



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

April 15, 2021

Robert Johnson
Captain
Iowa Dept. of Transportation
6310 SE Convenience Blvd.
Ankeny, IA 50021

Reference No. 21-0015

Dear Mr. Johnson:

This letter is in response to your February 10, 2021, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to anhydrous ammonia transported in nurse tanks. Specifically, you state that inspection officers from the Iowa Department of Transportation (DOT) have encountered carriers transporting anhydrous ammonia (NH₃) nurse tanks on flatbed motor vehicles and you ask questions regarding the applicability of provisions found in § 173.315(m) when these nurse tanks are in transportation.

Additionally, you describe two scenarios where a person (e.g., a private motor carrier versus a for-hire motor carrier) is transporting anhydrous ammonia (NH₃) nurse tanks that are not cleaned or purged and you provide two photographs as examples:

- Photograph #1: Illustrates a “nurse tank” attached to a farm wagon with wheels removed and secured on a flatbed motor vehicle.
- Photograph #2: Illustrates a “nurse tank” attached to a farm wagon with wheels attached and secured on a flatbed motor vehicle.

We have paraphrased and answered your questions as follows:

Scenario #1: A private motor carrier (e.g., a farmer) purchases an anhydrous ammonia (NH₃) nurse tank that is not cleaned and purged and transports it to their farm for agricultural operations.

Q1. You ask whether the cargo tank shown in photograph #1 is considered to be a “nurse tank” in accordance with § 173.315(m), provided it meets all applicable requirements of that paragraph.

- A1. Based on the scenario you provided and the cargo tank shown in photograph #1, it is the opinion of this Office that it would not meet the conditions that would allow for a non-DOT specification cargo tank carrying anhydrous ammonia (NH₃) to be transported under § 173.315(m). Specifically, it appears the transport does not conform to the conditions of § 173.315(m)(3)(iii), which restricts the nurse tank to rural roads in areas within 50 miles of the fertilizer distribution point. Please note that securely mounting a nurse tank to a farm wagon and then placing that farm wagon on a flatbed motor vehicle is not an acceptable means to comply with the requirements in § 173.315(m)(1) through (m)(3).
- Q2. You ask whether the cargo tank and/or motor vehicle in photograph #1 meet the requirements of §§ 173.315(m)(1) introductory text, 173.315(m)(1)(vi), or 173.315(m)(3).
- A2. The answer is no, see answer A1.
- Q3. You ask whether the cargo tank shown in photograph #2 is considered to be a “nurse tank” in accordance with § 173.315(m), provided it meets all applicable requirements of that paragraph.
- A3. The answer is no, see answer A1.
- Q4. You ask whether the cargo tank and/or motor vehicle in photograph #2 meet the requirements of §§ 173.315(m)(1) introductory text, 173.315(m)(1)(vi), or 173.315(m)(3).
- A4. The answer is no, see answer A1.
- Q5. You ask whether a tank may be defined as a “nurse tank” if the tank used to transport anhydrous ammonia (NH₃) cannot meet the applicable requirements in § 173.315(m).
- A5. “Nurse tank” is a common term to describe a tank used in husbandry for purposes of transporting agricultural chemicals. The term “nurse tank” has no defined meaning in the HMR and is not specifically defined in § 171.8. Rather, the HMR outline conditions under which a non-DOT specification cargo tank may be used to transport anhydrous ammonia (NH₃) and those provisions address husbandry operations that use such a tank. In accordance with § 173.315(m)(1), a cargo tank is excepted from specification requirements if it is an implement of husbandry for transporting anhydrous ammonia (NH₃) and is operated by a private motor carrier (e.g., farmer) exclusively for agricultural purposes. Therefore, if a non-DOT specification cargo tank does not meet the conditions of § 173.315(m), a private motor carrier must represent the non-DOT specification cargo tank as “empty” (see § 173.29(b)) or must obtain a special permit to transport the anhydrous ammonia (NH₃) in the cargo tank.

Q6. You ask whether a private motor carrier is subject to HMR requirements for the transportation of anhydrous ammonia (NH₃) if a “nurse tank” is unable to meet any of the conditions in § 173.315(m).

A6. The answer is yes. If any of the stated conditions in § 173.315(m) are not met, the private motor carrier is subject to the HMR.

Scenario #2: A for-hire motor carrier (e.g., a contractor) transports an anhydrous ammonia (NH₃) nurse tank that is not cleaned and purged.

Q7. You ask whether these tanks are eligible for the provisions found in § 173.315(m)(1) through (m)(3) if it can be confirmed that the for-hire motor carrier (i.e., contractor) is transporting the cargo tanks containing anhydrous ammonia (NH₃) to a farm for agricultural purposes.

A7. The answer is no. Hiring a contractor renders the transportation of these cargo tanks as being no longer in private transportation exclusively for agricultural purposes in accordance with § 173.315(m) introductory text.

Q8. You ask whether these tanks would be eligible for the provisions found in § 173.315(m)(1) through (m)(3) if a for-hire motor carrier transported them to a general commercial location (e.g., an equipment dealer).

