



Verifying Propane Odorization

September 2016

Safety Topic

Because propane is flammable, DOT regulations and NFPA 58 require that propane be odorized before delivery to a bulk plant or when the shipment will bypass the bulk plant. Propane personnel are required to verify the presence of odorant at various times, typically through a "sniff test." It is essential that you understand how to perform these tests safely and document them for your company.

WHEN PERFORMING A SNIFF TEST, AT TIME OF BULK PLANT DELIVERY:

- Protect yourself by wearing appropriate personal protective equipment (PPE).
- Vent only a small amount of liquid propane.
- Sniff only after the vent is closed and the liquid propane has vaporized.
- Understand your company's policies and procedures, including how to document the presence of odorant, and what to do if you believe propane is not properly odorized.

WHEN PERFORMING A SNIFF TEST, WHILE LOADING A BOBTAIL:

- After you secure the plant liquid transfer hose to the cargo tank connection and before you fill the cargo tank, briefly open and close the transfer hose end valve.
- Vent a small amount of liquid propane through a #54 vent and then close it.
- Sniff the area immediately after the liquid vaporizes.
- If you can smell propane odorant*, proceed with loading your truck.
- If you cannot smell propane odorant, or smell anything unusual*, do not load the cargo tank. Contact your supervisor immediately and tell others not to load until approved by the facility manager or supervisor.
- Record your sniff test on your loading ticket, daily routing report, or other company form and proceed with the loading operation.

IF YOU CANNOT SMELL PROPANE ODORANT:

In some situations, odorant can oxidize or fade, thus producing a potential hazard. If you cannot detect propane odor via sniff test (or other measure, such as an odorometer), carefully take the following actions:

- Do not load the cargo tank or cylinder.
- Disconnect the transfer hoses and secure them in their storage racks.
- Contact your supervisor immediately.
- Warn others not to load until approved by your supervisor. Your company may also require you to close and tag the withdrawal valves on the storage container so that the propane is not distributed to consumers.

Discussion Topics

1. While loading a bobtail, you detect a smell you do not recognize. What do you do?
2. Discuss company and other practices for documenting propane odorants.

LEARNING ACTIVITY

Secure an odorometer and stain tubes and discuss alternative methods to verify odorant in different situations.

Source: *Propane Delivery Operations and Cylinder Delivery* [PERC]

For more information about verifying propane odorization, visit propanesafety.com.

September 2016 Safety Test
Verifying Propane Odorization

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) Propane personnel are required to verify the presence of odorant at various times, typically through a _____.
 - (A) Combustible gas indicator
 - (B) Leak check
 - (C) Leak test
 - (D) Sniff test

- (2) When performing a sniff test at the time of a bulk plant delivery, sniff only after the vent is closed and the liquid propane has vaporized.
 - (A) True
 - (B) False

- (3) If you cannot smell propane odorant, do not load the cargo tank. Contact your supervisor and tell others not to load until approved by a manager or supervisor.
 - (A) True
 - (B) False

- (4) A sniff test does not have to be documented.
 - (A) True
 - (B) False

- (5) In some situations, odorant can oxidize or fade. If you cannot detect propane odor, carefully take the following actions
 - (A) Do not load the cargo tank or cylinder
 - (B) Disconnect the transfer hoses and secure them in their storage racks
 - (C) Contact your supervisor immediately and warn others not to load until approved by a supervisor
 - (D) All of the above

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Answer Key

1. D
2. A
3. A
4. B
5. D

MONTHLY SAFETY MEETING MINUTES AND ATTENDANCE RECORD

Company Name: _____

City: _____ **State:** _____

Date: _____ **Time Started:** _____ **Time Finished:** _____

Instructed By: _____ **Number Attending:** _____

Subject Covered and Comments:

By my signature below, I certify that I attended and participated in this Safety Meeting and I understand the material presented.

Employee Name (Please print)	Employee Signature	*License Expires	**Endorsements	***Physical Exam
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				

*Driver licenses may be for multiple years and require HazMat testing between license renewal periods. List expiration date.

**Check licenses for proper endorsements and re-testing. (HazMat) List endorsements in this column.

***Physical Examinations are good for 2 years from the original date of the exam or sooner by Physician's request. List original exam date in this column.

By my signature below, I hereby certify that the employees listed above have been trained in accordance with the applicable regulations and curriculum for this monthly safety meeting.

Instructor's Signature: _____ **Date:** _____