



Cylinder Delivery



2.4 Performance-Based Skills Assessment Evaluation Packet

- Task 2.4-1 Applying Driving Techniques for Safe Operation of a Cylinder Delivery Vehicle**
- Task 2.4-2 Preparing DOT Cylinders for Filling, Storage or Transportation**
- Task 2.4-3 Replacing Valves and Fittings in DOT Cylinders**
- Task 2.4-4 Operating Dispensing Equipment to Fill DOT Cylinders**
- Task 2.4-5 Transporting DOT Cylinders**
- Task 2.4-6 Examining DOT Cylinder Installations**
- Task 2.4-7 Examining DOT Cylinder Storage Rack Installations**

NOTICE: THE SKILLS EVALUATOR MUST BE THE EMPLOYEE'S SUPERVISOR OR SOME OTHER QUALIFIED PERSON WHO HAS COMPLETED CETP "PROPANE DELIVERY OPERATIONS AND CYLINDER DELIVERY" OR IS FAMILIAR WITH THE SUBJECT MATTER. CETP CERTIFICATION REQUIRES THAT THE EMPLOYEE SEEKING CERTIFICATION CANNOT ACT AS HIS/HER OWN EVALUATOR.

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 Education and Research Council, the National Propane Gas Association 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.

Table of Contents

I. General Instructions	2
Instructions for Use	2
Instructions to the Employee	3
Instructions to the Skills Evaluator	3
II. Task Information	4
III. Employee Performance Checklist	4-12
IV. Employer Record	13-14

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 13 and page 14 is photocopied for the company's personnel training record files. **The original of Section IV, pages 13 and 14 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 15.
- Remove Section IV (pages 13 and 14) 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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**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**

- This Evaluation Packet and the photocopy of Section IV (pages 13 and 14) 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 2.4, "Cylinder Delivery"; successful completion of CETP Certification Area 2.1, "Propane Delivery Operations"; AND an NPGA CETP Certification in CETP Certification Area 1.0, "Basic Principles and Practices."

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 "Propane Delivery Operations and Cylinder Delivery" 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

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.

[Tasks begin on next page.]

Task 2.4-1
Applying Driving Techniques for Safe Operation of a Cylinder Delivery Vehicle.

The employee is qualified to perform Task 2.4-1 at the following level:

Satisfactory

Applying Driving Techniques for Safe Operation of a Cylinder Delivery Vehicle. (PDO/CD Module 5)

Performance Guide: En route to a customer location, the person being evaluated for certification:

1. Made frequent reference to rearview mirrors and scanned the roadway ahead to determine traffic and road surface conditions.
2. Properly controlled the speed of the vehicle, making smooth turns and changes of direction, using direction signals, and proper preparation for direction changes.
3. Adjusted driving techniques as appropriate for weather and traffic conditions.
4. Demonstrated or explained techniques for controlling skids or recovering from a tire blowout or pavement drop off.
5. Explained how to avoid vehicle roll over in the event of a blowout or pavement drop off.
6. Maneuvered the vehicle onto customer property to avoid damage to property and having to re-enter the roadway by backing into traffic.

Task 2.4-2
Preparing DOT Cylinders for Filling, Storage or Transportation

The employee is qualified to perform at Task 2.4-2a at the following level:

Satisfactory



**Preparing DOT Cylinders for Filling, Storage or Transportation.
(PDO/CD Module 7)**

Performance Guide: While handling cylinders being returned or preparing cylinders for refilling and resale, the person being evaluated for certification:

