

CTRMC

Workers on the Top of Tanks

REGARDING OSHA-2007-0072 DATED MAY 24, 2010: **OUR ANSWERS TO EIGHT QUESTIONS POSED RELATIVE TO MOTOR VEHICLES**

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ABOUT CTRMC

CTRMC is the Cargo Tank Risk Management Committee. Our group was formed by cargo tank industry leaders on March 17th, 2010 to enhance the safety of workers on the top of tanks. Our members represent several significant industry stakeholders; carriers, consignees, manufacturers, shippers and wash racks.

While the above NPRM addresses many matters, our comments are limited to motor vehicles – specifically, cargo tank motor vehicles – covered on pages 28867 and 28868 of the May 24, 2010 Federal Register.

9. In your establishment and/or industry, how many or what percentage of employees working on top of motor vehicles are exposed to fall hazards?

- a. To a certain extent every worker who accesses the top of a transportation tank is exposed to a fall hazard. Below, we list the most common workers who reach the top of a transportation tank to perform their work.

Worker	Frequency of Exposure	Degree of Exposure
Driver	Low, relative to hours worked.	Low to high, depending upon devices available.
Wash rack personnel*	Moderate, due to limited time on top of transportation tanks.	Low to moderate, due to typical presence of fall arrest systems and railings.
Product loaders (at shipper)*	Moderate, due to limited time on top of transportation tanks and increasing incidence of bottom loading.	Low to moderate, due to typical presence of fall arrest systems and railings.
Product unloaders (at consignee)*	Low to moderate, because of wide scale use of bottom unloading.	Low to moderate, due to typical presence of fall arrest systems and railings.
Maintenance and repair personnel*	Low, relative to hours worked.	Low to high, depending upon devices available.

Inspectors and management	Very low.	Low to high, depending upon devices available.
Intermodal transloaders	Moderate to high, depending on equipment and facility.	Low to high, depending upon devices available.

* Some of these workers already fall within OSHA rules.

- b. For OSHA's reference we provide, below, a list of the top ten reasons workers ascend the top of transportation tanks.
- 1) Assuring security.
 - 2) Checking ...
 - a. cleanouts.
 - b. manhole..
 - c. venting.
 - 3) Extracting sample.
 - 4) Loading product.
 - 5) Assessing liquid contents.
 - 6) Initiating ...
 - a. air unloading.
 - b. vapor recovery.
 - 7) Performing maintenance.
 - 8) Washing tank.
 - 9) Removing snow.
 - 10) Discharging heel.

10. How are these employees protected from fall hazards while working on such equipment?

- a. Loading racks with fixed railings.
- b. Fall arrest systems (harnesses and retractable lanyards.)
- c. Transportation tanks with side walkways, additional hand rails and outer railings.
- d. Elimination of hazard through process improvements (like bottom loading, unloading and sampling.)
- e. Company specific safety programs with policies, procedures and related training that are effectively communicated and enforced.

11. If employee training on the recognition of fall hazards is provided in your workplace, please describe the nature and frequency of the training.

While the nature and frequency of training varies in our industry, most responsible companies providing initial training, recurrent (ongoing) training, periodic (e.g., weekly newsletter or toolbox talk, annual refresher, etc.) safety communications, and remedial training (in the event of an incident or policy violation). Training typically includes fall hazard recognition and company specific policies to reduce the potential for falls.

12. If fall protection equipment is used, please provide detailed information on the types and costs of the fall protection used on motor vehicles and please explain how it is used.

By and large, fall protection compliant with OSHA rules is not provided on transportation tanks due to weight constraints, anchoring difficulty and other considerations. However, many transportation tanks have some device to afford worker protection atop such units. Please see the table and figures, below.

Devices	Cost Range	How Used
Loading racks with fixed railings	Low to high, depending on system (new construction or retrofit).	Provides access to top of tank without use of trailer ladder (fixed stairs, platforms, etc.). Reduces climbing related fatigue.
Fall arrest systems	Low to high, depending upon available structure.	Workers are attached by a harness and retractable lanyard when they leave the confines of a fixed platform, or during maintenance.
Side walkways, additional hand rails and outer railings	Low to moderate, relative to the total cost of a tank trailer.	Better assures three points of contact at all times, lowers the working surface, and provides a more comfortable work environment.



