ENERGY FOR EVERYONE
propane

# PERC COURSE CATALOG

## JUNE 2026



# Contents


**About PERC . . . . . 4**
**Legal Notice & Disclaimer . . . . . 5**
**Transcripts . . . . . 6**
**Training & Education Policies . . . . . 7**
**Reader's Guide to the Catalog . . . . . .46**
**Market & Industry Training . . . . . .47**
Get Started Here! . . . . . 48
An Introduction to Selling in thePropane Markets . . . 50
Autogas . . . . . 53
Combined Heat and Power . . . . . 56
Connecting withYour Customers . . . . . 58
Defining Your Business Growth Strategy . . . . . 62
Introduction to Strategic Partnerships . . . . . 66
Office Personnel . . . . . 69
Propane and the Environment . . . . . 72
Residential and Commercial Construction . . . . . 77
**Certified Employee Training Program . . . . . .99**
CETP Certification Training . . . . . 100
CETP Refreshers . . . . . 153
CETP Proctor and Skills Evaluator Training . . . . . 156
**Safety & Technical Training . . . . . 159**
Bulk Plant Operations . . . . . 160
Commercial Motor Vehicle (CMV) Operations . . . . . 172
Customer Service Representatives . . . . . 179
Delivering Propane . . . . . 181
Installation . . . . . 187
Loading . . . . . 201
MANAGER TRAINING . . . . . 206
Propane Containers . . . . . 209
Propane Emergencies . . . . . 212
Regulatory . . . . . 231
Safety Basics . . . . . 234
System Layout and Design . . . . . 246
System STARTUP . . . . . 257
**Refreshers . . . . . 269**
Commercial Motor Vehicle Refreshers . . . . . 270
Delivering Propane Refreshers . . . . . 272
Installation Refreshers . . . . . 274
Loading Refreshers . . . . . 279
Regulatory Refresher . . . . . 282
Safety Basics Refresher . . . . . 284
System Layout and Design Refreshers . . . . . 290
**PEP Recognition Training . . . . . 297**
**Learning Paths. . . . . 303**
Market and Industry Training Learning Paths . . . . 304
Safety and Technical Training Learning Paths . . . . 312
State Specific Learning Paths . . . . . 350

# About PERC

## THE PROPANE EDUCATION & RESEARCH COUNCIL



PERC was authorized by the Propane Education and Research Act of 1996 and established through a propane industry-wide referendum.

### Mission statement

The Propane Education & Research Council is a nonprofit that provides leading propane safety and training programs and invests in research and development of new propane-powered technologies. PERC is operated and funded by the propane industry. PERC programs benefit a variety of markets including transportation, agriculture, commercial landscaping, residential, and commercial building.

PERC was authorized by the U.S. Congress with the passage of the Propane Education and Research Act (PERA), signed into law on Oct. 11, 1996. PERC is governed by a 21-member board appointed by the National Propane Gas Association and the GPA Midstream Association. Each association appoints nine Council members and they cooperate in the appointment of three public members.

PERC's operations and activities are funded by an assessment levied on each gallon of propane gas at the point it is odorized or imported into the United States.

- **The Learning Center:** PERC's Learning Management System is the central hub for training within the propane industry. Members of the propane industry can take eLearning courses within The Learning Center, download Instructor Led Training (ILT) Toolkits for classroom training and access other resources.

- **IACET accreditation:** PERC is accredited by the International Accreditors for Continuing Education and Training (IACET) and offers IACET CEUs for its learning events that comply with the ANSI/IACET Continuing Education and Training Standard. IACET is recognized internationally as a standard development organization and accrediting body that promotes quality of continuing education and training.




### Contact information

**Propane Education & Research Council**
200 S. 10th Street, Suite 1075
Richmond, VA 23219
Phone: 202-452-8975
learning@propane.com

# Legal Notice & Disclaimer

The Propane Education and Research Council (PERC) is a non-profit 501(c)(6) trade organization authorized by the Propane Education and Research Act of 1996 (PERA), Public Law 104-284, as amended. PERC was created "to enhance consumer and employee safety and training, to provide for research and development of clean and efficient propane utilization equipment, and to inform and educate the public about safety and other issues associated with the use of propane." PERC is governed by a 21-member Board of Directors appointed by the National Propane Gas Association (NPGA) and GPA Midstream. PERC program beneficiaries include propane retail marketers, producers, transporters, and agricultural cooperatives, as well as representatives of allied service and supply industries (industry members).

The voluntary guidelines as recommended in this training material were developed in cooperation with independent consultants retained by PERC. While PERC administers the process of obtaining the information, it does not independently test or verify the accuracy of the information or methods used to collect the data that supports the conclusions or recommendations reflected in this content.

PERC, NPGA, GPA Midstream, and the industry members disclaim any liability for any personal injury, property damage, business losses, or other damages of any nature whatsoever, whether special, indirect, consequential, or compensatory, directly or indirectly resulting from the publication, use, or reliance on this content, or any information, apparatus, method, process, or similar item disclosed in this content.

This disclaimer of liability shall apply even if such loss or damage results, in whole or in part, from any acts or omissions of or by any negligence on the part of PERC, NPGA, GPA Midstream, or the industry members or any persons who contributed to the development of the information contained in this content. PERC, NPGA, GPA Midstream, and the industry members make no warranty or guaranty as to the accuracy or completeness of any information published in this content.

The information contained in this training material suggests methods you might find useful in implementing applicable codes, standards, and legal requirements. This training material is not, however, intended to be an exhaustive review or treatment of all codes, standards and legal requirements. It is also not intended nor should it be construed to (1) set forth policies or procedures which are the general custom or practice in the propane industry; (2) establish the legal standards of care owed by propane distributors to their customers; (3) prevent the user from using different methods to implement applicable codes, standards, or legal requirements, or (4) provide comprehensive training regarding all aspects of your particular job. There may be additional training required in order for you to safely perform your job. You should consult applicable codes, standards and legal requirements as well as your company policies and procedures to determine what training is necessary for your particular job.

By disseminating or publishing this training material, PERC is not undertaking to render any professional or other service to or on behalf of any person or entity. PERC, NPGA, GPA Midstream, and the industry members are not undertaking to perform any duty owed by any person or entity to any third party. Anyone reading or using this training material should rely on his or her own judgment or, as appropriate, should seek the advice of a competent professional in determining the exercise of reasonable care in any and all circumstances.



# Transcripts



PERC maintains a permanent record of a learner's transcript in The Learning Center. The transcript is a record of all eLearning taken within The Learning Center and classroom training submitted by instructors. The transcript may not be modified or deleted for any reason. Learners can view and download their transcripts from The Learning Center.



# Training & Education Policies

## CETP Certification Program Policy

### Disclaimer

Users of this program should consult the law of their individual jurisdiction for codes, standards, and legal requirements applicable to them. This program 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 program merely suggests methods the user may find useful in implementing applicable codes, standards, and legal requirements. This program 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 user from using different methods to implement applicable codes, standards, or legal requirements. This program 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 methods of implementation. The Propane Education and Research Council, the National Propane Gas Association and the Industry Training Services, Inc. assume no liability for reliance on the contents of this program material. Issuance of this program 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.

### Background of CETP Certification Program

The Certified Employee Training Program (CETP) started in 1987. The Propane Education and Research Council (PERC) currently sponsors and administers a Knowledge Examination and Skills Assessment for Initial Certification of Candidates. There is also an ongoing educational component within the CETP certification program for certification holders to remain current with code changes, new safety programs and new technology and equipment that relate to the propane industry. Each certification holder must review, accept, and agree to the terms of this program to maintain CETP certification. Inquiries or questions concerning this program should be directed to the Propane Education and Research Council's (PERC) Director of Safety & Compliance.

In 2022 PERC began the process of replacing CETP training material with new material focused on job tasks. The PERC Education Program (PEP) is organized around Learning Paths for job roles. In 2024 PERC began formally transitioning to replace the CETP program with PEP Learning Paths. Starting in 2025 CETP programs that have been replaced with equivalent Learning Paths will be archived. Candidates will no longer be able to take the certification exam and skills assessment for archived program. Existing Certification holders will continue to hold their certification. See Addendum #2 – Phase Out of CETP Certifications for a schedule for the CETP Certification Program phase out.

## Purpose of CETP Certification Program

The purpose of the program is to provide a systematic and verifiable methodology for demonstrating that CETP certification holders have been educated in safety and operational methods and are familiar with applicable codes and regulations within the United States propane industry, as well as providing accepted documentation methods for knowledge evaluation, skills assessment, and Refresher Training.

## Basis of the Certification Program

The CETP Certification Knowledge Examination, Skills Assessment and Refresher Training are based on job task analyses, subject matter expert review and instructional design expertise relevant to each Certification Area within the CETP certification program. The CETP certification program is based on current United States codes, regulations, and standards as they apply to propane operations. Some of the codes, regulations and standards referenced in the program are promulgated by the National Fire Protection Association (NFPA), Department of Transportation (DOT) and the Occupational Safety and Health Administration (OSHA). The Propane Education and Research Council (PERC) produces training/educational materials that can be used to prepare Candidates for Knowledge Examinations.

## Definitions of Terms

**Candidate**: Individual seeking or who has attained CETP certification within the certification program.

**Certification Area**: A specific group of related skills within the certification program, based on tasks within a general job classification in the propane industry.

**Initial Certification:** The successful completion of both the Knowledge Examination and Skills Assessment and any required Prerequisites in a given Certification Area.

**Knowledge Examination:** An examination consisting of a series of questions and answers that is designed to demonstrate a Candidate's mastery of concepts and information within a given Certification Area. Knowledge Examinations are available in either a paper based or an on-line format and are administered by a Registered Proctor.

**Learning Path:** A structured framework to organizing learning programs that guides learners through training materials.

**PERC Education Program (PEP):** Training material created by the Propane Education & Research Council that is function-based and modular.

**Program Administrator:** The Propane Education and Research Council or organization designated to provide support and oversee the daily operations of the CETP certification program.

**Refresher Training:** A training program produced by PERC that is designed to keep certification holders current with safety procedures, technology, equipment, and code changes. Refresher Training does not fulfill any requirements for initial CETP certification.

**Registered Proctor:** A person who has successfully completed the CETP Certification Registered Proctor training course and whose primary responsibility is for the security and administration of all CETP certification Knowledge Examinations. A CETP Registered Proctor is required for every CETP certification Knowledge Examination.

**Registered Skills Evaluator:** A Registered Skills Evaluator must be a qualified person who has completed CETP certification or is familiar with the subject matter being evaluated and has successfully completed skills evaluator training per CETP certification program requirements.



**Remaining Current:** An element of the CETP certification program that utilizes Refresher Training to augment a Candidate's Initial Certification to remain current within the program.

**Skills Assessment:** A process where the Candidate demonstrates proficiency in various skills within a Certification Area to a Registered Skills Evaluator.

**Stakeholder:** A person or organization, such as an employer, designated within the Certification Program that may access a Candidate's transcript and training records.

**Virtual Knowledge Examinations:** Proctored CETP Certification Knowledge Examinations performed utilizing technology in lieu of an on-site Proctor that maintains compliance with CETP certification policy.

## Development of Certification Program Components

### Knowledge Examination Development

- In order to strengthen the validity of the Knowledge Examinations, this program utilizes accepted procedures for developing reliable and content valid Knowledge Examinations.
- Knowledge Examinations are based on a role delineation or job task analysis study along with input from industry subject matter experts and instructional designers, which determines the knowledge needed by a competent professional in a given Certification Area
- Knowledge Examination items are monitored to assure their validity. In addition, aggregate Knowledge Examination group scores and field feedback are monitored to assure there are no irregularities in the testing environment.

### Skills Assessment Development

- In order to ensure that Candidates have functional capabilities to perform tasks in a safe and efficient manner, the Skills Assessments have been developed.



- Skills Assessments are matched to the Knowledge Examination and are based on a role delineation or job task analysis study, along with input from industry subject matter experts and instructional designers, which determines the skills needed by a competent professional in the Certification Area being evaluated.
- Skill Assessment items are monitored to assure their validity. In addition, subject matter experts and field feedback are utilized to assure that Skills Assessments reflect accepted operating practices and that there are no irregularities in the Skills Assessments.

### Refresher Training Development

- To provide a method for certification holders to remain current and knowledgeable with regard to safety procedures, technology, equipment and code changes, a Refresher Training component is part of the CETP certification program.
- Refresher Training is produced by PERC using the job task analysis study, industry subject matter experts and instructional design expertise.
- Refresher Training is derived from the CETP training program which is produced to the most current codes and standards at the time of release and is updated and reviewed by industry subject matter experts.




## Overview of Certification Process:

### Certification Requirements

- The program administrator has established CETP certification requirements. All Candidates must meet the following requirements for each Certification Area:
  - Pass the Certification Area Knowledge Examination by scoring at the designated mastery level score or higher, and
  - Documentation of completion of the corresponding performance-based Skills Assessment, and
- Candidates must complete the corresponding Skills assessments within 12 months of passing the Knowledge Examination in order to be eligible for certification.
- Candidates may re-take one or more certification Knowledge Examinations without any required waiting period between attempts. A regular Knowledge Examination fee is charged for each attempt, and a Registered Proctor is required for each attempt.
- Upon successful completion of the certification Knowledge Examination and Skills Assessment, each Candidate is issued an electronic CETP Certification certificate, and an electronic record (transcript) is kept on file. Both the certificate and the transcript can be downloaded from the Learning Center, training.propane.com.

CETP Certification Areas – See Addendum #1 - Certification Areas for current listing of CETP Certification Area descriptions.

## Knowledge Examination Policies

### Knowledge Examination Security

The integrity of Knowledge Examination questions and Knowledge Examination answers are paramount to this certification program. It is the responsibility of all Stakeholders (Registered Proctors, Candidates, administration and/or Program Administrators) involved in the certification program to keep Knowledge Examination information confidential and to see that Knowledge Examination questions and answers are never made available to anyone other than persons authorized by the program administrator to have access to them.

- Any Stakeholder that is aware of or has reason to believe there has been a breach of Knowledge Examination material security should immediately notify the PERC Director of Safety and Compliance.
- Anyone found to have copied, distributed, shared or otherwise compromised Knowledge Examination materials in any way may, at the discretion of the program administrator, have some or all privileges under the certification program suspended or revoked and may have legal action brought against them.

## Knowledge Examination Administration – Candidates

- Candidates shall present a government issued photo ID, for identification purposes.
- The Knowledge Examination must be administered as a closed-book examination. The only reference materials available to the Candidate while taking the test are NFPA pamphlets 54 and/or 58 to be used as references for technical data that may be required to answer particular questions.
- Candidates shall follow instructions provided by the CETP Certification Program Administrator at all times.
- Any paper answer sheet returned without the Knowledge Examination booklet will not be scored and the Candidate may not be allowed to re-test.
- Candidates shall be expelled from the testing session for attempting to take the Knowledge Examination for someone else, giving or receiving assistance of any kind, using books (except NFPA 54 and 58), notes, papers, or recording devices of any kind, creating a disturbance, attempting to remove Knowledge Examination materials or scratch paper from testing room, or failing to follow the Knowledge Examination administrator's (Registered Proctor's) directions.



## Knowledge Examination Ordering and Purchasing Procedures

- Knowledge Examinations can only be ordered by Registered Proctors or by a state propane gas association or company ordering Knowledge Examinations on behalf of a Registered Proctor. Knowledge Examinations must remain secured at all times and can only be released to the Registered Proctor. The Registered Proctor is responsible for the security of the Knowledge Examinations and the return of all Knowledge Examinations and Knowledge Examination booklets in accordance with CETP return policies.
- CETP certification on-line Knowledge Examinations are obtained purchased through PERC's Learning Center website: training.propane.com
- Paper Knowledge Examinations
  - CETP Certification written Knowledge Examinations are ordered using the appropriate Knowledge Examination order form from the CETP Certification Program Administrator.
  - At the time the Knowledge Examination order is placed, the CETP Certification Program Administrator will assign an identifying group number, which will be indicated on the Registered Proctor's instructions. This number is used for tracking purposes; is recorded on each Candidate's answer sheet; and must not be changed.
- Registered Proctors are permitted to order more than one Knowledge Examination group (defined as all Knowledge Examinations ordered on one order form).

## Knowledge Examination Fees

- Knowledge Examination fees are reviewed on an annual basis and are approved by the program administrator. Fee information is available on the CETP Certification website: training.propane.com Registered Proctors, as well as state propane gas associations and individual companies acting on behalf of Registered Proctors can order CETP Certification Knowledge Examinations.

- Except as provided below, Knowledge Examination fees must be remitted at the time of ordering the Knowledge Examination, utilizing CETP Certification Program Administrator accepted practices.

## Knowledge Examination Irregularities

- The Registered Proctor is responsible for ensuring the Candidate places all Knowledge Examination materials in their Knowledge Examination packets and returning all such materials to the CETP Certification Program Administrator. Only complete Knowledge Examination packets, comprised of the Knowledge Examination booklet and the Scantron© answer sheet, will be processed for certification.
- Completed Knowledge Examination packets and Knowledge Examination results will be monitored by the CETP Certification Program Administrator. Any irregularity must be immediately reported to the CETP Certification Program Administrator for further investigation.
- Reports of any irregularity from Candidates, employers or other witnesses should be addressed to the CETP Certification Program Administrator.
- The CETP Certification Program Administrator will investigate reports of irregularity and assign penalties at their discretion.
- Registered Proctors may not participate as students in the same class where they are proctoring or administering a Knowledge Examination.
- Under no circumstance may a Registered Proctor proctor themselves if taking a CETP Knowledge Examination.
- Examples of Knowledge Examination irregularities include, but are not limited to the following:
  - attempting to take the Knowledge Examination for someone else.
  - giving or receiving assistance of any kind.
  - using books (except NFPA 54 and 58), notes, papers, or recording devices of any kind.
  - creating a disturbance.
  - attempting to remove Knowledge Examination materials.
  - failing to follow the Knowledge Examination administrator's (Registered Proctor's) directions.
  - Registered Proctor misconduct, such as providing information or Knowledge Examination answers, suspending and restarting a Knowledge Examination, or unsealing Knowledge Examination packets prior to distributing the materials to all Candidates.



### Knowledge Examination Appeals and Hand-Scoring

- Any Candidate who does not meet the mastery level score may submit a written appeal to the PERC Director of Safety and Compliance.
- Appeals must be received within 90 days of the Knowledge Examination date.
- Appeals may be based on subject matter, clarity of questions, or irregularities with the Scantron© answer sheet.
- A Candidate may request to have their Scantron© answer sheet hand-scored within 90 days of the Knowledge Examination date.
- Decisions made on appeal by the PERC Director of Safety and Compliance are final and are not subject to further review.




## Skills Assessment Policies

### Skills Assessment Overview

Skills Assessments are typically performed in the field or in a simulated environment. Skills Assessments must be completed with a Registered Skills Evaluator present to observe and evaluate each of the tasks listed on the Skills Assessment form.

### Skills Assessment Forms

The Skills Assessment must be completed using the most current edition of the Skills Assessment form. Current Skills Assessment forms can be obtained on the website: [training.propane.com](training.propane.com) . All tasks specified on the Skills Assessment form must be completed unless otherwise indicated on the form.

### Skills Assessment Completion

The Candidate has 12 months from the date of successfully passing the CETP Certification Knowledge Examination to successfully complete the tasks within the Skills Assessment. The completed affidavit page and final checklist must be fully completed, including the Registered Skills Evaluator number, and signed by both the Candidate and Registered Skills Evaluator. Completed Skills Assessment affidavits must be received by the CETP Certification Program Administrator within 12 months after the Candidate passes the Knowledge Examination. Skills Assessments that are not completely filled out will be returned to the Skills Evaluator and will not be processed until all of the required information is received.

### Candidates Performing Tasks within the Skills Assessments

Candidates may practice the operations as many times as needed to become confident and proficient with the documents and/or equipment necessary to complete each task within the Skills Assessment. The Registered Skills Evaluator will check and observe performance, ensuring that the Candidate is proficient in each skill being evaluated.

### Skills Assessment Safety

The Candidate must adhere to all safety precautions. If a safety precaution is violated, the demonstration shall be stopped, and the Registered Skills Evaluator must instruct the Candidate on the applicable safety procedures before allowing the Candidate to continue.

# Remaining Current Policy

## Overview

The Remaining Current program is designed to assist CETP certification holders in remaining current with new safety procedures, technology, equipment, and code changes. Many of the codes and standards that are referenced in the CETP training courses (NFPA, OSHA & DOT) require recurrent or Refresher Training. This program assists in complying with some of those requirements. It is the sole responsibility of the user of this program to determine if this program fulfills any local, state, or federal requirements for recurrent or Refresher Training pertaining to their needs or operations. The Remaining Current program will only be available for active CETP programs. Refresher Training programs for archived CETP programs will not be available.

## Program Requirements

The process for Remaining Current for each applicable Certification Area within the CETP certification program is outlined below:

- The Candidate must have achieved initial CETP certification for the applicable Certification Area as prescribed by the policies and procedures of the CETP certification program in order for the Candidate's transcript to reflect completion of the refresher training for a specific Certification Area.
- The PERC produced "Refresher Training" for each Certification Area has been developed within accepted educational standards that include job task analysis, instructional design input, subject matter expert review, and adult educational expertise. These programs are the only accepted Refresher Training program for each Certification Area.
- The Remaining Current program is based on the Candidate completing the PERC produced Refresher Training program for each Certification Area for which the Candidate has achieved Initial Certification within the time interval outlined in (C) below.
- Training programs can be completed in a classroom setting or on-line.
- There is no requirement for a Knowledge Examination or Skill Assessment to be completed.
- All CETP Remaining Current programs must be administered in accordance with Certification Program policies and procedures, as well as state and local codes.
- CETP Certification program Registered Proctors or Registered Skills Evaluators are responsible for verifying the identity of Candidates attending classroom style Remaining Current programs by using a government-issued photo identification.
- Registered Proctors or Registered Skills Evaluators are responsible for providing a safe and comfortable training environment.
- It is the responsibility of the Candidate to confirm that they have achieved the initial CETP Certification before taking any Refresher Training.
- A Registered Proctor or Registered Skills Evaluator is required to fill out an electronic affidavit verifying that the Candidate attended the entire Refresher Training class.
- Refresher Training programs that are completed on-line will update the Candidate's training records within the system, utilizing the Candidate's unique log-in credentials.
- Remaining Current in no way affects the status of a Candidate's Initial Certification.



### Affidavits

All affidavits for classroom training must be submitted by a Registered Proctor or Registered Skills Evaluator via electronic format per the requirements of the program. All affidavits must be submitted within 14 calendar days of the completion of the applicable training program.

### Time Interval

The program requirements (outlined in "Program Requirements" above) for Remaining Current with the CETP certification program shall be completed at a minimum of three-year intervals.

- If the 3 -year interval is exceeded, a Candidate will be considered current once the applicable Refresher Training is completed per the Remaining Current policy.
- In order to allow a phase-in period for existing certification holders to comply with this section, all Candidates with Initial Certification(s) prior to the implementation of the Remaining Current program will have 3 years from the implementation date of the program to complete the Refresher Training in each Certification Area that they currently hold.

### Notification to Candidates

The Program Administrator will contact the certification holder and/or Stakeholders via e-mail prior to the 3-year time interval requirement, advising the propane professional and/or their Stakeholder that the applicable CETP Certification will not be current if they have not taken the corresponding Refresher Training within said time periods specified in this policy.

### Implementation Date

The implementation date of the Remaining Current program is June 2017.

### Program Fees

Any program fees are reviewed on an annual basis and are approved by the Propane Education and Research Council. Fee information is available on the program provider's web site: [training.propane.com](training.propane.com) .



## Candidate Policies

### Non-Discrimination

- PERC shall not discriminate against any Candidate based on age, gender, race, religion, national origin, or sexual orientation.
- Knowledge Examinations and courses related to CETP Certification are subject to the Americans with Disabilities Act (ADA).
- A disabled individual must have an equal opportunity to obtain the same result as any other applicant, i.e., an equal opportunity to demonstrate the skills, knowledge, and achievement that the certification Knowledge Examination is intended to measure.

- Candidates may request reasonable accommodation (such as additional time or an orally administered Knowledge Examination) due to a lack of reading skills or other difficulty. Upon prior and reasonable notice to the Program Administrator, arrangements and authorization for an orally administered Knowledge Examination will be made.
- It is the responsibility of the Candidate to ensure that the contact information in the CETP Certification record keeping system is current and accurate. The Candidate must ensure that their log-on information is kept confidential and is not shared with anyone. The CETP Certification Program will utilize e-mail as the primary contact method for Candidates and shall not be responsible if notifications are not received by a Candidate due to inaccurate or outdated contact information.
- Candidates that attempt to, or are found to have copied Knowledge Examination questions, cheat on Knowledge Examinations, circumvent Skills Assessment policy, or fail to adhere to any of the CETP Certification policies referenced herein may be expelled from testing, have Knowledge Examination results nullified, or have their CETP certification(s) suspended or revoked.



### Record/Reprint Requests

Candidates may obtain copies of their transcript or a reprint of their certificate(s) by accessing the CETP record keeping system training.propane.com using their username and unique password.

## Registered Proctor Policies

### Non-Discrimination

PERC shall not discriminate against any applicant for the Registered Proctor Training Program, or any Registered Proctor based on age, gender, race, religion, national origin or sexual orientation.

### Registered Proctor Training and Registration

- All Registered Proctors must complete training and registration on-line through the CETP Certification website at (training.propane.com). The training remains valid for three (3) years.
- Registered Proctors are informed of CETP policy changes through their CETP Certification Database contact information and shall keep their contact information up to date at all times.

### Registered Proctor Knowledge Examination Administration

- The Registered Proctor is responsible for preventing unauthorized use or reproduction of Knowledge Examination materials, including the CETP Certification Knowledge Examinations and NFPA code books.
- All CETP Certification Knowledge Examinations must be administered as closed book examinations with the exception of NFPA 54 and/or 58 as appropriate.
- All CETP Certification Knowledge Examinations must be administered in accordance with CETP Certification Program policies and procedures, as well as state and local codes.
- State and/or local codes may require an independent Registered Proctor that is not an employee of the same company.

- Registered Proctors are responsible for verifying the identity of Candidates prior to testing and ensuring that the name submitted on the Knowledge Examination answer sheet or on-line Knowledge Examination record matches the name listed on the Candidate's government-issued photo identification.
- Registered Proctors are responsible for providing a safe and comfortable testing environment.
- Registered Proctors must supervise Candidates continuously during testing.
- Registered Proctors must not show favoritism, discrimination or inappropriate behavior toward any Candidate participating in the testing process.
- Registered Proctors may identify Candidates who require a reasonable accommodation in the administration of a Knowledge Examination (such as an orally administered certification Knowledge Examination) made to compensate for the qualified disability without altering the content or purpose of the Knowledge Examination. Upon prior and reasonable notice to the CETP Certification Program Administrator, arrangements and authorization for an orally administered certification Knowledge Examination will be made. It is recommended that instructors or course sponsors provide an opportunity for Candidates to indicate whether such accommodations are necessary.
- Registered Proctors shall expel Candidates from the testing session for attempting to take the Knowledge Examination for someone else, giving or receiving assistance of any kind, using books (except NFPA 54 and 58), notes, papers, or recording devices of any kind, creating a disturbance, attempting to remove Knowledge Examination materials from the testing room, or failing to follow Registered Proctor's directions.
- The Registered Proctor should explain to the Candidates that the Knowledge Examination results will only be communicated to the Candidate, the Candidate's employer, or the Registered Proctor.




- Registered Proctors who do not adhere to the prescribed Knowledge Examination administration policy outlined above may, at the discretion of the Program Administrator, receive a written reprimand or have their Registered Proctor privileges suspend or revoked. CETP Certification Program Administrator(s) may temporarily suspend proctor privileges for non-return of Knowledge Examinations (i.e.: until Knowledge Examinations are returned).

## Registered Proctor Knowledge Examination Security

Registered Proctors must protect their Registered Proctor number and Registered Proctor password to prevent unauthorized access to CETP Certification Knowledge Examinations.

- Registered Proctor privileges may be suspended/revoked immediately if unauthorized access to a Registered Proctor number and password are shared.
- Registered Proctors are responsible for the security of CETP Certification at all times. Knowledge Examinations will be shipped to the Registered Proctor administering the Knowledge Examination at the address provided on the order form. Registered Proctors shall immediately report any missing Knowledge Examinations or abnormalities discovered during shipment to the Program Administrator. Registered Proctor privileges may be suspended immediately, and may be revoked, if unauthorized access is granted to CETP Certification Knowledge Examinations.

### Registered Proctor Suspension / Missing Knowledge Examinations

If a Registered Proctor determines that there are missing Knowledge Examination(s), the Registered Proctor must submit an affidavit that they no longer possess the Knowledge Examination(s) and indicate how the Knowledge Examination(s) left their possession, including as appropriate, shipping documents or other documentation that would support an investigation by the Program Administrator into whether the Knowledge Examination(s) were compromised.

### Virtual Knowledge Examinations

Knowledge Examinations performed by a Registered Proctor using virtual technology may be accepted if the Registered Proctor implements procedures that address Knowledge Examination integrity, ensures Candidate identity, addresses observation of the Knowledge Examination environment and complies with all the CETP Certification polices contained herein.



## Registered Skills Evaluator Policy

### Non-Discrimination

PERC shall not discriminate against any Registered Skills Evaluator based on age, gender, race, religion, national origin or sexual orientation.

### Purpose

The Skills Assessments serve an important function in the certification process as they demonstrate functional capabilities of the Candidate to perform job functions based on learning objectives. They also allow Candidates to demonstrate required skills performance criteria.

### Registration of Registered Skills Evaluators

All Registered Skills Evaluators must complete online training and registration through the CETP Certification website at (training.propane.com). The training remains valid for a three (3) year period.

- Registered Skills Evaluators are informed of CETP policy changes through their CETP Certification Database contact information and shall keep their contact information up to date at all times.
- Registered Skills Evaluators must protect their Registered Skills Evaluator number to prevent unauthorized use of Registered Skills Evaluator credentials.
- Registered Skill Evaluator privileges may be suspended immediately, or may be revoked, if unauthorized access to their Registered Skills Evaluator number is shared.
- Under no circumstance may a Registered Skills Evaluator complete or sign a Skills Assessment or affidavit for themselves.

### Registered Skills Evaluator Responsibilities

Registered Skills Evaluators must be familiar with the CETP instructional materials they are evaluating. They also must be familiar with the proper procedures for performing the tasks listed in the Skills Assessment and meet the following qualifications:



- Be familiar with the propane company's policies and procedures.
- Direct the Candidate to describe each task as it is performed.
- Registered Skills Evaluators should ask Candidates questions involving difficult operating conditions or abnormal scenarios and use methods to ensure the Candidate can demonstrate required skills and applied knowledge criteria on the job.
- Ensure that the Candidate properly applies company-required safety measures while performing the skills.
- Registered Skills Evaluators should know which of the skills designated as optional are not required under the Candidate's job description and duties.
- Complete the documentation of Skills Assessment, including the affidavit form and final checklist. After the documentation is complete, the Skills Evaluator should supply the designated pages to the Candidate and forward the original copy of the completed affidavit to the CETP Certification Program Administrator via the accepted program process.
- The Skills Assessment process must be completed within 12 months of the Candidate's Knowledge Examination. The Skills Assessment must be received by the CETP Certification Program Administrator before the expiration of the 12-month qualifying period.
- If a complaint is made or irregularity found in regard to a Registered Skills Evaluator not following established CETP policy and procedures, The Program Administrator may, at their sole discretion, issue a written reprimand or suspend or terminate the Registered Skills Evaluator's privileges.

### Instructions

A separate page of basic instructions for the Registered Skills Evaluator is sent with each Skills Assessment packet. Instructions for Performance-Based Skills Assessments are not included in this Policy Manual.

- The entire assessment packet should be provided to Candidates for retention by the Candidate or their employer.
- Follow all instructions contained in the assessment packet.

## Stakeholder Policies

- All Stakeholders will comply with the CETP Certification policy regarding Candidate records.
- Potential Stakeholders must make a request to the CETP Certification Program Administrator in order to obtain Stakeholder status within the CETP Certification program.
- Stakeholder access to Candidate training records is restricted to employees or individuals who have provided the Stakeholder with specific identification information identifying them within the Certification program.
- Stakeholders may only use Candidate information internally as part of their training or compliance programs.
- Stakeholders are prohibited from publicly sharing any Candidate information unless expressly authorized to do so by a Candidate or required to do so as a matter of law.
- Stakeholders that do not adhere to the CETP Certification policy regarding Stakeholders and the release of Candidate information policy outlined above may, at the discretion of the CETP Program Administrator, receive a written reprimand or have their Stakeholder privileges suspended or revoked.

