



1.0 Basic Principles and Practices of Propane Performance-Based Skills Assessment 2019



Section 1 Identify Propane Codes & Regulations and Verify Product Specifications and Personal Safety

- Task 1 Identify NFPA Codes and Regulations that Apply to Propane Operations
- Task 2 Verify Product Specifications and Odorization of Propane Shipments
- Task 3 Obtain Information from a Propane Safety Data Sheet (SDS/MSDS)
- Task 4 Identify Personal Protective Equipment (PPE) and Safe Work Practices

Section 2 Odorants, Service Interruptions, and Characteristics of Carbon Monoxide

- Task 1 Perform and Document a "Sniff Test" to Verify the Presence of Propane Odorant
- Task 2 Explain Safety Instructions for a Gas Odor Call
- Task 3 Identify Causes for a Gas Service Interruption and Associated Potential Hazards
- Task 4 Identify the Characteristics and Hazards of Incomplete Combustion

Section 3 Identify Emergency Equipment and Procedures and the Proper Use of Fire Extinguishers

- Task 1 Identify Emergency Procedures and Emergency Equipment at the Bulk Plant/Facility
- Task 2 Locate and Explain Proper Use of Fire Extinguishers and Identify Fire Prevention Policies

Section 4 DOT Cylinders and Propane Piping System Components

- Task 1 Verify Required Stampings on DOT Cylinders and Identify Propane Piping System Components
- Task 2 Fill a DOT Cylinder by Weight and/or Volume

NOTICE: The Skills Evaluator must be the Candidate's supervisor or another qualified person who has:

CETP Certification requires that the employee seeking certification cannot act as his/her own evaluator.

Instructions for Use:

The Performance Based Skill Assessment Evaluation is designed to standardize conditions under which the candidate demonstrates performance of tasks to meet the requirements for NPGA CETP Certification.

The Skills Assessment should be supplemented with company policies and procedures related to each task being evaluated as needed.

1. The candidate has 12 months from the date of successfully passing the CETP Certification exam to train and successfully complete the tasks within the evaluation.
2. The affidavits and a final checklist are provided on the last two pages of the skills packet.
 - Affidavits must be signed by both the candidate and the skill evaluator
 - The final checklist must be fully completed within 12 months of passing the exam (Candidates may use this time to practice skills as often as necessary)
 - Make a copy for the training records when the skills assessment is completed for future audits
 - Send the affidavit page and final checklist (last two pages) to the testing center within 12 months of passing the exam
3. All requirements and prerequisites must be met before certification will be granted.

1.0 Certification Requirements

- Passing exam score on 1.0 *Basic Principles and Practices of Propane* exam
- Completed and signed 1.0 *Basic Principles and Practices of Propane* Skills Assessment returned to the testing center within 12 months of passing the exam.

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.

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NPGA – Basic Principles and Practices of Propane Skills Assessment (2019)

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v112315

Instructions for Candidate:

Practice the operations as many times as needed to become confident and proficient with the documents or equipment necessary to complete each task. Your evaluator will check and observe your performance, using the steps to complete each hands-on operation and/or company procedures.

The candidate 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 candidate on the proper safety procedures that apply before allowing the candidate to continue.

After completing the skills evaluation, the candidate must fill out the Employee Information section and sign the Affidavit.

Required information includes the candidate's last four digits of the SSN to assist the testing center in locating the correct records.

Instructions to the Skills Evaluator:

The candidate 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 candidate on the proper safety procedures that apply before allowing the candidate to continue.

- Review the tasks within the Skills Evaluation with the candidate.
- Review all of the instructions, answering any questions and explaining how the skills assessment will be used.
- Demonstrate and/or talk the candidate through each of the steps required to perform each task.
- Allow the candidate time to ask questions and/or study the steps.
- Observe the candidate performing the required steps, providing corrections as needed
- Allow the candidate to practice until he/she is confident. *Remember:* the candidate has 12 months from the date of passing the exam to complete and return the skills assessment
- Evaluate the candidate when ready
- After completing the final checklist, complete the Skills Evaluator information and sign the affidavit.
- Ensure that the Affidavit and final Checklist are copied for the Employee Training Records and then sent to the testing center.

