U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

May 9, 2024

Mr. Joseph E. Connelly
Partner
KC Partners Group
P.O. Box 1551
Annandale, VA 22003-1551

Reference No. 23-0022

Dear Mr. Connelly:

This letter is in response to your March 9, 2023, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) pertaining to the applicability of the security plan requirements to bulk packagings containing a residue of a hazardous material. In your email, you request clarification on the definition of a "residue" and present scenarios specifically relating to the practicability of the unloading process.

We have paraphrased and answered your questions as follows:

Q1. You ask about the meaning of the phrase "maximum extent practicable" in the definition of "residue" in § 171.8. Specifically, you ask whether certain scenarios—such as equipment failure, running out of storage space at a facility, or needing to equalize the tank car pressure—would result in a tank car being designated as containing a residue.

A1. As defined in § 171.8, a residue means "the hazardous material remaining in a packaging, including a tank car, after its contents had been unloaded to the maximum extent practicable and before the packaging is either refilled or cleaned of hazardous material and purged to remove any hazardous vapors." The "maximum extent practicable" means that the proper procedure for unloading has been executed to full effect, and the remaining material that cannot be removed by the successful unloading process qualifies as residue. The scenarios you describe in your email are not the full execution of the unloading process, as various obstacles prevented the completion of that process. If the packagings described in your email had been emptied to the maximum extent practicable, the hazardous material would be considered a residue by definition.

Q2. You ask whether a company is required to create and maintain a security plan if it unloads a placarded tank car, uses the contents solely in their unloading process, then returns the placarded tank car containing a residue as defined in § 171.8.

A2. The answer is that it depends. The security plan requirements apply to persons who offer for transportation in commerce or transport hazardous materials in the quantities and thresholds established by § 172.800(b). If the placarded tank cars containing residue meet any of the quantity thresholds as described in § 172.800(b), a security plan is required. A

security plan must cover personnel, unauthorized access, and en route security—that is, the security of a covered hazardous materials shipment from its origin to its destination, including shipments stored incidental to movement.

Q3. You ask whether a railroad must create and maintain a security plan if it only stores rail cars containing a residue of a hazardous material.

A3. See answer A2. The security plan requirements apply to persons who offer for transportation in commerce or transport hazardous materials in the quantities and thresholds established by § 172.800(b). If the railroad performs any functions in transportation or incidental to transportation and meets the quantity thresholds established in § 172.800(b), a security plan is required.

Q4. You ask what the consequences are for not having a security plan when shipping a residue—see § 171.8—exceeding the weight and volume requirements in § 172.800(b).

A4. Each person who offers a hazardous material for transportation or transports a hazardous material in commerce is responsible for compliance with the requirements of the HMR, or a special permit, approval, or registration issued under the HMR, with respect to any regulated function that the person performs or is required to perform. Penalties for violations of the HMR are assessed on a case-by-case basis and depend on a number of factors, including the nature, circumstances, extent, and gravity of the violation. As of December 28, 2023, under 49 CFR Part 107, Appendix A to Subpart D, the civil penalty for knowingly violating the Federal hazardous materials transportation law (49 U.S.C. 5101, et. seq.) or the HMR is not more than $99,756 for each violation, and $232,762 if the violation results in death, serious illness, severe injury to any person, or substantial destruction of property. There is no minimum civil penalty, except for a minimum civil penalty of $601 for violations relating to training. *See* § 107.329 and § 107.333. The monetary values of these penalties are adjusted annually, with the latest revisions occurring (and effective) on December 28, 2023.[1]

Criminal penalties may include fines and/or imprisonment for not more than 5 years, except in any case in which the violation involves the release of a hazardous material which results in death or bodily injury to any person, in which case the maximum amount of imprisonment shall be not more than 10 years.

I hope this information helpful. Please contact us if we can be of further assistance.

Sincerely,

Steven Andrews
Acting Chief, Regulatory Review and Reinvention Branch
Standards and Rulemaking Division

[1] 88 FR 89551 (Dec. 28, 2023). Available at: https://www.federalregister.gov/d/2023-28066

Jacobson

23-0022

From: INFOCNTR (PHMSA)
To: Dodd, Alice (PHMSA)
Cc: Hazmat Interps
Subject: FW: Request for Interpretation
Date: Thursday, March 16, 2023 1:01:13 PM
Attachments: RFI - 172.800.pdf

Hi Alice,

Please see the attached interpretation request.

Let us know if you need anything.