## Record Retention

- Paper Based Knowledge Examinations: A hard copy of the Scantron© answer sheet must be maintained for 90 days after the Knowledge Examination is completed to allow for Candidate appeals or requests for hand scoring. After 90 days, the Scantron answer sheet shall be destroyed.
- Electronic Knowledge Examination: The electronic record of the Knowledge Examination (including answers as submitted by the Candidate) shall be purged once statistical information has been gathered. The policy is retroactive for all records still existing prior to adoption of this policy.
- Skills Assessment Affidavit: The skills assessment affidavit shall be maintained for a period of 3 years from the certification date. The skills assessment affidavit may be stored electronically or by hard copy.

## CETP Certification Program Oversight

### General

Oversight of the CETP Certification Program is the responsibility of the Propane Education and Research Council. These responsibilities include, but are not limited to the following:

- Establishing the scope of each Certification Area.
- Determining requirements for Certification Area.
- Reviewing Knowledge Examination content for clarity, accuracy and adherence to codes and standards.
- Establishing the mastery level score for each Certification Area; and
- Resolving appeals, disputes, or Registered Proctor and Registered Skills Evaluator irregularities.

## Privacy Policy/Release of Records and Knowledge Examination Information

### General

The CETP Certification Program Administrator may, at its sole discretion, release certification status upon request, unless the certification holder notifies CETP Certification Program Administrator that they do not wish a release of information to any person or organization, except as required by law.

### Knowledge Examination Improvement

- In order for Certification Program to maintain and improve the quality of the Knowledge Examination questions and answers, the Program Administrator may gather Knowledge Examination data based on Knowledge Examination groups. Access to this data will be at the discretion of the Certification Program Administrator.
- In order to provide relevant information for the improvement of Candidate safety and training, The Program Administrator, at its sole discretion, may release information on select Knowledge Examination areas or questions in a given Knowledge Examination group to relevant Stakeholders.

### Knowledge Examination Reports Available to Stakeholders

- Records can be shared within the CETP Program Administrator's system to registered Stakeholders unless the Candidate expressly requests that the records not be shared.
- Training records are set up to be shared with employers who are registered Stakeholders.



- Upon request, Program Administrators will release Knowledge Examination group results to a Stakeholder, instructor or Registered Proctor as applicable. The group results will indicate only the number of Candidates who pass and the number who fail the Knowledge Examination.
- Program Administrators will not release individual numerical Knowledge Examination scores.

*Date: March 2024*

## Addendum #1 - Certification Areas

| | |
|---|---|
| **1.0** | Basic Principles and Practices |
| **2.2** | Bobtail Delivery Operations |
| **2.2-2.4** | Bobtail/Cylinder Delivery COMBO |
| **2.4** | Cylinder Delivery Operations |
| **3.1-3.5** | Basic Plant Operations |
| **3.6** | Performing Railcar Product Transfers and Maintaining DOT Intermodal (IM) Tanks |
| **4.1** | Designing and Installing Exterior Vapor Distribution Systems |
| **4.2** | Placing Vapor Distribution Systems and Appliances into Operation |
| **4.3** | Installing Appliances and Interior Vapor Distribution Systems |
| **4.4** | Basic Electricity for Propane Appliance Service |
| **4.5** | Basic Propane Appliance Service and Troubleshooting |
| **4.6** | Advanced Propane Appliance Service and Troubleshooting |
| **5.1** | Designing and Installing Dispenser Transfer Systems |
| **8.0** | Large Industrial/Commercial Gas-Fired Equipment Connection and Service |
| **9.0** | HVAC & Plumber Technical Training |



# Addendum #2 – Phase Out of CETP Certifications

## Overview

In 2019 the Council recognized the need to restructure propane industry training. The goal was to move away from a one-size-fits all approach to a more customizable focused, updated and shorter training program for industry employees. The PERC safety team, with the direction from the Council and working group, started converting CETP training programs into smaller interactive training modules. Starting in 2025, the PERC Education Program (PEP) will begin to replace CETP.




The new material is packaged into learning paths, a collection of programs tied together for learners to progress through. These learning paths are based on job function, i.e. Bobtail Driver or Cylinder Delivery Driver. Once a learning path is released for the equivalent CETP program that CETP program will start transitioning into being phased out, at which point the exam will no longer be available. The CETP program will expire 12 months from the release date of a learning path for that equivalent CETP program.

- **Exam Expiration Date:** 12 months after the release of the equivalent learning path the online and paper exam will no longer be available.
- **Skills Assessment**: A candidate who has successfully passed the exam will continue to have 12 months from the date of the exam to pass the Skills Assessment, even if the exam is no longer available.
- **eLearning Availability**: The eLearning will be available until the archival date of the CETP program.
- **Printed CETP Books**: Printed copies of the CETP book will be available until the archival date of the CETP program. After the archival date books will be available until they are sold out.
- **Electronic CETP Books**: The electronic version of the CETP book will be available in the Learning Center until the archival date of the program.
- **Instructor Led Classroom Material Availability (PowerPoints, instructor guides, etc.):** Instructor led classroom material will be available for download until the archival date of the CETP program.

**NOTE:** At the beginning of redevelopment of a CETP program the corresponding CETP exam and training material (books, PowerPoints, Instructor guides, etc.) will **not** be updated for regulation and code updates, content or errors.

# Schedule for CETP Phase Out

This schedule is subject to change as development continues.

| Program | | Development Start Date | Learning Path Release Date | Archival Date |
|---|---|---|---|---|
| **1.0** | Basic Principles and Practices | 2019 | Not a separate learning path, included in paths as appropriate | 12/31/2024 |
| **2.2** | Bobtail Delivery Operations | 2021 | 2022 | 12/31/2024 |
| **2.2-2.4** | Bobtail/Cylinder Delivery COMBO | 2021 | 2022 | 12/31/2024 |
| **2.4** | Cylinder Delivery Operations | 2021 | 2022 | 12/31/2024 |
| **3.1-3.5** | Basic Plant Operations | March 2024 | Estimated 2nd quarter 2026 | |
| **3.6** | Performing Railcar Product Transfers and Maintaining DOT Intermodal (IM) Tanks | March 2024 | Estimated 2nd quarter 2026 | |
| **4.1** | Designing and Installing Exterior Vapor Distribution Systems | March 2023 | August 2024 | 11/31/2025 (90-day extension) |
| **4.2** | Placing Vapor Distribution Systems and Appliances into Operation | March 2023 | August 2024 | 11/31/2025 (90-day extension) |
| **4.3** | Installing Appliances and Interior Vapor Distribution Systems | June 2026 | | |
| **4.4** | Basic Electricity for Propane Appliance Service | June 2026 | | |
| **4.5** | Basic Propane Appliance Service and Troubleshooting | June 2026 | | |
| **4.6** | Advanced Propane Appliance Service and Troubleshooting | June 2026 | | |
| **5.1** | Designing and Installing Dispenser Transfer Systems | June 2026 | Estimated 3rd quarter 2026 | |
| **8.0** | Large Industrial/Commercial Gas-Fired Equipment Connection and Service | | | |
| **9.0** | HVAC & Plumber Technical Training | | | |

DATE: NOVEMBER 2025

# Safety and Workplace Violence

Nothing is more important than the lives and wellbeing of propane industry members, their customers, and the public. Thus, everyone affiliated with PERC is responsible for maintaining a safe work and training environment. Everyone is encouraged to immediately report unsafe conditions or practices to the Director Learning Center Operations and Educational Projects.

Employees, trainers, PERC contractors and students are expected to refrain from fighting, "horseplay," or other conduct that may be dangerous to others.

All threats of (or actual) violence, both direct and indirect, should be reported as soon as possible to the Director Learning Center Operations and Educational Projects. PERC will promptly and thoroughly investigate all reports of threats of (or actual) violence and of suspicious individuals or activities. If we determine that anyone was engaged in any threats of, or actual, violence, they will be disciplined up to and including expulsion from a class, or termination of employment or their relationship as a PERC contractor.

DATE: NOVEMBER 2022




# Policy Prohibiting Harassment and Discrimination

## General Harassment and Discrimination

PERC and its contractors and trainers strive to provide an environment where all individuals are treated with respect and dignity and where everyone can work and learn together comfortably and productively, free from harassment and discrimination. PERC expects that all relationships among persons in every venue will be business-like and free of bias, prejudice, and harassment.

PERC has a zero-tolerance policy for any form of harassment, and prohibits the harassment of or discrimination based on an individual's race, color, religion, age, sex, gender identity or expression, marital status, pregnancy, national origin, military/veteran status, disability, personal appearance, sexual orientation, political affiliation, family responsibilities, genetic information, matriculation, HIV/AIDS, enrollment in vocational, professional, or college education, employment status, place of residence or business, victim of intrafamily offense, use of tobacco, any other reason other than individual merit, or any other characteristic protected by applicable law. To provide a comfortable environment for all, the standards set by PERC may be higher than those that are legally required. These standards apply not just to what occurs at PERC facilities, but anywhere PERC-related functions or activities are taking place.

Prohibited conduct may include, but is not limited to, epithets, slurs, derogatory comments or jokes, intimidation, negative stereotyping, threats, assault or any physical interference with an individual's normal activities or movement. Such prohibited conduct may also include written or graphic material placed on walls, bulletin boards or elsewhere, included in email, or circulated in a manner that denigrates, shows hostility or aversion towards an individual or group because of the characteristics identified above. While such behavior, depending on the circumstances, may not be severe or pervasive enough to create a hostile environment, it can nonetheless make others present uncomfortable.

Accordingly, such behavior is inappropriate and may result in disciplinary action, up to and including expulsion from a class, or termination of employment or their relationship as a PERC contractor, regardless of whether it is unlawful.

## Sexual Harassment and Unwelcome Sexual Conduct

PERC is committed to providing a workplace and learning environment free of sexual harassment and other unwelcome sexual conduct. Sexual harassment is defined as unwelcome sexual conduct that creates an offensive or hostile environment or unwelcome sexual conduct that is made a condition of work or learning.
PERC recognizes that sexual harassment can be a manifestation of power relationships and often occurs within unequal relationships (i.e. between a supervisor and his/her employee, or an instructor and his/her student), but anyone can be a victim of sexual harassment, regardless of their sex and of the sex of the harasser. PERC recognizes that sexual harassment may also occur between people of the same sex. What matters is that sexual conduct is unwanted and unwelcome by the person against whom the conduct is directed. Conduct prohibited by these policies is unacceptable. All sexual harassment is prohibited whether it takes place within PERC premises or in any PERC-related setting outside of the workplace, including at social events, business meeting and trips, training sessions or conferences sponsored by PERC. These policies apply to everyone, including employees of industry partners, consultants/contractors, vendors, visitors, or students, etc. who sexually harasses another will be reprimanded in accordance with this internal policy.

Examples of conduct that PERC prohibits, when the conduct is based on gender and is unwelcome, includes but is not limited to:

- Verbal harassment (e.g., sexual requests, comments, jokes, slurs);
- Physical harassment (e.g., physical contact or blocking movement); and
- Visual harassment (e.g., posters, gestures, cartoons, e-mails or drawings of a sexual nature).




## Retaliation Prohibited

PERC will not retaliate, nor will it tolerate retaliation against persons who complain in good faith about harassment or discrimination. If you experience, observe, or become aware of any conduct you believe may be retaliatory, you must immediately follow the Reporting Procedure described below.

## Reporting Procedure

PERC encourages the prompt reporting of complaints or concerns so that rapid and constructive action can be taken. Therefore, while no fixed reporting period has been established, early reporting and intervention have proven to be the most effective method of resolving actual or perceived incidents of harassment. Any reported allegations of harassment, discrimination or retaliation will be investigated promptly. Anyone who is subject to sexual or other forms of harassment should, if possible, inform the alleged harasser that the conduct is unwanted and unwelcome. PERC recognizes that harassment may occur in unequal relationships and that it may not be possible for the victim to inform the alleged harasser.

To ensure we have knowledge of any such misconduct and can respond appropriately, you must report any possible violation of this policy.

- If you experience, observe, or become aware of conduct that violates this policy, you must immediately report the possible violation to the Director Learning Center Operations and Educational Projects.
- If you do not feel comfortable reporting the possible violation to the Director Learning Center Operations and Educational Projects, you may report the possible violation to the Senior Vice President of Safety and Training.

PERC will promptly, fairly, and thoroughly investigate all reports of unlawful harassment or discrimination. We will keep the investigation confidential to the extent possible and will disclose information relating to the investigation only on a need-to-know basis; however, we cannot guarantee confidentiality under all circumstances. If the investigation confirms a policy violation, we will take appropriate action to correct the violation and prevent its recurrence. We may put reasonable interim measures in place during an investigation, if we determine that such measures would be in the affected person's and/or PERC's best interest. These measures may include, but are not limited to, a leave of absence, suspension, or transfer of the person(s) who reportedly violated this policy.

## Professional Conduct

Everyone is expected to conduct themselves in a professional manner at all times and to avoid even the appearance of impropriety in their work and business relationships. Below are examples of conduct that PERC considers inappropriate and may justify termination for cause:

- Theft of property from colleagues, trainers, fellow students, or PERC.
- Falsifying tests, class, or other business records.
- Misrepresenting your position at PERC or as a PERC contractor.
- Soliciting gratuities for the performance of official duties.
- Violation of the drugs or alcohol laws.
- Fighting or using obscene, abusive, or threatening language or gestures.
- Disregarding safety or security regulations.
- Making statements that are false or misleading or jeopardize safety.
- Insubordination.
- Other behavior that adversely affects the reputation of PERC or its ability to perform its mission.

DATE: NOVEMBER 2022





## Conflict of Interest

Employees, contractors, and trainers shall avoid situations where personal interests could conflict, or reasonably appear to conflict, with the interests of PERC. PERC shall award business solely on merit, getting the best value for the industry, and on a competitive basis whenever practical.

PERC shall maintain the highest standards of integrity and objectivity in dealing with vendors and service providers. Employees and PERC contractors and trainers are prohibited from accepting or giving gifts or gratuities beyond common business courtesies of nominal value. Under no circumstances shall anyone affiliated with PERC accept or give kickbacks when obtaining or awarding contracts, services, referrals, goods, or business.

Each employee, contractor or trainer who is involved with an actual or potential conflict of interest situation, is responsible for reporting the situation to the Director Learning Center Operations and Educational Projects.

DATE: NOVEMBER 2022

## Intellectual Property Policy

The Propane Education & Research Council (PERC) is committed to a high level of legal and ethical standards in the conduct of our operations. This commitment includes respecting the intellectual property rights of our project partners, industry members, propane users, the public, and others. No PERC employee, independent contractor, or agent, should use, copy, transfer, misappropriate, or otherwise misuse the intellectual property rights owned or maintained by another. The purpose of this Policy is to help maintain PERC's reputation as a fair organization, ensure the integrity of the competitive marketplace in intellectual property, and comply with the laws regulating intellectual property its use and its protection. This Policy applies to all employees, independent contractors, agents, officers, and directors of PERC, its partners, and joint ventures where PERC has the right to exercise management control.

### PERC's Intellectual Property

PERC is committed to protecting its own intellectual property, such as information, processes, software, and technology, from infringement by others. PERC makes significant investments of time, resources, and funds in support of its intellectual property. By protecting our intellectual property from compromise, we safeguard the ability to provide services to the propane industry, propane users, and the public.

PERC's intellectual property includes confidential PERC business information, trade secret technology (such as computer software and systems and related knowhow), inventions and processes, trademarks and service marks, and copyrighted works. It is the responsibility of every PERC employee to help protect PERC intellectual property. It is the responsibility of PERC managers and supervisors to foster and maintain awareness of the importance of protecting PERC's intellectual property. Additionally PERC removes access to all intellectual property and PERC's electronic systems as soon as it is practical when employees leave PERC's employment.

As a federal checkoff program funded by assessment payments on the domestic sale of odorized propane, PERC strives to make a wide array of its intellectual property available to others at the lowest cost possible, in many cases at no cost at all. PERC does this because intellectual property development costs are not recouped in the price of programs and products, rather it is funded by the assessment which, by law, serves the needs of, and for the betterment of, the propane industry, propane users, and the American public. PERC shall insist that the intellectual property for which it has granted a license or otherwise provided usage rights be portrayed and used in a manner that properly characterizes the intellectual property, is respectful and protective of the reputation of PREC, the industry, propane users and the public, and complies fully with the terms of the license or grant of usage rights.



## Intellectual Property of Others

PERC is further committed to respecting the intellectual property of others and to ensuring legal and ethical conduct to prevent improper introduction of third-party proprietary information. The rules with respect to intellectual property, including misuse or misappropriation of business information and trade secrets (e.g., computer systems, software, and related knowhow) and infringement of patents, trademarks and service marks, trade dress, and copyrights, generally apply to intellectual property of third-party partners or others. Substantial civil and criminal penalties may be levied for misappropriation of trade secrets for violating PERC policies, or federal or state laws. Accordingly, when a situation is unclear, employees, independent contractors, and agents should consult with PERC management. PERC management may in its discretion consult with PERC's attorneys.

PERC employees, independent contractors, and agents may have confidential information from a former employer and may be bound by a nondisclosure obligation. PERC expects employees, independent contractors, and agents to fulfill this obligation and adhere to the requirements of a nondisclosure agreement.

## Examples of Prohibited Practices

The following are examples of activities that might constitute a violation of the laws protecting intellectual property or PERC's policies. If you are aware of a similar situation, you should promptly contact PERC management.

### Copyright Infringement

- Installing computer software on more than one computer system without a proper license.
- Making or maintaining additional copies of computer software, including providing such copies to unauthorized third parties, without a proper license.
- Copying a third-party's documentation, technical manuals, or user manuals without permission.
- Downloading information from a subscription database without permission.

### Trademark, Patent, or Trade Dress Infringement

- Adopting or using a slogan, name, or symbol for goods or services that is confusingly similar to a slogan, name, or symbol used by another.
- Making or using a process, product, or device that incorporates patented ideas or features belonging to another.
- Failing to act upon notice or information that PERC may be infringing a patent belonging to another.
- Using an overall look or design that is confusingly similar to the overall look or design of another's product or service and causing confusion in the minds of consumers as to who is the source of the product or service.

### Trade Secret Infringement

- Disclosing to others any information received in confidence from or protected from disclosure by a supplier, contractor, customer, or other third party.
- Stealing, soliciting, or using the trade-secret information of another without written permission from the owner of the information.

### PERC Trade Secrets

PERC officers, directors, employees, independent contractors, and agents are prohibited from disclosing PERC proprietary or confidential information to third parties with whom PERC is doing business, such as suppliers, licensees, or consultants, except as specifically needed for the third party to perform the services or task requested. Such third parties should be provided information only on a "need to know" basis to allow them to perform the specific services or task requested. All disclosure of PERC proprietary or confidential information may be made only after a confidentiality agreement has been entered into with the third party

## Proprietary Interest Policy

PERC discloses, in advance of training, whether an instructor has a proprietary interest in any product, service, or material discussed during the experience, training, or program.

PERC has a policy, included in PERC Instructor Manuals, requiring each Instructor to disclose any proprietary interest before beginning any training we offer. If it is determined that the instructor did not disclose this information, PERC will review the situation and take appropriate actions to address the issue.



Per PERC policy, before any training event, the instructor will disclose, both to PERC and its students, any proprietary interest in any product, training, program, or material discussed during the training and the source of any third-party compensation related to their instruction.

PERC has policies and procedures to address intellectual property rights for the design and delivery of education and training and is included in the PERC Instructor Manuals.

DATE: DECEMBER 2022

## PERC Privacy Policy

**When you visit training.propane.com, you are trusting us with your information. We work hard to protect it!**

The Propane Education & Research Council ("PERC", "us", "we", or "our") operates the Learning Center, training.propane.com, which is a learning management system (the "Services"). This Privacy Policy is intended to help you understand what information we collect, why we collect it, how we handle your information, and how you can manage your information.

We offer a range of Services to help you and others explore, interact, and learn about the world of propane in new ways. By using our Services, you agree to the collection and use of information in accordance with this Privacy Policy.

You can use our Services in a variety of ways to manage your privacy. For example, you can create an account if you want to download, purchase, and manage content like safety, training, or consumer education materials. You can choose whether to provide certain information. To help explain things as clearly as possible, and if you have any questions about this Privacy Policy, you can contact us at legal@propane.com.

## Information Perc Collects

We want you to understand the types of information we collect as you use our Services.

We collect information to provide better Services to all users. The information PERC collects, and how we use that information, depends on how you use our Services and how you manage your privacy.

When you're not signed into your PERC Account, or do not create a PERC Account, we store the information we collect with unique identifiers tied to the browser, application, or device you're using.

When you're signed into your PERC Account, we also collect information that we store with your PERC Account, which we treat as personal information. Your learner records are part of your personal information. PERC does not delete learner records. Learners will always have access to their records.

## Information You Provide to Us

When you create a PERC Account, you provide us with personal information that includes your name and a password. You can also choose to add addresses, company or organization, phone number or other information to your account.

## Information We Collect as You Use Our Services

### Your Browsers and Devices

We collect information about the browsers, and devices you use to access PERC Services, which helps us provide features.

The information we collect includes unique identifiers, browser type and settings, device type and settings, operating system, mobile network information including carrier name and phone number, and application version number. We also collect information about the interaction of your browsers and devices with our Services, including IP address, and the date, time.



### Your Activity

We collect information about your activity in our Services, which we use to do things like recommend a video or publication you might like. The activity information we collect may include:

- Terms you search for.
- Videos you watch.
- Views and interactions with content.
- Purchase activity.
- People with whom you communicate or share content.

### Your Location Information

We collect information about your location when you use our Services, which helps us offer features like identifying products or services that may interest you that are nearby.
Your location can be determined with varying degrees of accuracy by:

- GPS
- IP address
- User Input

In some circumstances, PERC also collects information about you from publicly accessible sources. For example, if your name appears in your local newspaper, PERC may index that article and display it to other people if they search for your name. We may also collect information about you from trusted partners, including partners who provide us with information about potential customers of our Services, and security partners who provide us with information to protect against abuse.

We use various technologies to collect and store information, including cookies, pixel tags, local storage, such as browser web storage or application data caches, databases, and server logs.

## We Collect and Use Data to Build Better Services

We use the information we collect from all our Services for the following purposes:

### Provide Our Services

We use your information to deliver our Services, like processing the terms you search for in order to return results, developing more items of particular interest, fulfilling your purchases, or helping you share content with others.

### Maintain & Improve Our Services

We also use your information to make improvements to our Services — for example, understanding which search terms are most frequently used helps us determine which content to feature.



### Provide Personalized Services, Including Content and Ads

We use the information we collect to customize our Services for you, including providing recommendations, personalized content, and customized search results.
Depending on your settings, we may also show you personalized ads based on your interests. For example, if you search for "furnaces," you may see an ad for or information about water heaters or other equipment when you're browsing a site that shows ads served by PERC.
We don't show you personalized ads based on sensitive categories, such as race, religion, sexual orientation, health or politics.

We don't share information that personally identifies you with advertisers, such as your name or email, unless you ask us to. For example, if you see an ad for or information about a nearby propane marketer and select the "contact" button, we may share your personal information with the propane marketer so that they may contact you.

### Measure Performance

We use Google Analytics to understand how our Services are used. For example, we analyze data about your visits to our sites to do things like optimize the site design.
Google Analytics is a web analytics service offered by Google that tracks and reports website traffic. Google uses the data collected to track and monitor the use of our service. This data is shared with other Google services.

Google may use the collected data to contextualize and personalize the ads of its own advertising network.
You can opt-out of having made your activity on the service available to Google Analytics by installing the Google Analytics opt-out browser add-on. The add-on prevents Google Analytics JavaScript (ga.js, analytics.js, and dc.js) from sharing information with Google Analytics about visits activity.

For more information on the privacy practices of Google, please visit the Google Privacy & Terms web page: [policies.google.com/privacy](policies.google.com/privacy)

### Communicate with You

We use information we collect, like your email address, to interact with you directly. For example, we may send you a notification if we detect suspicious activity, like an attempt to sign into your PERC Account from an unusual location. Or we may let you know about upcoming changes or improvements to our Services. And if you contact PERC, we'll keep a record of your request in order to help solve any issues you might be facing.

### Protect PERC, Our Users, and the Public

We use information to help us improve the safety and reliability of our Services. This includes detecting, preventing, and responding to fraud, abuse, security risks, and technical issues that could harm PERC, our users, or the public.

We use different technologies to process your information for these purposes. We use automated systems that analyze your content, such as your order history, to provide you with things like customized search results, personalized ads, or other features tailored to how you use our Services. And we analyze your content to help us detect abuse such as spam, malware, and illegal content. We also use algorithms to recognize patterns in data.

We'll ask for your consent before using your information for a purpose that isn't covered in this Privacy Policy.



## You Have Choices Regarding the Information We Collect and How It's Used

This section describes key controls for managing your privacy across our Services.

### Managing, Reviewing, and Updating Your Information

Ways to review & update your information Your personal information.

There are other ways to control the information PERC collects whether or not you're signed into a PERC Account, including:

Browser settings: For example, you can configure your browser to indicate when PERC has set a cookie in your browser. Cookies are files with small amounts of data which may include an anonymous unique identifier.
Cookies are sent to your browser from a website and stored on your device. Tracking technologies that are also used include beacons, tags, and scripts to collect and track information and to improve and analyze our service. You can instruct your browser to refuse all cookies or to indicate when a cookie is being sent. However, if you do not accept cookies, you may not be able to use some portions of our service.
Examples of Cookies we use:

- Session Cookies. We use Session Cookies to operate our Services.
- Preference Cookies. We use Preference Cookies to remember your preferences and various settings.
- Security Cookies. We use Security Cookies for security purposes.

Device-level settings: Your device may have controls that determine what information we collect. For example, you can modify location settings on your mobile device.



## When PERC Shares Your Information

We do not share your personal information with companies, organizations, or individuals outside of PERC except in the following cases:

### WITH YOUR CONSENT

We will share personal information outside of PERC when we have your consent. If you are completing accredited programs, we will request your permission to share your information with Authority Having Jurisdiction (AHJ).

### WITH DOMAIN ADMINISTRATORS

They may be able to:

- Access and retain information stored in your account, like your email.
- View statistics regarding your account, like what and how many purchases you make.
- Change your account password.
- Suspend or terminate your account access.
- Receive your account information in order to satisfy applicable law, regulation, legal process, or enforceable governmental request.
- Restrict your ability to delete or edit your information or your privacy settings.

### FOR LEGAL REASONS

We will share personal information outside of PERC if we have a good-faith belief that access, use, preservation, or disclosure of the information is reasonably necessary to:

- Meet any applicable law, regulation, legal process, or enforceable governmental request.
- Enforce applicable Terms of Service, including investigation of potential violations.
- Detect, prevent, or otherwise address fraud, security, or technical issues.
- Protect against harm to the rights, property or safety of PERC, our users, or the public as required or permitted by law.

We may share non-personally identifiable information publicly and with our partners – like publishers, grantees, developers, or rights holders. For example, we share information publicly to show trends about the general use of our Services.



## We Build Security into Our Services to Protect Your Information

The security of your data is important to us but remember that no method of transmission over the Internet, or method of electronic storage is 100% secure. While we strive to use commercially acceptable means to protect your Personal Data, we cannot guarantee its absolute security. Some of our security methods include:

- We use encryption to keep your data private while in transit.
- We review our information collection, storage, and processing practices, including physical security measures, to prevent unauthorized access to our systems.
- We restrict access to personal information to PERC employees, contractors, and agents who need that information in order to process it. Anyone with this access is subject to strict contractual confidentiality obligations and may be disciplined or terminated if they fail to meet these obligations.

## Compliance & Cooperation with Regulators

We regularly review this Privacy Policy and make sure that we process your information in ways that comply with it.

## Data Transfers

We utilize servers around the world and your information may be processed on servers located outside of the country where you live. Data protection laws differ around the world, with some counties providing more protection than others.

When we receive formal written complaints, we respond by contacting the person who made the complaint. We work with the appropriate regulatory authorities, including local data protection authorities, to resolve any complaints regarding the transfer of your data that we cannot resolve with you directly.

## When This Policy Applies

This Privacy Policy applies to all Services offered by PERC. This Privacy Policy does not apply to services that have separate privacy policies that do not incorporate this Privacy Policy.

This Privacy Policy doesn't apply to:

- The information practices of other companies and organizations that advertise our Services.
- Services offered by other companies or individuals, including products or sites that may include PERC Services, be displayed to you in search results, or be linked from our Services.

## Changes to This Policy

We change this Privacy Policy from time to time. We will not reduce your rights under this Privacy Policy without your explicit consent. We always indicate the date the last changes were published, and we offer access to archived versions for your review. If changes are significant, we'll provide a more prominent notice (including, for select Services, email notification of Privacy Policy changes).

# Related Privacy Practices

## Deliver Our Services

Examples of how we use your information to deliver our Services include:

- We use the IP address assigned to your device to send you the data you requested, such as loading a video.
- We use unique identifiers stored in cookies on your device to help us authenticate you as the person who should have access to your PERC Account.

Our service may contain links to other sites that are not operated by us. These sites may include, and are not limited to: Google, YouTube, Vimeo, HubSpot, WooCommerce, Stripe, and others. If you click on a third-party link, you will be directed to that third party's site. We strongly advise you to review the Privacy Policy of every site you visit.
We have no control over and assume no responsibility for the content, privacy policies or practices of any third-party sites or services.

## Ensure Our Services Are Working as Intended

For example, we continuously monitor our systems to look for problems. If we find something wrong with a specific feature, reviewing activity information collected before the problem started allows us to fix things more quickly.

## Improve Our Services

For example, we use cookies to analyze how people interact with our Services. And that analysis can help us build better products. For example, it may help us discover that it's taking people too long to complete a certain task or that they have trouble finishing steps at all. We can then redesign that feature and improve the product for everyone.

## Customized Search Results

For example, when you're signed into your PERC Account, you can get more relevant search results that are based on your previous searches and activity. You may also get customized search results even when you're signed out. If you don't want this level of search customization, you can search and browse privately.

### MAY LINK INFORMATION

Google Analytics relies on first-party cookies, which means the cookies are set by the PERC Analytics customer. Using our systems, data generated through Google Analytics can be linked by the Google Analytics customer and by Google to third-party cookies that are related to visits to other websites. For example, an advertiser may want to use its Google Analytics data to create more relevant ads, or to further analyze its traffic.

### SAFETY AND RELIABILITY

Some examples of how we use your information to help keep our Services safe and reliable include:
Collecting and analyzing IP addresses and cookie data to protect against automated abuse. This abuse takes many forms, such as sending spam account holders, or censoring content by launching a Distributed Denial of Service (DDoS) attack.



### Detect Abuse

When we detect spam, malware, illegal content, and other forms of abuse on our systems in violation of our policies, we may disable your account or take other appropriate action. In certain circumstances, we may also report the violation to appropriate authorities.

We do not knowingly collect personally identifiable information from anyone under the age of 18. If you are a parent or guardian and you are aware that your Children has provided us with Personal Data, please contact us. If we become aware that we have collected Personal Data from children without verification of parental consent, we take steps to remove that information from our servers.

### Children's Privacy

Our Services do not address anyone under the age of 18 ("Children").

We do not knowingly collect personally identifiable information from anyone under the age of 18. If you are a parent or guardian and you are aware that your children provided us with personal data, please contact us. If we become aware that we have collected personal data from children without verification of parental consent, we take steps to remove that information from our servers.

### Legal Process, or Enforceable Governmental Request

Like other companies, PERC may receive requests from governments and courts to disclose user data. Respect for the privacy and security of data you store with PERC underpins our approach to complying with these legal requests. Our legal team will review a request, regardless of type, and we will push back when a request appears to be overly broad or doesn't follow the correct process.

DATE: DECEMBER 2022

## Mobile Program Terms of Service

Propane Education & Research Council (PERC) Mobile Message Service Terms and Conditions

The PERC mobile message service (the "Service") is operated by the Propane Education & Research Council ("PERC", "we", or "us"). Your use of the Service constitutes your agreement to these terms and conditions ("Mobile Terms"). We may modify or cancel the Service or any of its features without notice. We may also modify these Mobile Terms at any time and your continued use of the Service following the effective date of any such changes, shall constitute your acceptance of such changes.

We do not charge for the Service, but you are responsible for all charges and fees associated with text messaging imposed by your wireless provider. Message and data rates may apply.

