

**REQUEST FOR ADDITIONAL INFORMATION  
WILCOX TRUCK LINE, INC.  
IMMOBILIZATION DEVICE REVIEW**

**P.O. BOX 3325 SPRINGFIELD, MISSOURI 65808**

**REQUEST FOR ADDITIONAL INFORMATION**

**OCTOBER 17, 2017**

During a review of the Wilcox Truck Line, Inc. (referred to as "WTL") application submitted August 30, 2017 (see Agencywide Documents Access and Management System (ADAMS) Accession Number ML17278A173), for use of a vehicle immobilization device for certain shipments, the following request for additional information (RAI) is required before a determination can be made on your application.

**RAI 1:**

NRC Staff Observation: The application does not specifically state that the cab or cargo carrying portion of the vehicle is immobilized. Additionally, if the cab is immobilized, the application needs to state that the cab/vehicle is incapable of movement under its own power once the immobilization device is activated.

*NRC Request:* In order to ensure that WTL has considered the technical specification in NUREG-0561, Revision 2, Section 3.3 and meets the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Paragraph 73.37(c)(4), WTL should consider amending their application with the following information to include: "Once the immobilization device is activated, the cab/vehicle carrying the spent nuclear fuel is incapable of movement under its own power."

Applicable Requirements: The regulation in 10 CFR 73.37(c)(4) state that the transport vehicle is equipped with NRC-approved features that permit immobilization of the cab or cargo-carrying portion of the vehicle. NUREG-0561, Revision 2, provides the technical specifications that the NRC staff uses to assess the effectiveness of licensee immobilization devices in order to gain NRC approval.

**RAI 2:**

NRC Staff Observations: The application does not specifically state that WTL will commit to providing a training course for escorts and a familiarization program for drivers on the operation of the immobilization device. Additionally, the driver shall demonstrate that he or she is capable of implementing the immobilization device.

*NRC Request:* In order to ensure that WTL has considered the technical specifications in NUREG-0561, Revision 2, Section 3.3 and meets 10 CFR 73.37(c)(5) requirements, WTL should consider amending their application with the following information to include: "Wilcox Truck Line, Inc. will develop a procedure on the operation of the immobilization device to be used in a training course for escort(s) and a familiarization program for driver(s). Additionally, the driver shall demonstrate that he or she is capable of implementing the immobilization device to Wilcox Truck Line, Inc. management."

Enclosure

WTL should consider keeping records regarding training and demonstrations of the immobilization device for escorts and drivers in case the NRC requests a copy of records.

**Applicable Requirements:** The regulation in 10 CFR 73.37(c)(5) states that the transport vehicle driver has been familiarized with, and is capable of implementing, the transport vehicle immobilization device. Furthermore, Section 3.3 of NUREG-0561, Revision 2, states that immobilization procedures should be developed and the procedure governing its use must be covered in both the training course for escort(s) and the familiarization program for driver(s).

### **RAI 3**

**NRC Staff Observation:** The application does not specifically state that the immobilization device and procedure will be operated and performed from inside the cab of the transport vehicle by one person, and immobilization should occur shortly (several seconds) after the immobilization procedures are initiated.

**NRC Request:** In order to ensure that WTL has considered the technical specification in NUREG-0561, Revision 2, Section 3.3.1 and meets 10 CFR 73.37(c)(4) requirements, WTL should consider amending their application with the following information to include: "The immobilization device and procedure shall be operated and performed from inside the cab of the transport vehicle by one person and immobilization should occur shortly (several seconds) after the immobilization procedures are initiated."

**Applicable Requirements:** The regulations in 10 CFR 73.37(c)(5) and NUREG-0561, Revision 2, Section 3.3.1 state that the immobilization device and procedure should be able to be operated and performed from inside the cab of the transport vehicle by one person. Immobilization should occur shortly (several seconds) after the immobilization procedures are initiated.

### **RAI 4**

**NRC Staff Observation:** The application does not specifically state that after the immobilization device is activated, skilled technical personnel should require at least 1/2 hour to return the transport vehicle to normal operating conditions. It should not be possible, by coercion of the drivers or escorts, for an adversary to bypass the effects of the immobilization or to significantly shorten the time needed to make the transport operational again. The application must further state that the immobilization device will be modified so that the feature to disarm the device (once the immobilization device has been activated) will not be possible.

**NRC Request:** In order to ensure that WTL has considered the technical specifications in NUREG-0561, Revision 2, Section 3.3.1 and meets 10 CFR 73.37(c)(4) requirements, WTL should consider amending their application with the following information to include: "Once the immobilization device is activated, skilled technical personnel should require at least 1/2 hour to return the transport vehicle to normal operating conditions. It should not be possible, by coercion of the driver(s) or escort(s), for an adversary to bypass the effects of the immobilization or to significantly shorten the time needed to make the transport operational again. The immobilization device will be modified so that the feature to disarm the device (once the immobilization device has been activated), using the key pad, will not be possible during operation of the transport vehicle to carry spent nuclear fuel."

Applicable Requirements: In order for WTL to gain NRC approval for their immobilization device per 10 CFR 73.37(c)(4) requirements, after the immobilization device is activated, skilled technical personnel should require at least 1/2 hour to return the transport vehicle to normal operating conditions per Section 3.3.1 of NUREG-0561, Revision 2. Furthermore, after the immobilization device is activated, skilled technical personnel should require at least 1/2 hour to return the transport vehicle to normal operating conditions.

#### **RAI 5**

NRC Staff Observation: The application does not specifically state that this immobilization device poses no significant safety hazard before, during, or after the immobilization is initiated.

*NRC Request:* In order to ensure that WTL has considered the technical specifications in NUREG-0561, Revision 2, Section 3.3.1 and meets 10 CFR 73.37(c)(4) requirements, WTL should consider amending their application with the following information to include: "The immobilization device in this application poses no significant safety hazard before, during, or after the immobilization is initiated."

Applicable Requirements: In order for WTL to gain NRC approval for their immobilization device per 10 CFR 73.37(c)(4) requirements, WTL needs to confirm and state in their application that the immobilization device poses no significant safety hazard before, during, or after the immobilization is initiated per NUREG-0561, Revision 2, Section 3.3.

#### **RAI 6**

NRC Staff Observation: The application does not specifically state that WTL seeks NRC approval for an immobilization device in accordance with 10 CFR 73.37(c)(4) requirements for spent nuclear fuel shipments by road.

*NRC Request:* WTL needs to clarify in its application that it is seeking NRC approval for the "103T Digital Failsafe Starter Kill" immobilization device for use in spent nuclear fuel shipments in accordance with 10 CFR 73.37(c)(4).

Applicable Requirements: In order for WTL to gain NRC approval for their immobilization device per 10 CFR 73.37(c)(4) requirements, the application must state WTL is seeking NRC approval for the specific immobilization device referenced in their application in accordance with 10 CFR 73.37(c)(4).

#### **CONTRIBUTOR:**

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