



3.7 Performance-Based Skill Assessment Evaluation Packet

- 3.7.2 Identifying Testing and Inspection Requirements for DOT IM Tanks**
- 3.7.3 Applying Safe Handling Practices for Flammable and Combustible Liquids/ Injecting Methanol Into IM Tanks**
- 3.7.9**
- 3.7.4 Identifying Testing Procedures for Anhydrous Ammonia Contamination**
- 3.7.5 Evacuating DOT IM Tanks**
- 3.7.6 Conducting Vapor Flaring Operations**
- 3.7.7 Replacing Valves & Fittings in DOT IM Tanks**
- 3.7.10 Applying Protective Coatings to DOT IM Tanks**
- 3.7.11 Preparing DOT IM Tanks for Transportation**

Employee's Name (Please Print)

Date of Skills Evaluation

Skills Evaluator Name (Please Print)

NOTICE: THE SKILLS EVALUATOR MUST BE THE EMPLOYEE'S SUPERVISOR OR SOME OTHER QUALIFIED PERSON WHO HAS COMPLETED CETP "MAINTAINING DOT INTERMODAL (IM) TANKS" OR IS FAMILIAR WITH THE SUBJECT MATTER. CETP CERTIFICATION REQUIRES THAT THE EMPLOYEE SEEKING CERTIFICATION CANNOT ACT AS HIS/HER OWN EVALUATOR.

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Users of this material should consult the law of their individual jurisdictions for codes, standards and legal requirements applicable to them. This material is not intended to be an exhaustive treatment of the subject, and should not be interpreted as precluding other procedures that would enhance safe LP-gas operations. This training material merely suggests methods the user may find useful in implementing applicable codes, standards, and legal requirements. This publication is not intended nor should it be construed to (1) set forth procedures which are the general custom or practice in the propane industry; (2) to establish the legal standards of care owed by propane distributors to their customers; or (3) to prevent the reader from using different methods to implement applicable codes, standards or legal requirements. This material was designed to be used as a resource only to assist expert and experienced supervisors and managers in training personnel in their organizations and does not replace federal, state, local, or company safety rules. The user of this material is solely responsible for the method of implementation. The Propane Research and Education Council, the National Propane Gas Association, CASTLE Worldwide and Industrial Training Services, Inc. assume no liability for reliance on the contents of this training material.

Issuance of this material is not intended to nor should it be construed as an undertaking to perform services on behalf of any party either for their protection or for the protection of third parties.

I. General Instructions

Instructions for Use

This **Performance Based Skill Assessment Evaluation Packet** is designed to:

- provide structured on-the-job training for the LP-gas employee under the direction of an experienced and qualified skills evaluator, and
- standardize conditions under which the employee demonstrates his/her performance of tasks that meet the requirements of the NPGA Certified Employee Training Program.

Each task is divided into one or more operations on which the employee's performance is evaluated. Each operation is designated by the following symbol: . Also, under each operation is a performance guide that establishes the standard used by the skills evaluator.

When an operation within a task is successfully performed by the employee according to the criteria listed in the performance guide, a check (✓) is placed in the .

After completing the checklist for those operations required in the employee's job duties, the skills evaluator and employee must sign their respective affidavits. Section IV (page 11 and page 12) is photocopied for the company's personnel training record files. **The original of Section IV, pages 11 and 12, must be forwarded to the appropriate test processing facility to complete certification.**

On-line Test Candidates:
CASTLE Worldwide
900 Perimeter Park Drive, Suite G
Morrisville, NC 27560

Paper test Candidates:
Industrial Training Services, Inc.
310 C.C. Lowry Drive
Murray, KY 42071

Instructions to the Employee

The Performance Based Skill Assessment Evaluation Packet is designed as a training guide to assist you and your evaluator in performing the tasks listed on the front cover. Practice the tasks as many times as needed to become confident and proficient with the documents or equipment. Your skills evaluator will check and observe your performance using the checklist included in each hands-on task assignment.

The employee must adhere to all safety precautions. If a safety precaution is violated, then the demonstration shall be stopped and the skills evaluator must instruct the employee on the proper safety procedures that apply before allowing the employee to continue.

The packet is designed to establish the basic conditions under which the employee demonstrated his/her level of knowledge and proficiency.