Text messages may be sent using an automatic telephone dialing system or other technology. Your consent to receive autodialed text messages is not required as a condition of purchasing or obtaining any products or services. If you have opted in, the Service provides updates, alerts, information, promotions, specials, and





other PERC marketing offers (e.g., cart reminders) via text messages through your wireless provider to the mobile number you provided. Message frequency varies. Text the single keyword command STOP in response to a text message from PERC to cancel at any time. You will receive a one-time opt-out confirmation text message. If you have subscribed to other PERC mobile message programs and wish to cancel, you will need to opt out separately from those programs by following the instructions provided in their respective mobile terms. For Service support or assistance, please email our support team directly at help@propane.com or submit a ticket propane.com/providers/help-desk.

We may change any short code or telephone number we use to operate the Service at any time and will notify you of these changes. You acknowledge that any messages, including any STOP or HELP requests, you send to a short code or telephone number we have changed may not be received and we will not be responsible for honoring requests made in such messages.

The wireless carriers supported by the Service are not liable for delayed or undelivered messages. You agree to provide us with a valid mobile number. You agree to maintain accurate, complete, and up-to-date information with us related to your receipt of messages.

You agree to indemnify, defend, and hold us harmless from any third-party claims, liability, damages, or costs arising from your use of the Service or from you providing us with a phone number that is not your own. You agree that we will not be liable for failed, delayed, or misdirected delivery of any information sent through the Service, any errors in such information, and/or any action you may or may not take in reliance on the information or Service.

DATE: MAY 2021

# Internal and External Hires for Training and Development

## Policy

The company is committed to hiring qualified individuals in the education and training department to perform the assigned tasks of design, development, delivery, and evaluation of all learning events.

## Purpose

This policy has been established to ensure consistency in the hiring process, internally and externally, regarding training and development in the industry relations and safety department. All hires, external which include contractors and vendors, and internal which include PERC employees, are required to hold the appropriate credentials before being hired. Upon request, all hires are required to provide proof of appropriate credentials as a condition upon hire.

## Scope

- Senior Vice President, Education, Safety and Compliance (**SVPSEC**)
- Director of Safety & Compliance (**DSC**)
- Director Learning Center and Educational Products (**DLCEP**)
- Educational Content Manager (**ECM**)
- Instructional Design and Development Specialist (**IDDS**)
- Contractors (**C**)
- Vendors (**V**)

## Responsibilities

Responsibilities: The **SVPSEC** is responsible for carrying out the company's Internal & External Hire for Training and Development policy. The **SVPESC** has the responsibility of evaluating and approving all internal and external hires in the safety and training department. The **SVPSEC** is responsible for determining if the qualifications for the individual(s) involved in the development, design, evaluation, or administration of the learning event meet the specific requirements for PERC and will recruit people internally to evaluate upon request.

## Definitions

**Credentials** consist of the appropriate professional background for each person that provides services to PERC. This ensures that quality, education and training material is provided to our learners. Internal hires must provide their credentials during the initial application, as requested by the job posting and/or hiring manager; contractors and vendors must provide their credentials with their proposal, and during the initial interview and/or as requested by job posting and/or hiring manager. All hires, internal and external, must have one or more of the required credentials as listed below along with the credentials listed within the job description. It is up to the evaluator to determine which credentials are appropriate for the position outside what is listed in the job description, but should include some background in instructional design, adult learning theories, and software platforms that house the education and training material.

Credentials should include maintaining professional development to ensure credentials are up-to-date and accurate to deliver the best instructional design practices to PERC's educational and training material. Furthermore, internal and external hires hired to develop, design, or review educational events must have the experience and/or education that demonstrates knowledge in that specific area. Instructional designer must have some background in instructional design such as educational degrees, professional experience, and/or certifications.

Credentials include but are not limited to:

- Educational degrees (e.g., educational degrees such as a bachelor's or higher in instructional design, education, etc.)
- Professional experience (number of years in instructional design such as the IDDS needs at least 1 year in the instructional design (ID), the ECM needs 5 plus years in ID, etc.)
- Certifications (certification could be in instructional design, Articulate Storyline, etc.)
- Licenses
- Resumes
- Professional Development
- Portfolio

DATE: DECEMBER 2022






# Instructional Design Evaluation

## Policy

The company is committed to delivering quality educational training that is effective, current, and applicable to learners through an internal rigorous review.

## Purpose

This policy has been established to ensure that quality, effectiveness, currency, and applicability is implemented into our internal review process during the design and development phase to ensure our learners have a quality learning experience. All educational and training programs will go through a rigorous review that includes various areas that are measured to uphold quality.

## Scope

- Educational Content Manager (**ECM**)
- Director of Safety and Compliance (**DSC**)
- Instructional Development and Design Specialist (**IDDS**)

## Responsibilities

The **ECM**, **DSC**, & **IDDS** have the responsibility of evaluating all educational and training materials to ensure a quality learning experience. The **ECM**, **DSC**, & **IDDS** are responsible for carrying out the company's Instructional Design Evaluation policy.

## Definitions

**Rigorous review** is a twice over internal evaluation done at PERC that starts with a checklist which is completed against the Instructional Design Document; the checklist process initiates a waterfall process through the continued design and development phase that upholds specific areas important to our education and training.
The areas in the checklist that are measured include:

- Applicability
- Quality
- Relevancy
- Current

Applicability is defined as ensuring that our content is appropriate to the learners. Quality is defined as upholding a rigorous review standard to ensure we provide the best training to our learners. Relevancy is defined as employing close connectivity to all of our training. Current is defined as keeping all content in our training up to date.

The time frame for the internal review process of our educational and training material varies depending on the needs of the industry. If the industry requires a change, then the process for new material and updates starts immediately. If no changes are made to the educational and training material, then the internal review of our educational and material starts on a ten-year schedule or as recommended by the **ECM** and **DSC**.

DATE: DECEMBER 2022

# Continuing Education Eligibility Policy

Propane Education and Research Council (PERC) provides the Continuing Education Eligibility Policy to the industry to ensure ongoing training development and to the public to show PERC's commitment to providing world-class education and instruction that benefits the propane industry. The International Accreditors for Continuing Education and Training (IACET) recognizes PERC as an accredited provider.

## Continuing Education Unit (CEU)

A continuing education unit (CEU) is a measurement used to show the successful completion of a learning event.

## CEU Credit Value

1 CEU equals 10 contact hours. Learning events are calculated through the learner's interaction with the content. A learning event is calculated using the following formula.

- First, find the total number of contact hours. To find the total number of contact hours, divide the total number of contact minutes* by 60.
- Second, find the number of CEUs. To find the number of CEUs, divide the total number of contact hours by 10.
- Last, round the number of CEUs to the nearest tenth.

**Contact Hours =**

Total minutes for all instructional activities/60

Number of CEUs = Contact Hours/10

Round Number of CEUs to the nearest tenth

*The total number of contact minutes does not include breaks or lunch. The minutes allocated for breaks and lunch should be subtracted from the total number of contact minutes before totaling the total number of contact hours.



## CEU Eligible Learning Events

### eLearning

eLearning is defined as an electronic learning experience offered in the PERC Learning Center. Courses eligible for CEUs will have the awarded CEUs listed in the description and an IACET watermark on the tile image.

### Instructor-led Training (ILT)

Instructor-led Training is defined as any training facilitated by an instructor. Courses eligible for CEUs will have the awarded CEUs listed in the workbook. For a CEU to be awarded it must be delivered by a PEP Recognized Instructor.

## Granting CEUs

### eLearning

To earn CEUs for eLearning, the learner must enroll in the course in The Learning Center and successfully complete all required tasks. Once the learning event is successfully completed, the CEUs will automatically be recorded in the learner's transcript.

### Instructor-led Training

To earn CEUs for instructor-led training, the learner must attend a CEU eligible course delivered by a PEP Recognized Instructor. The learner must sign the roster and successfully complete all required tasks. Once the learner has successfully completed the course, the instructor will document the training in The Learning Center and the CEUs will be added to the learner's transcript. It may take up to a month for the transcript to be updated in The Learning Center.

## Submitting CEUs to PERC for Instructor Led Training

Only PEP Recognized Instructors can issue CEUs on behalf of PERC to learners for attending their instructor-led training course.

PEP Recognized instructors have two options when adding CEUs to a learner's transcript.

### Instructors Add CEUs to Transcript

PEP Recognized Instructors can add the CEUs to the learner transcript in The Learning Center. Instructors have one month to update the transcript. The completed roster must also be uploaded to the Learning Center to document the course.

### Request PERC to Add CEUs to Transcript

A PEP Recognized Instructor can request PERC to add CEUs to learner transcripts on their behalf. To request PERC to add CEUs to learner transcripts, a PEP Recognized Instructor must send a completed copy of the roster to learning@propane.com within three weeks of course completion.

## Technical Issues

PERC will provide technical support with all CEU technical issues. To get technical support contact the Learning Center Help Desk for assistance.



## File an Appeal

To appeal a decision regarding the denial of a CEU, the learner must submit a written letter with supporting information and evidence to learning@propane.com within 6 months of the completed course. A decision regarding the appeal can take up to two months and will be emailed to the learner. All decisions regarding the appeal are final. PERC will review all CEU appeals on a case-by-case basis.

# PERC Education Program (PEP) Recognized Instructor Policy

The Propane Education and Research Council (PERC) is committed to providing world-class education and training to educate instructors on the best facilitation and education practices to use in the classroom. PERC is committed to supporting instructors to use effective teaching practices to create the best learning environment for their learners.

## PEP Recognized Instructor

A PERC Education Program Recognized Instructor, also known as a PEP Recognized Instructor, is defined as an instructor who can issue a continuing education unit (CEU) to learners using PERC Education Program (PEP) materials. The PEP Recognized Instructor is limited by subject matter (i.e., completion of PEP Learning Path).

The option to become a PEP Recognized Instructor is available to all who are interested.

## PEP Recognized Instructor Requirements Overview

An instructor must meet specific requirements to become a PEP Recognized Instructor. An instructor must successfully complete the PEP Recognized Instructor Training requirements and the PEP Learning Path they want to facilitate. Once the instructor is awarded PEP Recognized Instructor status, they must maintain their qualification yearly.

## Achieving PEP Recognized Instructor Status

To become a PEP Recognized Instructor, the instructor must successfully complete the following:

- PEP Recognized Instructor Training (eLearning or Instructor Led).
- Instructional Skills Evaluation (virtual or in-person).
- A PEP Learning Path in its entirety.

### PEP Recognized Instructor Training

Instructors must successfully complete the PEP Recognized Instructor Training within 1 year of registering.

### Instructional Skills Evaluation

Instructors are required to pass the instructional skills evaluation within 12 months after successfully completing the PEP Recognized Instructor Training.

### PEP Learning Path

The instructor must successfully complete an entire PEP Learning Path, including optional and elective content. The Learning Path is defined by PERC.

After the initial award of PEP Recognized Instructor status, the instructor can qualify in additional learning paths at any time, as long as they are maintaining their PEP Recognized Instructor status.






## Maintaining PEP Recognized Instructor Status

An instructor must complete the following to maintain their status as a PEP Recognized Instructor:

- Professional Development
- Learner Survey Review

### Professional Development

An instructor must complete required refresher content every 5 years. PERC maintains a library of refresher courses in The Learning Center.

### Review of Learner Feedback

An instructor must successfully pass an annual review of learner survey feedback. The instructor is evaluated on survey ratings completed by learners in the classroom. If a feedback survey raises concerns PERC will contact the instructor to discuss the survey results. Together, the instructor and PERC will develop a plan to address the issues.

If the instructor cannot successfully complete the agreed upon plan, they will lose their PEP Recognized Instructor status. In this event, the instructor can attempt to requalify in 1 year. All decisions are final.

## Technical & Administrative Support

PERC will provide technical and administrative support to PEP Recognized Instructors.

- Contact the Learning Center Help Desk for assistance with the Learning Center.
- Contact the Learning Center Help Desk for administrative assistance.

## File an Appeal

To appeal a decision regarding the denial to become a PEP Recognized Instructor, the instructor must submit a written letter with supporting information and evidence to learning@propane.com within 6 months of the denial. A decision regarding the appeal can take up to two months and will be emailed to the instructor. All decisions regarding the appeal are final. PERC will review all appeals on a case-by-case basis.

MARCH 2025

# PERC Education Program (PEP) Recognized Field Trainer Policy

The Propane Education and Research Council (PERC) is committed to providing world-class education and training to educate instructors on the best facilitation and education practices to use in the classroom. PERC is committed to supporting field trainers to use effective teaching practices to create the best learning environment for their learners.

## PEP Recognized Field Trainer

A PERC Education Program Recognized Field Trainer, also known as a PEP Recognized Field Trainer, is defined as an On-The-Job (OJT) trainer who can issue a continuing education unit (CEU) to learners using PERC Education Program (PEP) On-The-Job (OJT) Worksheets. The PEP Recognized Field Trainer is limited by subject matter (i.e., completion of PEP Learning Path).

The option to become a PEP Recognized Field Trainer is available to all who are interested.

## PEP Recognized Field Trainer Requirements Overview

A field trainer must meet specific requirements to become a PEP Recognized Field Trainer. A field trainer must successfully complete the PEP Recognized Field Trainer training program and the PEP Learning Path that contains the OJT Worksheet that they want to administer. Once the field trainer is awarded PEP Recognized Field Trainer status, they must maintain their qualification yearly.

## Achieving PEP Recognized Field Trainer Status

To become a PEP Recognized Field Trainer, the field trainer must successfully complete the following:

- PEP Recognized Field Trainer Training.
- A PEP Learning Path in its entirety, including optional and elective content.

### PEP Recognized Field Training

Field Trainers must successfully complete the PEP Recognized Field Trainer online training.

### PEP Learning Path

A Field Trainer must successfully complete an entire PEP Learning Path, including optional and elective content. The Learning Path is defined by PERC.

After the initial award of PEP Recognized Field Trainer status, the field trainer can qualify in additional learning paths at any time, as long as they are maintaining their PEP Recognized Field Trainer status.






## Annual Maintenance of PEP Recognized Field Trainer Status

A field trainer must complete the following to maintain their status as a PEP Recognized Field Trainer:

- Professional Development
- Learner Survey Review

### Professional Development

A field trainer must complete required refresher content every 5 years. PERC maintains a library of refresher courses in The Learning Center (pending).

### Review of Learner Feedback

A field trainer must successfully pass an annual review of learner survey feedback. The field trainer is evaluated on survey ratings completed by learners in the field.
If a feedback survey raises concerns PERC will contact the field trainer to discuss the survey results. Together, the field trainer and PERC will develop a plan to address the issues.

If the field trainer cannot successfully complete the agreed upon plan, they will lose their PEP Recognized Field Trainer status. In this event, the field trainer can attempt to requalify in 1 year. All decisions are final.

## Technical & Administrative Support

PERC will provide technical and administrative support to PEP Recognized Field Trainers.

- Contact the Learning Center Help Desk for assistance with the Learning Center.
- Contact the Learning Center Help Desk for administrative assistance.

## File an Appeal

To appeal a decision regarding the denial to become a PEP Recognized Field Trainer, the field trainer must submit a written letter with supporting information and evidence to learning@propane.com within 6 months of the denial. A decision regarding the appeal can take up to two months and will be emailed to the field trainer. All decisions regarding the appeal are final. PERC will review all appeals on a case-by-case basis.

MARCH 2025



# Reader's Guide to the Catalog

## About the PERC catalog

Every attempt was made to ensure the accuracy of this catalog at the time of publication. However, the PERC library of courses is constantly changing. This catalog is a static document, updated annually. For the most recent list of available courses please go to The Learning Center.

## Where to find training

Training is divided into six main sections, then divided into subtopics as listed below.

## How to read the program listing

Training may be available as eLearning and as instructor led, or it may be available only as eLearning or only as instructor led. Some programs have multiple modules, and some programs are only a single module. If N/A is used in the program description next to eLearning or ILT run time it indicates that the training is not available in that modality. If unknown is used it means that we do not have the information for the run time for that modality.

**Market & Industry Training**

- Get Started Here!
- An Introduction to Selling in the Propane Markets
- Autogas
- Combined Heat and Power
- Connecting with Your Customers
- Defining Your Business Growth Strategy
- Introduction to Strategic Partnerships
- Office Personnel
- Propane and the Environment
- Residential and Commercial Construction

**CETP**

- CETP Certification Training
- CETP RefresherTraining
- CETP Proctor and Skills Evaluator Training

**Safety & Technical Training**

- Bulk Plant Operations
- Commercial Motor Vehicle Operations
- Customer Service Representatives
- Delivering Propane
- Installation
- Loading
- Manager Training
- Propane Containers
- Propane Emergencies
- Regulatory
- Safety Basics
- System Layout and Design
- System Startup

**Safety & Technical Refresher Training**

- Commercial Motor Vehicle Refreshers
- Delivering Propane Refreshers
- Installation Refreshers
- Loading Refreshers
- Regulatory Refreshers
- Safety Basics Refreshers
- System Layout and Design Refreshers
- System Startup Refreshers

**PEP Recognition Training**

- PEP Recognized Field Trainer
- PEP-Recognized Instructor Applicants

**Learning Paths**

- Market & Industry
- Safety & Technical Training
- State Learning Paths

# MARKET & INDUSTRY TRAINING

**Get Started Here!**

**An Introduction to Selling in the Propane Markets**

**Autogas**

**Combined Heat and Power**

**Connecting with Your Customers**

**Defining Your Business Growth Strategy**

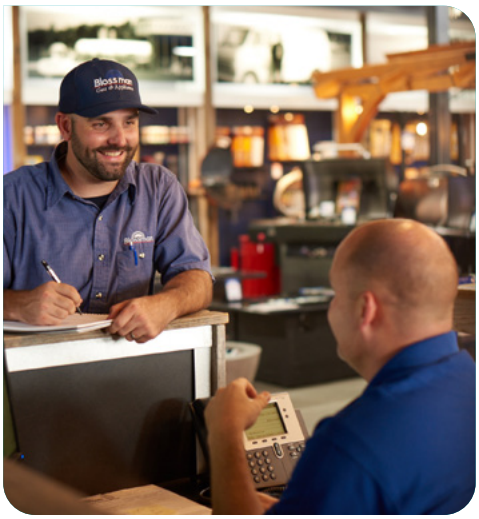
**Introduction to Strategic Partnerships**

**Office Personnel**

**Propane and the Environment**

**Residential and Commercial Construction**

# GET STARTED HERE!



## THE MODERN PROPANE LEARNER

Whether you're new to The Learning Center, or a seasoned pro, listen to these four simple tips to get the most out of your experience in The Learning Center, and how to set up a framework to incorporate training into your schedule. No matter what your role, we have over 500+ courses relevant to your day to day activities.

| | |
|---|---|
| **eLearning run time:** | 2 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |

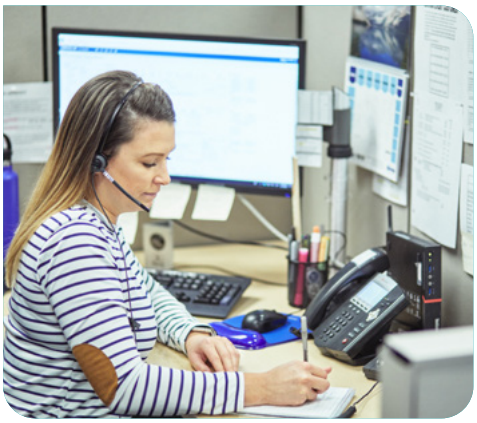
# AN INTRODUCTION TO SELLING IN THE PROPANE MARKETS



## LISTENING TO BUILD RELATIONSHIPS

This e-learning course will help you develop productive questioning and active listening skills to be a more effective marketer.

| | |
|---|---|
| **eLearning run time:** | 10 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## MANAGE THE CONVERSATION

This e-learning course explains how to handle conversations when they go "off the train track."

| | |
|---|---|
| **eLearning run time:** | 11 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## SALES PROCESS FOR ALL MARKETS

The Train Track Sales Process, a simple and commonly used sales process, is explained in a clear, step-by-step format. To learn more about how the train track can be utilized by your whole team, enroll and complete the course Expanding Residential Sales through Customer Service.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## THE MANY USES OF PROPANE

This interactive module provides a marketer-focused snapshot of each of the major propane markets.

| | |
|---|---|
| **eLearning run time:** | 4 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## TODAY'S PROPANE

This video provides a marketer-focused snapshot of the state of the propane industry.

| | |
|---|---|
| **eLearning run time:** | 3 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## WHAT DOES IT TAKE TO GROW?

This video introduces the concept of a growth-focused mindset and offers some strategies for growth.

| | |
|---|---|
| **eLearning run time:** | 3 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |

# AUTOGAS



## AUTOGAS SALES TRAINING SERIES

This eLearning experience will equip propane providers with the industry knowledge and insight to build their customer fleet base and be successful in the Autogas market. The information and skills the learner will acquire in this series will help develop long-term relationships with key partners and customers, and best of all, grow gallons by selling Autogas!

**eLearning run time:** 1 hour & 11 minutes
**ILT run time:** N/A
**CEUs:** 0.10
**Spanish:** No

---

## THE INTRODUCTION TO THE AUTOGAS SALES SERIES

**eLearning run time:** 5 minutes
**OJT worksheet:** No

---

## FLEET PROSPECTS AND THE POWER OF AUTOGAS

**eLearning run time:** 17 minutes
**OJT worksheet:** No

---

## CURRENT TECHNOLOGY AND FUELING OPTIONS

**eLearning run time:** 20 minutes
**OJT worksheet:** No

---

## BEFORE THE SALE

**eLearning run time:** 17 minutes
**OJT worksheet:** No

---

## USING THE SKILLS FOR SUCCESS

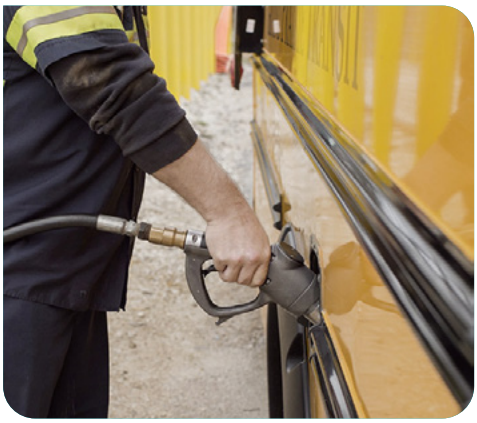
**eLearning run time:** 12 minutes
**OJT worksheet:** No



## PROVEN POWER FOR YOUR BOTTOM LINE: AUTOGAS ADOPTION

Proven Power for Your Bottom Line, PERC's Autogas Adoption eLearning module provides facts, tools, and testimonials for propane marketers looking to convert their own to fleet to Autogas. As an industry, we already know the benefits that propane Autogas delivers—like cost savings, operational advantages, and lower emissions. It's time to put those same advantages to work for your own company! In this module you will find case studies of some early Autogas adopters, tools to calculate savings in switching to Autogas, industry fleet information, answers to some perceptions you might have believed in the past, and many other resources to save and use while planning your switch.

| | |
|---|---|
| **eLearning run time:** | 14 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## THE MANY USES OF PROPANE - AUTOGAS

This e-learning module provides an overview of the sales and marketing opportunities in the Autogas market.

| | |
|---|---|
| **eLearning run time:** | 11 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |

# COMBINED HEAT AND POWER



## COMBINED HEAT & POWER (CHP)

Between the two modules in this series, you will be introduced to what Combined Heat & Power (CHP) units are, how they work, which propane markets they work best for, CHPs benefits and advantages, and the different type of CHP technologies available. You will learn who to network with to have success in these sales and be provided with resources for you to download, save, and refer to while you make your way through the sales process.

| | |
|---|---|
| **eLearning run time:** | 22 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |

## INTRODUCTION TO COMBINED HEAT AND POWER (CHP)

| | |
|---|---|
| **eLearning run time:** | 8 minutes |
| **OJT worksheet:** | No |

## PARTNERSHIPS FOR SELLING SOLUTIONS

| | |
|---|---|
| **eLearning run time:** | 14 minutes |
| **OJT worksheet:** | No |

# CONNECTING WITH YOUR CUSTOMERS



## A CONVERSATION FRAMEWORK

How well do you handle difficult conversations? This downloadable, interactive PDF provides a framework that can help you anticipate, prepare for, and manage challenges associated with difficult conversations. Tap into your questioning skills to drive a consultative conversation allowing you to maintain the trust, credibility, and confidence of your team, customers, and other stakeholders.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## BUYER TYPES

"Customer style" refers to a customer's particular communication preferences and behaviors. In combination, these preferences and behaviors form archetypes that can be used describe personality traits or buying styles. Use this guide to learn about four common archetypes.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## BUYER TYPES IN ACTION

Buyer Types taught you about different customer styles. Now, use this guide to learn how to customize your communication tactics in a way that matches the preferred style of your individual customers.

| | |
|---|---|
| **eLearning run time:** | 8 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## CREATING WIN-WIN NEGOTIATIONS

This video discusses ways to negotiate that will help build and maintain strong relationships.

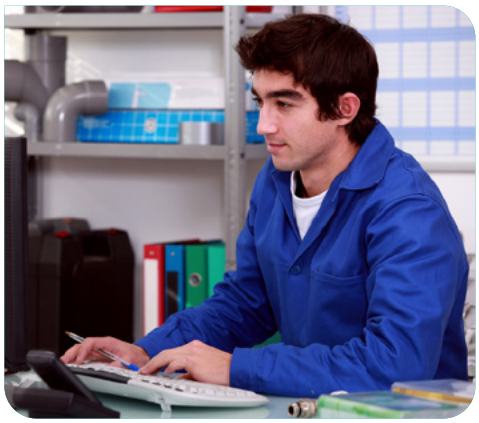
| | |
|---|---|
| **eLearning run time:** | 2 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## CUSTOMER JOURNEY MAPPING

Customer Journey Mapping provides a clear overview of customer experiences, helping you stand out from competitors. By using journey maps, you gain insights to connect with customers effectively, whether overall or in specific areas. These maps reveal customer needs, expectations for your offerings, channels they use, preferred messaging, and points where they may feel frustrated or underserved.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## CUSTOMER SERVICE SCENARIOS

This is an interactive e-learning module that includes a short series of customer-driven questions and problems and how they can best be handled.

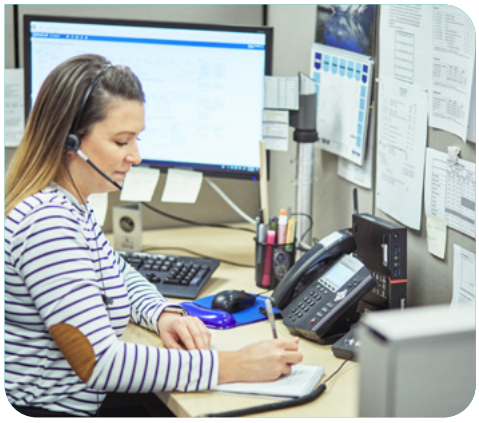
| | |
|---|---|
| **eLearning run time:** | 11 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## HANDLING DIFFICULT CONVERSATIONS

This module is an interactive exploration of A Conversation Framework. How well do you handle difficult conversations? Walk through examples of difficult conversations and tap into your questioning skills to drive a consultative conversation allowing you to maintain the trust, credibility, and confidence of your team, customers, and other stakeholders.

| | |
|---|---|
| **eLearning run time:** | 10 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |

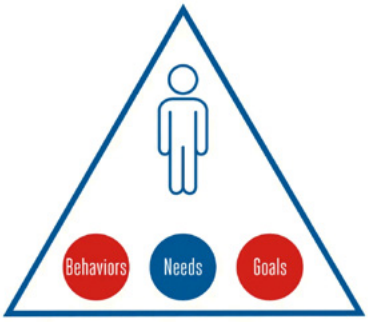


## UNCOVERING CUSTOMER'S PROPANE NEEDS

This video discusses the use of good, productive questioning and active listening to identify propane solutions that meet your customers' needs.

| | |
|---|---|
| **eLearning run time:** | 3 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |

# DEFINING YOUR BUSINESS GROWTH STRATEGY




## CUSTOMER SEGMENTATION

This e-learning module reviews a handful of finer points you can use when incorporating customer segments into your strategic decisions.

| | |
|---|---|
| **eLearning run time:** | 2 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## DATA IN ACTION

Data should be used to inform your growth strategies. This is an exploration into relevant data — why it's important, where to find it, and how to synthesize it to formulate strategies and tactics.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## MARKETING IN THE DIGITAL AGE

Marketing in the Digital Age is an interactive guide that helps you explore digital marketing and content marketing as part of your strategy and tactics to raise awareness, build relationships, establish a brand identity, and grow gallons.

**Objectives:**

- Identify the dos and don'ts of digital marketing.
- Analyze social media marketing statistics to shape digital marketing strategies.
- Identify basic guidelines for crafting a digital marketing strategy.
- Identify different digital monitoring tools.
- Describe digital marketing design elements such as "mobile-friendly".
- Identify PERC-offered digital media assets.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## TIPS FOR YOUR GROWTH STRATEGY CHECKLIST

This guide helps your organization identify, prepare for, and pursue opportunities in various propane markets. Use it to assess your customers' needs, evaluate your organization's readiness, and implement strategies for growth and profitability.

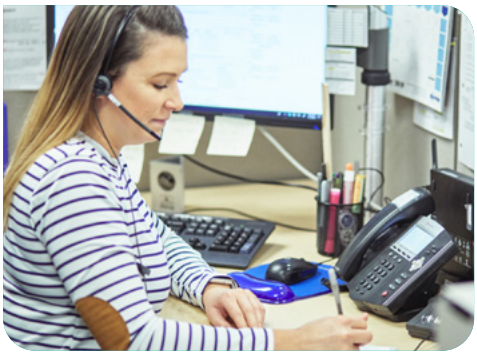
| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |




## UPSELLING AND CROSS-SELLING

This lesson reviews a handful of finer points you can use when you incorporate upselling and cross-selling into your growth strategy.

| | |
|---|---|
| **eLearning run time:** | 5 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## YOUR CUSTOMER'S POINT OF VIEW

This two-minute video describes how to put the end user first and create a problem statement that pinpoints their point of view. This skill can be used when conversing with your customers and business partners to create solutions that will help your company grow by meeting the needs of your target audience.

| | |
|---|---|
| **eLearning run time:** | 2 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |

# INTRODUCTION TO STRATEGIC PARTNERSHIPS



## A BUSINESS STRATEGY SELF-ASSESSMENT CHECKLIST

Whether you are starting a new business or developing a strategy for growing your existing business, you need to have a business plan and strategy. This checklist helps you to think through your strategy to make sure you have targeted a market with considerable growth opportunities and that you are well prepared to meet your customers' needs in that market. To set yourself up for success, assess your ability to answer these questions. Once you are confident in your answers, you are ready to implement your strategy.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## BE THEIR TRUSTED ADVISOR

This e-learning module will help refine how you think about your relationship with customers. It will teach you how to earn the status of a trusted advisor to your customers by helping them reach their energy goals and learning about possible barriers that you might come across in the process.

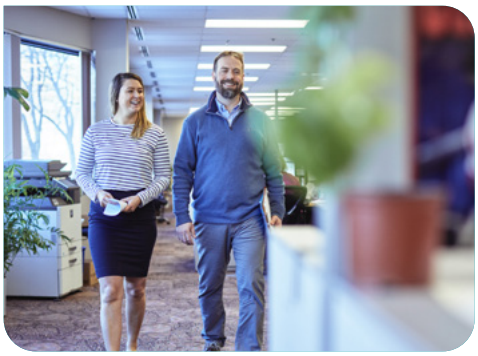
| | |
|---|---|
| **eLearning run time:** | 9 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |




## EXPAND YOUR IMPACT OVER TIME WITH STRATEGIC RELATIONSHIPS

This PDF explains how to develop strategic partnerships with industry professionals to expand your reach and capacity.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## INFLUENCERS IN THE MARKET

This PDF provides tips on identifying people in the industry who can help you grow your business.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## STRATEGIC PEER NETWORKS

This PDF provides tips on partnering with other propane professionals to expand your business and your network.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## THE ART OF THE PROPANE PARTNERSHIP

This video discusses the benefits of collaborating with other propane professionals. Not only does working with others help your company pull from a range of experiences, but helps you gain insight to, and pinpoint, your customer's needs. Learn who to connect with to build value-based collaborations in your community and across the states. A good collaboration can provide total solutions, increase industry knowledge , elevate the propane industry.

| | |
|---|---|
| **eLearning run time:** | 3 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |

# OFFICE PERSONNEL



## OFFICE PERSONNEL

These three modules provide an overview of key concepts and skills for office personnel when handling safety related calls or sales calls for residential properties. The goal is for CSRs to be knowledgeable and confident in the way they handle customer calls, whether it is safety related, or working to provide a solution to their residential propane use needs. Having the skill set for both types of customer interactions will help mitigate risk and show that you care and are there to help.

| | |
|---|---|
| **eLearning run time:** | 3 hours & 42 minutes |
| **ILT run time:** | 14 hours |
| **CEUs:** | 0.4 |
| **Spanish:** | No |

---

## SAFETY BASICS INTRODUCTION

| | |
|---|---|
| **eLearning run time:** | 41 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Identify the critical goals of the safety mission,
- Explain of the fundamentals of propane
- Articulate how to promote customer satisfaction while resolving safety issues

## HANDLING SAFETY-RELATED PHONE CALLS

**eLearning run time:** 1 hour & 14 minutes
**OJT worksheet:** No

**Objectives:**

- Articulate your role as a Customer Service Representative (CSR)
- Describe the importance of consumer safety education
- Recognize how to handle gas odor complaint calls and produce instructions to be given during a gas leak
- Recognize how to handle Carbon Monoxide (CO) calls
- Demonstrate procedure for interruption of service
- Describe measures for uncontrolled release of propane gas
- Demonstrate how to handle service and maintenance calls

## EXPANDING RESIDENTIAL SALES THROUGH CUSTOMER SERVICE

**eLearning run time:** 1 hour & 47 minutes
**OJT worksheet:** No

**Objectives:**

- Break down the residential market opportunity.
- Explain how you can use propane as a whole home solution.
- Communicate the benefits of propane over electricity or heating oil.
- Demonstrate how to ask questions to uncover the customer's true needs.
- Match the customer needs with the right solution.
- Demonstrate how to effectively communicate the value of the solution.

