC staff to conclude that the U.S. transportation, management, and disposal requirements for ensuring protection of public health and safety will be met.

(3) Has NRC ever granted an import license with the understanding that some of the wastes will be so dangerous they must be exported back to the country of origin? If so, what were the instances where this occurred?

No instances have occurred in which imported waste could not be handled safely or with undue risk to the public health and safety. This is largely due to the material description requirements discussed in the answer to questions 1 and 2. On several occasions, the NRC has granted import licenses along with a corresponding export license. For these occasions, the import was initially for processing the waste for disposal (generally by volume reduction). Once processed

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for disposal, some of the material may be authorized to be disposed in a U.S. facility and some, or all of the material, may be returned to the country of origin for final disposal. The fact that some LLW material is not allowed to be disposed at a specific U.S. facility does not imply that it is too dangerous to be disposed in any U.S. facility. For example, the EnergySolutions Clive facility is only authorized to accept class A waste. Barnwell, which is licensed for class A, B, and C waste, has a general policy that it will not accept foreign waste for disposal.

(4) Does a State identified by an applicant as a host for the storage or processing of the imported radioactive wastes have any authority to object? Has this ever occurred? If so, what were the circumstances?

(5) If the importation of radioactive wastes is inconsistent with a regional low-level radioactive waste interstate compact, can the regional commission established by the compact object?

Because questions 4 and 5 concern similar issues, both are addressed below:

Absolutely, the NRC will consult with interested States and the LLW compact(s), if applicable, before issuing an import license for LLW. The NRC will only grant an import license for waste intended for disposal if it is clear that the waste will be accepted by a disposal facility, host State, and compact (where applicable). This will be part of the staff's determination regarding the appropriateness of the facility that has agreed to accept the waste for management or disposal.

For example, in 1995 the State of South Carolina objected to a proposed import of radioactive waste from Mexico that was planned to be processed in Texas and then to be sent to the Barnwell Low-Level Radioactive Waste Disposal Facility for final disposal. The South Carolina point of contact commented that foreign generated material is not accepted at Barnwell. The State of Texas commented that they could not concur with the import until a waste disposal site agreed to accept the waste. Based on this information, the NRC did not grant a license to import the radioactive waste.

(6) If U.S. Customs and Border Protection determines a sea cargo container laden with radioactive wastes needs to be inspected, are port security officers trained and prepared to handle the kind of radioactive wastes described in the EnergySolutions applications?

The NRC recommends that this question be referred directly to the U.S. Department of Homeland Security which can more appropriately characterize its capabilities in this regard.

NRC has worked closely with U.S. Customs and Border Protection (CBP) on imports of radioactive material, established 24-hour communication channels between the two agencies, routinely provided licensee information to CBP, and briefed CBP on NRC's licensing practices and information sharing capabilities.

(7) When the NRC established its criteria for evaluating import licenses, did the Commission anticipate commercial applicants would seek to import large volumes of radioactive wastes for domestic disposal?

No, when the NRC amended its regulations in 1995 to establish specific licensing requirements for the import and export of radioactive waste it did not specifically anticipate that bulk quantities of foreign generated LLW would be disposed in U.S. facilities. The 1995 amendment aligned U.S. policies with the guidelines of the International Atomic Energy Agency's (IAEA) Code of

Practice on the International Transboundary Movement of Radioactive Waste and strengthened the NRC's control over radioactive waste entering and leaving the United States. The Statement of Consideration published with the 1995 rule does not address whether the Commission expected applications for the import of large volumes of waste. However, one criterion for the import of waste into the United States is that an appropriate facility as well as the host State and compact where applicable have agreed to accept the waste for management or disposal.

(8) If radioactive waste is imported without a clear understanding of its type and composition, how would NRC ensure that domestic transport of such waste would not be inimical to public health and safety?

The NRC requires specific information regarding the type and composition of radioactive waste to be imported into the United States. In this particular case, the staff requested additional information from EnergySolutions to better understand the type and composition of the proposed import. Regarding transportation, EnergySolutions states in its application that shipments will comply with the packaging, labeling, and marking requirements of the International Atomic Energy Agency's "Regulations for the Transport of Radioactive Material" (TS-R-1). U.S. Department of Transportation (DOT) regulations authorize transportation of shipments imported into the United States under the IAEA TS-R-1 regulations. DOT and NRC domestic transport regulations are derived from and compatible with TS-R-1. In instances where some relevant data is not available, TS R-1 applies more restrictive activity limits on the shipment than would be applied if all relevant data were available.

(9) When NRC evaluates an application to import large quantities of radioactive waste, does it consider the existing capacity of domestic low-level waste facilities and the future disposal needs of domestic generators?

No, as a regulator, the agency does not directly consider future domestic disposal needs during the license application review process. However, NRC does solicit the opinions of the affected LLW compacts and States. It would be reasonable for a LLW compact (or State) to comment if capacity became a concern at a particular disposal site, and for NRC to consider those comments in the licensing process. However, as discussed previously, the LLW compact (or State) has the ability to deny the disposal of specific LLW waste in their facility for any reason.