Instructions to the Skills Evaluator

Review Section II, "Task Information."

Conduct the training as follows:

- Give a copy of the Performance Based Skill Assessment Evaluation Packet to the employee.
- Review all of the instructions with the employee and answer any questions or concerns about how it will be used.
- Demonstrate and/or talk the employee through each of the steps required to do the task.
- Allow the employee time to ask questions and/or study the steps.
- Observe the employee performing the required steps; correct him/her as needed.
- Allow the employee to practice until he/she is confident.
- Evaluate the employee at his/her request.
- Complete Section III, "Employee Performance Checklist," beginning on page 5.
- Complete **both** pages of Section IV, "Employer Record," which **must be signed and dated by both the Skills Evaluator and employee** on page 11.
- Remove Section IV (pages 11 and 12) from the packet and photocopy. Retain photocopy for your files. **For employee certification this form must be received within 12 months of the Certifying Examination date.** Mail original to:

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Morrisville, NC 27560

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Industrial Training Services, Inc.
310 C.C. Lowry Drive
Murray, KY 42071

- This Evaluation Packet and the photocopy of Section IV (pages 11 and 12) should be retained in the Company's employee training files.

II. Task Information

Certification Standard: The employee's certification is based on satisfactory completion of the operations listed under each task in the Performance Based Skill Assessment Evaluation Packet and a Mastery Score on the Certification Area Examination.

Prerequisites: Successful completion of CETP Certification Area 3.7, "Maintaining DOT Intermodal (IM) Tanks."

References: Applicable LP-Gas Codes and company policies.

Evaluation: The skills evaluator must be the employee's supervisor or some other qualified person who has completed CETP "Maintaining DOT Intermodal (IM) Tanks" or is familiar with the subject matter. CETP certification requires that the employee seeking certification cannot act as his/her own evaluator.

III. Employee Performance Checklist—3.7

Print or type all entries except signatures and initials.

Employee Name _____

Social Security No. _____ Date _____

Skill Evaluator (Please Print) _____

I, _____, hereby attest the employee named on
(Skill Evaluator's Signature)

top line of this section has demonstrated the correct performance of the tasks listed below and on following pages.

| |
|---|
| <p style="text-align: center;">Task 3.7.2 Identifying Testing and Inspection Requirements for DOT IM Tanks/ Determining DOT IM Tank Fitness for Continued Service</p> |
|---|

The employee is qualified to perform Task 3.7.2a at the following level:

Satisfactory



Identifying Testing and Inspection Requirements for DOT IM Tanks /Determining DOT IM Tank Fitness for Continued Service. 3.7.2a

Performance Guide: The person being evaluated for certification visually inspected a DOT intermodal portable tank to determine its fitness for continued propane service, completing the following:

1. Verified proper working pressure for propane and data plate information;
2. Checked all welds, valves, and fittings for leaks;
3. Verified the proper working order of valves and fittings;
4. Examined the shell, heads, and structural support and securing components for defects or damage;
5. Verified that all required tank openings were fitted with the required valves, emergency shutdown components including fusible links, back check or excess flows (as appropriate), and protective caps.
6. Verified that all valves and fittings were protected by any of the following:
 - Protection by a heavy dome
 - Protection by being recessed within the tank profile
 - Protection by the superstructure or other heavy protective structure
7. Evaluated the tank's protective coating.
8. Verified that the tank's markings were current for the DOT required:
 - Pressure test
 - Internal inspection
 - Leakage test
 - External visual inspection
9. Properly identified any needed corrections or maintenance, documenting the tank's condition on designated company forms or tags.

Tasks 3.7.3 & 3.7.9
**Applying Safe Handling Practices for Flammable and Combustible Liquids/
Injecting Methanol Into DOT IM Tanks**

The employee is qualified to perform Tasks 3.7.3a and 3.7.9a at the following level:

Satisfactory

Applying Safe Handling Practices for Flammable & Combustible Liquids. 3.7.3a

Injecting Methanol Into DOT IM Tanks. 3.7.9a

Performance Guide: At the bulk plant, the person being evaluated for certification:

1. Explained how to identify the proper personal protective equipment (PPE) for handling methanol, solvents, and other toxic, combustible or flammable liquids.
2. Identified the proper container to use for handling small quantities of a flammable liquid such as methanol.
3. Wearing proper PPE, checked a drum or other large methanol storage container for proper electrical grounding.
4. Wearing proper PPE, electrically bonded the large methanol storage container and the small container and transferred methanol into the small container, leaving adequate expansion room.
5. Demonstrated how to:
 - a. check the container for leakage,
 - b. label it.
6. Demonstrated how to inject methanol into a DOT IM tank under container pressure.