# PROPANE AND THE ENVIRONMENT



## BUILDERS, PROPANE, AND THE ENVIRONMENT

This module covers what zero net energy (ZNE) is, why the source energy matters, strategies to achieve a ZNE home, what the Home Energy Rating (HERS) Index is and how it is used, and the environmental benefits of using propane in new and remodeled homes.

**Objectives:**

- Discuss Zero Net Energy (ZNE) with homebuilders.
- Discuss Home Energy Rating System (HERS) Index with homebuilders.
- Describe the environmental benefits of using propane in new and remodeled homes.

| | |
|---|---|
| **eLearning run time:** | 20 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## ENVIRONMENTAL IMPACTS: PROPANE VS ELECTRICITY

This module covers the benefits of using propane as compared to electricity, the benefits of creating energy onsite, and some ideas for responding to customers who are concerned about the impact of propane on the environment.

**Objectives:**

- Describe environmental benefits of using propane compared to electricity.
- Describe the virtues of onsite energy creation.
- Discuss propane and its impact on the environment with a customer.

| | |
|---|---|
| **eLearning run time:** | 10 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## HOW TO TALK ABOUT PROPANE AND THE ENVIRONMENT

As more and more conversations about the environment are taking place, learn how to position propane as a clean energy and which key messages you should be using in front of different audience types.

| | |
|---|---|
| **eLearning run time:** | 20 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## MARKETER MATH: IN THE NUMBERS WITH PROPANE & ELECTRICITY

When customers ask about the cost difference between electricity and propane, providing an accurate difference can be challenging. Calculating the cost of using one energy source over the other can involve many factors, but there is a way to simplify the comparison and quantify the difference in general. This downloadable interactive toolkit focuses on how to calculate the cost difference between electricity and propane and prepare for conversations with customers and partners.

| | |
|---|---|
| **eLearning run time:** | 15 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## PROPANE AND THE ENVIRONMENT

This classroom training program covers the following topics: environmental impacts of propane vs. electricity, renewable propane and the environment and builders, propane and the environment.

**Objectives:**

- Explain the benefits of using propane as compared to electricity.
- Describe the benefits of onsite energy creation.
- Discuss propane and its impact on the environment with a customer.
- Describe what renewable propane is and why it is good news for the industry and the environment.
- Define and describe Zero Net Energy (ZNE) and Home Energy Rating System (HERS) Index with homebuilders.
- Describe environmental benefits of using propane in new and remodeled homes.

| | |
|---|---|
| **eLearning run time:** | N/A |
| **ILT run time:** | 2 hours & 35 minutes |
| **CEUs:** | 0 |
| **Spanish:** | No |



## RENEWABLE PROPANE AND THE ENVIRONMENT

This module covers what renewable propane is and how renewable propane benefits the propane industry and the environment.

**Objectives:**

- Describe renewable propane.
- Describe the benefits of renewable propane for the industry and the environment.

| | |
|---|---|
| **eLearning run time:** | 8 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## THE COMPETITOR SERIES: ELECTRICITY

This video provides insight to why customers might choose one power source over another, and strategies for you to implement as someone competing in the market against electricity.

| | |
|---|---|
| **eLearning run time:** | 3 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |

# RESIDENTIAL AND COMMERCIAL CONSTRUCTION



## ALLIED PARTNERS, BUILDING PROFESSIONAL TOOLKIT

Working with allied partners, the other businesses and tradespeople working with your propane customers on the same project, provides an opportunity to generate more customer leads and retain more current customers than you could alone. Trade professionals like residential builders, HVAC/plumbing contractors, REALTORS®, and even educators are key allied partners for the propane industry. They often guide decisions about energy and equipment, making their role essential. These courses will help you prepare for conversations when talking to the allied partners in your community.

This classroom training is available for download. The toolkit contains the following PowerPoints to use for training:

- Adult Learning Basics
- Understanding Federal Standards for Residential Water Heaters: Analysis of Energy, Economics, and Emissions
- Propane-Enabled Solutions for Commercial Buildings in Rural Areas
- Propane Tankless Water Heating in Commercial Building Applications
- Propane Micro-CHP for Homes and Commercial Buildings
- Designing and Building High-Performance Homes with Propane
- Propane Gas Systems: Considerations for Residential Construction
- What's Next? Resources for Success

| | |
|---|---|
| **eLearning run time:** | N/A |
| **ILT run time:** | Unknown |
| **CEUs:** | 0 |
| **Spanish:** | No |



## AN INTRODUCTION TO PROPANE COOLING

Using propane cooling to achieve grid independence, add resilience, and save money.

**Objectives:**

- Examine available proven propane cooling technologies that utilize clean, dependable, and efficient site-based energy.
- Conduct a comprehensive and comparative analysis of propane-fueled cooling systems through the lens of resilience, energy usage, and economics.
- Explain the environmental benefits inherent in propane cooling technology, including grid avoidance, redundancy, and site-based advantages.
- Deliberate the potential for environmental and cost advantages when choosing propane as an energy source for cooling.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## ANALYSIS OF RESIDENTIAL ENERGY EFFICIENCY UPGRADES

Homeowners, builders, contractors, and weatherization agencies today have a wide range of energy efficiency upgrades to choose from for existing homes. This course is intended to serve as a guide in answering questions about prioritizing energy efficiency investments for existing homes. By closely examining a study commissioned by the Propane Education & Resource Council, the Analysis of Energy Efficiency Upgrades for Existing Homes course will provide objective information about the most effective measures and/or equipment choices across five climate regions.

**Objectives:**

- Identify the most beneficial EEMs in each of the five targeted climate zones covered.
- Convey the costs and benefits of the EEM options to your clients.
- Explain the difference between elective and non-elective energy efficiency measures or EEMs.
- Determine approximate payback periods and Savings to Investment ratios for EEMs in your projects.

| | |
|---|---|
| **eLearning run time:** | 1 hour & 22 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0.1 |
| **Spanish:** | No |



## DESIGNING THE RESILIENT HOME

This course equips design professionals with strategies to enhance residential resilience through smart design, durable materials, and reliable energy systems. It covers structural reinforcements, moisture- and impact-resistant components, and energy independence solutions—such as clean fuels like propane that support both resilience and everyday living.

**Objectives:**

- Describe extreme weather events' financial and emotional impacts on homeowners and how these challenges influence residential resilience strategies.
- Define building materials and strategies that improve the durability and longevity of homes subjected to climate-related stressors.
- Discuss backup energy solutions based on reliability, availability, and performance during power grid disruptions.
- Identify the advantages of propane as a resilient, long-term energy solution for everyday use and residential backup power systems.

| | |
|---|---|
| **eLearning run time:** | 4 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## DESIGNING AND BUILDING HIGH PERFORMANCE HOMES WITH PROPANE

Over the last 15 years, the U.S. homebuilding industry has seen a remarkable transformation. Residential building systems have rapidly evolved to offer unprecedented levels of efficiency and performance. This course provides a data-driven look at the role of propane as an energy option in today's high-performance homes. The course compares propane with other available energy sources in terms of its availability, applications, and environmental footprint. At the technology level, the course examines 12 different propane applications in terms of their functionality, efficiency, cost-effectiveness, and environmental impact.

**Objectives:**

- Understand the energy and performance characteristics of high-efficiency propane applications for residential projects.
- Understand propane storage and distribution system options.
- Compare propane to other energy choices for high-performance homes.
- Understand propane's role in energy ratings and above-code energy performance programs.
- There is a PowerPoint presentation that can be used in classroom training in the Allied Partners, Building Professional Toolkit available for download from The Learning Center.

| | |
|---|---|
| **eLearning run time:** | 1 hour & 5 minutes |
| **ILT run time:** | Unknown |
| **CEUs:** | 0.1 |
| **Spanish:** | No |



## DESIGNING TO THE EDGES: EXPLORING COMMUNITY-LED ARCHITECTURE

Tools such as community-led design can help develop trust between partners, deepen historical and cultural understanding, and elevate community voices.

**Objectives:**

- Identify and characterize underserved, vulnerable, and special needs populations.
- Examine the challenges that various underserved populations face in our built environment and how community-led architecture can lift these populations and alleviate some of their burdens.
- Describe how propane is used globally for cooking, water- and space-heating to provide an affordable, energy-efficient option for vulnerable communities.
- Explore several case studies where community-led architecture improved the quality of life of underserved populations.

| | |
|---|---|
| **eLearning run time:** | 6 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |




## ENERGY EFFICIENCY AND RESILIENCE OF BUILDING AND RENOVATING WITH PROPANE

Exploring propane's energy advantages for residential renovations and new construction.

**Objectives:**

- Evaluate the environmental benefits provided to a project by propane, including reduced greenhouse gas and NOx emissions and lowered energy costs.
- Conduct a thorough comparative analysis of propane-fueled systems through the lens of energy and performance.
- Deliberate the profile of environmental and cost advantages for a renovation project when converting from heating oil to propane.
- Validate why propane is both an adaptable and renewable energy source, as well as demonstrate how this fuel contributes to net zero energy homes and environmental qualifications, including LEED® for Homes (LEED H v4) and the 2015 National Green Building Standard (NGBS).

| | |
|---|---|
| **eLearning run time:** | 5 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## ENERGY SOLUTIONS FOR COMMERCIAL BUILDING

Commercial buildings and the businesses they support are particularly vulnerable to natural disasters, power outages, and other unforeseen events. Severe weather, mandated downtimes, and other incidents can cause unexpected power outages. Planning for future challenges, both anticipated and unforeseen, is imperative to ensure that a building project will protect occupant safety and comfort. That means designing for resilience.

**Objectives:**

- Analyze the opportunities created by propane that enable architects to overcome challenges when designing commercial buildings in areas with restricted infrastructure or other limitations.
- Through an examination of applications and case studies, assess how propane can be used in large campus projects, such as warehouse facilities and schools, to provide reliable, cost-efficient, and sustainable energy, and achieve LEED certification.
- Investigate uses for propane that solve commercial design challenges by providing space savings and flexibility.
- Demonstrate how designing with propane can help commercial buildings meet resilience and sustainability goals that maximize health, wellness, and occupant comfort.

| | |
|---|---|
| **eLearning run time:** | 6 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## ENERGY SOLUTIONS FOR PRIME, BACK-UP, AND MICROGRIDS

Clean, reliable, and abundant energy sources build the bridge for success. To ensure project success, designs should anticipate how a building may need to adapt to uncertain energy conditions.

**Objectives:**

- Analyze the challenges confronting the U.S. electric grid, in both generation and distribution, while applying responsible solutions and new technologies to overcome these obstacles and add resilience.
- Apply propane-based technology to support back-up power and microgrid use.
- Design and specify propane as a fuel source for large scale power generation systems and prime power.
- Examine how propane-powered equipment provides a cleaner option than diesel counterparts while also requiring less maintenance and offering lower costs.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## EXPANDING OUTDOOR LIVING: PROPANE FOR OUTDOOR RESIDENTIAL USE

Propane gas is considered to be a clean alternative fuel by the EPA; it is a versatile and environmentally safe fuel source for healthy and sustainable living. Many people use propane to fuel their outdoor grills or barbecues, but its much more versatile than a cooking fuel in residential outdoor applications. This learning unit will explore alternative uses for propane, specifically for outdoor use in and around a home.

**Objectives:**

- Describe features of different outdoor rooms that can be incorporated into their design.
- Review residential propane supply options for an outdoor space, including safety and environmental benefits.
- Explore the popularity of outdoor living spaces and considerations for their design.
- List additional outdoor residential uses for propane gas.

| | |
|---|---|
| **eLearning run time:** | 46 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0.1 |
| **Spanish:** | No |



## GENERATOR SELECTION AND SIZING FOR OUTAGE-READY HOMES

Homes that integrate propane appliances for heating, cooking, and outdoor living require smaller standby generators while maintaining reliable performance during grid outages. This course will review whole-home design strategies to reduce electric loads and diversify energy sources.

**Objectives:**

- Describe the impact of grid instability and extended outages on residential energy planning.
- Explain how whole-home generators function and support residential resilience.
- Discuss how electrical load and appliance choices impact generator size and cost.
- Identify the benefits of propane appliances in reducing electrical demand and enabling the use of smaller generators.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## HEAT PUMP HELPER TRAINING

Residential heating is a major use of energy for the home. Traditional electric heat pumps struggle to deliver heat when temperatures fall, relying on inefficient electric back-up strips. Bindus Manufacturing has developed the Heat Pump Helper®, a hydronic solution that heats the home using the existing heat pump and hot water. This module will explore the benefits of Heat Pump Helper® technology in providing more efficient, comfortable and effective heating, while reducing demand on the electric grid.

| | |
|---|---|
| **eLearning run time:** | 20 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |




## HEATING OIL CONVERSION: EXPLORING PROPANE AS A VIABLE ALTERNATIVE ENERGY SOURCE

Heating Oil Conversion: Exploring Propane as a Viable Alternative Energy Source equips homeowners, residential builders, and remodelers with knowledge to make informed decisions about their fuel choice. This module explains the background, maintenance, and concerns surrounding heating oil, a widely used fuel source, and proves that there are better alternatives. Propane gas has the same fuel benefits as heating oil and uses fewer emissions and higher efficiency equipment. At the end of the module, learners will test their understanding through a multiple-choice question quiz that will challenge their retention and critical thinking skills.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## LEVERAGING HIGH-EFFICIENCY PROPANE SYSTEMS IN ZERO NET ENERGY (ZNE) HOMES

Leveraging High-Efficiency Propane Systems in Zero Net Energy (ZNE) Homes equips architects, engineers, and other building professionals with design strategies to make cognizant decisions about leveraging propane systems in ZNE homes. There is a misconception that ZNE homes mean all-electric; however, a ZNE home can operate on a dual-fuel system and is a clean, affordable option. A ZNE home that runs on propane is an excellent way to reduce emissions. This module explains the background, performance, and misconception about ZNE homes and proves using a dual-fuel system is a solid, reliable source for homeowners. At the end of the module, learners will test their understanding through a multiple-choice quiz that will test their retention and critical thinking skills.

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## MEETING ENERGY DEMANDS WHILE FACING THE CHALLENGES OF ELECTRIC GRID INSTABILITY

Exploring clean, viable, and available options for electric independence.

**Objectives:**

- Examine the basic facts around propane energy while overcoming some common myths in order to find a more environmentally friendly solution.
- Investigate the nature of the current electrical grid in the United States and some of the current limitations on providing clean, all-electric buildings.
- Assess the options of using hybrid propane and electric systems for heating, hot water, power generation, and combined heat and power (CHP) solutions.
- Evaluate the use of propane energy systems as shown in the case study applications and examples.

| | |
|---|---|
| **eLearning run time:** | 8 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## OPPORTUNITIES IN THE EQUIPMENT RENTAL MARKET

Opportunities in the Equipment Rental Market is a 20-minute lesson on propane's role and benefits in construction related equipment, the strategic partnerships needed to be successful in this market, and how you can build a marketing plan to engage with those key players.

**Objectives:**

- What is the rental service market?
- What opportunities do rental service markets present for you?
- What are the benefits propane offers for rental service companies?
- Who are your strategic partners?
- How can you build a marketing plan to engage with this market?

| | |
|---|---|
| **eLearning run time:** | 19 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## PROPANE AND THE EVOLVING ENERGY LANDSCAPE FOR COMMERCIAL BUILDINGS

This course will help specifiers compare the advantages and disadvantages of various fuel sources and storage options, as well as examine the flexibility and reliability of propane, enabling them to more readily determine which fuel source best meets the needs of individual commercial projects.

**Objectives:**

- Assess various fuel sources, including their advantages and disadvantages.
- Review the basic principles of propane as a building fuel source.
- Evaluate the power demands of a commercial building and the most efficient and sustainable options for meeting those demands.
- Apply propane system design strategies to address commercial building challenges in energy efficiency, resilience, and occupant comfort.
- Identify relevant codes and standards governing propane use in commercial buildings, including NFPA, ASHRAE 90.1, and the International Green Construction Code (IgCC).

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## PROPANE ESSENTIALS: BUILDING HIGH-PERFORMANCE HOMES WITH VERSATILE ENERGY SYSTEMS

Today's residential projects demand energy strategies that balance efficiency, sustainability, cost, and resilience. Propane offers architects a flexible, low-carbon fuel that complements electricity, natural gas, heating oil, and solar energy, especially for rural, off-grid, or resilience-focused homes.

**Objectives:**

- Analyze the opportunities created by propane that enable architects to overcome challenges when designing commercial buildings in areas with restricted infrastructure or other limitations.
- Through an examination of applications and case studies, assess how propane can be used in large campus projects, such as warehouse facilities and schools, to provide reliable, cost-efficient, and sustainable energy, and achieve LEED certification.
- Investigate uses for propane that solve commercial design challenges by providing space savings and flexibility.
- Demonstrate how designing with propane can help commercial buildings meet resilience and sustainability goals that maximize health, wellness, and occupant comfort

| | |
|---|---|
| **eLearning run time:** | 3 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## PROPANE TANKLESS WATER HEATING IN COMMERCIAL BUILDING APPLICATIONS

Water heating is a major energy end-use in commercial buildings and is very significant in certain commercial building types. Many commercial building owners and operators have a critical need for water heating systems which are reliable, able to meet varying levels of demand, energy efficient, and able to fit within a building's space constraints in order to maintain their business operations. Propane tankless water heaters are a flexible, energy-efficient technology which provides these attributes in many commercial applications. This course will explore how commercial buildings use energy and the potential application of propane tankless systems to provide a solution for water heating needs. There is a PowerPoint presentation that can be used in classroom training in the Allied Partners, Building Professional Toolkit available for download from The Learning Center.

| | |
|---|---|
| **eLearning run time:** | 48 minutes |
| **ILT run time:** | Unknown |
| **CEUs:** | 0.1 |
| **Spanish:** | No |



## PROPANE-ENABLED SOLUTIONS FOR COMMERCIAL BUILDINGS IN RURAL AREAS

This course will discuss how architects and business owners can achieve outstanding performance and low-cost operation by incorporating high-efficiency, low-emission propane appliances into commercial new builds or retrofits. We will discuss the challenges of designing commercial buildings in rural areas, especially those that do not have natural gas service, and how propane can help to meet resilience and sustainability goals, and maximize health, wellness, and occupant comfort. In addition, this course will explore applications for propane in different commercial building types, as well as case studies where propane was used.

**Objectives:**

- Identify the challenges architects face when designing commercial buildings in rural areas and how propane can help solve those challenges.
- Discover how designing with propane can help commercial buildings meet resilience and sustainability goals that maximize health, wellness, and occupant comfort.
- Explore how propane can be used in retail, restaurants, and hotels to solve design challenges by providing space savings and flexibility; two hospitality case studies will demonstrate these solutions.
- Examine how propane is used in large campus projects, such as warehouse facilities and schools, for reliable, cost-efficient, and sustainable energy, including a case study in which a school received LEED Silver certification.
- There is a PowerPoint presentation that can be used in classroom training in the Allied Partners, Building Professional Toolkit available for download from The Learning Center.

| | |
|---|---|
| **eLearning run time:** | 44 minutes |
| **ILT run time:** | Unknown |
| **CEUs:** | 0.1 |
| **Spanish:** | No |



## RESIDENTIAL GENERATOR OPTIONS AND SIZING

Propane-powered residential generators have become increasingly necessary due to natural disasters and other power outages. Propane marketers are often called upon to advise contractors and homeowners on installing this equipment either as a retrofit to an existing home or as part of a new residential construction. This program equips propane sales professionals and customer service representatives on how to provide a whole home solution utilizing propane, including power generation. This module explains the costs, benefits, and importance of a whole home generator and how it works. This module is designed to show you how to conduct customer site assessments prior to delivering propane. You will learn how to assess hazards upon approach to approaching a customer's property, personal risk, and on-site installations.

**Objectives:**

- Explain what a whole home generator is
- Detail how a whole home generator works
- List the benefits of a whole home generator
- List the cost factors of a whole home generator
- Explain the importance of appliances in relation to a whole home generator

| | |
|---|---|
| **eLearning run time:** | 51 minutes |
| **ILT run time:** | 2 hours & 10 minutes |
| **CEUs:** | 0.1 |
| **Spanish:** | No |



## THE FUTURE OF HOT WATER IN COMMERCIAL OPERATION

Tankless Water Heaters Save Energy, Money, and Space with Next-Level Technology.

**Objectives:**

- Define the features and benefits of tankless hot water systems.
- Identify myths and realities of tankless systems.
- Discuss major retrofit projects to replace failing storage water heating systems with tankless systems.
- Describe innovations and the future of tankless water heating.

| | |
|---|---|
| **eLearning run time:** | 5 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |

# CERTIFIED EMPLOYEE TRAINING PROGRAM

**CETP Certification Training**

**CETP Refresher Training**

**CETP Proctor and Skills Evaluator Training**



# CETP CERTIFICATION TRAINING

# 3.1 - 3.5 BASIC PLANT OPERATIONS



The purpose of this course is to provide you with current information, practices, and procedures to safely and efficiently perform bulk plant operations tasks. The content includes information plant workers need to perform their job duties responsibly and will also prepare you for PERC's CETP certification or your company's certifications.

| | |
|---|---|
| **eLearning run time:** | 6 hours |
| **ILT run time:** | 4 days |
| **CEUs:** | 0 |
| **Spanish:** | No |

## INTRODUCTION

| | |
|---|---|
| **eLearning run time:** | 6 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Understand the objectives of this program.
- Understand the scope of this program.

## IDENTIFY THE MAIN COMPONENTS OF A BULK PLANT

| | |
|---|---|
| **eLearning run time:** | 18 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Identify the systems used to unload propane from trucks or rail cars, safely store propane for distribution, and fill propane containers.
- Recognize the hazards that exist in the plant.
- Identify the codes and regulations that apply to plant operations and equipment.
- Describe the differences between the two types of propane containers, DOT cylinders and ASME tanks.
- Identify the authority governing the design, fabrication, testing, and marking of each type of container.

## OPERATE THE PROPANE LIQUID SUPPLY SYSTEM

**eLearning run time:** 33 minutes
**OJT worksheet:** No

**Objectives:**

- Identify and safely open or reopen the valves in the liquid supply lines leading from the storage tanks.
- Avoid unintentionally closing (slugging) an excess flow valve.
- Reopen an excess flow valve to resume liquid delivery.
- Detect and investigate suspected contamination of stored propane.
- Avoid potential problems when operating with multiple storage tanks of different diameters.
- Know when to shut down and secure the liquidsupply system, and how to do so safely.

## INSPECT AND FILL DOT CYLINDERS

**eLearning run time:** 57 minutes
**OJT worksheet:** No

**Objectives:**

- Identify the characteristics of DOT cylinders that determine how they are filled and used.
- Inspect a DOT cylinder and determine whether it is fit for service.
- Fill a cylinder by weight.
- Fill a cylinder by volume.
- Advise customers regarding the safe transportation of propane containers.
- Recognize, and take all necessary steps to avoid, the hazards associated with filling containers.
- Follow the proper procedures in the event of a propane leak, fire or personal injury at or near a transfer location.

## INSPECT AND FILL VEHICLE MOUNTED ASME TANKS

**eLearning run time:** 21 minutes
**OJT worksheet:** No

**Objectives:**

- Inspect a vehicle-mounted ASME tank and determine whether it is fit for service.
- Fill a vehicle-mounted ASME tank safely.
- Recover from a break-away
- Identify what to do if there is an uncontrolled release of propane from starting evacuation procedures to providing appropriate information to 911.

## REQUALIFY DOT CYLINDERS BY VISUAL INSPECTION

**eLearning run time:** 42 minutes
**OJT worksheet:** No

**Objectives:**

- Identify DOT requirements for requalifying DOT cylinders.
- Inspect and requalify, reject, or condemn a cylinder.
- Mark the cylinder appropriately after completing the inspection.

## MAINTAIN CYLINDER AND ASME TANKS

**eLearning run time:** 28 minutes
**OJT worksheet:** No

**Objectives:**

- Prepare new DOT cylinders received at the bulk plant facility.
- Evacuate DOT cylinders.
- Prepare ASME tanks for installation.
- Evacuate ASME tanks.
- Repair or replace container valves.
- Inject methanol when needed.
- Flare propane vapor from containers.
- Apply protective coatings to storage containers.
- Recognize anhydrous ammonia contamination.



## UNLOAD A CARGO TANK MOTOR VEHICLE

**eLearning run time:** 34 minutes
**OJT worksheet:** No

**Objectives:**

- Identify the components that play a role in the transfer process.
- Avoid fires and personal injuries when unloading a CTMV.
- Avoid overfilling bulk storage tanks when unloading a CTMV.
- Safely unload a bobtail using the bobtail pump.
- Safely unload a cargo transport using the transport pump.
- Recognize and avoid hazards posed by auto-refrigeration.

## UNCONTROLLED PROPANE RELEASE- CETP

**eLearning run time:** 5 minutes
**OJT worksheet:** No

**Objectives:**

- Identify what to do if there is an uncontrolled release of propane.
- Identify how to encourage people to safely evacuate the scene of emergency.
- Identify information that must be provided to 911 or other emergency response operators in the event of an emergency.

## MAINTAIN BULK PLANT SYSTEMS AND EQUIPMENT

**eLearning run time:** 10 minutes
**OJT worksheet:** No

**Objectives:**

- Recognize and avoid the hazards associated with inspecting and servicing bulk plant systems and equipment.
- Identify the sources for guidelines on how to do the following in your plant:
- Assess the proper location, installation and operating condition of each piece of equipment.
- Service or replace components where necessary and appropriate.
- Verify that all systems comply with applicable codes and regulations.
- Find and follow written procedures for all bulk plant operations for which you are responsible.

## BULK PLANT TASKS REQUIRING ADDITIONAL TRAINING

**eLearning run time:** 2 minutes
**OJT worksheet:** No

**Objectives:**

- This module identifies those tasks and the training required to become qualified to perform the tasks. The tasks include, but are not limited to:
- Loading and securing cylinders for transport.
- Loading a bobtail.
- Loading and securing an ASME tank for transport.
- Loading a cargo transport.
- Unloading a rail car.

## PRE-CERTIFICATION REVIEW

**eLearning run time:** 30 minutes
**OJT worksheet:** No

**Objectives:**

- Prepare for the certification exam.
- eLearning run time: unknown

## 3.1-3.5 BASIC PLANT OPERATIONS ASSESSMENT

**eLearning run time:** 3 hours
**ILT run time:** 3 hours
**CEUs:** N/A
**Spanish:** No

To receive a CETP certification the candidates must meet the following requirements for each Certification Area:

- Pass the Certification Area Knowledge Examination by scoring at the designated mastery level score or higher, and
- Documentation of completion of the corresponding performance-based Skills Assessment, and
- Candidates must complete the corresponding Skills assessments within 12 months of passing the Knowledge Examination in order to be eligible for certification.
- Candidates may re-take one or more certification Knowledge Examinations without any required waiting period between attempts. A regular Knowledge Examination fee is charged for each attempt, and a Registered Proctor is required for each attempt.

## CERTIFICATION EXAM

The exam is available online or as a paper version. There is a 3-hour time limit. A CETP Proctor is required to take the exam.

## SKILLS ASSESSMENT

The Skills Assessment is available online or as a paper version. A CETP Skills Evaluator is required to deliver the skills assessment.

# 3.6 PERFORMING RAILCAR PRODUCT TRANSFERS AND MAINTAINING DOT INTERMODAL (IM) TANKS



This program provides an overview of key concepts and strategies for field personnel and will aid in preparing for PERC's CETP certification. Performing Railcar Product Transfers and Maintaining DOT Intermodal (IM) Tanks is an essential tool for ensuring employee safety and continuing success.

| | |
|---|---|
| **eLearning run time:** | N/A |
| **ILT run time:** | 1.75 days |
| **CEUs:** | N/A |
| **Spanish:** | No |

## INTRODUCTION

| | |
|---|---|
| **eLearning run time:** | N/A |
| **OJT worksheet:** | No |

**Objectives:**

- Understand the objectives of this program.
- Understand the scope of this program.

## PERSONAL PROTECTIVE EQUIPMENT USED IN PROPANE OPERATIONS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- The typical hazards associated with handling and transferring propane.
- The personal protective equipment used in propane transfer procedures.

## RAILCAR DOCUMENTATION, CONDITION AND SPOTTING PROCEDURES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- The typical hazards associated with handling and transferring propane.
- The personal protective equipment used in propane transfer procedures.

## VERIFYING THE PRESENCE OF PROPANE ODORANT

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Verify the presence of propane odorant in a railcar shipment per code requirements.

## BULK PLANT RAILCAR UNLOADING AND LOADING SYSTEMS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify equipment used to transfer liquid by differential pressure.
- Identify emergency equipment procedures.

## UNLOADING RAILCARS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify regulatory requirements relating to railcar unloading.
- Identify safety precautions related to the transfer of propane from railcars.
- Identify railcar/spotting procedures.
- Identify and check the valves and fittings used in unloading the railcar.
- Identify procedures for unloading a railcar.
- Identify post-unloading and releasing procedures.

## LOADING RAILCARS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify regulatory requirements relating to railcar loading.
- Identify safety precautions related to the transfer of propane to railcars.
- Identify railcar spotting procedures.
- Identify and check the valves and fittings used in loading the railcar.
- Identify procedures for loading a railcar with a compressor or pump.
- Identify post-loading and releasing procedures.

## RAILCAR AREA SECURITY TRAINING AND EMERGENCY PROCEDURES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify security plan components and training requirements.
- Identify the design and construction features of propane railcars that can help prevent emergencies.
- Identify what to do in the event of an uncontrolled propane release.

## TESTING AND INSPECTION

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify the procedures for inspecting and testing intermodal (IM) tanks for fitness for continued service.
- Identify required markings for intermodal (IM) tanks.

## PREPARING DOT INTERMODAL (IM) TANKS FOR TRANSPORTATION

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify load inspection rules for tanks and cargo in transit.
- Identify procedures for transporting DOT intermodal (IM) tanks.

## MAINTAINING DOT INTERMODAL (IM) TANKS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Safely handle flammable and combustible liquids.
- Identify procedures for applying protective coatings to storage containers.
- Identify procedures to test for anhydrous ammonia contamination.
- Identify procedures for evacuating intermodal tanks at the bulk plant.
- Identify procedures for conducting vapor flaring operations.
- Identify procedures for purging intermodal tanks.
- Identify procedures for injecting methanol into intermodal tanks.
- Identify NFPA requirements for intermodal tank valves and fittings.
- Identify precautions for tank valve and fitting replacement.
- Identify procedures for replacing intermodal tank valves and fittings.

## PRE-CERTIFICATION REVIEW

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Prepare for the CETP certification exam

## 3.6 PERFORMING RAILCAR PRODUCT TRANSFERS AND MAINTAINING DOT INTERMODAL (IM) TANKS ASSESSMENT

**eLearning run time:** 3 hours
**ILT run time:** 3 hours
**CEUs:** N/A
**Spanish:** No

To receive a CETP certification the candidates must meet the following requirements for each Certification Area:

- Pass the Certification Area Knowledge Examination by scoring at the designated mastery level score or higher, and
- Documentation of completion of the corresponding performance-based Skills Assessment, and
- Candidates must complete the corresponding Skills assessments within 12 months of passing the Knowledge Examination in order to be eligible for certification.
- Candidates may re-take one or more certification Knowledge Examinations without any required waiting period between attempts. A regular Knowledge Examination fee is charged for each attempt, and a Registered Proctor is required for each attempt.

