ENERGYSOLUTIONS

July 25, 2013 CD13-0218

Annette Vietti-Cook
Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
ATTN: Rulemakings and Adjudications Staff

Subject: Revision to Transportation Safety Requirements

Reference: Docket ID NRC-2008-0198

Dear Ms. Vietti-Cook:

Energy*Solutions* hereby submits the comments contained in the attachment in response to the subject notice. We appreciate the opportunity to comment on the proposed changes to 10 CFR 71. We have one overriding concern regarding the effect of the changes proposed by the U.S. Nuclear Regulatory Commission and the U.S. Department of Transportation in its companion rulemaking. That concern is that the two rules may have the unintended consequence of severely complicating the storage of radioactive material containers and conveyances when they are not in use. Our concern is addressed in more detail in the attachment.

Thank you again for this opportunity to comment. Questions regarding these comments may be directed to me at (801) 649-2109 or dshrum@energysolutions.com.

Sincerely,

Daniel B. Shrum
Senior Vice President
Regulatory Affairs

Attachment

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Comments on Proposed Rule
Revisions to Transportation Safety Requirements

DOT Companion Rulemaking – In its companion rulemaking, the U.S. Department of Transportation (DOT) proposed a change to 49 CFR 173.443 (c) that would severely limit the use and management of conveyances (including overpacks, freight containers, tanks, and intermediate bulk containers). Although the proposed DOT regulations include the same new definition of "contamination" as the proposed NRC regulations, the revisions to 49 CFR 173.443(c) impose new and severely limiting restrictions on the return to service of conveyances that have been used for the transport of Class 7 materials in excess of the new contamination limits. This subsection establishes contamination and radiation levels which a conveyance must meet to be returned to service (RTS). This provision has historically been used across the nuclear industry to release a conveyance after a shipment is complete and the packages are removed for essentially unrestricted use.

The DOT stated in the *Federal Register* notice that the reason for the change was that DOT did not have the regulatory authority to establish a radioactive material unrestricted transfer (free release) limit. As a result, DOT has left it to the NRC as to whether it will continue the longstanding provision of the DOT regulations, with NRC acquiescence, to allow conveyances that meet the RTS standards to be released without applying NRC licensing requirements. As discussed in more detail below, it is Energy*Solutions* view that by creating a definition for contamination, NRC is continuing this position for materials below the level that meets the definition of contamination for conveyances in transportation or storage incidental to transportation.

Although this application of the definition of contamination in the proposed rule does provide a regulatory path for the release of conveyances, it does not relieve the impacts to Energy*Solutions*, and others, as described herein. As a suggested resolution to the issue, Energy*Solutions* proposes that the current language found in 49 CFR 173.443(c) and the associated table of contamination limits be incorporated into NRC regulations as an authorized method to remove conveyances from licensed control when the conveyances are limited to the transportation of contaminated or potentially contaminated material or storage for future such transportation.

Implications of DOT Rulemaking – Energy*Solutions*, extensively and routinely, uses RTS as an efficient method to release conveyances (gondola rail cars, Sealand containers, intermodal containers, and transportation vehicles) and return them back to customers or for general unrestricted use in commerce. The proposed DOT rule would restrict RTS for exclusive-use transport of Class 7 (radioactive) materials only. Therefore, all conveyances not released RTS must meet radioactive material license requirements for unrestricted release (UR) unless authorized as another type of DOT packaging, such as, empty package or sole use. The level of effort for an UR is significantly greater than a RTS release; and some conveyances cannot be

decontaminated to meet UR criteria resulting in unnecessary disposal of useable conveyances. DOT has not provided a health and safety rationale that would justify this change.

The DOT rule essentially defines RTS conveyances not in use for Class 7 material as radioactive material; therefore, it implies that a radioactive material license is necessary to store these RTS conveyances when not in-use transporting Class 7 material. This would impose a significant burden on Energy*Solutions*, our customers, and other industry processors as there are no licensed facilities that have sufficient capacity to store the inventory of gondola rail cars and other conveyances.

Conservative estimates indicate that 85% of the rail fleet may need to be stored as licensed material. This far exceeds the current restricted area capacity at Energy*Solutions*' disposal and processing facilities. This does not include the storage capacity needed for the intermodal containers. From a practical perspective, 100% storage capacity is not necessary since at any given time a certain portion of this conveyance inventory is in commerce. Therefore, Energy*Solutions* would have to determine its operational inventory capacity based on current and projected customer usage, including the time necessary to process a conveyance from receipt to return to customer, to determine the balance of capacity necessary for storage.