Each task is divided into one or more operations upon which the candidate's performance is evaluated. All tasks must be completed unless the "Not Applicable" option is both available for the task and applicable to the candidate or the marketer's present situation.

Satisfactory - When all the operations within a task are successfully performed by the candidate according to the criteria provided, the evaluator will check off the box marked "Satisfactory."

* **Not Applicable** – Certain tasks have the "Not Applicable" option available. The Skills Evaluator must ensure the circumstances described under the option are applicable to either the candidate or marketer's present situation.

NPGA – Basic Principles and Practices of Propane Skills Assessment (2019)

Section One: Identify Propane Codes & Regulations and Verify Product Specifications and Personal Safety

Task 1: Identify NFPA Codes and Regulations that Apply to Propane Operations

Preparation Guide: Use copies of NFPA 54, NFPA 58, the Code of Federal Regulations, and other regulatory codes available at the workplace for the skills assessment task evaluation:

1. Locate chapters within NFPA 54 & NFPA 58 applicable to the candidate's job description.
2. Locate any applicable state or local codes and determine if NFPA 54 and 58 are adopted, modified, or referenced by state and/or local codes.
3. Locate any portion of the Code of Federal Regulations and find a section that applies to propane or LP-gas operations.

Satisfactory

Task 2: Verify Product Specifications and Odorization of Propane Shipments

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) and use the appropriate the documents listed below for the skills assessment task evaluation:

Document Used: Actual Propane Shipment Bill of Lading (BOL)
 Facsimile Bill of Lading Included with Checklist

1. Verify the product name, number of net gallons shipped and product vapor pressure, as applicable, noted in BOL.
2. Verify the quantity of ethyl mercaptan added to the propane.
3. Determine that the specific gravity of the liquid is between .504 and .510 for Commercial Propane (such as Table B.1.2.(a), found in Annex B to NFPA 58).
4. Determine the amount of ethyl mercaptan added for the net gallons shipped was equal to or greater than the amounts shown in the chart below.
5. List the actions required by company procedures if product specifications or odorization is not properly documented.

PROPANE GALLONS	lb ETHYL MERCAPTAN	cc ETHYL MERCAPTAN	PROPANE GALLONS	lb ETHYL MERCAPTAN	cc ETHYL MERCAPTAN
8,000	0.800	432.0	9,500	0.950	513.0
8,100	0.810	438.0	9,600	0.960	519.0
8,200	0.820	443.0	9,700	0.970	524.0
8,300	0.830	448.0	9,800	0.980	529.0
8,400	0.840	453.0	9,900	0.990	535.0
8,500	0.850	459.0	10,000	1.000	540.0
8,600	0.860	465.0	10,100	1.010	545.0
8,700	0.870	470.0	10,200	1.020	551.0
8,800	0.880	475.0	10,300	1.030	556.0
8,900	0.890	481.0	10,400	1.040	561.0
9,000	0.900	486.0	10,500	1.050	567.0
9,100	0.910	491.0	10,600	1.060	572.0
9,200	0.920	497.0	10,700	1.070	578.0
9,300	0.930	502.0	10,800	1.080	583.0
9,400	0.940	508.0	10,900	1.090	588.0

1.0 lb ethyl mercaptan per 10,000 gallons LP-Gas = 0.01 lb EM per 100 gallons
540 cc ethyl mercaptan per 10,000 gallons LP-Gas = 5.40 cc EM per 100 gallons

Satisfactory

Continued

Task 2: continued: The Railcar example below may be used if an actual of Bill of Lading is not available

02/25/2013 UNNAMED NGL SERVICES B/L # P 3735

Shipper	PROPANE SERVICES	DORE	ND
Consignee	PES INC	KLAMATH FALLS	OR
Care Of	UNNAMED PETROLEUM, INC.	KLAMATH FALLS	OR
Third Party Pay	ANONYMOUS PROPANE SERVICES GROUP	TULSA	OK 74136

123 ACME HWY
8002278

Origin:	DORE	ND	Prepared by:	JOHN DOE
Destination:	KLAMATH FALLS	OR	Phone Number:	555-123-1234
Sec 7 (Y/N):	No			
Freight Charges:	"To Be Prepaid"		Patron Code:	

Route:	BNSF			
Origin Switch Road:		Junction:	SNWDN	Delivery Switch Road:
Rule 11 (Y/N):	No			
Contract(s) #:	-			
LIQUEF	4905752	Loaded	1	Tank Car Shipper Scale Weights

				Net Weights
				134,500 Pounds

SPECIAL CHARGE:

HAZARDOUS MATERIALS
1 Tank // 31,847 Gallon
UN1075 // LIQUEFIED PETROLEUM GAS
2.1

EMERGENCY CONTACT : 123-123-1234
SHIPPER CONTACT : CCN626079
HAZMAT STCC = 4905752

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the department of transportation.