1. Checked the condition of a minimum of 6 cylinders to determine fitness for continued propane service, including the following items:
 - The last marked manufacture or requalification date, and determined the requalification date indicated that the cylinder could be continued in service according to the type of requalification marked;
 - Verified that the cylinder valve(s) were properly protected by a cap, collar, or neck ring as appropriate;
 - Verified that there were no apparent leaks at the relief valve, or any other valve or fitting;
 - Correctly determined if an overfill prevention device (OPD) was required for any cylinder, and if so, that the OPD was properly installed.
2. Visually inspected each cylinder to determine fitness for continued propane service by examining each of the following:
 - Service valve handwheels;
 - Service valve stem for evidence of leakage;
 - Condition of foot rings and welds;
 - Any abnormal condition reported by the customer;
 - Evidence of ammonia contamination.On motor fuel cylinders:
 - Relief valve condition and the condition of pipe-away adapters, weather caps, and relief valve manufacture dates—correctly determining if the relief valve required replacement based on manufacture date;
 - Condition of quick-closing couplings;
 - Condition of filler valves and weather caps;
 - Condition of maximum fixed liquid level gauge;
 - Condition of float gauge dial faces, and operation of float gauges.
3. Verified that none of the following cylinder conditions were present:
 - Crack or leak
 - Bulging
 - Defective valve
 - Defective or leaking pressure relief device
 - Evidence of physical abuse, fire or heat damage, or detrimental rusting or corrosion
4. If any of the conditions listed above were present, correctly determined and designated if the cylinder met the criteria for “rejection” or “condemnation.”
5. Determined that each cylinder was properly labeled for:
 - Transportation in commerce (DOT shipping label)
 - Consumer safety information
6. Verified that all required DOT cylinder markings were readable and proper for propane service.
7. Separated the cylinders based on the determination of fitness for continued service, appropriately marking, tagging, or otherwise indicating cylinders that were rejected or condemned.
8. Moved the cylinders to the appropriate work areas in the plant, making proper use of cylinder dollies and handling equipment.
9. Ensured that cylinders were positioned so that the discharge from relief valves did not impinge on other nearby cylinders.

Task 2.4-2 Continued
Preparing DOT Cylinders for Propane Storage and Transportation

The employee is qualified to perform at Task 2.4-2b at the following level:

Satisfactory

Purging DOT Cylinders of Air. 2.4-2b (PDO/CD Module 7)

Performance Guide: The person being evaluated for certification purged a DOT cylinder of air using: **(Evaluator: mark the box before the equipment used.)**

- a purging pump (if a new cylinder or one that has not contained a flammable)
- an electrically grounded purging stack

and completed the following operations:

1. If the cylinder was a new cylinder—
 - Installed a negative/positive pressure gauge in the service valve or used some other means to determine that the cylinder was vacuum purged of air by the manufacturer, and that negative pressure was present in the cylinder.
 - If negative pressure was found, moved the cylinder to the purging stack or other location and pressurized the cylinder with propane vapor.
 - If negative pressure was not found, used a purging pump or purging stack to purge the cylinder of air (as described in 2 below), then pressurized the cylinder with propane vapor.
 - Applied a DOT shipping label and any other required consumer information label in preparation for liquid filling.
2. If the cylinder was a used cylinder that had been open to the air—
 - Inspected the purging stack to ensure it was electrically grounded.
 - Using pressure-regulated propane vapor, pressurized the cylinder to 15 psig then vented the gas/air mixture, reducing the cylinder pressure to near atmospheric pressure, repeating the purging cycle 4 times.
 - On the final purging cycle, pressurized the cylinder with propane vapor.
 - Applied a DOT shipping label and any other required consumer information label in preparation for liquid filling.

Task 2.4-3
Replacing Valves and Fittings in DOT Cylinders

The employee is qualified to perform at Task 2.4-3 at the following level:

Satisfactory

Not
Applicable*

Replacing Valves and Fittings in DOT Cylinders. 2.4.5a

Performance Guide: In a well ventilated location outdoors or in a cylinder filling room meeting the requirements of Chapter 10 of NFPA 58, 2004 edition, and wearing suitable personal protective equipment (PPE) the person being evaluated for certification:

1. Replaced at least one valve or fitting in a vapor service cylinder, completing the following steps:
 - (a) Secured the cylinder in a cylinder vise or other suitable restraining device;
 - (b) Determined the valve(s) or fitting(s) requiring replacement.
 - (c) Obtained and prepared 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).
 - (d) After determining that vapor pressure in the cylinder was reduced to atmospheric pressure or only slightly above, and using appropriate tools, loosened the valve(s) or fitting(s) to be removed to a point where it was hand-tight.
 - (e) Removed the old valve or fitting by hand—then immediately hand-tightened the prepared replacement into the cylinder opening.
 - (f) Tightened the valve or fitting using appropriate tools, stopping at the proper position without over-tightening the valve or fitting.
 - (g) Pressurized the cylinder with propane vapor and checked for leaks using a suitable leak detection solution or device.
2. Replaced at least one valve or fitting in a motor fuel cylinder, completing the steps listed in number 1.
3. Verified that all required caps, plugs, or protective devices were provided, including valve protection before removing the cylinder from the restraining device.

*Not applicable means that this person's job description does not require the person to perform this task.

Task 2.4-4 Operating Dispensing Equipment to Fill DOT Cylinders
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The employee is qualified to perform at Task 2.4.-4A at the following level:

Satisfactory Not Applicable*

**Operating Manually Operated Dispensing Equipment
(PDO/CD Module 8)**

Performance Guide: At a dispenser or cylinder dock and wearing suitable PPE, the person being evaluated for certification:

1. Verified that the dispensing equipment was in good working order and met NFPA 58 requirements.
2. Opened the liquid outlet valve on storage tank and valves in by-pass return line.
3. Verified by visual inspection of the outside of the cylinder that the cylinder was fit for propane service and filling.
4. Placed scales index at the proper setting, equal to the tare weight of the cylinder plus the weight of propane (cylinder water capacity times 0.42) plus the weight of the transfer hose, hose-end valve and adapter(s).
5. Connected the hose to cylinder fill valve.
6. Opened the hose-end valve.
7. Opened the valve on cylinder.
8. Started the pump.
9. Closed the hose-end valve as soon as scale beam or indicator tipped.
10. Shut off the pump.
11. Closed the cylinder valve.
12. Disconnected the hose.
13. Checked the weight of filled cylinder after filling connector was disconnected. If overfilled, bleed off excess propane in a safe location.
14. Checked the cylinder service valve and relief valve for leaks.
15. Installed a POL plug on cylinders 45 lbs. or less propane capacity not equipped with a quick closing connection or adapter.
16. Applied a DOT shipping label if one was not already in place and/or cylinder warning label if the manufacturer's label is not legible, or any other consumer or commercial customer warning label required by company procedures

*Not applicable means that this person's job description does not require the person to perform this task or that the required equipment was not available.

The employee is qualified to perform at Task 2.4-4B at the following level:

Satisfactory Not Applicable*

**Operating Automatically Operated Dispensing Equipment
(PDO/CD Module 8)**

Performance Guide: At a cylinder dock or in a cylinder filling room meeting the requirements of Chapter 10 of NFPA 58 and wearing suitable personal protective equipment (PPE), the person being evaluated for certification:

1. Verified that the dispensing equipment was in good working order and met NFPA 58 requirements.
2. Placed scales index at the proper setting, equal to the tare weight of the cylinder plus the weight of propane (cylinder water capacity times 0.42) plus the weight of the transfer hose, hose-end valve and adapter(s).
3. Connected the hose to cylinder fill valve.
4. Checked for proper status of the hydraulic, electric, or pneumatic shutdown actuator.
5. Opened the hose-end valve.
6. Opened the valve on cylinder.
7. Started the pump (if required).
8. Closed the hose-end valve after the scale beam or indicator tipped and the shutdown actuator stopped the flow of liquid propane.
9. Shut off the pump (if required).
10. Closed the cylinder valve.
11. Disconnected the hose.
12. Checked the weight of filled cylinder after filling connector was disconnected. If overfilled, bleed off excess propane in a safe location.
13. Checked the cylinder service valve and relief valve for leaks.
14. Installed a POL plug on cylinders 45 lbs. or less propane capacity not equipped with a quick closing connection or adapter.
15. Applied a DOT shipping label if one was not already in place and/or cylinder warning label if the manufacturer's label is not legible, or any other consumer or commercial customer warning label required by company procedures.

