



U.S. Department  
of Transportation

400 Seventh Street, S.W.  
Washington, D.C. 20590

**Pipeline and  
Hazardous Materials Safety  
Administration**  
JAN -3 2005

Ms. Cheryl A. Burke

Ref. No. 05-0300

Distribution Safety Consultant  
Dupont Safety, Health and Environmental  
Excellence Center  
1007 Market Street  
Wilmington, DE 19898

Dear Ms. Burke:

This responds to your November 18, 2005 letter requesting clarification concerning the applicability of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) to cargo tank loading operations.

A cargo tank loading operation may be considered a pre-transportation function or a transportation function depending on the circumstances of the particular operation. The filling of a cargo tank or other bulk packaging or the loading of packaged or containerized hazardous materials onto a transport vehicle by an offeror is regulated as a pre-transportation function under the HMR. A pre-transportation function is a function required under the HMR to assure the safe transportation of a hazardous material in commerce. Thus, an offeror must comply with applicable HMR requirements concerning compatibility of lading with the packaging, outage and filling limits, securing of valves and closures, venting, segregation, cargo securement, and similar provisions.

The attendance requirements in § 177.834(i) apply to loading and unloading operations conducted by carrier personnel. Shipper personnel filling a cargo tank prior to the onset of transportation in commerce (i.e., the arrival of the carrier and the attachment of motive power) need not comply with the attendance requirements in § 177.834(i). Similarly, the attendance requirements in § 177.834(i) do not apply to unloading operations conducted by consignee personnel after the carrier delivers the cargo tank, disconnects the motive power, and leaves the unloading site.

I hope this answers your inquiry.

Sincerely,

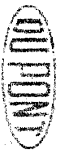
Jedra K. Gale

Chief, Standards Development  
Office of Hazardous Materials Standards



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177.834(i)



*Bothe  
§177.834  
Loading & Unloading  
05-0360*

DuPont SHE Excellence Center  
1007 Market Street  
Wilmington, DE 19898

DuPont SHE Excellence Center

November 18, 2005

VIA E-MAIL

File: Cargo Tank Loading Attendance

Mr. Edward Mazzullo  
U.S. Department of Transportation  
Pipeline and Hazardous Materials Safety Administration  
Office of Hazardous Materials Safety  
400 7th St, S.W.  
Washington, DC 20590

**REQUEST FOR INTERPRETATION CONCERNING USE OF REMOTE VIDEO SURVEILLANCE  
TO OBSERVE CARGO TANK LOADING OPERATIONS**

Dear Mr. Mazzullo:

With the enacting of HM-223, questions have arisen concerning the need for physical attendance within 25 feet of a cargo tank being loaded with regulated hazardous materials.

Prior to HM-223, at least 2 published interpretations from the Office of Hazardous Materials Standards (attached) made it clear that under certain circumstances - namely when the carrier's obligation for transportation has ceased, the cargo tank has been placed on the consignee's property, and the motive power removed - the cargo tank was no longer considered to be in transportation, and therefore the attendance rules in 49 CFR 177.834 did not apply.

With HM-223, the regulations changed to define the loading of a cargo tank as a "pre-transportation function," to which the HMR do apply.

Question 1. Under the current regulations, does a cargo tank being loaded under the circumstances described above (i.e. when the carrier is not present or involved, and the motive power has been disconnected and left the area) need to be attended throughout the process by a qualified, alert person within 25 feet of the tank and having an unobstructed view of it?

Question 2. If attendance is required, is the use of remote video surveillance in the control room an acceptable alternative to having a person within 25 feet of the tank?

Our questions are raised for two reasons. Cargo tanks containing liquefied compressed gas can take upwards of 6 hours to load. Physical attendance during that entire time period, particularly during inclement weather, places a new and burdensome requirement on an operation that previously was not subject to this requirement.

Also, pre-HM-223, the tank car regulations had read such that the unloading of tank cars had to be attended by an unloader during the entire period of unloading and while the unloading connections were intact. A number of formal and informal interpretations were issued by the Office of Hazardous Material Standards and the

Federal Railroad Administration allowing the use of signaling systems such as sensors, alarms, and electronic surveillance equipment in lieu of having the person attending the unloading physically present in the actual unloading area.

In order for such signaling systems to be authorized, the following criteria were established in the formal letter of interpretation 87-4-RSPA.

- 1) An employee was made responsible for unloading and was familiar with the nature and properties of the material being unloaded;
- 2) The employee responsible for unloading was instructed in the procedures to be followed during unloading and in the event of an emergency, and had the authority and ability to halt the flow of product immediately and take emergency action;
- 3) In the event of an emergency, the system was capable of immediately halting the flow of product or alerting the employee responsible for unloading;
- 4) The monitoring device provided immediate notification of any malfunction to the person responsible for unloading, or the device was checked hourly for malfunctions; and
- 5) In case of a malfunction, the device would no longer be relied upon and instead the individual responsible for unloading would constantly observe the unloading.

(The use of remote observation through signaling systems and video surveillance has now been incorporated into the tank car unloading regulations that apply to transloading operations.)

An interpretation that remote observation of cargo tank loading is permissible - under these same conditions that were acceptable for tank car unloading - would help to relieve the regulated community of this new and burdensome requirement, while still providing an equivalent level of safety. Again, we are seeking this interpretation of the regulations as they apply when the carrier's obligation for transportation has ceased, the cargo tank has been placed on the consignee's property, and the motive power removed.

Your assistance in clarifying these issues is most appreciated.

Sincerely,

*Cheryl A. Burke*

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