JOHN DOE

OUTAGE = 17.50" = 3,233 GAL.
HD 5 PROPANE (STENCHED)
5 LBS MERCAPTAN line TEMP. 40° F. line S.G. .505
THIS IS A CORRECTED BILL OF LADING

INIT NUMBER	WEIGHT	SEALS	DUNNAGE	REFERENCE
GATX 95837	134500	04715		0

STATUS: Accepted-824 Date: 02/25/2013 Time: 19:10 CST WAYBILL #: 592648

Satisfactory

Task 3: Obtain Information from a Propane Safety Data Sheet (SDS/MSDS)

Preparation Guide: Wear appropriate Personal Protection Equipment (PPE) for the skills assessment task evaluation:

1. Obtain a propane safety data sheet (SDS/MSDS) from the work place Hazard Communication Program records.
2. Identify the Chemical Abstract Service (CAS) number for propane.
3. Identify the section of the SDS/MSDS that lists the hazards associated with propane, including each of the NFPA 704 hazard values from 0 to 4 for propane's health, flammability, and reactivity hazards.
4. Identify the sections of the SDS/MSDS detailing:
 - Health effects
 - First aid measures for exposure to propane
 - Firefighting measures that apply to propane
 - Accidental release of propane
 - Handling and storage of propane
 - Exposure control PPE
 - Propane's physical and chemical properties
5. Identify any other section titles in the SDS/MSDS, such as Transportation Information or Regulatory Information, and explain to the evaluator how the information is used on the job.

Satisfactory

Task 4: Identify Personal Protective Equipment (PPE) and Safe Work Practices

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) for the skills assessment task evaluation:

1. Provide examples for the following Personal Protective Equipment (PPE)::
 - OSHA Requirements
 - Face and eye protection
 - Head protection
 - Hands and arm protection
 - Hearing protection
 - Foot protection
 - Respirators
2. Explain company policies and procedures for using Personal Protective Equipment (PPE).
3. Explain the company policies and procedures for the following:
 - Safe Lifting
 - Storing Materials and/or Cylinders
 - Recognizing Safety Code Colors
 - Loading and Securing Materials
 - Using Ladders and/or Platforms
 - Identifying Bulk Plant Safety Precautions

Satisfactory

Section Two: Odorants, Service Interruptions, and Characteristics of Carbon Monoxide

Task 1: Perform and Document a "Sniff Test" to Verify the Presence of Propane Odorant

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) for the skills assessment task evaluation:

1. Wear appropriate PPE as required by company safety procedures.
2. Perform and document a sniff test according to company policies and procedures.
3. Explain the proper response/procedure if it is suspected that propane is not properly odorized.

Satisfactory

Not Applicable*

****Not applicable** means that this person's job description does not require him/her to perform an odorant sniff test in the course of his/her duties.*

Task 2: Explain Safety Instructions for a Gas Odor Call

Evaluator Note: Calls used in this skill performance evaluation may be actual or simulated calls from customers or the public if the company does not deliver to residential customers.

Preparation Guide: Follow company policies and procedures for the skills assessment task evaluation:

1. Explain safety instructions for the following, as applicable, for a Gas Odor Call:
 - No flames or sparks
 - Leave the area immediately
 - Shut off the gas
 - Report the leak
 - Do not return to the building
 - Get your system checked
2. **If applicable**, dispatch designated service/delivery personnel and clearly communicate that the service call is a priority service call/reported gas leak.
3. Properly complete any company documentation as required.