Regards,

-Breanna

-----Original Message-----
From: Joseph Connelly <jecnnlly@verizon.net>
Sent: Thursday, March 9, 2023 2:03 PM
To: INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>; jecnnlly@verizon.net; mail@kcpartners.us
Subject: Request for Interpretation

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Please see attached concerning my request for interpretation concerning
49 CFR Subpart I and clarification on the definition of residue in 49 CFR §171.8. If you need clarification, please contact me via email at either of the addresses in the TO: line.

As always, thank you for your consideration...

Joe Connelly - KC Partners Group

March 9, 2023

Joesph E. Connelly
Partner
KC Partners Group
PO Box 1551
Anandale VA 22003-1551

Standards and Rulemaking (PHH-10)
U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
East Building, 2nd Floor
1200 New Jersey Ave., SE
Washington, DC 20590
Transmitted via email to infocntr@dot.gov

To whom it may concern:

I am writing to request a Department of Transportation (DOT) interpretation concerning the applicability of a DOT Security Plan in Subpart I (49 CFR §§172.800 - 804) to residue tank cars. There are two (2) industry types or practice I would like you to address in particular. I would also like to address the definition of Residue in §171.8 to clearly understand how a residue quantity in a tank car is determined, as it impacts the interpretations I am requesting.

Part of my confusion in this matter emanates from reviewing the interpretations previously published concerning Subpart I as there appears to be an over-reliance on placarding. As I am certain you are also aware, tank cars containing a residue of a hazardous material are required to be placarded when moving reverse route, with a few exceptions.

A residue, as it is defined in 49 CFR §171.8 “means the hazardous material remaining in a packaging, including a tank car, after its contents have been unloaded to the maximum extent practicable and before the packaging is either refilled or cleaned of hazardous material and purged to remove any hazardous vapors.”

What does “to the maximum extent practical” mean?” If unloading equipment fails during the unloading process can the car be considered to be unloaded to the maximum extent practical? If the facility runs out of storage space in their facility and leaves a quantity of hazardous material in the package, is this unloaded to the maximum extent practical? In cases where unloading can only be accomplished through equalization of the car, is that considered to the maximum extent practical? Please address this for residue tank cars whose quantities exceed the limits specified in the definition.

The two industries or Industry practices considering residue tank cars are as follows:

The first industry would be any company that unloads loaded, placarded tank cars and returns them as last containing a hazardous material (residue). The second industry would be a railroad engaged only in the storage of residue tank cars. These would be cars that arrive and leave the facility as residue, last contained…

My primary interest is only those hazard classes which are required to have a security plan when they are shipped in a large, bulk quantity and identified as such in the applicability section of Subpart I. These are listed below as follows:

(3) A large bulk quantity of Division 2.1 material.

(4) A large bulk quantity of Division 2.2 material with a subsidiary hazard of 5.1..

(6) A large bulk quantity of a Class 3 material meeting the criteria for Packing Group I or II.

8) A large bulk quantity of a Division 4.2 material meeting the criteria for Packing Group I or II.

(9) A quantity of a Division 4.3 material requiring placarding in accordance with subpart F of this part.

(10) A large bulk quantity of a Division 5.1 material in Packing Groups I and II; perchlorates; or ammonium nitrate, ammonium nitrate fertilizers, or ammonium nitrate emulsions, suspensions, or gels.

(12) A large bulk quantity of Division 6.1 material (for a material poisonous by inhalation see paragraph (5) above).

.(16) A large bulk quantity of Class 8 material meeting the criteria for Packing Group I.

In previous federal registers, it is noted that a “large bulk quantity” refers to a quantity greater than 3,000 kg (6,614 pounds) for solids or 3,000 liters (792 gallons) for liquids and gases in a single packaging such as a cargo tank motor vehicle, portable tank, tank car, or other bulk container.

My secondary interest is of those listed as any quantity as follows. For these commodities; again listed below, is a security plan required or does the term residue on a shipping paper supersede the requirement?

(5) Any quantity of a material poisonous by inhalation, as defined in §171.8 of this subchapter.

(9) A quantity of a Division 4.3 material requiring placarding in accordance with subpart F of this part.

(14) A quantity of uranium hexafluoride requiring placarding under §172.505(b).

To reiterate, based upon the above information;

Does a company have to promulgate and maintain a security plan if it unloads a tank car and uses the contents solely in their process, then returns the tank car as a residue, last containing that hazardous material in a placarded rail car?

Does a railroad have to promulgate and maintain a security plan if it stores only cars containing a residue of a hazardous material?

Finally, if the answer to the two (2) questions above is no, what are the consequences for exceeding the weight and volume requirements defined as residue by §171.8. Or, if no security plan is required, what would be the consequences...

Thank You for your consideration

Joseph E. Connelly
On behalf of KC Partners Group