Figure 1: Loading Rack with Fixed Railings



Figure 2: A Cargo Tank Motor Vehicle with a Collapsible Outer Railing



Figure 3: A Cargo Tank Motor Vehicle with a “Balcony Ladder” System and Additional Side Hand Rails



Figure 4: A Cargo Tank Motor Vehicle with an Angled Rear Access Walkway System



Figure 5: A Cargo Tank Motor Vehicle with a Pneumatically Actuated Outer Hand Rail



Figure 6: A Cargo Tank Motor Vehicle without any Ladder or Walkway

13. If fall protection equipment is not used, please explain what technological and/or economic obstacles may be involved.

Some measures to mitigate the risk of a fall are provided in most cases involving the operation of a transportation tank. We have listed a few examples (in the table, below) of situations where some uncontrolled exposures may exist.

Situation	Economic or Technological Obstacle
Loading/unloading at a small business. (Risk of accessing the top of the transportation tank is placed on the driver.)	Such entities do not have sufficient capital to invest for equipment with limited use, such investment likely would not have any payback, and such businesses may not be able to secure financing for the expensive equipment.
Limited space to accommodate a transportation tank.	Older locations in central cities cannot accommodate a 45' long transportation tank, and so, the unit is parked next to the building, or on the road.
Remote locations (removed from infrastructure).	Transportation tanks are often used in services where the presence of fall protection is not feasible; oil fields, roadside inspections, spill clean-up, product transfer at an accident site and rail transfer.
Shipper/consignee policies restricting non-employee to access top of tank.	Some companies adopt policies to avoid liability, but perhaps, heightening the overall risk to the driver (because of a less-than-optimal environment).
Older transportation tank. (Some units are in service for over 30 years.)	Many older transportation tanks cannot be effectively retrofitted with measures to mitigate the risk of a fall.

14. Are there alternative means to protect employees from fall hazards while working on motor vehicles? Please explain.

Yes, first every possible effort should be taken to reduce the frequency of access to the top of tanks through the use of equipment, process, and cleaning technique changes. Also, see our answers to questions 10 and 12, above.

Our industry has been developing, and will continue to pursue innovations to protect employees from fall hazards on transportation tanks. Indeed, this is the mission of the CTRMC. For example, our group is working on developing changes to products and processes where workers would not have to access cleanout nozzles on the top of transportation tanks.

15. What is your safety experience with fall hazards on or from motor vehicles?

While falls from the top of tank trailers can result in serious injury, the actual frequency of such injuries is very rare. A typical large cargo tank motor vehicle fleet makes over 300 deliveries per day and has averaged less than 2 falls from its tank trailers per year. Further, most of these falls have been from the ladder, not the tank top.

16. Should OSHA exclude motor vehicles from coverage under subpart D? Please explain and provide data and information to support your comments.

Yes.

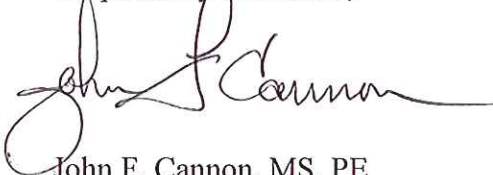
First, our data and experience suggest the frequency of injuries sustained in a fall from a transportation tank is extremely low.

Furthermore, the effective improvement of worker safety from fall related injuries on transportation tanks is a complex challenge, requiring the participation of many industry stakeholders. The CTRMC has been formed for this very purpose. In our experience the best solutions come from the ones closest to the issue – indeed, we have already started to effect positive change.

Finally, our industry has many small businesses with fragile economic models. We need to ensure improvements related to workers on transportation tanks are financially feasible, and the CTRMC intends to develop a long-term plan to systematically improve in this important area.

We are available to discuss this matter to whatever extent OSHA deems appropriate.

Respectfully submitted,



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