A8. The answer is no, see answer A7.

Q9. You ask whether there is an instance when a for-hire motor carrier, who transports anhydrous ammonia (NH₃) in nurse tanks, is eligible for the provisions in § 173.315(m)(1) through (m)(3)?

A9. The answer is no, see answer A7.

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

Sincerely,



Dirk Der Kinderen
Chief, Standards Development Branch
Standards and Rulemaking Division

From: [Foster, Glenn \(PHMSA\)](#)
To: [Dodd, Alice \(PHMSA\)](#); [Hillman, Kenetha CTR \(PHMSA\)](#)
Subject: FW: PHMSA Interpretations needed
Date: Wednesday, February 10, 2021 1:11:03 PM
Attachments: [NH3 Questions.docx](#)

Alice and Kenetha.

Please process the attached as a request for a letter of interpretation.

Thanks,
Glenn

From: Johnson, Robert [mailto:Robert.Johnson@iowadot.us]
Sent: Wednesday, February 10, 2021 1:09 PM
To: Foster, Glenn (PHMSA) <Glenn.Foster@dot.gov>
Cc: Stiles, Jessica (FMCSA) <jessica.stiles@dot.gov>; Dugger, Jeremy (FMCSA) <jeremy.dugger@dot.gov>; Mcguire, Shirley (FMCSA) <shirley.mcguire@dot.gov>; Goode, Glenn <Glenn.Goode@iowadot.us>
Subject: PHMSA Interpretations needed

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.

Hi Glenn. I am the Iowa MVE Special Units Captain or supervisor and I am specifically asking PHMSA for an interpretation concerning the file that I have attached. This file has several questions concerning Anhydrous Ammonia (NH3) Tank Transportation Questions.

Thank you.

Captain Robert Johnson T115

Certified Public Manager®

6310 SE Convenience Blvd

Ankeny, Iowa 50021

515-250-5973



Anhydrous Ammonia (NH₃) Tank Transportation Questions

During roadside inspections officers from the Iowa DOT have encountered motor carriers transporting anhydrous ammonia (NH₃) tanks on flatbed semitrailers. The encounters have called into question the applicability of the exceptions provided in 49 CFR 173.315(m) while transporting these tanks.

Example 1 – Tanks attached to farm wagon with wheels removed, securely mounted to semitrailer.



Example 2 – Tank attached to farm wagon with wheels attached, securely mounted to semitrailer.



- 1) **A private motor carrier (e.g., a farmer) purchased used anhydrous ammonia tanks and is transporting them to their farm for use in the farmer’s agricultural operations. The tanks have not been cleaned and purged.**
 - A. Is the tank shown in *Example 1* considered to be a nurse tank in accordance with 49 C.F.R. 173.315(m), provided it meets all applicable criteria listed in this paragraph?
 - i. More specifically, does this tank and or transportation meet the criteria of:
 - a. 49 C.F.R. 173.315(m)(1) – “exclusively for agricultural purposes”, and
 - b. 49 C.F.R. 173.315(m)(1)(vi) – “securely mounted on a farm wagon”, or

c. 49 C.F.R. 173.315(m)(3) – “field mounted tanks”? Is the tank shown in *Example 2* considered to be a nurse tank in accordance with 49 C.F.R. 173.315(m), provided it meets all applicable criteria listed in this paragraph?

ii. More specifically, does this tank and or transportation meet the criteria of:

a. 49 C.F.R. 173.315(m)(1) – “exclusively for agricultural purposes”, and

b. 49 C.F.R. 173.315(m)(1)(vi) – “securely mounted on a farm wagon”, or

c. 49 C.F.R. 173.315(m)(3) – “field mounted tanks”?

B. If any tank used to transport anhydrous ammonia does not meet *all* the applicable criteria of 49 C.F.R. 173.315(m), does that mean that it would not be considered a nurse tank?

C. If any tank used to transport anhydrous ammonia fails to meet *any* criteria listed in 49 C.F.R. 173.315(m), does that mean that the carrier could not enjoy the exceptions provided by this paragraph and all other applicable regulations would then apply to the transportation of anhydrous ammonia in these tanks?

2) A for-hire motor carrier is transporting used anhydrous ammonia tanks. The tanks have not been cleaned and purged.

A. If any of the tanks shown in *Example 1* or *Example 2* are being transported by a for-hire carrier *and* it can be confirmed that they are being transported to an agricultural operation (e.g., a farm), would the tank(s) be eligible for the nurse tank exceptions provided in 49 C.F.R. 173.315(m)(1), (2), or (3)?

B. If any of the tanks shown in *Example 1* or *Example 2* are being transported by a for-hire carrier to a general commercial location (e.g., an equipment dealer), would the tank(s) be eligible for the nurse tank exceptions provided in 49 C.F.R. 173.315(m)(1), (2), or (3)?

C. Is there any instance not addressed in either (A) or (B) above when an anhydrous ammonia tank transported by a for-hire carrier would be eligible for the exceptions provided in 49 C.F.R. 173.315(m)(1), (2), or (3)?