In the past, Energy*Solutions* has stored gondola cars and other conveyances at locations or facilities that do not possess a radioactive material license. The proposed DOT rule implies that this practice would no longer be an option. **Energy*Solutions* does not believe that DOT has demonstrated, nor that in fact there exists, a health and safety justification for imposing new restrictions on the storage of conveyances while not in use.**

Energy*Solutions* operations and facilities will not support the initial magnitude or the routine day-to-day decontamination activities necessary to support proposed DOT rule change. It takes approximately 8 times longer to process a conveyance for UR than for RTS. This assumes that the UR is radiologically and economically feasible. Many conveyances in Energy*Solutions*' fleet have been in service for years with resultant embedded fixed contamination and areas inaccessible for radiological survey and would require significant effort to UR. The required decontamination efforts would impose a significant cost. Additionally, the decontamination process involves various industrial safety risks, e.g., high pressure water spray, cutting, and grinding, which pose real hazards to workers.

NRC Rulemaking – As noted above, by the DOT and the NRC adopting the same definition of "contamination," and excluding conveyances with contamination below the limits established by that definition, transportation requirements of the DOT and the NRC are not applicable to such conveyances. It is Energy*Solutions* view that by adopting the DOT definition for contamination, the NRC is continuing the long held position that conveyances in transportation or storage incidental to transportation do not need to be licensed. This is an appropriate safety position as the NRC noted in its Statement of Considerations for the proposed rule:

> The derived values used in the definition of contamination are conservative with respect to transportation, and quantities of radioactive substances below these values would result in small amounts of exposure during normal conditions of transportation and would contribute to insignificant exposures under accident conditions.

In essence, the NRC by defining contamination is establishing a *de minimis* quantity. This is a sensible view given the minimum potential for contamination in transportation or storage pending future transportation.

We believe that the proposed language constitutes a sound application of the NRC's risk-informed, performance-based approach. Our interpretation of the proposed rule language arises from a plain reading of the text. However, it would be helpful given the many stakeholders and agreement state regulators that this position be clearly stated in the NRC regulations. Specifically, section 71.14(a)(3) should be modified to state:

> (3) Non-radioactive solid objects with radioactive substances present on any surfaces in quantities not in excess of the levels cited in the definition of contamination in § 71.4 of this part. Such objects in the transportation process, or in storage pending future transportation, need not be licensed under this chapter.

In addition, as noted above, Energy*Solutions* proposes that the NRC regulations address the current RTS provisions of the DOT regulations for vehicles transporting contaminated or potentially contaminated material or empty vehicles in storage pending future such transportation. Specifically, NRC should amend section 71.14(a) to add a paragraph 4 that would read:

> (4) Transport vehicles with radioactive substances meeting the return to service provisions of 49 CFR 173.443(c) in effect on September 13, 2004 when in transport of contaminated or potentially contaminated material or empty vehicles in storage pending future such transportation. Such vehicles need not be licensed under this chapter.

We also propose that NRC coordinate with DOT in the promulgation of their respective final rules to make necessary revisions to the DOT rule. The DOT rule should clearly defer to the NRC regulations in 10 CFR 71.14(a)(3) and (4) for the control of conveyances in transportation service, including storage, as described above. While the DOT Statement of Considerations for its proposed rule implies this position at 76 FR 50342 (August 12, 2011), it would be clearer for future readers of the DOT rules if this position was specifically stated in rule language.

We welcome the NRCs proposed changes to 10 CFR Part 71 relating to the Quality Assurance Program approvals. The proposed changes will streamline the process of maintaining an approved program and contribute to implementation of continued improvement efforts by the

approval holders. It also recognizes past and ongoing efforts of approval holders to maintain compliant programs that have assured the safety of radioactive shipments. We believe that these changes, along with the NRC's continued oversight through the current inspection program, will ensure the level of safety afforded shipments will not be diminished.

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From:	Treesa Parker
To:	RulemakingComments Resource
Subject:	Docket ID NRC-2008-0198
Date:	Friday, July 26, 2013 10:48:22 AM
Attachments:	EnergySolutions LLC Comments ; Docket NRC-2008-0198.pdf

On July 25, 2013, Energy*Solutions* LLC, provided comments in regards to Docket ID NRC-2008-0198. Please replace the previously submitted comments with the attached.

Thank you,

Treesa Parker on behalf of
Dan Shrum
Senior Vice President, Regulatory Affairs
Energy*Solutions* LLC