Task 3.7.4
Testing DOT IM Tanks for Ammonia Contamination

The employee is qualified to perform Task 3.7.4a at the following level:

Satisfactory

Testing DOT IM Tanks for Ammonia Contamination. 3.7.4a

Performance Guide: At the bulk plant, the person being evaluated for certification:

1. Wearing suitable personal protective equipment (PPE), examined brass fittings for discoloration and deterioration associated with exposure to ammonia.
2. Wetted a strip of red litmus paper with distilled water, being careful not to contaminate the litmus paper or water by touching them with hands, or any object that transfer oils, grease, dirt, salts, acids, or alkali materials.
3. Wearing proper PPE, and using a clean tool such as tweezers to secure and handle the litmus paper, placed the wetted litmus paper in front of the tank's vapor valve, fixed maximum liquid level gauge or other controllable vapor venting fitting.
4. Briefly opened the vapor valve or outage gauge, venting propane vapor onto the litmus paper.
5. Correctly determined:
 - a. If there was a change in color of the litmus paper, and
 - b. The meaning of the change or lack of change in color.

Task 3.7.5 Evacuating DOT IM Tanks

Skills Evaluator: Indicate if the employee was evaluated by:

- Actual performance of the task
 Simulation of the task

The employee is qualified to perform Task 3.7.5a at the following level:

Satisfactory

Evacuating DOT IM Tanks. 3.7.5a

Performance Guide: Using an IM tank at the bulk plant, wearing suitable personal protective equipment (PPE), the person being evaluated for certification demonstrated and explained:

1. The method to use to unload the maximum possible quantity of LP-gas liquid using available transfer equipment at the bulk plant.
2. If a plant transfer pump was the only available transfer equipment:
 - How to inspect transfer hoses, valves and connecting fittings prior to transfer;
 - How to connect between the transfer pump, bulkhead and the IM tank valves and connections;
 - How to check for leakage;
 - How to set plant piping valves and bulk storage tank or receiving cargo tank(s) valves for the transfer operation;
 - How to monitor the unloading operation;
 - How to shutdown the ESVS on the unloading bulkhead and IM tank in the event of a hose break, leak, fire, or other emergency;
 - How to complete the liquid transfer, properly close all valves, vent trapped propane, disconnect and store transfer hoses and prepare the IM tank for movement.
3. If a cargo tank motor vehicle pump was the only available transfer equipment:
 - How to inspect transfer hoses, valves and connecting fittings prior to transfer;
 - How to connect between the CTMV pump and the IM tank valves and connections;
 - How to check for leakage;
 - How to set IM tank valves and receiving cargo tank(s) valves for the transfer operation;
 - How to monitor the unloading operation;
 - How to shutdown the ESVS on the cargo tank(s) and IM tank in the event of a hose break, leak, fire, or other emergency;
 - How to complete the liquid transfer, properly close all valves, vent trapped propane, disconnect and store transfer hoses and prepare the IM tank for movement.
4. If a plant compressor was available:
 - How to inspect transfer hoses, valves and connecting fittings prior to transfer;
 - How to connect between the unloading bulkhead and the IM tank valves and connections;
 - How to check for leakage;
 - How to set IM tank valves, bulkhead valves, plant piping valves, the compressor manifold valves and 4-way valve for liquid transfer, and the valves on the receiving cargo tank(s) or bulk storage tank(s) valves for the transfer operation;
 - How to monitor the unloading operation;
 - How to shutdown the ESVS on unloading bulkhead and IM tank in the event of a hose break, leak, fire, or other emergency;
 - How to complete the liquid transfer and properly close the applicable liquid valves;
 - How to change the compressor 4-way valve, manifold valves, IM tank valves and receiving tank(s) valves for vapor recovery;
 - How to complete the vapor recovery transfer, properly close all valves, vent trapped propane, disconnect and store transfer hoses and prepare the IM tank for movement.