## CERTIFICATION EXAM

The exam is available online or as a paper version. A CETP Proctor is required to take the exam.

## SKILLS ASSESSMENT

The Skills Assessment is available online or as a paper version. A CETP Skills Evaluator is required to deliver the skills assessment.

# 4.3 INSTALLING APPLIANCES AND INTERIOR VAPOR DISTRIBUTION SYSTEMS




This course provides an overview of key concepts and strategies for field personnel and will aid in preparing for PERC's CETP certification. Installing Appliances and Interior Vapor Distribution Systems is an essential tool for ensuring employee safety and continuing success.

| | |
|---|---|
| **eLearning run time:** | N/A |
| **ILT run time:** | 4 days |
| **CEUs:** | N/A |
| **Spanish:** | No |

## INTRODUCTION

| | |
|---|---|
| **eLearning run time:** | N/A |
| **OJT worksheet:** | No |

**Objectives:**

After completing this module, you will be able to:

- Distinguish between different types of appliances.
- Choose an appliance based on its intended location.
- Calculate how much air an appliance needs using two different methods.
- Identify how to supply additional air to an appliance when needed.

## DESIGN CONSIDERATIONS FOR GAS APPLIANCES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Distinguish between different types of appliances.
- Choose an appliance based on its intended location.
- Calculate how much air an appliance needs using two different methods.
- Identify how to supply additional air to an appliance when needed.

## DESIGNING GAS VENTING SYSTEMS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Distinguish between natural and mechanical draft systems and direct vent systems.
- Size a venting system in accordance with the number of connected appliances.

## DESIGN OF INTERIOR VAPOR DISTRIBUTION SYSTEMS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Calculate Btu/hr demand in a system and choose a regulator.
- Identify the relationship between gas volume and pressure and pipe length and size.
- Size gas piping and identify other piping considerations.

## INSTALLING APPLIANCES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this lesson, you will be able to:

- Identify general information about code requirements that apply to the installation of an appliance

## INSTALLING VENTING SYSTEMS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Identify considerations when installing components in a natural draft venting system.
- Identify procedures for installing mechanical draft venting systems.
- Identify procedures for installing mechanical direct venting systems.

## INSTALLATION OF INTERIOR VAPOR DISTRIBUTION SYSTEM

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Identify procedures for installing interior piping and tubing for a vapor distribution system.
- Identify code requirements for installing CSST piping.
- Identify procedures for pressure testing a system.



## SAFETY INFORMATION

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Identify the content in some of the PERC consumer safety materials.
- Identify what to do if there is an uncontrolled release of propane from stating evacuation procedures to providing appropriate information to 911.

## PRE-CERTIFICATION REVIEW

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Prepare for the certification exam.

## 4.3 INSTALLING APPLIANCES AND INTERIOR VAPOR DISTRIBUTION SYSTEMS ASSESSMENT

**eLearning run time:** 3 hours
**ILT run time:** 3 hours
**CEUs:** N/A
**Spanish:** No

To receive a CETP certification the candidates must meet the following requirements for each Certification Area:

- Pass the Certification Area Knowledge Examination by scoring at the designated mastery level score or higher, and
- Documentation of completion of the corresponding performance-based Skills Assessment, and
- Candidates must complete the corresponding Skills assessments within 12 months of passing the Knowledge Examination in order to be eligible for certification.
- Candidates may re-take one or more certification Knowledge Examinations without any required waiting period between attempts. A regular Knowledge Examination fee is charged for each attempt, and a Registered Proctor is required for each attempt.

### CERTIFICATION EXAM

The exam is available online or as a paper version. A CETP Proctor is required to take the exam.

### SKILLS ASSESSMENT

The Skills Assessment is available online or as a paper version. A CETP Skills Evaluator is required to deliver the skills assessment.

# 4.4 BASIC ELECTRICITY FOR PROPANE APPLIANCE SERVICE



This program enables participants to interpret electrical components and diagrams, and measure electrical quantities, and will aid in preparing for PERC's CETP certification. Basic Electricity for Propane Appliance Service is an essential tool for ensuring employee safety and continuing success.

| | |
|---|---|
| **eLearning run time:** | N/A |
| **ILT run time:** | 3 days |
| **CEUs:** | N/A |
| **Spanish:** | No |

## INTRODUCTION

| | |
|---|---|
| **eLearning run time:** | N/A |
| **OJT worksheet:** | No |

**Objectives:**

- Understand the objectives of this program.
- Understand the scope of this program.

## OVERVIEW OF BASIC ELECTRICITY FOR PROPANE APPLIANCES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Describe the service technician's role in maintaining and promoting safety for customers and themselves during the maintenance and repair of propane appliances.
- Describe the primary purpose and function of each type of component in a basic propane appliance.

## INTRODUCTION TO ELECTRICAL CIRCUITS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Define components of simple electrical circuits.
- Explain open and short circuits.
- Recognize definitions of current, voltage, and resistance.

## MEASURING ELECTRICAL QUANTITIES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Recognize safety measures when working on electrical appliances.
- Determine which tool to use for a specific measurement.
- Recognize safety measures when using electrical meters.
- Set up and use a multimeter and accessories to measure electrical quantities.
- Safely measure voltage between two points in an electrical circuit.
- Safely measure resistance between two points in an electrical circuit.
- Measure current between two points in an electrical circuit.
- Use a clamp meter or clamp accessory to measure current.

## PROPERTIES OF ELECTRICAL CIRCUITS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Explain series and parallel circuits.
- Given values for two of the properties (current, voltage, resistance), calculate the third.
- Given a change in one of the values (voltage, current, resistance), identify the impact on another.
- Distinguish between single pole and double pole switches and single throw and double-throw switches.
- Interpret switch action from a diagram (normally open or closed; open or close on sensor activation).
- Verify if circuit is 120 V or 240 V by looking at the electrical panel box.
- Given a simple electrical diagram, determine how much power is supplied to a load.
- Explain the difference between AC and DC power supply.
- Define bonding, grounding, and polarity.

## COMMON SENSING DEVICES IN PROPANE APPLIANCES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Recognize the following sensing devices in propane appliances:
  - Temperature-responsive devices
  - Pressure-responsive devices
  - Flow-responsive devices
  - Current-responsive devices
  - Liquid level sensors
  - RPM sensors
  - Flame sensors
- Recognize the symbol used in electrical circuit diagrams for each type sensing device.
- Describe the basic function of each type of sensing device.

## ELECTRICAL COMPONENTS IN PROPANE APPLIANCES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Recognize the purpose of a transformer.
- Determine if a transformer is a step up or step down transformer.
- Interpret the components of a ladder diagram as related to transformers.
- Recognize examples of relays.
- Recognize the symbol used in electrical circuit diagrams for relays.
- Describe the purpose and general operation of relays.
- Recognize examples of the following components:
  - Motors.
  - Capacitors.
- Recognize the symbols used in electrical circuit diagrams for capacitors and motors.
- Describe the purpose and general operation of capacitors and motors.
- Describe the purpose of a wall thermostat.
- Recognize the function of wireless controls.
- Describe the purpose of a limit control.
- Describe the purpose of a fan control.
- Identify the components of a gas control valve.

## ELECTRICAL CONTROL CIRCUIT DIAGRAMS AND TROUBLESHOOTING

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**
After completing this module, you will be able to:

- Match definitions with the symbols for common components of propane appliance systems.
- Given a connection diagram, interpret the information contained in the diagram.
- Given a ladder diagram, interpret the information contained in the diagram.

## PRE-CERTIFICATION REVIEW

Prepare for the certification exam.

**eLearning run time:** N/A
**OJT worksheet:** No

## 4.4 BASIC ELECTRICITY FOR PROPANE APPLIANCE SERVICE ASSESSMENT

**eLearning run time:** 3 hours
**ILT run time:** 3 hours
**CEUs:** N/A
**Spanish:** No

To receive a CETP certification the candidates must meet the following requirements for each Certification Area:

- Pass the Certification Area Knowledge Examination by scoring at the designated mastery level score or higher, and
- Documentation of completion of the corresponding performance-based Skills Assessment, and
- Candidates must complete the corresponding Skills assessments within 12 months of passing the Knowledge Examination in order to be eligible for certification.
- Candidates may re-take one or more certification Knowledge Examinations without any required waiting period between attempts. A regular Knowledge Examination fee is charged for each attempt, and a Registered Proctor is required for each attempt.

## CERTIFICATION EXAM

The exam is available online or as a paper version. A CETP Proctor is required to take the exam.

## SKILLS ASSESSMENT

The Skills Assessment is available online or as a paper version. A CETP Skills Evaluator is required to deliver the skills assessment.

# 4.5 BASIC PROPANE APPLIANCE SERVICE AND TROUBLESHOOTING




This program enables participants to efficiently service, troubleshoot, and repair basic propane appliances and will aid in preparing for PERC's CETP certification. Basic Propane Appliance Service and Troubleshooting is an essential tool for ensuring employee safety and continuing success. This program includes a workbook along with the training manual. This program is designed for a minimum of three days of classroom training. This schedule is very tight and does not include time to complete any lab activities and only some of the troubleshooting exercises. A four-day schedule allows completion of all the required course materials, but not the lab activities. To include all course materials and lab activities requires approximately six days.

| | |
|---|---|
| **eLearning run time:** | N/A |
| **ILT run time:** | 3-6 days |
| **CEUs:** | N/A |
| **Spanish:** | No |

## INTRODUCTION

| | |
|---|---|
| **eLearning run time:** | N/A |
| **OJT worksheet:** | No |

**Objectives:**

- Understand the objectives of this program.
- Understand the scope of this program.

## OVERVIEW OF BASIC PROPANE APPLIANCE SERVICE AND TROUBLESHOOTING

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Objectives: After completing this module, you will be able to:
- Describe the service technician's role in maintaining and promoting safety for customers and themselves during the maintenance and repair of propane appliances.
- List actions an appliance service technician can take to promote positive customer relations.
- Describe the primary purpose and importance of each type of propane appliance service call.
- Explain the importance of properly maintaining tools and equipment.
- List steps in a systematic approach to troubleshooting propane appliances.

## MEASURING TEMPERATURE, PRESSURE, AND GAS CONCENTRATION

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Measure temperature.
- Measure pressure.
- Use a combustible gas indicator (CGI) and a combustible gas detector (CGD).

## COMMON SENSING DEVICES IN PROPANE APPLIANCES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Recognize the following sensing devices in propane appliances:
- Temperature-responsive devices.
- Pressure-responsive devices.
- Flow-responsive devices.
- Current-responsive devices.
- Liquid level sensors.
- RPM sensors.
- Flame sensors.
- Recognize troubleshooting tips for each type of sensing device.

## ELECTRICAL COMPONENTS IN PROPANE APPLIANCE SYSTEMS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Interpret the components of a ladder diagram as related to transformers.
- Identify steps to test a transformer.
- Recognize examples of relays.
- Describe how to test a relay.
- Describe the purpose and general operation of capacitors and motors.
- Describe how to test a capacitor.
- Describe how to test a motor.

## WALL THERMOSTATS AND WIRELESS CONTROLS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify two common types of wall thermostats.
- Describe the general operation of each type of wall thermostat.
- Describe the proper location and mounting of wall thermostats.
- Explain how to use current measurement to set a heat anticipator for an electromechanical thermostat.
- Identify solutions for common problems with wall thermostats.
- Check the calibration of a wall thermostat.
- Recognize troubleshooting tips for wall thermostats.
- Resolve problems with wireless controls.

## LIMIT AND FAN CONTROLS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Describe the operation of common high limit controls.
- Describe the operation of common fan controls.
- Identify solutions for common problems with limit or fan controls.

## IGNITION SYSTEMS FOR BASIC PROPANE APPLIANCES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**
After completing this module, you will be able to:

- Recognize the definition of standing pilot ignition systems.
- Explain the components and sequence of operation of the different types of ignition systems.
- Identify solutions for common problems with ignition systems.

## PRESSURE-REGULATED GAS CONTROL VALVES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Identify the components of a gas control valve.
- Match the type of gas control valve with appliance design and application.
- Identify solutions for common problems with gas control valves.



## BURNERS AND ORIFICES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

After completing this module, you will be able to:

- Recognize different types of burners.
- Identify problems with burners.
- Correct problems with burners so they burn properly.
- Verify that the orifice is correct.

## ELECTRICAL CONTROL CIRCUIT DIAGRAMS AND TROUBLESHOOTING

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Determine the sequence of operation from a ladder diagram of a basic propane appliance.
- Given a fault, identify expected voltage measurements.
- Isolate the fault in an electrical circuit given voltage measurements.
- Given a real-world scenario about a basic propane appliance, describe the troubleshooting strategy.
- Test the continuity of the circuit.

## APPLIANCE SERVICE TOOLS AND TECHNIQUES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Explain the benefits of having appropriate tools and supplies.
- Verify manifold gas pressure measurements and adjust to manufacturer specifications.
- Describe the conditions to look for when inspecting a burner for defects.
- Identify potential appliance safety problems requiring removing the appliance from service.
- Explain the importance and general steps of routine preventive maintenance.
- Describe tasks performed during preventive maintenance including:
  - Test safety shut-off devices and operational controls
  - Inspect and clean appliance burner and pilot assemblies
  - Clean and inspect appliance heat exchangers
  - Lubricate appliance motor bearings
  - Replace defective components:
    - ◊ Thermocouple or thermopile
    - ◊ Main burner
    - ◊ Pilot burner
    - ◊ Heat exchanger
- Verify adequate gas pressure.
- Verify appliance burner operation.

## TROUBLESHOOTING BASIC PROPANE APPLIANCE SYSTEMS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Follow a systematic approach for troubleshooting propane appliances.
- Interpret component and ladder diagrams for propane appliance operating systems.
- Isolate the fault in an electrical and mechanical system.
- Investigate cause(s) of component or control failure to minimize recalls.
- Clean, tighten, repair, or replace components or controls as appropriate.

## LEAKS, ODOR AND CARBON MONOXIDE COMPLAINTS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify what to do if there is an uncontrolled propane release
- Identify how to encourage people to safely evacuate the scene of an emergency.
- Identify information that must be provided to 911 or other emergency response operators in the event of an emergency.
- Recognize different methods for leak checking.
- Isolate a propane leak.
- Investigate gas odors.



## PRE-CERTIFICATION REVIEW

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Prepare for the certification exam.

## 4.5 BASIC PROPANE APPLIANCE SERVICE AND TROUBLESHOOTING ASSESSMENT

**eLearning run time:** 3 hours
**ILT run time:** 3 hours
**CEUs:** N/A
**Spanish:** No

To receive a CETP certification the candidates must meet the following requirements for each Certification Area:

- Pass the Certification Area Knowledge Examination by scoring at the designated mastery level score or higher, and
- Documentation of completion of the corresponding performance-based Skills Assessment, and
- Candidates must complete the corresponding Skills assessments within 12 months of passing the Knowledge Examination in order to be eligible for certification.
- Candidates may re-take one or more certification Knowledge Examinations without any required waiting period between attempts. A regular Knowledge Examination fee is charged for each attempt, and a Registered Proctor is required for each attempt.



### CERTIFICATION EXAM

The exam is available online or as a paper version. A CETP Proctor is required to take the exam.

### SKILLS ASSESSMENT

The Skills Assessment is available online or as a paper version. A CETP Skills Evaluator is required to deliver the skills assessment.

# 4.6 ADVANCED PROPANE APPLIANCE SERVICE AND TROUBLESHOOTING




This program enables participants to efficiently service, troubleshoot, and repair advanced propane appliances with electronic ignition systems. The course will aid in preparing for PERC CETP certification. 4.6 Advanced Propane Appliance Service and Troubleshooting is an essential tool for ensuring employee safety and continuing success. This program is designed for a minimum of four days of classroom training. This schedule is very tight and allows completion of all the required course materials, but not the lab activities. To include all course materials and lab activities requires approximately six days. Learners taking the course in a self-paced mode may require more time.

| | |
|---|---|
| **eLearning run time:** | N/A |
| **ILT run time:** | 4-6 days |
| **CEUs:** | N/A |
| **Spanish:** | No |

## INTRODUCTION

| | |
|---|---|
| **eLearning run time:** | N/A |
| **OJT worksheet:** | No |

**Objectives:**

- Understand the objectives of this program.
- Understand the scope of this program.

## SYSTEMATIC APPROACH TO TROUBLESHOOTING PROPANE APPLIANCES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Explain the difference between advanced and basic propane devices.
- List steps in a systematic approach to troubleshooting propane appliances.

## ADVANCED ELECTRICAL CIRCUITS AND ELECTRICAL SAFETY

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Recognize safety measures when working on electrical appliances.
- Verify if circuit is 120V or 240V by looking at the electrical panel box.
- Given an electrical diagram, determine how much power is coming to a load.
- Distinguish the difference between single and three-phase power.
- Recognize the following switches in propane appliances: spill switches, water-flow switches, and float-type devices.
- Recognize the symbols used in electrical circuit diagrams for spill switches, water-flow switches, and float-type devices.
- Describe the basic function of spill switches, water-flow switches, and float-type devices.
- Recognize troubleshooting tips and techniques of spill switches, water-flow switches, and float-type devices.
- Recognize the purpose of a resistor (fixed, variable, adjustable) and a thermistor.
- Recognize the symbols used in electrical circuit diagrams for resistors and thermistors.
- Identify elements on a circuit board—connectors, lights, dip switches.
- Interpret circuit boards in wiring diagrams and identify specific connectors on board.

## MEASURING DIFFERENTIAL TEMPERATURE, PRESSURE AND OTHER KEY TESTS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Measure temperature and temperature differential.

## COMMON COMPONENTS IN PROPANE APPLIANCE SYSTEMS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Match the different types of motors (ECM, PSC, DC) with the descriptions of their operation.
- Describe how to test motors.
- Recognize examples of contactors.
- Recognize the symbol used in electrical circuit diagrams for contactors.
- Describe the purpose and general operation of contactors.
- Describe how to test a contactor.
- Adjust settings on an electronic fan timer.
- Explain the purpose of draft fans and draft inducers.
- Explain the function of the pressure switch in a draft fan system.
- Test the operation of draft fan pressure switches.
- Identify solutions for common problems with draft fan systems.
- Recognize functions of external controls and components.
- Identify potential impact of external components and controls on the operation of the propane appliance.
- Explain the purpose of power vents and condensate pumps.
- Describe the operation of power vents and condensate pumps.
- Identify solutions for common problems with external components.
- Recognize inshot burners.
- Describe the difference in operation for power burners.
- Describe the difference in operation for pre-mixing burners.
- Modify orifice to the correct size.

## ADVANCED IGNITION SYSTEMS AND GAS CONTROL VALVES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Define flame rectification and explain how it is used in propane appliances.
- Explain how to test flame rectification components of an electrical circuit.
- Describe the function of flame sensors in an electronic ignition system.
- Measure microamps.
- Explain the purpose of electronic ignition systems.
- Recognize the definition of:
  - Intermittent spark ignition (ISI) systems
  - Direct spark ignition (DSI) systems
  - Hot surface ignition (HSI) systems
  - Hot surface to pilot (IHSP) systems
- Explain the components and sequence of operation of the different types of electronic ignition systems.
- Explain the components and sequence of operation of a gas dryer ignition system.
- Identify solutions for common problems with gas dryer ignition systems.
- Match type of valve with type of ignition system.
- Match type of gas control valve with appliance design application.
- Identify solutions for common problems with gas control valves.

## ELECTRICAL CONTROL CIRCUIT DIAGRAMS AND TROUBLESHOOTING

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Given a ladder diagram of a propane appliance, interpret the information contained in the diagram.
- Given a ladder diagram of a propane appliance, determine the sequence of operation.
- Given a real world scenario, describe the troubleshooting strategy.

## TYPICAL PROPANE APPLIANCE DISTRIBUTION SYSTEMS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Recognize the components and controls of a forced warm air system and their functions.
- Recognize differences between single-zone and multiple-zone forced warm air systems.
- Check temperature rise across the furnace.
- Identify solutions for common problems with forced warm air systems.
- Recognize the components and controls of a hydronic system and their functions.
- Recognize differences between single-zone and multiple-zone hydronic systems.
- Check temperature differential between supply and return piping.
- Purge air from hydronic systems.
- Identify solutions for common problems with hydronic systems.
- Recognize the components and controls of a potable water heating system and their functions.
- Verify water quality.
- Verify supply water pressure.
- Verify water flow rate.
- Identify solutions for common problems with potable water heating systems.

## APPLIANCE SERVICE TOOLS AND TECHNIQUES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Correctly select and install universal replacement components.
- Explain the importance and general steps of routine preventive maintenance.
- Inspect appliance venting system.
- Clean appliance burner and pilot assemblies.
- Clean and inspect appliance heat exchangers.
- Test safety shut-off devices and operational controls.
- Verify appliance burner operation.
- Identify potential appliance safety problems requiring "red" tagging out of service.

## TROUBLESHOOTING ADVANCED APPLIANCE SYSTEMS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Follow a systematic approach for troubleshooting propane appliances.
- Interpret component and ladder diagrams for propane appliance operating systems.
- Isolate the fault in an electrical and mechanical system.
- Investigate cause(s) of component or control failure to minimize recalls.
- Clean, tighten, repair, or replace components or controls as appropriate.

## LEAKS, ODOR AND CARBON MONOXIDE COMPLAINTS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify what to do if there is an uncontrolled propane release.
- Identify how to encourage people to safely evacuate the scene of an emergency.
- Identify information that must be provided to 911 or other emergency response operators in the event of an emergency.
- Recognize different methods for leak checking.
- Isolate a propane leak.
- Investigate gas odors.

## PRE-CERTIFICATION REVIEW

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Prepare for the certification exam.

## 4.6 ADVANCED PROPANE APPLIANCE SERVICE AND TROUBLESHOOTING ASSESSMENT

**eLearning run time:** 3 hours
**ILT run time:** 3 hours
**CEUs:** N/A
**Spanish:** No

To receive a CETP certification the candidates must meet the following requirements for each Certification Area:

- Pass the Certification Area Knowledge Examination by scoring at the designated mastery level score or higher, and
- Documentation of completion of the corresponding performance-based Skills Assessment, and
- Candidates must complete the corresponding Skills assessments within 12 months of passing the Knowledge Examination in order to be eligible for certifications
- Candidates may re-take one or more certification Knowledge Examinations without any required waiting period between attempts. A regular Knowledge Examination fee is charged for each attempt, and a Registered Proctor is required for each attempt.

### CERTIFICATION EXAM

The exam is available online or as a paper version. A CETP Proctor is required to take the exam.

### SKILLS ASSESSMENT

The Skills Assessment is available online or as a paper version. A CETP Skills Evaluator is required to deliver the skills assessment.

# 5.1 DESIGNING & INSTALLING DISPENSER TRANSFER SYSTEMS



Designing and installing a propane dispenser requires a clear determination of the functions the installation will serve. This program reviews how to design and install propane dispensers.

**eLearning run time:** N/A
**ILT run time:** 1 day
**CEUs:** N/A
**Spanish:** No

## DETERMINING DISPENSER APPLICATION, OPERATING REQUIREMENTS AND PROPER LOCATION

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identifying the types of containers to be filled at the dispenser
- Determining the dispenser tank size and orientation
- Determining the location for the dispenser and other factors affecting dispenser component selection

## IDENTIFYING REQUIRED DISPENSER TANK VALVES, FITTINGS AND DISPENSER PIPING

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identifying NFPA 58 code requirements for ASME tank valves & fittings
- Verifying proper specifications and protection measures for tank relief valves
- Verifying that proper components for the dispenser installation are provided, including:
  - Filler valve or other filling systems
  - Internal valves and excess flow requirements
  - Emergency shutdown systems
  - Manual valves
  - Tank Fittings
  - Dispenser Piping

## IDENTIFYING DISPENSER ELECTRICAL SYSTEM REQUIREMENTS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Apply NFPA 58 electrical system location classification criteria for classified and unclassified areas
- Identify electrical component requirements for classified areas

## APPLYING PROPANE PUMP OPERATING CHARACTERISTICS AND SELECTING THE DISPENSER PUMP

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify the operating characteristics of propane pumps
- Select the dispenser pump

## IDENTIFYING DISPENSER EMERGENCY SHUTDOWN SYSTEMS AND FIRE EXTINGUISHER REQUIREMENTS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Apply NFPA 58 code requirements for selecting dispenser emergency shutdown system components
- Apply NFPA 58 code requirements for fire extinguishers used at propane dispensers

## SELECTING DISPENSER TRANSFER HOSE(S), HOSE END VALVES, HOSE SAFETY DEVICES, AND ADAPTERS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Select filling adapters based on the dispenser application (types of containers serviced) and hose-end valves to meet NFPA 58 code requirements
- Apply NFPA 58 code requirements for selecting dispenser transfer hose(s)

## IDENTIFYING AUXILIARY EQUIPMENT USED WITH PROPANE DISPENSERS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Select dispenser support and mounting components
- Select scales for cylinder filling dispenser applications
- Select liquid meters for motor fuel dispensing
- Identify dispenser vehicle (traffic) protection requirements

## IDENTIFYING METERING SYSTEMS AND MAINTENANCE PROCEDURES FOR SERVICE STATION DISPENSERS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify components of motor fuel dispensers
- Select components of motor fuel dispensers according to their applications
- Install motor fuel dispensers
- Identify the types and operating characteristics of liquid meters
- Identify components of metering systems
- Identify normal liquid meter operating conditions
- Recognize and react to abnormal liquid meter operating conditions
- Apply troubleshooting guides to the maintenance of liquid meters

## INSTALLING PROPANE DISPENSERS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Verify compliance with NFPA code requirements for dispenser installations
- Locate and install dispenser foundation and supporting structures
- Install dispenser component

## IDENTIFYING REQUIREMENTS FOR DISPENSERS WITH AGGREGATE STORAGE TANK CAPACITY GREATER THAN 4000 WATER GALLONS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify tank location and installation code requirements
- Identify tank valve and fittings, and bulkhead and auxiliary equipment requirements for a single tank over 4000 water gallon capacity

## IDENTIFYING STARTUP PROCEDURES FOR NEW AND EXPANDING LP-GAS STORAGE FACILITIES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

In this module you will learn the following procedures:

- Training
- Tools and equipment
- Initial inspection
- Removing nitrogen or inert gas
- Foreign material
- Closing valves
- Introducing vapor
- Seasoning
- Introducing liquid
- Final inspection and documentation
- Observing the transfer

## 5.1 DESIGNING & INSTALLING DISPENSER TRANSFER SYSTEMS ASSESSMENT

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | Unknown |
| **CEUs:** | N/A |
| **Spanish:** | No |

To receive a CETP certification the candidates must meet the following requirements for each Certification Area:

- Pass the Certification Area Knowledge Examination by scoring at the designated mastery level score or higher, and
- Documentation of completion of the corresponding performance-based Skills Assessment, and
- Candidates must complete the corresponding Skills assessments within 12 months of passing the Knowledge Examination in order to be eligible for certification.
- Candidates may re-take one or more certification Knowledge Examinations without any required waiting period between attempts. A regular Knowledge Examination fee is charged for each attempt, and a Registered Proctor is required for each attempt.



### CERTIFICATION EXAM

The exam is available online or as a paper version. A CETP Proctor is required to take the exam.

### SKILLS ASSESSMENT

The Skills Assessment is available online or as a paper version. A CETP Skills Evaluator is required to deliver the skills assessment.

# 8.0 LARGE INDUSTRIAL/ COMMERCIAL GAS-FIRED EQUIPMENT



This program covers determining gas supply requirements for large industrial gas fired equipment; identifying characteristics and functions of valve trains and ignition safety systems used with large gas fired equipment; identifying characteristics and functions of safety controls and burner designs used with large gas fired equipment; and identifying system testing and start up procedures that apply to large gas fired equipment.

**eLearning run time:** N/A
**ILT run time:** 3 days
**CEUs:** N/A
**Spanish:** No

## DETERMINING GAS SUPPLY REQUIREMENTS FOR LARGE INDUSTRIAL GAS-FIRED EQUIPMENT

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify operating characteristics of large gas-fired equipment.
- Identify system supply requirements for large gas-fired equipment.

## IDENTIFYING CHARACTERISTICS AND FUNCTIONS OF VALVE TRAINS AND IGNITION SAFETY SYSTEMS USED WITH LARGE GAS-FIRED EQUIPMENT

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify basic features and functions of gas valve train components.
- Identify basic features and functions of flame detection and ignition safety systems.

## IDENTIFYING CHARACTERISTICS AND FUNCTIONS OF SAFETY CONTROLS AND BURNER DESIGNS USED WITH LARGE GAS-FIRED EQUIPMENT

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify basic features and functions of gas controls and primary safety systems.
- Identify basic commercial/industrial burner types and their operating characteristics.

## IDENTIFYING SYSTEM TESTING AND START-UP PROCEDURES THAT APPLY TO LARGE GAS-FIRED EQUIPMENT

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify purging, pressure testing and leak checking procedures that are required for new and modified gas supply systems.
- Identify typical start-up procedures that apply to large industrial/commercial gas-fired equipment.

## 8.0 LARGE INDUSTRIAL/ COMMERCIAL GAS-FIRED EQUIPMENT

**eLearning run time:** 3 hours
**ILT run time:** 3 hours
**CEUs:** N/A
**Spanish:** No

To receive a CETP certification the candidates must meet the following requirements for each Certification Area:

- Pass the Certification Area Knowledge Examination by scoring at the designated mastery level score or higher, and
- Documentation of completion of the corresponding performance-based Skills Assessment, and
- Candidates must complete the corresponding Skills assessments within 12 months of passing the Knowledge Examination in order to be eligible for certification.
- Candidates may re-take one or more certification Knowledge Examinations without any required waiting period between attempts. A regular Knowledge Examination fee is charged for each attempt, and a Registered Proctor is required for each attempt.

### CERTIFICATION EXAM

The exam is available online or as a paper version. A CETP Proctor is required to take the exam.

### SKILLS ASSESSMENT

The Skills Assessment is available online or as a paper version. A CETP Skills Evaluator is required to deliver the skills assessment.

# 9.0 HVAC AND PLUMBER TECHNICAL TRAINING FOR HVAC AND PLUMBING PROFESSIONALS



The purpose of this course is to provide current information, practices, and procedures to educate HVAC and plumbing professionals on how to design, install, test, and operate propane-based HVAC and plumbing systems in a safe and efficient manner.

| | |
|---|---|
| **eLearning run time:** | N/A |
| **ILT run time:** | 80 hours |
| **CEUs:** | N/A |
| **Spanish:** | No |

## INTRODUCTION

| | |
|---|---|
| **eLearning run time:** | N/A |
| **OJT worksheet:** | No |

**Objectives:**

- Understand the objectives of this program.
- Understand the scope of this program.

## PROPANE BASICS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify the sources of Liquefied Petroleum gases (LP-gases).
- Name the primary LP-gases and their characteristics.
- Identify differences between propane and other LP-gases.
- Recognize the specific gravity of propane liquid and vapor.
- Identify the effects of pressure and temperature on propane.
- Explain how to handle a gas odor call from a customer.
- Identify the content in some of the PERC consumer safety materials.

## DESIGNING AND INSTALLING VAPOR DISTRIBUTION SYSTEMS: EXTERIOR GAS PIPING AND CONTAINERS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Determine the total gas demand of present and future propane-fueled appliances.
- Calculate the effective system load of a propane vapor distribution system.
- Identify factors that need to be considered when sizing a propane container.
- Explain how these factors affect the sizing of a propane container.
- Identify factors that must be considered when selecting appropriate pipe and tubing materials for exterior propane vapor distribution systems.
- Explain how to determine the appropriate size for exterior vapor distribution lines.

## DESIGNING VAPOR DISTRIBUTION SYSTEMS: REGULATORS AND METERS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify the appropriate size and selection of regulators and meters.
- Determine types of regulators based on individual vapor distribution systems.

## DESIGNING VAPOR DISTRIBUTION SYSTEMS: INTERIOR GAS PIPING

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Calculate Btu/hr demand in a system and choose a regulator.
- Identify the relationship between gas volume and pressure and pipe length and size.
- Size gas piping and identify other piping considerations.

## INSTALLATION AND PRESSURE TESTING OF INTERIOR VAPOR DISTRIBUTION SYSTEMS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify procedures for installing interior piping and tubing for a vapor distribution system.
- Identify code requirements for installing CSST piping.
- Identify procedures for pressure testing a system.