*Not applicable means that this person's job description does not require the person to perform this task or that the required equipment was not available.

Task 2.4-5
Transporting DOT Cylinders.

The employee is qualified to perform Task 2.4-5 at the following level:

Satisfactory



Transporting DOT Cylinders. (PDO/CD Module 9)

Performance Guide: The person being evaluated for certification:

1. Properly using cylinder handling dollies and equipment, loaded filled DOT cylinders onto the cylinder delivery vehicle.
2. Properly secured the cylinders in racks and/or by using cargo restrains, ensuring that
 - Cylinders were secured against relative motion within the vehicle, that all valves were properly protected, and that the cargo would be secured in the event of accident or collision;
 - Each cylinder relief valve communicated with the cylinder's vapor space.
3. Verified that each cylinder was within its current requalification period, without leaks, marked with a DOT (CGA 7 or equivalent) shipping label, and fit for transportation.
4. Verified that the correct number of cylinders was marked on the shipping paper, and that the shipping paper was properly dated.
5. Verified that chock blocks, fire extinguisher, cylinder dollies, and lifting equipments were properly stowed or secured for travel.
6. Verified that readable LP-Gas placards were visible from the front, back and both sides of the vehicle.

Task 2.4-6
Examining DOT Cylinder Installations

The employee is qualified to perform Task 2.4-6 at the following level:

Satisfactory



Examining DOT Cylinder Installations. (PDO/CD Module 9)

Performance Guide: At a customer location, the person being evaluated for certification:

1. Verified that the propane storage cylinder(s) was level and adequately supported on firm masonry foundations and secured against upset or tipping.
2. Verified that the cylinder(s) was adequately protected by a light reflective coating.
3. Verified that the storage cylinder(s) was properly marked with DOT and NFPA 58 required markings for propane service, and that the cylinder(s) was apparently safe for continued service.
4. Verified that the propane cylinder(s) was located in conformance to the minimum separation distance requirements of NFPA 58 with regard to:
 - Important Buildings
 - Ignition Sources
 - Combustible Materials
 - Property lines that can be built upon
 - Building openings
 - Direct vents and ventilation openings
5. Verified that container valves and fittings were in good operating condition and leak-free.
6. Verified that the pressure regulator and its vent were protected.
7. To the extent possible, verified that visible and buried distribution piping was adequately protected.

<p style="text-align: center;">Task 2.4-7 Examining DOT Cylinder Storage Rack Installations</p>

The employee is qualified to perform Task 2.4-7 at the following level:

Satisfactory

**Examining DOT Cylinder Storage Rack Installations.
(PDO/CD Module 9)**

Performance Guide: At a commercial customer location, the person being evaluated for certification:

1. Determined the minimum distance required to separate a cylinder storage rack from any doorway to a building frequented by the public such as a convenience store that has only one entrance.
2. Determined the minimum distance required to separate a cylinder storage rack from any doorway to a building frequented by the public such as a convenience store or home improvement store that has 2 or more entrances.
3. Correctly explained and pointed out the requirements for protection of cylinders stored outside as set out in NFPA 58.

IV. CETP Performance Evaluation / Employer Record

THIS SECTION 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, 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"/>		Applying Driving Techniques for Safe Operation of a Cylinder Delivery Vehicle.
<input type="checkbox"/>		Preparing DOT Cylinders for Filling, Storage or Transportation.
<input type="checkbox"/>	<input type="checkbox"/>	Replacing Valves and Fittings in DOT Cylinders.
<input type="checkbox"/>	<input type="checkbox"/>	Operating Manually Operated Dispensing Equipment
<input type="checkbox"/>	<input type="checkbox"/>	Operating Automatically Operated Dispensing Equipment
<input type="checkbox"/>		Transporting DOT Cylinders.
<input type="checkbox"/>		Examining DOT Cylinder Installations.
<input type="checkbox"/>		Examining DOT Cylinder Storage Rack Installations.

After completion of Section IV, "Employer Record," remove pages 13 and 14 from the packet and photocopy. Retain photocopy for your files. Mail original to:

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