Task 3.7.6 Conducting Vapor Flaring Operations

Skills Evaluator: Indicate if the employee was evaluated by:

- Actual performance of the task
- Simulation of the task

The employee is qualified to perform Task 3.7.6a at the following level:

Satisfactory

Conducting Vapor Flaring Operations. 3.7.6a

Performance Guide: Using an IM tank at the bulk plant and wearing suitable personal protective equipment (PPE), the person being evaluated for certification demonstrated and explained:

1. How to notify local fire department as to the nature and expected duration of the flaring operation.
2. How and where to locate the DOT IM tank and the flaring burner (at least 25 feet from the tank), and away from vehicular traffic, any LP-gas transfer area, flammables or source of ignition.
3. How to connect the tank vapor valve to the flaring equipment, open the vapor valves, then the flaring equipment valve(s) and check for leaks, then ignite the flaring burner.
4. How to monitor the flaring operation, and shutdown the flaring burner when the vapor pressure in the tank cannot fully supply the burner demand.
5. How to properly close the IM tank valves, transfer valves and flaring equipment valves, vent any trapped vapor, then disconnect the transfer hoses and flaring equipment connections.
6. How to properly cap or plug the flaring equipment connections.

Task 3.7.7 Replacing Valves and Fittings in DOT IM Tanks

Skills Evaluator: Indicate if the employee was evaluated by:

- Actual performance of the task
- Simulation of the task

The employee is qualified to perform Task 3.7.7a at the following level:

Satisfactory

Replacing Valves and Fittings in DOT IM Tanks. 3.7.7a

Performance Guide: In a well ventilated location outdoors, and wearing suitable personal protective equipment (PPE) the person being evaluated for certification:

Using an IM tank demonstrated and explained how to replace valves and fittings of a DOT IM tank, completing the following steps:

1. How to determine the valve or fitting requires replacement.
2. How to obtain and prepare the replacement valve or fitting, applying thread-sealing compound or tape to the threads after the leading 1½ to 2 threads of the valve or fitting (if a pipe-thread fitting).
3. If the valve replaced was a relief valve, how to determine that the relief capacity was adequate by comparing the tank's area in square feet to the required relief valve capacity table in NFPA 58.
4. How to reduce vapor pressure in the tank to near atmospheric pressure, and using appropriate tools, loosen the valve(s) or fitting(s) to be removed to a point where it is hand-tight.
5. How to removed the old valve or fitting by hand—then immediately hand-tighten the prepared replacement into the tank opening.
6. How to tighten the valve or fitting using appropriate tools, stopping at the proper position without over-tightening the valve or fitting.
7. How to pressurized the tank with propane vapor and check for leaks using a suitable leak detection solution or device.

Task 3.7.10
Applying Protective Coatings to DOT IM Tanks.

The employee is qualified to perform Task 3.7.10a at the following level:

Satisfactory Not Applicable*

*Not applicable means that this person's job description does not require the person to perform this task, or that the company does not own DOT IM tanks and is not responsible for IM tank maintenance except for maintenance incidental to transporting, loading or unloading IM tanks.

Applying Protective Coatings to DOT IM Tanks. 3.7.10a

Performance Guide: After inspecting the tank and determining it was fit for continued service and without leakage, the person being evaluated for certification:

1. Examined the tank and superstructure's light reflective protective coating and determined that the protective coating must be refurbished and completed the following:
2. Identified the coating system recommended by the tank manufacturer, required by company procedures, or recommended by an industrial coating manufacturer.
3. Wearing suitable PPE as designated in the coating manufacturer's MSDS, or company procedures, prepared the tank surface, removing "dead paint", scale, rust and loose particles.
4. Wearing suitable PPE as designated in the coating manufacturer's MSDS, or company procedures, and following coating manufacturer instructions, applied the protective coating, beginning with the primer if applicable.

