

Cargo Tank Motor Vehicle (CTMV) Loading/Unloading Operations Recommended Best Practices¹ Pocket Guide

BEFORE ENGAGING IN THE PROCESS OF LOADING AND/OR UNLOADING A **CTMV**, PHMSA STRONGLY ADVISES YOU TO CONSIDER THE FOLLOWING QUESTIONS (AS APPLICABLE) AND **DO NOT PROCEED** UNTIL ALL "NO" ANSWERS HAVE BEEN ADDRESSED AND RESOLVED.

Transfer Equipment Connections

Ensure proper connection between the CTMV, transfer equipment, and facility vessel(s):

- Is the transfer equipment right for the intended use?
- Are the components of the transfer equipment connection compatible with each other, the CTMV, and the facility vessel?
- Are any replacement parts similarly compatible?
- Are you using a procedural checklist to ensure proper transfer equipment connections?

Compatible Materials and Packaging

Ensure compatibility of the hazmat to be transferred with the receiving vessel (e.g., CMTV, facility storage tank), contents (if any) in the receiving vessel, and the transfer equipment (pump, hose, pipe, fittings).

¹ This CTMV *Loading/Unloading Operations Recommended Best Practices Pocket Guide* was prepared by DOT's PHMSA with input from OSHA and EPA. This pocket guide is a companion document to the *CTMV Loading and Unloading Operations Recommended Best Practices Guide*, PHH50-0151-0515, and is for **informational use only** and may be used as a supplement to, **not to be considered as**, applicable regulations. The applicable Hazardous Materials Regulations, 49 CFR Parts 171-180, are available from GPO or may be accessed through DOT's website: <http://hazmat.dot.gov>.

- Has the correct facility vessel been selected for the transfer of hazmat?
- Is the receiving vessel (i.e., the CTMV or the facility container) free of incompatible contents or residue? Has either/or been verified as such?
- Is the CTMV in dedicated service for compatible hazmat?
- Is there proof of CTMV cleaning prior to loading?
- Are visual aids displayed on receiving containers to indicate the appropriate receiving vessel (e.g., chemical name, GHS label, etc.)?

Overfills/Unintentional Releases

Ensure steps have been taken to prevent overfills or unintended releases:

- Is there enough space in the receiving vessel for the hazmat?
- Has the quantity to be transferred been confirmed?
- Are valves in the correct position consistent with operating instructions?
- Are level gauges, alarms, and safety interlocks functioning properly? Have they been maintained and inspected?
- Do you have appropriate PPE in the event of a spill or release?

Unmanned Facilities

Ensure that proper procedures are followed at all facilities:

- Have you been trained on the facilities' procedures?
- Are procedural instructions available and accessible? Do they include instructions on emergency response?
- Is a procedural checklist available and accessible?
- Are the transfer connections and discharging/receiving vessels clearly indicated?

**Need help? Call our Hazardous Materials Information Center at 800-467-4922
9:00 AM to 5:00 PM EST Monday through Friday except Federal holidays.**

