

March 2007 Safety Meeting

Cargo Tank Remote Shutdown

As you know, bobtail and transport truck drivers alike must be operating cargo tank motor vehicles equipped with remote shutdown capabilities. The purpose of this technology is to remotely shutdown all cargo tank internal valves and truck engine in the event of uncontrolled release of propane downstream of those valves. The purpose of this safety meeting is to remind drivers of their responsibilities with respect to this important safety requirement.

DOT Regulations—What They Say...

(n) “*Emergency shut down.* If there is an unintentional release of product to the environment during unloading of a liquefied compressed gas, the qualified person unloading the cargo tank motor vehicle must promptly shut the internal self-closing stop valve or other primary means of closure and shut down all motive and auxiliary power equipment.” 49 CFR 177.840 (n)

(o) “*Daily test of off-truck remote shut-off activation device.* For a cargo tank motor vehicle equipped with an off-truck remote means to close the internal self-closing stop valve and shut off all motive and auxiliary power equipment, an operator must successfully test the activation device within 18 hours prior to the first delivery of each day. For a wireless transmitter/receiver, the person conducting the test must be at least 45.72 m (150 feet) from the cargo tank and may have the cargo tank in his line of sight.” 49 CFR 177.840 (o).

The regulations are clear in the above two paragraphs; have your remote shutdown available at all times during off-loading and perform daily tests to ensure the truck’s shutdown capabilities work as designed.

Helpful Compliance Tips

Listed below are some suggestions/thoughts that should help you in your compliance efforts:

1. Perform a high-quality daily inspection of your truck at the beginning of your shift and immediately afterwards.
2. During your pre-trip inspection, test your remote control at 150 ft. line-of-site from the cargo tank.
3. Mark off the 150 ft. distance in your parking lot. Many drivers measure the distance with a tape measure and hang a sign or flag on a fence post to mark this distance. It’s much easier to persuade a zealous DOT official if this distance is marked.
4. It is suggested that this test be documented on your vehicle report. Some vendors like J. J. Keller and Associates have a daily inspection report that documents this test.
5. Keep at least one extra battery in the cab of your truck in case the remote control’s battery goes dead.
6. Remember to always have your remote control with you anytime you leave your truck. Drivers have been cited by the DOT on numerous occasions because they didn’t have their remote control in their possession.

7. When you do the test, make sure the engine shuts off and all internal valves, including the 1 ¼" valve on the rear head of the cargo tank closes.
8. During your pre-trip inspection always pay attention to the condition of the truck's remote shutdown antenna. These devices are often damaged by trees or other hazards. Replace or repair as necessary.
9. Protect your remote control device from water and the elements. Use a protective cover to protect the unit when you are wearing it or stowing it in your truck.
10. Be careful to protect the remote shutdown components like wires and control boxes that are oftentimes located under or behind the passenger seat in the cab. Tools and equipment can damage these delicate components and render your shutdown system inoperable.
11. If you accidentally drop your remote control immediately test it to determine if it still is in operable condition. If not, replace or repair the unit. Never load or off-load product unless the remote control is operable.
12. While loading or off-loading propane have your remote with you at all times. Be prepared to use your remote control to shutdown your truck and close the internal valves at the first sign of problems.

Class Discussion:

Discuss with class any issues, concerns or tips the students may have encountered with respect to this topic. Topics like the daily tests, remote control operation and internal valve operation can all be discussed.

Special Note: Remote shutdown equipment is designed to operate only when the PTO or parking brakes are engaged or both. Here's the issue...you don't want your truck to shutdown as you're traveling down the highway if you accidentally push the shutdown button on the remote control. Also, you don't want to have one of your "friendly" competitors shut you down by using their own remote control if they happen to be on the same radio frequency as your remote, not likely, but possible. Check your remote control for proper operation by trying to shut down the truck when it is idling, the PTO disengaged and the parking brakes released. If it shuts down, the wiring is incorrect on the truck and should be taken in for repairs. Note: some inexpensive shutdown systems cannot be configured as discussed above, check with your truck fabricator if you have questions.

March 2007 Test

Cargo Tank Remote Shutdown

Name: _____

Date: _____

Instructions: Read and answer each of the following questions. When complete, grade the test and review incorrect answers so each employee is “armed” with the correct answers before they leave the training.

1. Remote control devices must be tested within 18 hours of the first delivery
 - a. True
 - b. False

2. Remote controls need to be tested at a distance of _____ ft.
 - a. 50
 - b. 100
 - c. 150
 - d. 200

3. Remote shutdowns should only shut-off the engine, not any valves.
 - a. True
 - b. False

4. The DOT regulations that apply to this meeting are found in:
 - a. 29 CFR
 - b. 49 CFR 177.840
 - c. 49 CFR 393
 - d. 40 CFR Part 177

5. It's a good idea to have spare batteries on hand for the remote control.
 - a. True
 - b. False

6. Drivers should always have their remote control with them if they leave their truck.
 - a. True
 - b. False

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Answer Sheet

1. a
2. c
3. b
4. b
5. a
6. a