Satisfactory

Task 3: Identify Causes for a Gas Service Interruption and Associated Potential Hazards

Preparation Guide: Follow company policies and procedures for the skills assessment task evaluation:

1. Explain how a gas service interruption may occur under the following conditions:
 - Cylinders are changed or undergo maintenance
 - Changes made to a distribution line
2. Provide examples that may cause Out-of-Gas interruptions
3. Explain why Out-of-Gas interruptions must be considered potentially hazardous.
4. **If applicable**, identify company procedures for handling “Out-of-Gas” calls and properly complete any company documentation as required.
5. Identify the following Service Interruption requirements:
 - NFPA 58
 - State and Local Requirements, as applicable
 - NFPA 54
 - Company policy

Satisfactory

Task 4: Identify the Characteristics and Hazards of Incomplete Combustion

Preparation Guide: Follow company policies and procedures for the skills assessment task evaluation:

1. Identify the following characteristics of incomplete combustion, and explain their associated dangers:
 - Aldehydes
 - Excessive water vapor
 - Soot
 - Carbon monoxide
2. Explain why the following characteristics of carbon monoxide make it potentially hazardous:
 - No odor, color, or taste
 - Exposure
 - Range of Flammability
3. Describe the following conditions at customer location that may indicate carbon monoxide is present in the air:
 - Physical complaints from customers
 - Houseplants
 - Water vapor
4. **If applicable**, identify company procedures for handling “odor/possible carbon monoxide” calls and properly complete any company documentation as required.

Satisfactory

Section Three: Identify Emergency Equipment and Procedures and the Proper Use of Fire Extinguishers

Task 1: Identify Emergency Procedures and Emergency Equipment at the Bulk Plant/Facility

Preparation Guide: Wear appropriate Personal Protection Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

1. Obtain a copy of the company emergency response plan for the bulk plant/facility
2. Identify the notification procedures given in the plan as they apply to:
 - Emergency response agencies
 - Company personnel and management
3. Identify the site evacuation procedures and designated off-site gathering places for company personnel.
4. Identify the location of all key plant emergency control features.
5. Identify exit routes from buildings and work areas in the bulk plant/facility, and the location of fire extinguishers and other safety equipment located along the exit routes.
6. Identify the best exit route to follow from the employee's primary workstation, accounting for wind direction.
7. Explain company policies and procedures for ignition source control measures that apply in emergencies.

Satisfactory

Task 2: Locate and Explain the Proper Use of Fire Extinguishers and Identify Fire Prevention Policies

Preparation Guide: Wear appropriate Personal Protection Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

1. Locate fire extinguisher stations throughout the bulk plant/facility and determine if the extinguisher inspections were current.
2. Identify the rating of each fire extinguisher to determine the area and type or class of fire for its use.
3. Identify the extinguisher manufacturer's instructions for use.
4. Explain the proper use of a fire extinguisher.
5. Explain company policies and procedures for fire prevention rules.
6. Explain company policies and procedures for emergency contact notifications.

Satisfactory

Section Four: DOT Cylinders and Propane Piping System Components

Task 1: Verify Required Stampings on DOT Cylinders and Propane Piping System Components

Preparation Guide: Wear appropriate Personal Protective Equipment (PPE) for the skills assessment task evaluation:

1. Verify that the cylinder is stamped with one of the following DOT or ICC specifications:
 - 4B-240
 - 4BA-240
 - 4BW-240
 - 4E-240
 - 4BA-300
 - 39-240
2. Verify that the cylinder is properly marked with the following:
 - Tare weight
 - Manufacturer or trade name
 - Water Capacity
 - Dip Tube length
 - Serial Number
 - Registered tester's symbol
3. Identify the following:
 - Cylinder service valve
 - Relief valve
 - Direction that any gas relieved under pressure would be vented from the cylinder.
4. Verify the requalification date for the cylinder

Continued

Task 1 continued

- 5. Determine if any copper tubing stored in the inventories are: Type L Type K None available
- 6. Determine if any steel piping stored in the inventories are: Schedule 40 Schedule 80 None available
- 7. Identify a section of polyethylene (PE) tubing and associated fittings stored in the inventory, if available
- 8. Identify Corrugated Stainless Steel Tubing (CSST) stored in the inventory, if available
- 9. Identify the following piping systems components, if available:
 - Regulator Common pipe and tubing fittings

Satisfactory

Task 2: Fill a DOT Cylinder by Weight or Volume

Preparation Guide: Wear appropriate Personal Protection Equipment (PPE) and follow company policies and procedures for the skills assessment task evaluation:

- Filled a Cylinder by Weight** **Filled a Cylinder by Volume** **Filled a Cylinder by Weight and by Volume**

- 1. Verify that the dispensing equipment is in good working order and meets NFPA 58 requirements.
- 2. Open the liquid outlet valve on storage tank and valves in the by-pass return line.
- 3. Verify by visual inspection of the outside of the cylinder that the cylinder is fit for propane service and filling.
- 4. Place scales index at the proper setting.
- 5. Make all required connections and fill the cylinder.
- 6. If filling by weight, check the weight of filled cylinder after the filling connector is disconnected.
If filling by Volume, immediately close the hose end valve when white mist appears from the fixed maximum liquid level gauge.
If overfilled, bleed off excess propane in a safe location.
- 7. Check the cylinder service valve and relief valve for leaks.
- 8. Install a POL plug or protective cap if so equipped.
- 9. Apply 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 warning label required by company procedures.
- 10. Explain how to shut down and secure the filling station in an emergency situation.

Satisfactory

Not Applicable*

****Not applicable** means that this person's job description does not include any duty such as filling a DOT cylinder by weight or volume*

CETP Certification Performance Evaluation / Candidate Record (1.0)

Completing your NPGA CETP Certification:

- 1: Successfully pass the exam.
- 2: Complete and return the *CETP Performance Evaluation / Employee Record* to the testing center below within 12 months of passing the exam.
- 3: Complete any necessary prerequisites within 12 months of passing the exam.

Make a copy for your training records and then send to:

Industrial Training Services, Inc.

120 Max Hurt Drive ● Murray, KY 42071 ● PH: 270-753-2150 ext. 2 ● EMAIL: skills@its-training.com

The information requested below will be used to assist in locating your records in the CETP database.
Please make sure to complete all requested information; we thank you in advance for your assistance.

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

Name: _____ **Last four digits of SSN (only):** _____

Employer: _____

Address: _____ **Daytime Phone#:** _____

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.

Candidate Signature _____ **Date** _____

Skills Evaluator Information: (print or type)

Name: _____

Organization/Employer: _____

Affidavit

I affirm that I am the person who has administered this checklist, and that I have conducted this Performance-Based Skills Assessment Evaluation with integrity. I also affirm that the above named Candidate 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** _____

Registered Skills Evaluator Number _____

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Final Checklist for: 1.0 Basic Principles and Practices of Propane

Name: _____ Last four digits of SSN (only): _____

The candidate has been evaluated on the following tasks at the following level:
(N/A option available only as listed in Not Applicable column box(s) below)

Satisfactory	Not Applicable	
Section 1: Identify Propane Codes & Regulations and Verify Product Specifications and Personal Safety		
<input type="checkbox"/>		Identify NFPA Codes and Regulations that Apply to Propane Operations
<input type="checkbox"/>		Verify Product Specifications and Odorization of Propane Shipments
<input type="checkbox"/>		Obtain Information from a Propane Safety Data Sheet (SDS/MSDS)
<input type="checkbox"/>		Identify Personal Protective Equipment (PPE) and Safe Work Practices
Section 2: Odorants, Service Interruptions, and Characteristics of Carbon Monoxide		
<input type="checkbox"/>	<input type="checkbox"/>	Perform and Document a "Sniff Test" to Verify the Presence of Propane Odorant
<input type="checkbox"/>		Explain Safety Instructions for a Gas Odor Call
<input type="checkbox"/>		Identify Causes for a Gas Service Interruption and Associated Potential Hazards
<input type="checkbox"/>		Identify the Characteristics and Hazards of Incomplete Combustion
Section 3: Identify Emergency Equipment and Procedures and the Proper Use of Fire Extinguishers		
<input type="checkbox"/>		Identify Emergency Procedures and Emergency Equipment at the Bulk Plant/Facility
<input type="checkbox"/>		Locate and Explain the Proper Use of Fire Extinguishers and Identify Fire Prevention Policies
Section Four: DOT Cylinders and Propane Piping System Components		
<input type="checkbox"/>		Verify Required Stampings on DOT Cylinders and Propane Piping System Components
<input type="checkbox"/>	<input type="checkbox"/>	Fill a DOT Cylinder by Weight or Volume

Make a copy for your training records and then send to:

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Email: skills@its-training.com

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