Task 3.7.11
Preparing DOT IM Tanks for Transportation

The employee is qualified to perform Task 3.7.11a at the following level:

Satisfactory

Preparing DOT IM Tanks for Transportation. 3.7.11a

Performance Guide: The person being evaluated for certification:

1. Demonstrated and explained the **vehicle** placarding required for transporting DOT IM tanks containing any LP-gas in liquid or vapor state when the gross weight of the cargo exceeds 1,001 pounds including the weight of the tank and LP-gas.
2. Demonstrated and explained the marking requirements for DOT IM and portable tanks, including placarding, data plate and shipping labels, and verifying that tank tests and inspections are current.
3. Demonstrated and explained inspection procedures for cargo securing equipment used with DOT IM tanks.
4. Demonstrated and explained how to secure a single DOT IM tank on a straight truck or trailer of a tractor/trailer combination vehicle.
5. Demonstrated and explained how to secure multiple DOT IM tanks on a straight truck or trailer of a tractor/trailer combination vehicle.
6. Demonstrated and explained how to secure a single DOT IM tank on an intermodal container trailer of a tractor/trailer combination vehicle (if applicable).
7. Demonstrated and explained the shipping paper and emergency information requirements for a shipment of one or more DOT IM tanks.
8. Identified the valves of the IM tank that communicate with:
 - The tank's vapor space
 - The tanks liquid space
9. Identified the means of protection provided tank valves and fittings, and the means provided to shutdown the flow of gas in the event of an emergency.

IV. CETP Performance Evaluation / Employer Record (3.7)

THIS PAGE MUST BE RETURNED AS SOON AS POSSIBLE, BUT NO LATER THAN 12 MONTHS AFTER TAKING THE CERTIFICATION TEST, TO THE FOLLOWING ADDRESS:

On-line Test Candidates:

CASTLE Worldwide
900 Perimeter Park Drive, Suite G
Morrisville, NC 27560

Paper test Candidates:

Industrial Training Services, Inc.
310 C.C. Lowry Drive
Murray, KY 42071

Employee Information: (print or type) Test Group Number (if known): _____

Name _____ Social Security Number _____

Employer _____

Address _____

City, State: _____ Zip Code _____

Affidavit

I affirm that I am the person who has performed those items checked on this checklist. I acknowledge that the performance checklists used are solely for the purpose of skills assessment for the CETP certification requirements, and are not intended to replace or modify company operating or safety procedures, and may not be appropriate for use in all circumstances. I acknowledge that I am responsible for recognizing hazards and abnormal conditions in my workplace and must exercise care and good judgment, always using appropriate equipment, procedures and tools for the tasks I perform. The Propane Education and Research Council, the National Propane Gas Association, CASTLE Worldwide and Industrial Training Services, Inc. assume no liability for my actions, or for my application of the skills assessment performance guides used in this evaluation checklist.

Employee's Signature _____ Date _____

Skills Evaluator Information: (print or type)

Name _____

Organization/Employer _____

Telephone Number _____

Affidavit

I affirm that I am the person who has administered this checklist, and that I have conducted this employee skills assessment with integrity. I also affirm that the above named employee is the person whose performance I evaluated, and that the above named person performed the checked tasks at the indicated level without assistance from me or any other person.

Skill Evaluator's Signature _____ Date _____

The employee is qualified to perform the listed operations at the following level:

**Without
Direct
Supervision** **Not
Applicable**

| | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | | Identifying Testing and Inspection Requirements for DOT IM Tanks /Determining DOT IM Tank Fitness for Continued Service. 3.7.2a |
| <input type="checkbox"/> | | Applying Safe Handling Practices for Flammable & Combustible Liquids. 3.7.3a |
| <input type="checkbox"/> | | Injecting Methanol Into DOT IM Tanks. 3.7.9a |
| <input type="checkbox"/> | | Testing DOT IM Tanks for Ammonia Contamination. 3.7.4a |
| <input type="checkbox"/> | | Evacuating DOT IM Tanks. 3.7.5a |
| <input type="checkbox"/> | | Conducting Vapor Flaring Operations. 3.7.6a |
| <input type="checkbox"/> | | Replacing Valves and Fittings in DOT IM Tanks. 3.7.7a |
| <input type="checkbox"/> | <input type="checkbox"/> | Applying Protective Coatings to DOT IM Tanks. 3.7.10a |
| <input type="checkbox"/> | | Preparing DOT IM Tanks for Transportation. 3.7.11a |

After completion of Section IV, "Employer Record," remove pages 11 and 12 from the packet and photocopy. Retain photocopy for your files. Mail original to:

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