## INSTALLING REGULATORS AND METERS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify the procedures and precautions for installing regulators and vapor meters.
- Identify and explain the role of accessories required for regulator installation.
- Explain methods for storing and handling vapor meters.
- Identify locations for vapor meter installation.

## DESIGN CONSIDERATIONS FOR GAS APPLIANCES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Distinguish between different types of appliances.
- Choose an appliance based on its intended location.
- Calculate how much air an appliance needs using two different methods.
- Identify how to supply additional air to an appliance when needed.
- Identify the requirements to convert a gas appliance from natural gas to propane.

## DESIGNING APPLIANCE COMBUSTION, DILUTION, AND VENTILATION AIR REQUIREMENTS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Calculate how much air an appliance needs using two different methods.
- Identify how to supply additional air to an appliance when needed.

## DESIGN OF GAS APPLIANCE VENTING SYSTEMS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Distinguish between natural and mechanical draft systems and direct vent systems.
- Describe the materials used in natural draft systems.

## INSTALLING GAS APPLIANCE VENTING SYSTEMS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify considerations when installing components in a natural draft venting system.
- Identify procedures for installing mechanical draft venting systems.
- Identify procedures for installing mechanical direct venting systems.

## CONDUCTING A LEAK CHECK

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Know when and why you should perform a leak check on a piping system.
- Identify the steps to perform a leak check on a vapor distribution system using different methods.

## PURGING AIR FROM A GAS PIPING SYSTEM

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Explain the importance of purging a piping system of air.
- Communicate safety precautions when purging a piping system of air.
- Identify procedures for purging both indoor and outdoor piping.

## APPLIANCE STARTUP AND TEST REQUIREMENTS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify requirements for placing gas appliances into initial operation.
- Turn on appliances with either standing pilots or electronic ignition systems.
- Recognize procedures for a system flow and lock-up test.
- Perform a spillage test to verify proper venting of flue gases from an appliance.

## IDENTIFYING BURNING CHARACTERISTICS OF PROPANE

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify sources needed and by products of combustion.
- Recognize the components of a burner and how to adjust air for it.
- Recognize abnormal burner operations and know how to correct simple abnormalities.

## 9.0 HVAC AND PLUMBER TECHNICAL TRAINING FOR HVAC AND PLUMBING PROFESSIONALS ASSESSMENT

| | |
|---|---|
| **eLearning run time:** | 3 hours |
| **ILT run time:** | 3 hours |
| **CEUs:** | N/A |
| **Spanish:** | No |

To receive a CETP certification the candidates must meet the following requirements for each Certification Area:

- Pass the Certification Area Knowledge Examination by scoring at the designated mastery level score or higher, and
- Documentation of completion of the corresponding performance-based Skills Assessment, and
- Candidates must complete the corresponding Skills assessments within 12 months of passing the Knowledge Examination in order to be eligible for certification.
- Candidates may re-take one or more certification Knowledge Examinations without any required waiting period between attempts. A regular Knowledge Examination fee is charged for each attempt, and a Registered Proctor is required for each attempt.

### CERTIFICATION EXAM

The exam is available online or as a paper version. A CETP Proctor is required to take the exam.

### SKILLS ASSESSMENT

The Skills Assessment is available online or as a paper version. A CETP Skills Evaluator is required to deliver the skills assessment.

# OVERVIEW OF PROPANE DISTRIBUTION SYSTEMS FOR HVAC AND PLUMBING PROFESSIONALS



The primary purpose of Overview of Propane Distribution Systems is to provide HVAC and plumbing professionals with the knowledge and skills required to verify that gas appliances meet code and safe operational requirements. Participants will also be able to recognize and identify the impact that propane vapor distribution system installations and appliances may have on stakeholders. This course is not intended to provide detailed, comprehensive information about the topics, procedures, and regulations addressed in this training. Rather, it is designed as an awareness level overview course for HVAC technicians and plumbers.

| | |
|---|---|
| **eLearning run time:** | N/A |
| **ILT run time:** | 1 day |
| **CEUs:** | N/A |
| **Spanish:** | No |

## COURSE INTRODUCTION

| | |
|---|---|
| **eLearning run time:** | N/A |
| **OJT worksheet:** | No |

**Objectives:**

- Understand the objectives of this program.
- Understand the scope of this program.

## PROPANE BASICS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify the sources of Liquefied Petroleum gases (LP-gases).
- Explain the concept of specific gravity of propane liquid and vapor.
- Identify the effects of pressure and temperature on propane.
- Identify what to do if you smell gas or suspect a gas leak.
- Explain what may be required when the gas service is interrupted.
- Identify what to do if there is an uncontrolled release of propane.
- Identify how to encourage people to safely evacuate the scene of an emergency.
- Identify information that must be provided to 911 or other emergency response operators in the event of an emergency.

## THE VAPOR DISTRIBUTION SYSTEM

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Explain how propane containers, regulators, and gas piping supply adequate gas pressure to appliances.
- Identify when and why a propane container does not adequately supply the propane demand of the system.
- Identify regulator problems related to gas pressure.
- Explain the importance of having properly sized gas piping.
- Identify the differences in sizing between propane and natural gas piping systems.

## GAS PIPING, PROPANE CONTAINER, AND REGULATOR LOCATION REQUIREMENTS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify the impact to the consumer, the builder, the contractor, and the propane marketer when proper location requirements are not met.
- Determine the proper location for the gas piping stub out when installing gas systems for customers.
- Verify that proper separation distances are met between propane containers and regulators to external sources of ignition, direct vent air intakes and terminations, as well as building openings.

## APPLIANCE INSTALLATION REQUIREMENTS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Discuss the importance of installing a safe and code compliant venting system.
- Identify the different category types of vented appliances.
- Explain why it's important to select the correct venting system materials for the different appliance categories.
- Discuss the importance of maintaining proper clearances between an appliance venting system and combustible materials.
- Identify the importance of providing adequate air supply to gas appliances.
- Verify that proper appliance location and installation requirements are met.
- Determine if a gas appliance is properly converted to operate with propane.

## INTERIOR GAS PIPING INSTALLATION REQUIREMENTS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Verify that the correct gas piping system material is used.
- Verify that the gas piping distribution system is installed in a safe and code compliant manner.
- Differentiate between a sediment trap and a drip leg and their different installation requirements.
- Determine if the correct pressure is applied to the piping system.
- Explain the importance and code requirements for bonding and grounding gas piping systems.

## VAPOR DISTRIBUTION SYSTEM TESTS AND CHECKS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Define the different vapor distribution system checks and tests and explain their importance.
- Identify the purpose and code requirements for conducting a pressure test, a leak check, and a flow and lockup test.
- Identify the difference between a system flow test and a regulator flow test and how to conduct them.

## PLACING APPLIANCES INTO OPERATION

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Describe why it's important to follow code requirements when an appliance is being placed into service.
- Identify the purpose of purging gas piping.
- Identify the steps and code requirements for placing appliances into initial operation.
- Identify how to make the necessary adjustments to gas pressure and air settings to achieve proper flame burning characteristics.
- Verify proper operation of various appliance operational and safety devices.
- Verify if the appliance is venting properly by completing a spillage test.

# CETP REFRESHER TRAINING



## 3.1-3.5 BASIC PLANT OPERATIONS REFRESHER TRAINING

Review of content covered in 3.1-3.5 Basic Plant Operations training

| | |
|---|---|
| **eLearning run time:** | 3 hours & 46 minutes |
| **ILT run time:** | 6 hours |
| **CEUs:** | N/A |
| **Spanish:** | No |



## 3.6 AND 3.7 PERFORMING RAILCAR PRODUCT TRANSFERS AND MAINTAINING DOT INTERMODAL (IM)TANKS REFRESHER TRAINING

Review of content covered in 3.6 and 3.7 Performing Railcar Product Transfers and Maintaining DOT Intermodal (IM)Tanks training.

| | |
|---|---|
| **eLearning run time:** | N/A |
| **ILT run time:** | 4 hours |
| **CEUs:** | N/A |
| **Spanish:** | No |



## 4.1 DESIGNING AND INSTALLING EXTERIOR VAPOR DISTRIBUTION SYSTEMS REFRESHER TRAINING

Review of content covered in 4.1 Designing and Installing Exterior Vapor Distribution Systems training.

| | |
|---|---|
| **eLearning run time:** | 3 hours & 1 minute |
| **ILT run time:** | 8 hours |
| **CEUs:** | N/A |
| **Spanish:** | No |



## 4.2 PLACING INTERIOR VAPOR DISTRIBUTION SYSTEMS AND APPLIANCES INTO OPERATION REFRESHER TRAINING

Review of content covered in 4.2 Placing Interior Vapor Distribution Systems and Appliances into Operation training.

| | |
|---|---|
| **eLearning run time:** | 2 hours & 40 minutes |
| **ILT run time:** | 8 hours |
| **CEUs:** | N/A |
| **Spanish:** | No |

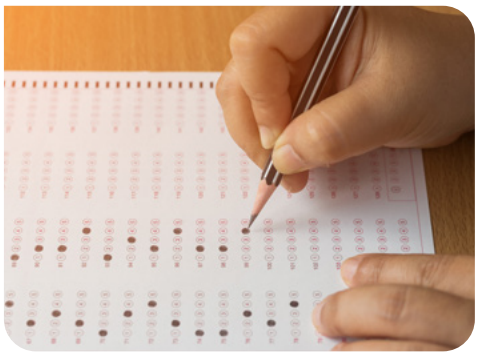



## 4.3 INSTALLING APPLIANCES AND INTERIOR VAPOR DISTRIBUTION SYSTEMS REFRESHER TRAINING

Review of content covered in 4.3 Installing Appliances and Interior Vapor Distribution Systems Refresher training.

| | |
|---|---|
| **eLearning run time:** | 3 hours & 39 minutes |
| **ILT run time:** | 1 day |
| **CEUs:** | N/A |
| **Spanish:** | No |

# CETP PROCTOR AND SKILLS EVALUATOR TRAINING



## CETP PROCTOR TRAINING COURSE

This is the online course to become a CETP Proctor or to renew CETP Proctor credentials. After successfully completing this course you will be issued a unique Proctor ID within 24 business hours. This unique Proctor ID will be located on your certificate of completion that is available on your transcript page.

| | |
|---|---|
| **eLearning run time:** | 31 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | N/A |
| **Spanish:** | No |





## CETP SKILLS EVALUATOR TRAINING COURSE

This is the online course to become a CETP Skills Evaluator. After successfully completing this course you will be issued a unique Skill Evaluator ID within 24 business hours. This unique Skill Evaluator ID will be located on your certificate of completion that is available on your transcript page.

| | |
|---|---|
| **eLearning run time:** | 30 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | N/A |
| **Spanish:** | No |

# SAFETY & TECHNICAL TRAINING

**Bulk Plant Operations**

**Commercial Motor Vehicle Operations**

**Customer Service Representative**

**Delivering Propane**

**Installation**

**Loading**

**Manager Training**

**Propane Containers**

**Propane Emergencies**

**Regulatory**

**Safety Basics**

**System Layout and Design**

**System Startup**

# BULK PLANT OPERATIONS

# EVACUATING PROPANE CONTAINERS



The goal of this training is to help learners properly and safely evacuate propane containers using a variety of different methods.

| | |
|---|---|
| **eLearning run time:** | 2 hours & 46 minutes |
| **ILT run time:** | 3 hours |
| **CEUs:** | TBD |
| **Spanish:** | No |

## INTRODUCTION TO EVACUATING PROPANE CONTAINERS

| | |
|---|---|
| **eLearning run time:** | 34 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Identify the purpose of evacuating propane containers (reasons why we evacuate).
- List the appropriate methods for propane removal.
- List common equipment needed to perform propane evacuation.
- Explain safety precautions that should be taken when evacuating propane.

## EVACUATING CONTAINERS USING A VAPOR COMPRESSOR

| | |
|---|---|
| **eLearning run time:** | 35 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- List the steps to evacuate containers using a small portable vapor compressor.
- List the steps to evacuate containers using a large stationary compressor.
- List the steps to evacuate containers using a large portable compressor.

## EVACUATING CONTAINERS USING A LIQUID PUMP

**eLearning run time:** 49 minutes
**OJT worksheet:** Yes

**Objectives:**

- List the steps to evacuate containers using a small portable liquid pump.
- List the steps to evacuate containers using a truck pump.
- List the steps to evacuate containers using a bobtail and venturi system device.

## EVACUATING CONTAINERS USING A FLARE

**eLearning run time:** 26 minutes
**OJT worksheet:** Yes

**Objectives:**

- List the steps to flare propane vapor using a portable flare setup.
- List the steps to flare liquid propane using a portable flare setup.

## TROUBLESHOOTING EVACUATION ISSUES

**eLearning run time:** 22 minutes
**OJT worksheet:** No

**Objectives:**

- Identify common issues that may occur during propane container evacuation using pumps, compressors, or flaring methods.
- List troubleshooting strategies that can be used when evacuating propane containers.

# FILLING PROPANE CONTAINERS AT A BULK PLANT



In this program you'll learn about filling containers at a bulk plant by weight and volume, commonly used equipment and how to inspect containers.

| | |
|---|---|
| **eLearning run time:** | 49 minutes |
| **ILT run time:** | 1 hour & 53 minutes |
| **CEUs:** | TBD |
| **Spanish:** | Yes |

## INTRODUCTION TO FILLING PROPANE CONTAINERS AT A BULK PLAT

| | |
|---|---|
| **eLearning run time:** | 23 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- List common bulk plant equipment that is involved and/or used when filling propane containers.
- Describe the process to prepare and inspect bulk plant equipment prior to filling containers.
- Explain why it's important to inspect propane containers before filling them.
- Explain safety precautions that should be taken when filling propane containers at a bulk plant.

## FILLING DOT CYLINDERS BY WEIGHT

**eLearning run time:** 18 minutes
**OJT worksheet:** Yes

**Objectives:**

- List the steps to fill a DOT cylinder by weight at a bulk plant.

## FILLING DOT AND ASME CONTAINERS BY VOLUME

**eLearning run time:** 17 minutes
**OJT worksheet:** Yes

**Objectives:**

- List the steps to fill a DOT cylinder by volume at a bulk plant.
- List the steps to fill an ASME container by volume at a bulk plant.

# FUNDAMENTALS OF PROPANE LIQUID TRANSFER



A common task performed in the propane industry is transferring liquid propane from one container to another. Understanding the principles behind the behavior of the liquid in the pipeline and the equipment associated to accomplish the transfer is essential to the efficiency of the system. It is also critical to the diagnosis and troubleshooting of liquid transfer systems. The program gives an overview of liquid transfer equipment, how the equipment operates and how individual components relate to each other. There is a workbook for this program.

**eLearning run time:** 32 minutes
**ILT run time:** N/A
**CEUs:** 0
**Spanish:** Yes

## OVERVIEW

**eLearning run time:** 2 minutes
**OJT worksheet:** No

**Objectives:**

- Understand the goal of this program.

## BASIC LIQUID PROPANE PROPERTIES

**eLearning run time:** 2 minutes
**OJT worksheet:** No

**Objectives:**

- Describe the relationship between propane liquid and propane vapor inside a pressurized container.

## OVERVIEW OF PROPANE LIQUID TRANSFER

**eLearning run time:** 7 minutes
**OJT worksheet:** No

**Objectives:**

- List the components of a propane liquid transfer system.

## PROPANE LIQUID TRANSFER PERFORMANCE

**eLearning run time:** 9 minutes
**OJT worksheet:** No

**Objectives:**

- Describe how liquid propane moves through the transfer system.
- Describe cavitation and its effect on liquid propane transfer.



## PUMP PROTECTIVE DEVICES

**eLearning run time:** 3 minutes
**OJT worksheet:** No

**Objectives:**

- List devices that protect the pump.

## REVIEW

**eLearning run time:** 1 minutes
**OJT worksheet:** No

**Objectives:**

- Describe the main learning points of the program.

## QUIZ

**eLearning run time:** 8 minutes
**OJT worksheet:** No

**Objectives:**

- Assess learner knowledge.

# PREPARING CONTAINERS FOR SERVICE



This program provides an overview of the process on how to prepare containers for service. Including the pre-fill inspection process, how to purge containers and inject methanol into containers.

| | |
|---|---|
| **eLearning run time:** | 1 hour & 12 minutes |
| **ILT run time:** | 1 hour & 40 minutes |
| **CEUs:** | TBD |
| **Spanish:** | No |

## INTRODUCTION TO PREPARING CONTAINERS FOR SERVICE

| | |
|---|---|
| **eLearning run time:** | 13 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Recall the steps for pressurizing a container.
- Recall the steps for testing a container for leaks.

## PURGING CONTAINERS

| | |
|---|---|
| **eLearning run time:** | 14 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Explain the importance of verifying purging of a container before sending it out for service.
- Recall the steps to verify that a container has been purged.
- Recall the steps for purging a container using propane vapor.
- Recall the steps for purging a container using a vacuum pump.

## ADDING OR INJECTING METHANOL INTO PROPANE CONTAINERS

**eLearning run time:** 45 minutes
**OJT worksheet:** No

**Objectives:**

- Identify characteristics and hazards of anhydrous methyl alcohol, commonly known as methanol.
- Describe when and why methanol is added to propane containers.
- Identify recommended PPE and safety precautions when handling methanol.
- Explain proper storage and labeling practices for methanol.
- Describe how to inject methanol into vacuum-purged (negative pressure) containers.
- Describe how to inject methanol into pressurized (positive pressure) containers.

# REQUALIFYING DOT CYLINDERS



The goal of this training is to help learners understand and apply U.S. Department of Transportation (DOT) and NFPA 58 requirements for propane cylinder requalification, including proper inspection, documentation, and marking practices to ensure compliance and safety. This program focuses on the external visual inspection, the most common method used in the propane industry.

This program consists of three modules:

- Introduction to Requalifying DOT Cylinders,
- Preparing and Inspecting Cylinders, and
- Testing, Processing, and Special Cylinder Types.
- Please note that completion of all three modules is necessary to complete this program.

Please note that completion of all three modules is necessary to complete this program.

| | |
|---|---|
| **eLearning run time:** | 1 hour 18 mins |
| **ILT run time:** | 2 hours 10 mins |
| **CEUs:** | TBD |
| **Spanish:** | No |

## INTRODUCTION TO REQUALIFYING DOT CYLINDERS

**eLearning run time:** 18 minutes
**OJT worksheet:** No

**Objectives:**

- Identify cylinder requalification timing requirements using the DOT chart.
- List qualifications and responsibilities of requalification personnel.
- Describe DOT reporting and record retention requirements.
- Explain the four major steps in the cylinder requalification process and their purpose.

## PREPARING AND INSPECTING CYLINDERS

**eLearning run time:** 53 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify the steps to prepare a DOT cylinder for requalification.
- Identify types of damage that affect cylinder fitness.
- Determine whether cylinder damage is within tolerance limits.
- Apply rejection and condemnation criteria for each type of cylinder damage.

## TESTING, PROCESSING AND SPECIAL CYLINDER TYPES

**eLearning run time:** 17 minutes
**OJT worksheet:** Yes

**Objectives:**

- Test a cylinder for leaks.
- Process cylinders after requalification (pass, reject, condemn).
- Recognize special requalification requirements for aluminum, composite, stationary, motor fuel/forklift, and small engine cylinders.

# SMALL CYLINDER PROPANE FILLING VIRTUAL REALITY PRACTICE



Designed for personnel who have completed the "Dispensing Propane Safely - Small Cylinders" or equivalent training. This module serves as a supplemental training resource and can be used individually or in a classroom setting. Key Training Elements include:

- Pre-filling safety protocols
- Proper cylinder inspection techniques
- Weight-based filling procedures
- Post-filling verification

For more information contact training@propane.com or perc-support@nxr.nyc

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | Unknown |
| **CEUs:** | N/A |
| **Spanish:** | No |

# COMMERCIAL MOTOR VEHICLE (CMV) OPERATIONS

# INSPECT COMMERCIAL MOTOR VEHICLES




This program covers the basic requirements for performing an inspection on different commercial motor vehicles (CMV). Inspecting a commercial vehicle according to safety and federal regulations is important because it helps keep the driver, customer, company, and equipment safe. This program covers different types of inspections along with maintenance and reporting requirements for different commercial motor vehicles.

| | |
|---|---|
| **eLearning run time:** | 2 hours & 37 minutes |
| **ILT run time:** | 11 hours |
| **CEUs:** | 0.3 |
| **Spanish:** | Yes |

## CONDUCT PRE- AND POST- TRIP VEHICLE CHASSIS INSPECTIONS

| | |
|---|---|
| **eLearning run time:** | 35 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- List the 11 checks required by regulations and why they're important.
- Explain when inspections are required.
- Identify the tools and preparations needed before inspection.
- Recall which engine components to check for basic safety.
- State how to use the Driver-Vehicle Inspection Report (DVIR) to document the condition of your vehicle.

## INSPECT CYLINDER DELIVERY VEHICLE

| | |
|---|---|
| **eLearning run time:** | 12 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- Identify the variety of truck configurations used for cylinder delivery.
- State the two kinds of cylinder racks and what to examine with each.
- Summarize the regulations specifying how often to reexamine tie-down components.
- Identify the lift gate components that should be inspected.

## INSPECT BOBTAIL COMPONENTS

**eLearning run time:** 30 minutes
**OJT worksheet:** Yes

**Objectives:**

- Conduct inspections for bobtails
- Identify requirements for the Daily Pre-transfer inspections
- Identify requirements for monthly and annual inspections
- Perform a meter creep test
- Recognize cargo tank markings and tests

## INSPECT CRANE TRUCK

**eLearning run time:** 18 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify the difference between a boom and articulating crane.
- Identify the kind of inspections required before using a crane.
- Describe the general components to be inspected before operating a crane.
- Explain the requirement to record the inspection.

## INSPECT TANK SETTING TRAILER

**eLearning run time:** 21 minutes
**OJT worksheet:** Yes

**Objectives:**

- Define a tank setting trailer
- Identify various tank setting trailer designs
- Demonstrate how to conduct a tank setting trailer inspection
- Perform pre and post-trip inspection

## INSPECT TRAILERS: TRANSPORT AND FLATBED

**eLearning run time:** 41 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify the components to inspect before towing a transport or flatbed trailer
- State the importance of daily, monthly, and annual inspections to employ the best safety practices
- Conduct inspections on a trailer chassis, flatbed trailer, and transport cargo tanker
- Apply a systematic method when doing a pre-trip inspection
- Identify transport cargo tank items

# MOBILE CRANE



This program is about safely working with stick boom cranes and articulating cranes. You'll learn about the general requirements and qualifications to operate a crane, including basic setup, operation and stowage. You'll also go over basic lift safety, including the importance of pre-planning, and how to properly rig and secure a load for lifting.

| | |
|---|---|
| **eLearning run time:** | 1 hour & 57 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0.2 |
| **Spanish:** | Yes |

## MOBILE CRANE INTRODUCTION AND SAFETY

| | |
|---|---|
| **eLearning run time:** | 39 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- General Requirements and Qualifications for Crane Operators
- Introduction to Crane Equipment
- Pre-Planning - Wind, Weather, and Adverse Operating Conditions
- Overhead Powerline Safety

## LIFT SAFETY, RIGGING, AND HAND SIGNALS

| | |
|---|---|
| **eLearning run time:** | 31 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- General Lift Safety
- Rigging Equipment and Techniques
- Two-Person Jobs & Use of Hand Signal

## MOBILE CRANE OPERATION

| | |
|---|---|
| **eLearning run time:** | 47 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- Crane Capacity & Load Charts
- Crane Set-Up
- Crane Operation
- Deploying the Crane
- Handling a Load
- Crane Shut-down, Stowage, and Transport



# PROPANE AUTOGAS VEHICLE INSPECTION: INTRODUCTION FOR AUTOMOBILE SERVICE TECHNICIANS

This is an introductory course for automobile service technicians looking to understand propane Autogas components, systems, and operations. This program has two prerequisites, Introduction to the Propane Industry and Fundamentals of Propane, both of which must be completed prior to taking this program.

| | |
|---|---|
| **eLearning run time:** | 2 hours & 6 minutes |
| **ILT run time:** | 2 hours |
| **CEUs:** | 0.2 |
| **Spanish:** | No |

## INTRODUCTION FOR AUTOMOBILE SERVICE TECHNICIANS

| | |
|---|---|
| **eLearning run time:** | 1 hour & 27 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Understand propane Autogas components, systems and operation
- Practice Propane Safety Considerations
- Be able to use/locate info in NFPA 58 specific to on road propane Autogas systems
- Perform Propane Autogas inspections
- Present customers the inspection results following the RIM approach
- Ability to document and follow the 3 C's of vehicle repair.

## FINAL QUIZ

| | |
|---|---|
| **eLearning run time:** | 39 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Assess the learner

# SAFE DRIVING



The Safe Driving program was developed to promote the safe and efficient operation of commercial motor vehicles used to transport propane. This program will explore how to drive defensively and be more aware on the road, and how to prevent the three most common types of accidents in our industry: rolling over, rear-ending other vehicles, and backing into something.

**eLearning run time:** 2 hours & 52 minutes
**ILT run time:** 9 hours & 30 minutes
**CEUs:** 0.3
**Spanish:** Yes

## INTRODUCTION TO SAFE DRIVING

**eLearning run time:** 43 minutes
**OJT worksheet:** No

**Objectives:**

- Explain important tips and defensive driving techniques that promote safe driving practices to reduce the chances of an accident

## PREVENT REAR-END ACCIDENTS

**eLearning run time:** 40 minutes
**OJT worksheet:** No

**Objectives:**

- Explain different preventative practices that reduce chances of causing a rear-end accident.

## PREVENT ROLLOVER ACCIDENTS

**eLearning run time:** 34 minutes
**OJT worksheet:** No

**Objectives:**

- Explain preventative measures that decrease chances of a rollover accident

## PREVENT BACKING ACCIDENTS

**eLearning run time:** 28 minutes
**OJT worksheet:** No

**Objectives:**

- Explain the steps and precautions to take when driving a propane delivery truck in reverse to reduce backing accidents

## SAFE DRIVING ASSESSMENT

**eLearning run time:** 27 minutes
**OJT worksheet:** No

**Objectives:**

- Incorporate the skills, techniques, and principles learned in the previous modules into real-life scenarios.

# CUSTOMER SERVICE REPRESENTATIVES

# OFFICE PERSONNEL



These three modules provide an overview of key concepts and skills for office personnel when handling safety related calls or sales calls for residential properties. The goal is for CSRs to be knowledgeable and confident in the way they handle customer calls, whether it is safety related, or working to provide a solution to their residential propane use needs. Having the skill set for both types of customer interactions will help mitigate risk and show that you care and are there to help.

The complete program is located in the Market & Industry Training section. The modules listed below are also available in the Safety Training section.

| | |
|---|---|
| **eLearning run time:** | 3 hours & 42 minutes |
| **ILT run time:** | 7 hours |
| **CEUs:** | 0.2 |
| **Spanish:** | No |

## OFFICE PERSONNEL: SAFETY BASICS INTRODUCTION

| | |
|---|---|
| **eLearning run time:** | 41 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0.1 |
| **Spanish:** | No |

Entry level introduction to Customer Service Representative safety training focusing on the safety mission critical goals and fundamentals of propane

## HANDLING SAFETY-RELATED PHONE CALLS

| | |
|---|---|
| **eLearning run time:** | 1 hour & 14 min. |
| **ILT run time:** | N/A |
| **CEUs:** | 0.1 |
| **Spanish:** | No |

Entry level Customer Service Representative safety training focusing on handling various propane customer safety concerns

# DELIVERING PROPANE

# EXCHANGING DOT CYLINDERS



In this program you'll learn about changing out residential & small commercial DOT exchange cylinders.

| | |
|---|---|
| **eLearning run time:** | 34 minutes |
| **ILT run time:** | 2 hours & 30 minutes |
| **CEUs:** | 0.1 |
| **Spanish:** | Yes |

## CHANGING OUT RESIDENTIAL AND SMALL COMMERCIAL DOT EXCHANGE CYLINDERS

| | |
|---|---|
| **eLearning run time:** | 34 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- Be able to determine whether there may have been an interruption of service.
- You will be able to determine whether an installation is manual or automatic by identifying the type of changeover manifold in use.
- And, you will know the order of the steps to exchange a cylinder on both automatic and manual installations.

# FILLING CUSTOMER CONTAINERS USING A BOBTAIL



This module is designed to show you how to unload your bobtail to fill customer propane containers. You will learn foundational steps like checking the liquid level in the container, verify if the service to the building has been interrupted, and how to safely fill propane containers. You will also identify the right connections, actions that take place during transfer, become familiar with the bobtail components used when making a delivery, disconnection workflow, and delivery completion steps.

| | |
|---|---|
| **eLearning run time:** | 16 minutes |
| **ILT run time:** | 50 minutes |
| **CEUs:** | 0 |
| **Spanish:** | Yes |

## FILLING CUSTOMER CONTAINERS USING A BOBTAIL

| | |
|---|---|
| **eLearning run time:** | 16 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- Prepare the bobtail to make a delivery
- Use bobtail components and their function
- Check for interruption of service
- Prepare to fill the container
- Fill the container
- Prepare the bobtail for travel

# PROPANE CONTAINER PRE-FILL PRE-EXCHANGE INSPECTION



This program covers compliant inspection practices for performing pre-fill pre-exchange inspections on different types of tanks and cylinders. Performing an inspection before replacing a propane container is important because it keeps the propane professional, customer, company, and equipment safe. This program covers basic inspection practices along with maintenance and reporting requirements for portable DOT cylinders, stationery ASME tanks, and DOT cylinders over 2,000 gal W.C.

| | |
|---|---|
| **eLearning run time:** | 1 hour & 6 minutes |
| **ILT run time:** | 5 hours & 15 minutes |
| **CEUs:** | 0 |
| **Spanish:** | Yes |

## INSPECT PORTABLE DOT CYLINDERS

| | |
|---|---|
| **eLearning run time:** | 26 minutes |
| **CEUs:** | 0 |
| **OJT worksheet:** | Yes |

**Objectives:**

- Apply common inspection practices on cylinders to determine if it is suitable for continued service
- Identify portable cylinders
- Identify common parts of cylinders
- Examine qualification markings
- Assess cylinders for damage

## INSPECT STATIONARY CONTAINERS UP TO 2,000 GALLON WATER CAPACITY

**eLearning run time:** 16 minutes
**CEUs:** 0
**OJT worksheet:** Yes

**Objectives:**

- Perform an inspection on an ASME tank and DOT stationary cylinder to determine if it is suitable for continued service
- Inspect a DOT stationary cylinder
- Inspect a ASME tank
- Apply documentation strategies when compliance issues are found with ASME tanks and DOT stationary cylinders

## INSPECT ASME TANKS OVER 2,000 GALLON WATER CAPACITY

**eLearning run time:** 14 minutes
**CEUs:** 0
**OJT worksheet:** Yes

**Objectives:**

- Perform a visual pre-fill inspection on an ASME tank that holds over 2,000 gallon W.C. to determine if it is suitable for continued service
- Identify containers and their markings on an ASME tank that holds over 2,000 gallon W.C.
- Identify important areas on an ASME tank that holds over 2,000 gallon W.C.
- Identify deficiencies on an ASME tank that holds over 2,000 gallon w.c

# TRANSPORT OPERATOR TRAINING PROGRAM



This course provides information, practices, and procedures to support general loading and unloading tasks for drivers who operate transports to deliver propane.

| | |
|---|---|
| **eLearning run time:** | 3 hours & 23 minutes |
| **ILT run time:** | 5 hours & 20 minutes |
| **CEUs:** | N/A |
| **Spanish:** | No |

## TRANSPORT OPERATOR TRAINING PROGRAM

| | |
|---|---|
| **eLearning run time:** | 3 hours & 23 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- State some of the physical properties of propane.
- Explain steps you can take to safely handle propane and other hazardous materials you work with.
- Describe transport inspection procedures.
- Explain emergency procedures to take in the event of an accident.
- Explain the purpose and functions of transport features and equipment.
- Identify the procedures for loading a transport at a terminal.
- Explain the purpose and functions of bulk plant equipment.
- Identify the procedures for unloading a transport at a bulk plant.

# INSTALLATION

# CONDUCTING A NEW SYSTEM INTERIOR SITE ASSESSMENT



The goal of this training is to help learners identify what an interior customer site assessment requires so they can make certain the system is up to code, installed in a safe manner, and is ready for propane gas service.

| | |
|---|---|
| **eLearning run time:** | 65 minutes |
| **ILT run time:** | 2 hours & 52 minutes |
| **CEUs:** | 0.1 |
| **Spanish:** | No |

## INTRODUCTION TO CONDUCTING A NEW SYSTEM INTERIOR SITE ASSESSMENT

| | |
|---|---|
| **eLearning run time:** | 3 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Explain the importance of conducting an interior site assessment before putting the gas system into service.
- Define a site assessment

## VALIDATING GAS PIPING

| | |
|---|---|
| **eLearning run time:** | 15 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- Identify and verify gas piping and components are installed in a safe and code compliant manner.

