



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

May 16, 2023

Randy Decker  
DOT Safety Solutions  
PO Box 25311  
Overland Park, KS 66225

Reference No. 22-0033

Dear Mr. Decker:

This letter is in response to your April 19, 2022, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to qualification and maintenance of cargo tanks. Specifically, you describe a scenario where crude oil is transported in cargo tanks made of aluminum; you state that, as a registered inspector, you have firsthand experience that the crude oil transported in the region of service can be and is corrosive to an aluminum tank. You ask who is responsible for making the determination that the cargo tank was transporting a material that was corrosive to the cargo tank or valve.

In accordance with § 180.401, the requirements in Part 180, Subpart E for the qualification and maintenance of cargo tanks apply to any person responsible for the continuing qualification, maintenance, or periodic testing of a cargo tank. In § 180.403, *corrosive to the tank or valve* means that the lading has been shown through experience or test data to reduce the thickness of the material of construction of the tank wall or valve. Thus, if the crude oil in the region of service has been shown through experience or test data to reduce the thickness of the material of construction of the tank wall or valve, then the cargo tank must be subjected to the testing and inspection regimen for associated cargo tanks transporting lading *corrosive to the tank* found in § 180.407(c).

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Dirk Der Kinderen".

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

**From:** [INFOCNTR \(PHMSA\)](#)  
**To:** [Dodd, Alice \(PHMSA\)](#)  
**Cc:** [Hazmat Interps](#)  
**Subject:** FW: 180.403 clarification  
**Date:** Wednesday, April 20, 2022 2:03:16 PM  
**Attachments:** [image006.png](#)  
[image007.png](#)  
[image008.png](#)

Cardez

22-0033

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Hello Alice,

Please see the below interpretation request.

Let me know if you have any questions.

Regards,

-Breanna

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**From:** Randy Decker <[randydecker@dottrainingsolutions.com](mailto:randydecker@dottrainingsolutions.com)>  
**Sent:** Tuesday, April 19, 2022 1:25 PM  
**To:** INFOCNTR (PHMSA) <[INFOCNTR.INFOCNTR@dot.gov](mailto:INFOCNTR.INFOCNTR@dot.gov)>  
**Subject:** RE: 180.403 clarification

**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.

*180.403*

*Corrosive to the tank or valve* means that the [lading](#) has been shown through experience or test data to reduce the thickness of the material of construction of the [tank](#) wall or valve.

I have had owners tell me that crude oil wasn't corrosive. From experience as an RI testing Crude trailer's, I know that crude product is corrosive to an aluminum tank in this area.

Question: I as the RI, tell the owner or the tank that the crude in this area is corrosive to his tank and I must do an internal, PRD test, and a liner inspection (if lined) annually and a thickness test every two years if unlined. The owner says it's not in corrosive service and not to do the additional test. Who's right and if the owner is correct, does this relieve the responsibilities from the RI? Can the RI supersede what the owner says in this case?



Crude residue sat in this Alum. DOT 407 unlined for 6 months.

Please respond by email and or by mail to PO Box 25311 Overland Park, KS 66225

Thank you



*Randy Decker*

Safety Consultant

Mobile: (913) 350-0373 | Toll Free: (866) 296-7394

Email: [randydecker@dottrainingsolutions.com](mailto:randydecker@dottrainingsolutions.com)

Website: <https://dottrainingsolutions.com>

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**From:** Randy Decker

**Sent:** Thursday, March 17, 2022 3:44 PM

**To:** [infocntr@dot.gov](mailto:infocntr@dot.gov)

**Subject:** 180.403 clarification

I have had owners tell me that crude oil wasn't corrosive. From past experience as an RI, I know that crude oil is corrosive to an aluminum tank.

Question: I as the RI, tell the owner or the tank that the crude is corrosive to his tank and I must do

an internal, PRD test, and a liner inspection (if lined) annually. The owner says it's not in corrosive service and not to do the additional test. Who's right and if the owner is correct, does this relieve the responsibility's from the RI?



*Randy Decker*

Safety Consultant

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