## VALIDATING GAS APPLIANCES

**eLearning run time:** 11 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify and verify general appliance installation requirements.
- Identify and verify different appliance types.
- Identify whether an appliance has been converted.
- Distinguish between dedicated and convertible appliances.
- Identify and verify requirements for installing vented and unvented appliances.

## VALIDATING APPLIANCE COMBUSTION AIR

**eLearning run time:** 10 minutes
**OJT worksheet:** No

**Objectives:**

- Explain how a natural draft venting system works.
- Explain how a direct venting system works.
- Explain how a mechanical venting system works.
- Identify general appliance venting requirements.
- Determine if a venting system is constructed to safely vent the products of combustion outside.

## VALIDATING APPLIANCE VENTING

**eLearning run time:** 26 minutes
**OJT worksheet:** Yes

**Objectives:**

- Define "air for combustion, dilution, and ventilation air"
- Determine whether the space is large enough to support combustion.

# CORROSION PREVENTION



Corrosion is an ever-present issue for steel tanks, cylinders and piping. This program will help learners understand what corrosion is and how to effectively prevent aboveground and underground steel containers and piping from corrosion.

**eLearning run time:** 1 hour & 24 minutes
**ILT run time:** 3 hours & 30 minutes
**CEUs:** 0
**Spanish:** No



## INTRODUCTION TO CORROSION PREVENTION

**eLearning run time:** 18 minutes
**OJT worksheet:** No

**Objectives:**

- Describe corrosion prevention methods.

## CORROSION PREVENTION – COATINGS

**eLearning run time:** 15 minutes
**OJT worksheet:** Yes

**Objectives:**

- Describe each type of coating used for corrosion prevention.
- Explain the procedure to protect a pipe from corrosion using each coating type.

## INSTALLING CATHODIC PROTECTION SYSTEMS

**eLearning run time:** 21 minutes
**OJT worksheet:** Yes

**Objectives:**

- List the steps to install a cathodic protection system.

## TESTING CATHODIC PROTECTION SYSTEMS

**eLearning run time:** 15 minutes
**OJT worksheet:** Yes

**Objectives:**

- Explain the procedure for testing a cathodic protection system.

## TROUBLESHOOTING AND RETROFITTING CATHODIC PROTECTION SYSTEMS

**eLearning run time:** 15 minutes
**OJT worksheet:** Yes

**Objectives:**

- List the steps to troubleshoot a cathodic protection installation.
- Describe retrofitting for corrosion protection and when it should be used.

# INSTALL, STARTUP, SHUTDOWN AND MAINTAIN VAPORIZERS



This module will review the general safety precautions for installing propane vaporizers. After completion of this module you should know the steps to install, startup and operate, shutdown and maintain vaporizers. The information in this module is generic in nature. You should always refer to the manufacturer's instructions for the specific vaporizer information.

| | |
|---|---|
| **eLearning run time:** | 50 minutes |
| **ILT run time:** | 67 minutes |
| **CEUs:** | 0.1 |
| **Spanish:** | No |

## INSTALL, STARTUP, SHUTDOWN AND MAINTAIN VAPORIZERS

| | |
|---|---|
| **eLearning run time:** | 50 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- Explain general safety precautions for installing vaporizers.
- List the steps to install vaporizers.
- List the steps to startup and operate vaporizers.
- List the steps to shutdown vaporizers.
- List the steps to maintain vaporizers.

# INSTALLING GAS PRESSURE REGULATORS



This module covers the installation of gas pressure regulators in fixed gas piping systems for residential and small commercial as well as large commercial and industrial systems.

| | |
|---|---|
| **eLearning run time:** | 37 minutes |
| **ILT run time:** | 67 minutes |
| **CEUs:** | 0.1 |
| **Spanish:** | No |

## INSTALLING GAS PRESSURE REGULATORS

| | |
|---|---|
| **eLearning run time:** | 37 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- Identify the general recommendations for installing regulators.
- Identify installation techniques for installing regulators.
- List NFPA 54 and 58 requirements for installing gas regulators.
- Explain how to install gas regulators.

# INSTALLING PROPANE CONTAINERS



The goal of the program is to help learners determine the factors that must be considered and activities that must be performed to install propane storage containers. In addition, this training will demonstrate the steps to: Install Stationary & Exchange Propane Containers up to 125 gal W.C. Install AG & UG ASME Tanks Greater than 125-gallon W.C. up to 2,000 gal W.C. Install AG & UG ASME Tanks over 2,000 gal W.C.

**eLearning run time:** 53 minutes
**ILT run time:** 2 hours & 34 minutes
**CEUs:** 0
**Spanish:** No

## INTRODUCTION TO INSTALLING PROPANE CONTAINERS

**eLearning run time:** 11 minutes
**OJT worksheet:** No

**Objectives:**

- Identify common NFPA 58 requirements for installing propane containers.
- List the activities that must be performed before installing a propane container.

## INSTALL STATIONARY & EXCHANGE PROPANE CONTAINERS UP TO 125 GAL WC

**eLearning run time:** 7 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify NFPA 58 requirements for installing stationary propane containers up to 125 gal W.C.
- List the steps to install DOT Cylinders and ASME Tanks.

## INSTALL AG & UG ASME TANKS GREATER THAN 125 GALLON WC UP TO 2,000 GAL WC

**eLearning run time:** 16 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify NFPA 58 requirements for installing aboveground ASME tanks.
- Identify NFPA 58 requirements for installing underground ASME tanks.
- List the steps to install aboveground ASME tanks.
- List the steps to install underground ASME tanks.

## INSTALL AG & UG ASME TANKS OVER 2,000 GAL WC

**eLearning run time:** 19 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify NFPA 58 requirements for installing underground ASME tanks.
- List the steps to install aboveground ASME tanks.
- Explain how to install underground ASME tanks.

# INSTALLING PROPANE DISTRIBUTION SYSTEM PIPING



The goal of this training is to help learners successfully install interior and exterior piping for a propane distribution system according to a piping plan or sketch, complying with requirements from NFPA 54 and 58. In addition, this training will demonstrate the steps to install exterior and interior gas piping.

| | |
|---|---|
| **eLearning run time:** | 53 minutes |
| **ILT run time:** | 1 hour & 10 minutes |
| **CEUs:** | 0 |
| **Spanish:** | No |

## INTRODUCTION TO INSTALLING GAS PIPING AND COMPONENTS

| | |
|---|---|
| **eLearning run time:** | 14 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Identify the portions of piping on a vapor distribution system that are covered by NFPA 54 and/or 58.
- Explain how a piping plan or sketch is used when laying out a gas piping system before installation.

## INSTALLING INTERIOR GAS PIPING AND COMPONENTS

**eLearning run time:** 16 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify NFPA 54 requirements for installing interior piping and tubing, including CSST, for vapor distribution systems.
- List the high-level steps to install interior piping and tubing.
- Explain specific techniques for installing interior / AG copper pipe and tubing.
- Explain specific techniques for installing interior / AG steel pipe.
- Explain specific techniques for installing interior / AG CSST pipe and tubing.

## INSTALLING EXTERIOR GAS PIPING AND COMPONENTS

**eLearning run time:** 23 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify NFPA 58 and NFPA 54 requirements for installing exterior piping and tubing for vapor and liquid distribution systems.
- List the high-level steps to install piping and tubing between the container and the second-stage regulator.
- Explain specific techniques for installing exterior metal pipe and tubing.
- Copper
- Steel / wrought iron
- Explain specific techniques for installing exterior polyethylene (PE) plastic pipe and tubing.

# INSTALLING VAPOR METERS




Some customers choose to have metered delivery for a variety of different reasons and will need vapor meters installed. In this program you will learn about how to select appropriate locations and support for installing vapor meters and then walk through the steps on how to install a vapor meter in residential and small commercial systems and large commercial and industrial systems.

**eLearning run time:** 27 minutes
**ILT run time:** 34 minutes
**CEUs:** 0
**Spanish:** No

## INTRODUCTION TO INSTALLING VAPOR METERS

**eLearning run time:** 15 minutes
**OJT worksheet:** No

**Objectives:**

- Describe the NFPA code requirements for installing vapor meters.
- Explain methods and precautions for storing and handling vapor meters.
- Identify propane vapor meter connections and accessories.

## INSTALLING VAPOR METERS

**eLearning run time:** 12 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify proper locations for vapor meter installation for residential/small commercial vapor distribution systems.
- Identify the procedures and precautions for installing vapor meters for a residential/small commercial vapor distribution system.
- Identify proper locations for vapor meter installation for large commercial/industrial vapor distribution systems.
- Identify the procedures and precautions for installing vapor meters for a large commercial/industrial vapor distribution system.

# JOINING GAS PIPING



The goal of this training is to help learners successfully join interior and exterior piping for a propane distribution system, complying with all requirements from NFPA 54 and 58. In addition, this training will demonstrate some of the steps and methods to properly join: Copper tubing, Steel pipe, CSST tubing, and Polyethylene (PE) piping.

| | |
|---|---|
| **eLearning run time:** | 1 hour & 8 minutes |
| **ILT run time:** | 2 hours & 30 minutes |
| **CEUs:** | 0.1 |
| **Spanish:** | No |

## INTRODUCTION TO JOINING GAS PIPING

| | |
|---|---|
| **eLearning run time:** | 11 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Identify code requirements for joining pipe and tubing, interior and exterior.
- Identify common practices followed when joining pipe and tubing, interior and exterior.

## JOINING COPPER TUBING AND COMPONENTS

| | |
|---|---|
| **eLearning run time:** | 11 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- Explain techniques, procedures, fittings, and tools used for joining copper tubing.

## JOINING STEEL PIPING & COMPONENTS

**eLearning run time:** 18 minutes
**OJT worksheet:** Yes

**Objectives:**

- Explain techniques, procedures, fittings, and tools used for joining steel piping.

## JOINING CSST TUBING & COMPONENTS

**eLearning run time:** 19 minutes
**OJT worksheet:** Yes

**Objectives:**

- Explain techniques, procedures, fittings, and tools used for joining CSST tubing.

## JOINING POLYETHYLENE PIPING: MECHANICAL FITTINGS

**eLearning run time:** 10 minutes
**OJT worksheet:** Yes

**Objectives:**

- Explain techniques, procedures, and tools used for joining PE pipe with mechanical fittings.

## JOINING POLYETHYLENE PIPING: HEAT FUSION

**eLearning run time:** 11 minutes
**OJT worksheet:** Yes

**Objectives:**

- Explain techniques, procedures, and tools used for joining PE pipe with heat fusion.

# LOADING

# LOAD BOBTAILS



In this program, learners will learn how to inspect the loading site and perform other safety inspections prior to loading and how to load the bobtail using a liquid pump. Optional modules are available for loading using a plant vapor compressor or an auxiliary pump inlet connection.

**eLearning run time:** 2 hours & 22 minutes
**ILT run time:** 7 hours & 40 minutes
**CEUs:** 0.1
**Spanish:** Yes



## PREPARING TO LOAD A BOBTAIL

**eLearning run time:** 19 minutes
**OJT worksheet:** Yes

**Objectives:**

- Perform a loading site safety inspection on arrival
- Spot potentially dangerous and unsafe loading conditions
- Read and properly measure container prefill levels
- Check valve and hose conditions prior to loading the bobtail

## LOADING BOBTAILS WITH A LIQUID PUMP

**eLearning run time:** 11 minutes
**OJT worksheet:** Yes

**Objectives:**

- This module was designed to show you how to load your bobtail with a plant's liquid pump. This is the most common method for loading bobtails and it involves several steps to ensure you do this safely.

## LOADING BOBTAILS WITH A PLANT VAPOR COMPRESSOR

**eLearning run time:** 12 minutes
**OJT worksheet:** Yes

**Objectives:**

- This module was designed to show you how to load your bobtail with a plant vapor compressor.

## LOADING BOBTAILS WITH AN AUXILIARY PUMP INLET CONNECTION

**eLearning run time:** 11 minutes
**OJT worksheet:** Yes

**Objectives:**

- This module was designed to show you how to load your bobtail through a bobtail's auxiliary inlet connection on the side of the pump when a plant's liquid pump or vapor compressor is not available.

# LOAD PROPANE CONTAINERS




After completing this module, you will understand the importance of proper loading techniques, the tools you'll commonly use, and the basic regulatory requirements that apply to loading and securing propane containers.

| | |
|---|---|
| **eLearning run time:** | 1 hour & 59 minutes |
| **ILT run time:** | 7 hours & 45 minutes |
| **CEUs:** | 0.1 |
| **Spanish:** | Yes |

## INTRODUCTION TO LOAD, SECURE, AND UNLOAD PROPANE CONTAINERS

| | |
|---|---|
| **eLearning run time:** | 32 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- Understand safe handling procedures for loading propane containers.
- Understand the basic regulations and code for loading propane containers to travel over the roads.

## LOAD, SECURE, AND UNLOAD DOT CYLINDERS

**eLearning run time:** 34 minutes
**OJT worksheet:** Yes

**Objectives:**

- Understand the safe handling procedures for propane cylinders, as well as for propane and other hazardous materials.
- Be familiar with the PPE required to keep you safe.
- Be familiar with common and varied features of Cylinder Delivery Trucks, required vehicle markings, and the importance of inspecting these.
- Know the items to inspect prior to loading cylinders.
- Know the requirements for loading and securing cylinders and be familiar with the various methods and equipment used to load them.
- Know which documents you must prepare prior to delivering cylinders.
- Be familiar with universal requirements for delivering cylinders, as well as requirements specific to different kinds of delivery locations.
- Know what to inspect when picking up return cylinders.

## LOAD, SECURE, AND UNLOAD PROPANE CONTAINERS UP TO 2000 GAL W.C.

**eLearning run time:** 35 minutes
**OJT worksheet:** Yes

**Objectives:**

- Understand the methods to load large containers onto trucks or flatbed trailers.
- Understand the regulations and codes for transporting containers with less than 5% of propane.
- Understand the regulations and codes for transporting containers with over 5% of propane.
- Explain the equipment and techniques required to safely secure large containers.

## LOAD & SECURE ASME TANKS ONTO A TANK SETTING TRAILER

**eLearning run time:** 18 minutes
**OJT worksheet:** Yes

**Objectives:**

- List the steps to load ASME tanks onto a tank setting trailer.
- Explain the equipment and techniques required to safely secure ASME tanks to a tank setting trailer.
- Explain how to position a tank for unloading.
- List the steps to unload an ASME tank from a tank setting trailer.

# MANAGER TRAINING

# MANAGING COMPLIANCE IN THE PROPANE INDUSTRY



Manager Training equips managers, supervisors, and personnel with the knowledge necessary to ensure their company complies with regulatory requirements common to the LP Gas industry. This program explains the importance, implementation, and maintenance of a manager's regulatory compliance responsibilities. You'll learn about relevant codes, regulations, and AHJs, along with how to use the Comprehensive Compliance Handbook, a centralized resource for understanding and applying relevant compliance requirements in daily operations. This program contains 2 lessons. The lessons are listed below but can not be taken independently.

| | |
|---|---|
| **eLearning run time:** | 50 minutes |
| **ILT run time:** | 1 hour & 5 minutes |
| **CEUs:** | 0.1 |
| **Spanish:** | No |

## INTRODUCTION TO MANAGING COMPLIANCE IN THE PROPANE INDUSTRY

**eLearning run time:**
**OJT worksheet:** No

**Objectives:**

- Explain the role of a manager in maintaining compliance with codes and regulations.
- Differentiate between codes and regulations.
- Define Authority Having Jurisdiction (AHJ) and explain their role in compliance and enforcement
- Explain the importance of complying with codes and regulations
- Identify employee training requirements based on federal regulations and NFPA 58.
- Explain the importance of using the Comprehensive Compliance Handbook as a centralized resource for understanding relevant codes, regulations, and agency requirements that impact your operations.



## USING THE COMPREHENSIVE COMPLIANCE HANDBOOK

**eLearning run time:**
**OJT worksheet:** No

**Objectives:**

- Use the Comprehensive Compliance Handbook to locate and apply regulatory information related to propane industry compliance.

# PROPANE CONTAINERS

# PROPANE CONTAINERS AND VALVES



The purpose of this program is to familiarize the learner with the containers, valves, and components commonly seen in the propane industry. This program explores common propane containers and valves, what they do and how they function.

| | |
|---|---|
| **eLearning run time:** | 1 hour & 3 minutes |
| **ILT run time:** | 2 hours & 10 minutes |
| **CEUs:** | 0 |
| **Spanish:** | Yes |

## INTRODUCTION TO PROPANE CONTAINERS AND VALVES

| | |
|---|---|
| **eLearning run time:** | 25 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- List the definitions of container, cylinder, and tank as per NFPA 58.
- Define appurtenances as described in NFPA 58.
- Identify a propane container by using the design codes.
- Identify names and functions of foot rings, collars, and lifting lugs.
- Describe the function of container supports.

## DOT/TC CYLINDERS AND VALVES

**eLearning run time:** 16 minutes
**OJT worksheet:** No

**Objectives:**

- Identify the characteristics of DOT/TC cylinders.
- Identify the valves and components commonly found in DOT cylinders.
- Define the purpose of each valve and component used in DOT cylinders from 1 lb. to 420 lb.
- Describe how each valve and component function in DOT Cylinders from 1 lb to 420 lbs.

## ASME VEHICLES MOUNTED TANKS AND VALVES: MOTORHOMES AND ENGINE FUEL TANKS

**eLearning run time:** 10 minutes
**OJT worksheet:** No

**Objectives:**

- Identify the characteristics of ASME Vehicle Mounted Tanks.
- Identify the valves and components commonly found in ASME Vehicle Mounted Tanks.
- Define the purpose of each valve and component used in ASME Vehicle Mounted Tanks.
- Describe how each valve and component function in ASME vehicle mounted tanks.

## AG/UG ASME TANKS UP TO 2,000 GALLON WATER CAPACITY

**eLearning run time:** 19 minutes
**OJT worksheet:** No

**Objectives:**

- Identify the characteristics of AG/UG ASME tanks up to 2,000 gal W.C.
- Identify the valves and components commonly found in AG/UG ASME tanks up to 2,000 gal W.C.
- Define the purpose of each valve and component used in AG/UG ASME tanks up to 2,000 gal W.C.
- Describe how each valve and component function.

## AG/UG ASME TANKS OVER 2,000 GALLON WATER CAPACITY

**eLearning run time:** 15 minutes
**OJT worksheet:** No

**Objectives:**

- Identify the characteristics of AG/UG ASME tanks over 2,000 gal W.C.
- Identify the valves and components commonly found in AG/UG ASME tanks over 2,000 gal W.C.
- Define the purpose of each valve and component used in AG/UG ASME tanks over 2,000 gal W.C.
- Describe how each valve and component function.

# PROPANE EMERGENCIES

# PROPANE EMERGENCIES TRAINING FOR AWARENESS MISSION-SPECIFIC RESPONDERS




This online course provides foundational knowledge to recognize fundamental propane characteristics, risks, regulations, safety, and indications of potential propane-related emergencies. The course prepares individuals who are likely to witness or discover a propane release to initiate the appropriate emergency response sequence based on their training and notify the proper authorities of the release. This program contains 5 lessons and an assessment. The lessons are listed below but cannot be taken independently.

| | |
|---|---|
| **eLearning run time:** | 3 hours & 14 minutes |
| **ILT run time:** | 4 hours & 31 minutes |
| **CEUs:** | 0 |
| **Spanish:** | No |

## PHYSICAL PROPERTIES, BENEFITS, AND RISKS OF PROPANE

**eLearning run time:**
**OJT worksheet:** No

**Objectives:**

- List two major flammable gases used in the Liquefied Petroleum Gases (LPG) industry.
- Describe two primary reasons for odorizing propane.
- Recall the physical properties of propane.
- Determine a safe evacuation area based on the physical properties of propane.
- List the basic products of incomplete combustion of propane.
- List the five primary signs and symptoms of carbon monoxide poisoning.

## INTRODUCTION TO PROPANE REGULATIONS AND STANDARDS

**eLearning run time:**
**OJT worksheet:** No

**Objectives:**

- Summarize the primary voluntary consensus standards commonly referenced in propane safety and fire protection.
- Describe the role of the two primary federal agencies that regulate LP-Gases in the United States.

## PROPANE CONTAINERS

**eLearning run time:**
**OJT worksheet:** No

**Objectives:**

- Identify the types of propane storage containers.
- Contrast the basic design and construction features for various types of propane storage containers.
- Contrast the basic design and construction features for propane storage cylinders.
- Contrast the basic design and construction features for the MC-331 cargo tank truck propane storage container.
- Contrast the basic design and construction features for bulk propane storage containers.
- Contrast the basic design and construction features for a propane railroad tank car.
- Contrast the basic design and construction features for propane bulk plants.
- Describe the key elements of fire safety analysis for a bulk plant.

## INTRODUCTION TO PROPANE EMERGENCIES AND INCIDENT RESPONSE

**eLearning run time:**
**OJT worksheet:** No

**Objectives:**

- Describe the importance of collaboration among personnel in the ICS.
- Explain the fundamental concepts that are part of a framework for systematically resolving a propane incident.

## INTRODUCTION TO HAZARD AND RISK EVALUATION

**eLearning run time:**
**OJT worksheet:** No

**Objectives:**

- Determine the critical safety considerations to be evaluated at a propane incident.
- List the most common propane fire and leak emergency scenarios.
- Rank the severity of types of damage that a pressure container could incur.

## END OF COURSE ASSESSMENT

**eLearning run time:**
**OJT worksheet:** No

**Objectives:**

- This assessment includes 50 questions.

# PROPANE EMERGENCIES TRAINING FOR OPERATIONS MISSION-SPECIFIC RESPONDERS



This online course provides specific knowledge about handling propane and propane related emergencies for fire service personnel who respond to releases or potential releases of hazardous substances as part of the initial response to the site to protect nearby persons, property, and the environment from the effects of the release. This program contains 3 lessons and an assessment. The lessons are listed below but cannot be taken independently.

| | |
|---|---|
| **eLearning run time:** | 4 hour & 7 minutes |
| **ILT run time:** | 4 hours & 40 minutes |
| **CEUs:** | 0 |
| **Spanish:** | Yes |

## APPLYING THE PHYSICAL AND CHEMICAL PROPERTIES PROPANE TO RISK ASSESSMENT

| | |
|---|---|
| **eLearning run time:** | |
| **OJT worksheet:** | No |

**Objectives:**

- Explain the significance of the physical properties of propane in the risk assessment process at a propane incident.
- Explain the significance of the chemical properties of propane in the risk assessment process at a propane incident.
- Predict the behavior of propane stored in a closed container.
- Determine appropriate actions in a situation involving the incomplete combustion of propane.

## HAZARD ASSESSMENT AND RISK MITIGATION

**eLearning run time:**
**OJT worksheet:** No

**Objectives:**

- Explain the fundamental concepts that are part of a framework for systematically resolving a propane incident.
- Recognize key players who may provide support in a propane incident.
- Differentiate between technical decontamination and emergency decontamination.
- Evaluate the strategies and tactics for managing a propane incident.
- Describe the capabilities and limitations of PPE for various hazards.

## RESPONDING TO AND MITIGATING PROPANE INCIDENTS

**eLearning run time:**
**OJT worksheet:** No

**Objectives:**

- Determine appropriate intervention actions when propane is stored in a closed container.
- Determine appropriate actions based on design and construction features of propane cylinders.
- Determine appropriate actions based on the design and construction features of the MC-331 cargo tank truck.
- Determine appropriate actions based on design and construction of a propane railroad tank car (DOT-105, DOT-112, DOT 114).
- Determine appropriate actions based on design and construction of a bulk plant.
- Determine appropriate actions based on design and construction of a bulk propane container.
- Determine appropriate actions based on design and construction of a bulk transport cargo tank truck.
- Determine appropriate actions based on design and construction of the IMO Type 5 / DOT Spec 51 propane tank container.

## FINAL ASSESSMENT

**eLearning run time:**
**OJT worksheet:** No

**Objectives:**

- This assessment includes 40 questions.

# FIRST RESPONDERS CULMINATING CLASSROOM TRAINING INSTRUCTOR TOOLKIT



This instructor-led course provides first responders with hands-on opportunities to deepen their knowledge of the physical properties of propane, including dispersion and auto-refrigeration. Students will identify features of a propane tank, test their ability to recognize ethyl mercaptan by smell, perform air monitoring, vapor control zone identification, and tabletop exercises with real-time information during scenarios. This program has two prerequisites, Propane Emergencies Training for Awareness Mission-Specific Responders and Propane Emergencies Training for Operations Mission-Specific Responders. This program is not available in eLearning.

| | |
|---|---|
| **eLearning run time:** | N/A |
| **ILT run time:** | 6 hours |
| **CEUs:** | 0 |
| **Spanish** | No |

## APPLIED PHYSICS AND CHEMISTRY OF PROPANE

| | |
|---|---|
| **eLearning run time:** | N/A |
| **OJT worksheet:** | No |

**Objectives:**

- Recommend appropriate mitigation strategies based on conditions.
- Recommend appropriate strategies and tactics to the Incident Commander.

## HANDS-ON WITH PROPANE CONTAINERS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Conduct damage assessment of a pressurized container.
- Determine appropriate actions based on design and construction features of a propane container.

## RECOGNIZING THE PRESENCE OF PROPANE

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Determine the critical safety considerations to be evaluated at a propane incident.

## TABLE-TOP EXERCISES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Recommend appropriate strategies and tactics to the Incident Commander
- Determine the critical safety considerations to be evaluated at a propane incident
- Identify required reports and supporting documentation pertaining to product control operations
- Complete reporting and documenting requirements as appropriate for a propane incident

# PROPANE EMERGENCIES



Propane Emergencies is a comprehensive textbook which is part of a coordinated training program for emergency responders from both public safety agencies and the propane industry. This book has been designed to help emergency responders develop the knowledge and skills necessary to safely and effectively manage a propane emergency in transportation or at fixed facilities. It is based upon commonly used practices, references to nationally recognized engineering practices, regulations and consensus standards, and training programs. The scenario library used in this training can be downloaded from The Learning Center.

| | |
|---|---|
| **eLearning run time:** | N/A |
| **ILT run time:** | Unknown |
| **CEUs:** | N/A |
| **Spanish** | No |

## INTRODUCTION, SCOPE AND PURPOSE

| | |
|---|---|
| **eLearning run time:** | N/A |
| **OJT worksheet:** | No |

**Objectives:**

- Describe the scope and target audience for this book.
- Define the key players who may become involved in a propane emergency and explain their role in resolving the emergency.

## PHYSICAL AND CHEMICAL PROPERTIES OF PROPANE

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- List the two major flammable gases used in the Liquefied Petroleum Gases
- (LPG) industry.
- Describe the two primary reasons for odorizing propane.
- Identify five basic characteristics of LP-Gases.
- Describe the following physical properties of propane and explain their significance in the risk assessment process at a propane incident:
  - Specific gravity
  - Vapor density
  - Boiling point
  - Expansion ratio
  - Vapor pressure
- Describe the following chemical properties of propane and explain their significance in the risk assessment process at a propane incident:
  - Flammable limits
  - Ignition temperature
  - Combustion characteristics
- Describe the three basic ways propane behaves when stored in a closed container.
- Describe the relationship between heat, temperature, and boiling point as it relates to the storage of propane in a closed container.
- List the basic products of incomplete combustion of propane.
- List the five primary signs and symptoms of carbon monoxide poisoning.
- Describe the basic hazards of aldehydes as they relate to incomplete combustion of propane.

## STANDARDS, CODES AND REGULATIONS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Define the term voluntary consensus standard as applied to propane safety and fire protection.
- Describe the general scope of *ANSI Z223.1—The National Fuel Gas Code*.
- Describe the general scope of *ASME Unfired Boiler and Pressure Vessel Code* (Division I, Section VIII).
- Describe the general scope of *NFPA 58—The LP-Gas Code*.
- Describe the role of independent testing laboratories in ensuring technical consistency and safety in the propane industry.
- List and describe the role of industry trade associations in ensuring safety in the propane industry.
- List and describe the role of the two primary federal agencies that regulate LP-Gases in the United States.
- Describe the role of state and local governments in adopting voluntary consensus standards related to propane safety and fire protection.

# NON-BULK AND BULK CONTAINER DESIGN AND CONSTRUCTION FEATURES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Define the following terminology as it relates to propane containers:
  - Container
  - Non-bulk packaging
  - Bulk packaging
  - Fixed containers
- Describe the following basic features of a propane container:
  - Basic storage container
  - Pressure regulators
  - Pressure relief devices
- Describe the basic design and construction features for the following categories of propane containers:
  - DOT portable cylinders
  - DOT portable tanks
  - ASME mobile motor fuel tanks
  - ASME stationary tanks
- Describe the following categories of DOT cylinders:
  - Portable service cylinder
  - Exchange service cylinder
  - Motor fuel cylinder
  - Stationary service cylinder
- Describe the differences between a DOT-approved exchange cylinder and a cylinder exchange station.
- Describe the differences between a DOT motor fuel cylinder and an ASME motor fuel tank.
- List the basic cylinder markings found on DOT cylinders.
- Describe the following basic design and construction features of a DOT portable tank:
  - Tank openings and valves
  - Mounting hardware
  - Data plate information
- Identify facility and transportation markings and colors that can indicate the presence of propane, including the following:
  - Placards and labels
  - UN/NA identification numbers
  - NFPA 704 markings
  - Container markings
- Describe the following applications of ASME motor fuel tanks:
  - Recreational vehicles
  - Lift trucks
  - Motor fuel tanks for road vehicles
- Describe the basic design and construction features of ASME motor fuel tanks.

## BULK TRANSPORTATION DESIGN AND CONSTRUCTION FEATURES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Describe the basic design and construction features of the MC-331 cargo tank truck used to transport propane. [NFPA 472-6.2.3.1(A)(1)]
- Describe the differences in design and construction between a propane bobtail delivery vehicle and a bulk transport cargo tank truck.
- Explain the design, construction, and operation of each of the following safety devices that may be found on an MC-331 cargo tank truck: [NFPA 472-12.2.1(7)].
  - Internal safety valve
  - Excess flow valve
  - Emergency remote shut-off device
  - Fusible links, nuts, and plugs
  - Pressure relief valves
- Describe the basic design and construction features of a propane railroad tank car (DOT-105, DOT-112, DOT-114). [NFPA 472-6.2.3.1(A)(6)]
- Explain the design and purpose of each of the following components found on a propane railroad tank car: [NFPA 472-11.2.1(3)]
  - Head shields
  - Shelf couplers
  - Thermal protection
- Describe the design, construction, and operation of each of the following valves and fittings found on a propane railroad tank car: [NFPA 472- 11.2.1(8)]
  - Liquid valves
  - Vapor valves
  - Excess flow valve
  - Pressure relief valve
  - Gauging device
  - Thermometer well
  - Sampling tube
- Describe the basic design and construction features of the IMO Type 5 /DOT Spec 51 propane tank container used for transporting propane. [NFPA 472-6.2.3.1(A)(3)]

## BULK PLANTS AND BULK STORAGE TANKS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- List and describe the operational objectives of a propane bulk plant.
- List and describe the three primary operational areas of a propane bulk plant.
- Describe the design, construction, and operation of each of the following valves and fittings found on a bulk propane storage tank [NFPA 472-C.2.1.3]:
  - Liquid valves
  - Vapor valves
  - Excess flow valves
  - Pressure relief valve
  - Gauging devices
- Identify the impact of the following fire and safety features on the behavior of propane during an incident at a bulk plant, when present. [NFPA 472-C.2.2.1]
  - Tank spacing
  - Transfer and product movement capabilities
  - Monitoring and detection systems
  - Fire protection systems
- Describe the key elements of a Product Release Prevention and Incident Preparedness Review for a bulk plant, as outlined in NFPA 58-6.23 (2004).
- Describe the operation of the following two types of bulk transport unloading stations found at a bulk plant.
  - Truck Unloading Stations
  - Rail Unloading Stations
- Describe the purpose and operation of a cylinder filling station.
- List two additional hazardous materials and related operations that may be found at a propane bulk plant.

## TABLE-TOP EXERCISES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Describe the importance of the Incident Command System (ICS) and the National Incident Management System (NIMS) as a tool for safely handling propane emergencies.
- Define the terms strategy and tactics.
- Describe the three operational modes of strategy and tactics for managing a propane emergency.
- Describe the Eight Step Process© and its application as a tactical incident management tool for managing on-scene operations at a propane incident.
- Describe the critical success factors in managing the first hour of a propane incident.



## BULK PLANTS AND BULK STORAGE TANKS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Describe the concept of hazard assessment and risk evaluation as it applies to propane emergencies.
- Given a scenario involving propane, identify and describe the critical safety considerations to be evaluated, including:
- Potential for multiple hazards
- Risk of container failure
- Vulnerability to external heating
- Requirements for adequate water supply
- Risks from secondary exposures
- Risks from pressure-fed fires
- Risks from exposure to liquid propane
- Risks from confined spaces
- Protective clothing and equipment requirements
- Describe the basic tactics for managing the most common types of propane fire and leak emergency scenarios.

## PRODUCT REMOVAL, TRANSFER AND RECOVERY OPERATIONS

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Identify three safety considerations for product transfer operations. [NFPA 472-6.4.3.7]
- Identify three factors to be considered in conducting a damage assessment of a pressurized container.
- Describe the following terms and their significance in the damage assessment process for pressurized containers:
  - Score
  - Gouge
  - Wheel burn
  - Dent
  - Rail burn
  - Street burn
  - Crack
- Identify one method for determining the pressure in propane bulk transport containers. [NFPA 472-6.2.2(F)].
- Identify one method for determining the amount of lading remaining in a damaged propane bulk transport container. [NFPA 472-6.2.2(G)].
- Identify the types of damage that a pressure container, such as an MC-331 propane cargo tank truck, could incur. [NFPA 472-6.2.3.4].
- Identify three factors to be considered when surveying an propane cargo tank truck prior to initiating transfer and/or uprighting operations.
- Define the following terms and their application at a propane emergency:
  - Bonding
  - Grounding
- Identify the common methods for product transfer from an MC-331 propane cargo tank truck. [NFPA 472-6.3.5(B)]
- Describe three product and transfer considerations for dealing with an overturned MC-331 propane cargo tank truck. [NFPA 472-6.4.3.11]
- Describe the application, advantages and limitations of flaring as a method of leak control.
- Describe the process of auto-refrigeration and its significance when dealing with propane emergencies
- Identify three factors to be considered in uprighting an overturned MC-331propane cargo tank truck.

# PROPANE EMERGENCIES MARKETER OUTREACH TRAINING KIT



The Propane Emergencies Marketer Training Kit is a condensed version of the Propane Emergencies educational curriculum and was developed based upon comments expressed by propane marketers and industry personnel for a shorter program using the Propane Emergencies (PE) curriculum. It is designed to facilitate planning for and delivering emergency responder training and walk-through sessions at propane marketing and distribution facilities. The scope of this program is specifically targeted towards propane behavior and container issues. In the eyes of the fire service, the propane industry representative is the product and container specialist. As a result, this program is NOT oriented towards emergency decision-making or strategies and tactics but focuses upon product and container issues important to the fire service. All of the information contained in this program has either been referenced from, or is consistent with, the Propane Emergencies curriculum.

| | |
|---|---|
| **eLearning run time:** | N/A |
| **ILT run time:** | 3 hours |
| **CEUs:** | N/A |
| **Spanish** | No |

## INTRODUCTION

| | |
|---|---|
| **eLearning run time:** | N/A |
| **OJT worksheet:** | No |

**Objectives:**

- Given a local propane marketing and distribution facility, describe the following:
- General background and history of facility
- Region served by facility
- Products handled at facility, including propane and others
- Movement of propane through the facility, including loading, storage and unloading stations
- Design, construction and safety features of bobtails, transports and rail cars (as appropriate)
- Normal and emergency points-of-contact (24 hour availability)

## PHYSICAL PROPERTIES AND CHARACTERISTICS OF PROPANE

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Describe the physical and chemical properties of propane, and explain their significance in an emergency
- Describe the relationship between heat, temperature, and boiling point as it relates to the storage of propane in a closed container.

## PHYSICAL PROPERTIES AND CHARACTERISTICS OF PROPANE

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Define the following basic features of a propane tank:
  - Container
  - Pressure Regulators
  - Pressure Relief Devices
- Describe the basic design and construction features for the following categories of propane containers:
  - DOT Cylinders
  - DOT Portable Tanks
  - ASME Mobile/Motor Fuel Tanks
  - ASME Stationary Tanks
- Identify the markings and colors that can be found on a propane container and at facility, including:
  - Container markings
  - Piping color coding
  - Placards and labels
  - UN/NA identification numbers
  - NFPA 704 markings

## BULK TRANSPORTATION CONTAINER DESIGN AND CONSTRUCTION FEATURES

**eLearning run time:** N/A
**OJT worksheet:** No

**Objectives:**

- Describe the basic design and construction features of the MC-331 cargo tank truck used to transport propane.
- Describe the differences in design and construction between a propane bobtail delivery vehicle and a bulk transport.
- Describe the basic design and construction features of a propane railroad tank car (DOT-105, DOT-112, DOT-114) [as appropriate].

# PROPANE EMERGENCIES SCENARIOS



These 20 scenarios are case studies for propane involved emergencies. Each scenario gives an overview of the incident, the Incident Action Plan (IAP) and closes with other factors to consider. These are suitable for independent study or for incorporating into classroom training. They can be downloaded from the Resources section of The Learning Center, under Instructor Tools.

| | |
|---|---|
| **eLearning run time:** | XXX |
| **ILT run time:** | XX hours |
| **CEUs:** | N/A |
| **Spanish** | No |

- 1: Cylinder Overfill Incident in a Home
- 2: Carbon Monoxide Incident in an Auto Shop
- 3: Removing Exposed Propane Tanks from a Structure on Fire
- 4: Underground Propane Tank Leak
- 5: MC-331 Cargo Tank Truck with Propane Liquid Leak
- 6: Barbecue Grill Fire Next to a Home
- 7: Fire Involving Stationary Tank on a Farm
- 8: Propane Fueled Delivery Truck Fire
- 9: Fire Involving Bobtail Delivery Truck
- 10: Overturned Railroad Tank Car with Fire
- 11: Gas Release Involving Stationary Tank
- 12: Fire Involving Stationary Tank
- 13: Underground Propane Tank Fire
- 14: Barbeque Grill Fire on Third Balcony of an Apartment Building
- 15: Automobile Leaking Propane in Parking Garage
- 16: Overturned MC-331 Cargo Tank Truck
- 17: Motor Fuel Cylinder Burning on a Forklift
- 18: Leak on Intermodal Pressure Tank Container
- 19: Emergency Planning for a Propane Bulk Plant
- 20: Developing Credible Scenarios for Emergency Response Planning

# REGULATORY

# HAZARDOUS MATERIALS TRAINING




This program was developed to assist companies in complying with the federal training requirements prescribed by the Department of Transportation (DOT) and the occupational Safety and Health Administration (OSHA). The program includes six modules in total. Modules one through five are based on DOT training requirements that apply to any hazmat employee. The sixth module covers the OSHA initial training requirements.

| | |
|---|---|
| **eLearning run time:** | 2 hours & 43 minutes |
| **ILT run time:** | 9 hours |
| **CEUs:** | 0.3 |
| **Spanish:** | Yes |

## DOT HAZARDOUS MATERIALS (HAZMAT) TRAINING: INTRODUCTION

| | |
|---|---|
| **eLearning run time:** | 15 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Identify the federal requirements around training those who handle or transport hazardous materials.

## GENERAL AWARENESS AND FAMILIARIZATION

| | |
|---|---|
| **eLearning run time:** | 24 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Recognize the rules and regulations that apply to the transportation of hazardous materials.
- Identify the Hazardous Materials Table, also known as the HazMat table.
- Apply the HazMat table when transporting Hazardous Materials.

## FUNCTION-SPECIFIC TRAINING

**eLearning run time:** 39 minutes
**OJT worksheet:** No

**Objectives:**

- Recognize the HMR requirements that are applicable to the functions you perform within the propane industry.

## SAFETY TRAINING

**eLearning run time:** 26 minutes
**OJT worksheet:** No

**Objectives:**

- Identify emergency response information you must carry with you while transporting hazardous materials.
- Explain the measures to protect yourself from the hazards associated with those hazardous materials.
- List the methods to avoid accidents while transporting and handling hazardous materials.

## SECURITY AWARENESS

**eLearning run time:** 26 minutes
**OJT worksheet:** No

**Objectives:**

- Recognize the requirements for a security plan.
- Identify and respond to potential security risks.
- List the requirements for maintaining security while carrying out your functions as a propane industry employee.

## OSHA HAZARD COMMUNICATION

**eLearning run time:** 38 minutes
**OJT worksheet:** No

**Objectives:**

- Define hazard communication.
- Recognize the basic requirements for protecting yourself.
- Explain how to prevent exposure of hazardous chemicals.

# SAFETY BASICS

# CONSUMER SAFETY EDUCATION



The purpose of this program is to train industry employees about the need to educate consumers about general propane safety. This content may be the PERC safety brochures, the safety content on propane.com, or company specific safety educational materials. There are two modules in this program, but the content is the same. The difference is in how the consumer is depicted. Choose the module that best reflects the learner's typical customer. This is an awareness program, there is no quiz.

| | |
|---|---|
| **eLearning run time:** | 3 minutes |
| **ILT run time:** | 20 minutes |
| **CEUs:** | 0 |
| **Spanish:** | Yes |

## CONSUMER SAFETY EDUCATION: AGRICULTURE

| | |
|---|---|
| **eLearning run time:** | 3 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Identify the safety material available on propane.com (or their own company website)
- Describe the main topics in the safety brochure
- Discuss with a consumer safety information that is consistent with the information in the brochure
- Identify the reasons why consumers need to be educated about propane safety
- Demonstrate to a consumer how to turn the gas supply off
- Demonstrate to a consumer how to identify the odor of propane by doing a sniff test

## CONSUMER SAFETY EDUCATION: RESIDENTIAL & COMMERCIAL

**eLearning run time:** 3 minutes
**OJT worksheet:** No

**Objectives:**

- Identify the safety material available on propane.com (or their own company website)
- Describe the main topics in the safety brochure
- Discuss with a consumer safety information that is consistent with the information in the brochure
- Identify the reasons why consumers need to be educated about propane safety
- Demonstrate to a consumer how to turn the gas supply off
- Demonstrate to a consumer how to identify the odor of propane by doing a sniff test

# FUNDAMENTALS OF PROPANE



The goal of this program is to explain the science and theory behind the properties of propane, how they apply in practical situations, and how to apply them safely. It will help propane industry employees answer these questions: Do you know what propane actually is? Do you know about its behavior as a liquid or a gas? Do you know how to apply what you know about propane to what you do in your job? This program has been split into modules for ease in scheduling, but the modules cannot be taken independently.

**eLearning run time:** 3 hours & 19 minutes
**ILT run time:** 6 hours & 50 minutes
**CEUs:** 0.33
**Spanish:** Yes

- Recount the history of LP-gas.
- Understand in scientific terms how and when propane changes from gas to a liquid and back and what that has to do with storing and using it safely.
- Explain the theory of combustion and the signs and consequences of incomplete combustion in order to ensure the safety of every customer.
- Compare the ignition temperature of propane with other fuels and possible ignition sources so that explosions can be avoided.
- Understand the relationship between temperature and pressure in order to correctly size a tank for the appliances it supplies.
- Describe to someone how and why propane smells, and how to ensure any possible leak can be detected

## FUNDAMENTALS OF PROPANE PROGRAM INTRODUCTION

**eLearning run time:** 17 minutes
**OJT worksheet:** No

**Objectives:**

- Review the overall Fundamentals of Propane Program.
- Be introduced to five real-life examples that show why it is so critical to know the fundamentals of propane.
- Recount the history of LP-gas.
- List the ways that propane is produced.
- Recognize why safety is a critical issue for the propane industry, those who work in it, and those who use it.

## PROPERTIES AND CHARACTERISTICS OF PROPANE

**eLearning run time:** 1 hour & 24 minutes
**OJT worksheet:** No

**Objectives:**

- Describe the relationship between temperature and pressure in order to correctly size a tank for the appliances it supplies.
- Describe in scientific terms how and when propane changes from gas to a liquid and back and what that has to do with storing and using it safely.
- Identify in scientific terms how and when propane changes from gas to a liquid and back and what that has to do with storing and using it safely. Test the continuity of the circuit.

## THE THEORY OF COMBUSTION

**eLearning run time:** 46 minutes
**OJT worksheet:** No

**Objectives:**

- Explain the theory of combustion.
- Identify the signs and consequences of incomplete combustion.
- Compare the ignition temperature of propane with other fuels and possible ignition sources so that explosions can be avoided.
- Recognize the heat value of propane in order to make the right decisions at installation and service jobs.

## MEASUREMENTS AND ODORIZATION

**eLearning run time:** 25 minutes
**OJT worksheet:** No

**Objectives:**

- Identify liquid measurement standards and pressure measurement terms.
- Describe to someone how and why propane smells, and how to ensure any possible leak can be detected.

## PROPANE... AN IDEAL FUEL

**eLearning run time:** 27 minutes
**OJT worksheet:** No

**Objectives:**

- Identify the unique characteristics that make propane an ideal fuel

# HANDLING PROPANE LEAKS



Propane is a safe, economical, clean-burning, and versatile fuel when properly used. Its safety record is due in part to the codes and regulations developed by the propane industry and the National Fire Protection Association, or NFPA. Being properly trained and adhering to your company's policies greatly help prevent propane emergencies. However, you should be prepared for emergency situations that may arise.

**eLearning run time:** 1 hour & 21 minutes
**ILT run time:** 1 hour & 44 minutes
**CEUs:** 0.14
**Spanish:** Yes



## GAS LEAK AND ODOR CALL RESPONSE

**eLearning run time:** 1 hour
**OJT worksheet:** Yes

**Objectives:**

- Identify the purpose of a combustible gas indicator (CGI) and differentiate it from a combustible gas detector (CGD).
- Describe potential dangers you may encounter when responding to a report of a gas leak or odor call.
- Explain proper actions to take when responding to a reported propane leak in an inside area, including use of a CGI.
- Explain proper actions to take when responding to a reported propane leak in an outside area, including use of a CGI.

## UNCONTROLLED RELEASE OF PROPANE

**eLearning run time:** 21 minutes
**OJT worksheet:** No

**Objectives:**

- Explain the difference between an uncontrolled release and a release that can be isolated by closing a valve.
- List the actions to take if there is an uncontrolled release of propane.
- Provide appropriate information to 911 and emergency response personnel.

# INTRODUCTION TO THE PROPANE INDUSTRY



Welcome to the propane industry, and congratulations as you take your first steps toward becoming a propane professional. This program is intended to give you a first look at the propane industry, who we are and what we do. While not intended to build specific job skills, you'll gain a solid foundation upon which to build as you begin your career and extend your knowledge and skills through more advance programs.

| | |
|---|---|
| **eLearning run time:** | 1 hour & 34 minutes |
| **ILT run time:** | 3 hours |
| **CEUs:** | 0.30 |
| **Spanish:** | Yes |

## INTRODUCTION TO THE PROPANE INDUSTRY

| | |
|---|---|
| **eLearning run time:** | 1 hour & 34 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Understand and commit to the propane industry's Safety Mission, and specific actions that protect customers, employees, and the environment and in fact, Protecting the public, whether they are our customers or not!
- Appreciate the size of the propane industry and the many opportunities available to those making a career in propane.
- Be familiar with common propane terminology and industry groups that regulate and influence this industry.
- Be able to explain what propane is, where it comes from, and how it is used today.
- Have a clear picture of how propane is stored and moved across the country and be familiar with this terminology.
- Understand the keys to maintaining good customer relations with those you serve.

# PROPANE PERSONAL SAFETY



Being safe at work is a right and responsibility of all workers. This program will review injury prevention techniques for making the workplace and the learner safe. You'll learn basic tools and techniques and how to apply them in the typical tasks performed by propane professionals.

| | |
|---|---|
| **eLearning run time:** | 1 hour & 5 minutes |
| **ILT run time:** | 1 hour & 23 minutes |
| **CEUs:** | 0 |
| **Spanish:** | Yes |



## INTRODUCTION TO PROPANE PERSONAL SAFETY

| | |
|---|---|
| **eLearning run time:** | 19 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Explain why personal safety is important for workers in the propane industry.
- List the tasks performed in a personal risk assessment.
- Describe typical personal protective equipment used by propane workers.
- Explain the main strategies of body mechanics.
- Identify ways to prevent slips, trips, and falls while on the job.

## PERSONAL SAFETY WHEN WORKING AROUND VEHICLES

| | |
|---|---|
| **eLearning run time:** | 14 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- Describe the "three-point rule" for entering and exiting a vehicle and how it is performed when operating typical vehicle types used in the propane industry.
- Distinguish proper techniques for climbing on and off a truck bed.
- Identify safe use of a lift gate.
- Explain the importance of placing wheel stops during loading, unloading, and deliveries.

## HANDLING CYLINDERS SAFELY

**eLearning run time:** 19 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify personal safety issues that may arise when handling typical cylinders used in the propane industry.
- Describe general guidelines for lifting and moving different types of cylinders safely.
- Explain how to load/unload 420 cylinders safely.
- Explain how to load/unload forklift cylinders safely.
- State the guidelines for delivering and filling cylinder cages safely.

## BULK DELIVERY SAFETY

**eLearning run time:** 13 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify general principles for safe deliveries of propane.
- Describe aspects of vehicle safety that are specific to making bobtail deliveries, regarding vehicle inspections and entering/exiting a vehicle.
- Explain the value of a personal risk assessment when delivering to a customer's site.
- List the proper personal protective equipment used for bobtail deliveries.
- Explain basic principles for safely carrying the hose to and from a customer's container.

# SAFELY WORKING WITH PROPANE CONNECTED TO MOBILE FOOD FACILITIES




In this module, you will learn the basic properties and characteristics of propane. You will also learn best safety practices to use when shutting off and replacing propane gas containers on a mobile food facility, which is a movable commercial or retail food facility, such as a food truck or trailer, food cart, food tent, or food booth. Knowing this will help keep you and everyone around you safe.

This program is designed so that the eLearning can be used outside of The Learning Center. The eLearning and ILT are on USB and available for purchase through the Resource Catalog on propane.com or they can be downloaded from The Learning Center.

| | |
|---|---|
| **eLearning run time:** | 16 minutes |
| **ILT run time:** | 26 minutes |
| **CEUs:** | No |
| **Spanish:** | Yes |

## SAFELY WORKING WITH PROPANE CONNECTED TO MOBILE FOOD FACILITIES

**eLearning run time:** 16 minutes
**OJT worksheet:** No

**Objectives:**

- Explain the importance of fundamentals of propane.
- Explain how odorization can detect a potential propane leak.
- Differentiate between a vapor leak and a liquid leak.
- Explain specific gravity and its importance.
- Explain the importance of the theory of combustion.
- Identify sources of ignition which include static electricity, open flames, lit cigarettes, sparks from motors, and light switches
- Recognize situations when it is important to shutoff a propane container on a mobile food facility.
- Explain the importance of turning off a propane container when not in use.
- List emergency procedures to hazardous situations when working with propane cylinders.
- Identify the main shutoff valve and other control devices used to shutoff a propane container.
- List the method on how to shutoff a propane container.
- Explain the importance of using personal protective equipment (PPE) when working with propane cylinders
- Describe NFPA 58 requirements for transportation and storage of propane container not in use.
- List the general steps on how to uninstall a DOT cylinder.
- List the general steps on how to re-install a DOT cylinder.

# STATIC ELECTRICITY




This course provides a basic understanding of static electricity, including its varied sources, common threats that may be present at propane handling facilities, and strategies to reduce the risk of a static ignition. There is an accompanying Student Workbook but there is no Instructor Led Toolkit.

| | |
|---|---|
| **eLearning run time:** | 24 minutes |
| **ILT run time:** | 2 hours |
| **CEUs:** | No |
| **Spanish:** | No |



## STATIC ELECTRICITY

| | |
|---|---|
| **eLearning run time:** | 24 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Evaluate their facility for static electricity and static discharge hazards.
- Implement remediation or mitigation actions.
- Facilitate appropriate training/ instruction for all applicable employees.

# SYSTEM LAYOUT AND DESIGN

# CONDUCTING AN EXTERIOR CUSTOMER SITE ASSESSMENT PROGRAM



Conducting an Exterior Customer Site Assessment equips learners with the knowledge and strategies needed for safe propane preparation, exchange, and installation at residential and business locations. It's important for propane providers to identify any hazards at the customer's establishment to avoid injuries. This program details various types of exterior site assessments, such as personal risk and temp heat site assessments. In this program, NFPA 58 location code requirements for different types of propane storage containers, such as American Society of Mechanical Engineers (ASME) tanks and the Department of Transportation (DOT) cylinders, are discussed.

| | |
|---|---|
| **eLearning run time:** | 2 hours & 41 minutes |
| **ILT run time:** | 11 hours & 5 minutes |
| **CEUs:** | 0.1 |
| **Spanish:** | Yes |

## INTRODUCTION TO CONDUCTING AN EXTERIOR CUSTOMER SITE ASSESSMENT

| | |
|---|---|
| **eLearning run time:** | 13 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- Identify external hazards at a customer site.
- Identify personal injury risks.
- Identify risks to customer property.
- Identify risks to the bobtail.

## DELIVERY TRUCK HAZARD ASSESSMENT

**eLearning run time:** 37 minutes
**OJT worksheet:** No

**Objectives:**

- This module utilizes simulations that encourage a delivery driver to make sound judgments when approaching a customer site and completing a propane delivery via Bobtail or through cylinder exchange.

## LOCATION REQUIREMENTS: DOT & ASME STATIONARY CONTAINERS UP TO 2,000 GAL W.C.

**eLearning run time:** 28 minutes
**OJT worksheet:** Yes

**Objectives:**

- In this module you'll learn about the location requirements for DOT & ASME stationary containers up to 2,000 gal. W.C.

## LOCATION REQUIREMENTS: DOT EXCHANGE CYLINDER - CAGES

**eLearning run time:** 27 minutes
**OJT worksheet:** Yes

**Objectives:**

- In this module you'll learn about the location requirements for both indoor and outdoor DOT exchange cylinder cages and be able to recognize when there are problems with a location or installation.

## DOT EXCHANGE CYLINDER - RESIDENTIAL AND SMALL COMMERCIAL

**eLearning run time:** 27 minutes
**OJT worksheet:** Yes

**Objectives:**

- After completing this module, you will know the requirements for residential, commercial, and temp heat cylinder exchange locations and be able to quickly and accurately spot problems with a location or installation.

## LOCATION REQUIREMENTS: ASME TANK (AG/UG) OVER 2,000 GAL W.C.

**eLearning run time:** 29 minutes
**OJT worksheet:** Yes

**Objectives:**

- Know the requirements for ASME tank installations over 2000 gal W.C.
- Know the distance requirements for ASME tank installations over 2000 gal W.C.

# DESIGN, SIZE, AND SELECT PROPANE DISTRIBUTION PIPING SYSTEMS



To ensure that a propane distribution system works effectively it is important to design the piping system to move the required volume of gas from the storage container to each appliance where it is being used. The goal of this training is to help you analyze elements used when designing and installing a propane distribution system in order to successfully select and size all piping (interior and exterior) and to create a piping plan or sketch.

| | |
|---|---|
| **eLearning run time:** | 2 hours & 22 minutes |
| **ILT run time:** | 3 hours & 4 minutes |
| **CEUs:** | 0.1 |
| **Spanish:** | No |

## INTRODUCTION TO DESIGNING PROPANE DISTRIBUTION PIPING SYSTEMS

| | |
|---|---|
| **eLearning run time:** | 34 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Explain the importance of a piping plan or sketch for a vapor distribution system.
- Explain the relationship between gas volume and pressure and pipe length and size.
- Describe how to use an NFPA pipe sizing table.
- Identify piping materials that meet NFPA codes for exterior and interior piping systems.
- List the NFPA-recommended pipe sizing methods for exterior and interior piping systems.

## SIZING AND SELECTING EXTERIOR VAPOR PIPING SYSTEMS

**eLearning run time:** 21 minutes
**OJT worksheet:** No

**Objectives:**

- Determine the appropriate size for exterior vapor distribution lines and be able to select the proper size piping for a given application.
- Apply the "longest length" method to size interior gas piping.
- Identify exterior piping strategies to adjust the Btu/hr load of a system when adding or exchanging appliances.

## SIZING AND SELECTING INTERIOR VAPOR PIPING SYSTEMS

**eLearning run time:** 59 minutes
**OJT worksheet:** No

**Objectives:**

- Apply the "longest length" method to size interior gas piping.
- Apply the "branch length" method to size interior gas piping.
- Apply the "hybrid pressure" method to size interior gas piping.
- Identify interior piping strategies to adjust the Btu/hr load of a system when adding or exchanging appliances.

## SIZING AND SELECTING LIQUID PIPING SYSTEMS

**eLearning run time:** 28 minutes
**OJT worksheet:** No

**Objectives:**

- Identify the piping and components of a propane liquid piping system.
- Explain friction loss caused by fittings in a propane liquid piping system.
- Describe how piping is sized for a propane liquid system.

# DETERMINE TOTAL CONNECTED BTU LOAD



It's important to know how to determine total gas system demand to correctly size the entire distribution system. Incorrectly sized propane containers, piping, or regulators used in vapor service may not supply adequate vapor to the gas distribution system, which can negatively affect the safe and efficient operation of the appliances. The goal of this program is to help learners calculate the total gas demand and the effective system load of a propane system. This training will be the basis for subsequent trainings which seek to analyze the size of the system necessary to service the location's needs.

| | |
|---|---|
| **eLearning run time:** | 39 minutes |
| **ILT run time:** | 1 hour & 11 minutes |
| **CEUs:** | 0 |
| **Spanish:** | Yes |

## DETERMINING BTU SYSTEM DEMAND: INTRODUCTION

| | |
|---|---|
| **eLearning run time:** | 10 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Determine which method (total gas demand vs effective system load) to use in a specific application.
- Identify the reasons for calculating total gas system demand correctly.
- Identify the NFPA 54 and NFPA 58 codes that apply to determining the system load.

## DETERMINING BTU SYSTEM DEMAND: RESIDENTIAL & SMALL COMMERCIAL

**eLearning run time:** 15 minutes
**OJT worksheet:** No

**Objectives:**

- Determine which method (total gas demand vs effective system load) to use in a specific application.
- Identify the reasons for calculating total gas system demand correctly.
- Identify the NFPA 54 and NFPA 58 codes that apply to determining the system load.

## DETERMINING BTU SYSTEM DEMAND: LARGE COMMERCIAL & INDUSTRIAL SYSTEMS

**eLearning run time:** 14 minutes
**OJT worksheet:** No

**Objectives:**

- Determine which method (total gas demand vs effective system load) to use in a specific application.
- Identify the reasons for calculating total gas system demand correctly.
- Identify the NFPA 54 and NFPA 58 codes that apply to determining the system load.

# PROPANE CONTAINER SIZING AND SELECTION



The goal of this training is to help learners analyze elements used when designing and installing a distribution system in order to successfully select and size all containers, piping, regulators and other components for a propane distribution system.

| | |
|---|---|
| **eLearning run time:** | 42 minutes |
| **ILT run time:** | 46 minutes |
| **CEUs:** | 0.1 |
| **Spanish:** | No |

## PROPANE CONTAINER SIZING AND SELECTION

| | |
|---|---|
| **eLearning run time:** | 42 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Identify factors that need to be considered when sizing a propane container.
- Explain how these factors affect the sizing of a propane container.
- Select the appropriate container type for a propane distribution system.
- Determine the appropriate container size based on the propane distribution system demand and container vaporization rates.

# SIZING AND SELECTING GAS REGULATORS



This program covers sizing and selecting regulators based on the system demand and container vaporization rates. In addition to the information found in this program, be sure to also utilize specific regulator manufacturer instructions.

| | |
|---|---|
| **eLearning run time:** | 40 minutes |
| **ILT run time:** | 54 minutes |
| **CEUs:** | 0.1 |
| **Spanish:** | No |

## SIZING AND SELECTING GAS REGULATORS

| | |
|---|---|
| **eLearning run time:** | 40 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- List NFPA 58 requirements for sizing and selecting regulators.
- Select the appropriate regulator type for a vapor distribution system.
- Determine the appropriate regulator size based on the vapor distribution system demand and container vaporization rates.

# SIZING AND SELECTING PROPANE VAPORIZERS



In this program, you will learn how to determine the appropriate vaporizer type and size based on the vapor distribution system demand when the propane container vaporization rate is not able to support the gas demand.

| | |
|---|---|
| **eLearning run time:** | 14 minutes |
| **ILT run time:** | 30 minutes |
| **CEUs:** | No |
| **Spanish:** | No |

## SIZING AND SELECTING PROPANE VAPORIZERS

| | |
|---|---|
| **eLearning run time:** | 14 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Select the appropriate vaporizer type for a vapor distribution system.
- Determine the appropriate vaporizer size based on the vapor distribution system demand and container vaporization rates.

# SIZING AND SELECTING VAPOR METERS



Some customers choose to have metered delivery for a variety of different reasons and will need vapor meters installed. In this program, you will learn how vapor meters work and how to size and select vapor meters.

**eLearning run time:** 33 minutes
**ILT run time:** 1 hour & 14 minutes
**CEUs:** 0.1
**Spanish:** No

## INTRODUCTION TO SIZING AND SELECTING VAPOR METERS

**eLearning run time:** 20 minutes
**OJT worksheet:** No

**Objectives:**

- Identify typical vapor meter installations.
- Explain how vapor meters operate.
- Determine the propane capacity of a vapor meter based on its rating for natural gas.
- Explain how operating pressure, temperature, and elevation affect the operation and selection of vapor meters.
- Identify propane vapor meter accessories and options.

## PRACTICE SIZING AND SELECTING VAPOR METERS

**eLearning run time:** 13 minutes
**OJT worksheet:** No

**Objectives:**

- Select the appropriate vapor meter for a residential/ small commercial vapor distribution system.
- Select the appropriate vapor meter for a large commercial/ industrial vapor distribution system.

# SYSTEM STARTUP

# CONDUCTING GAS SYSTEM PERFORMANCE TESTING




Gas pressure that is too high can cause over-pressure situations and pressure that is too low in the system can cause inefficient and potentially unsafe operation of gas appliances and equipment. This program covers how to verify that the gas piping and regulators are sized and adjusted to supply the correct gas pressure to the piping system and appliances. You will learn how to perform gas piping system and regulator flow and lockup tests as well as checking appliance manifold pressure.

**eLearning run time:** 27 minutes
**ILT run time:** 48 minutes
**CEUs:** No
**Spanish:** No

## INTRODUCTION TO CONDUCTING GAS SYSTEM PERFORMANCE TESTING

**eLearning run time:** 6 minutes
**OJT worksheet:** No

**Objectives:**

- Define gas system performance testing.
- Define a flow test.
- Define a lock-up test.
- Describe how poor performance impacts the system.

## CONDUCTING GAS SYSTEM PERFORMANCE TESTING

**eLearning run time:** 21 minutes
**OJT worksheet:** Yes

**Objectives:**

- List the steps for a gas system performance test.

# GAS CHECK

The Gas Check program provides the propane industry with voluntary guidelines for conducting residential and small commercial safety inspections. This program includes a student manual.

**eLearning run time:** 52 minutes
**ILT run time:** 1 hour & 20 minutes
**CEUs:** N/A
**Spanish:** No

## GAS SYSTEM CHECK

**eLearning run time:** 32 minutes
**OJT worksheet:** No

**Objectives:**

- This video covers exterior gas distribution system, including the containers, regulators, and gas piping.

## GAS APPLIANCE SYSTEM CHECK

**eLearning run time:** 20 minutes
**OJT worksheet:** No

**Objectives:**

- This video covers the interior gas distribution system and all propane-burning appliances.

# LIGHTING APPLIANCE PILOTS



Whether you're restoring service or starting up a new appliance, you'll need to light the pilot or "cycle" an appliance on if the appliance is equipped with an electronic ignition. This program reviews the steps to lighting appliance pilots

| | |
|---|---|
| **eLearning run time:** | 55 minutes |
| **ILT run time:** | 1 hour & 12 minutes |
| **CEUs:** | 0.1 |
| **Spanish:** | Yes |

## LIGHTING APPLIANCE PILOTS - RESIDENTIAL & SMALL COMMERCIAL

| | |
|---|---|
| **eLearning run time:** | 30 minutes |
| **OJT worksheet:** | Yes |

**Objectives:**

- Light an appliance standing pilot
- Light appliance pilots without pilot safety devices
- Startup appliances equipped with electronic ignition systems

## LIGHTING APPLIANCE PILOTS - LARGE COMMERCIAL & INDUSTRIAL

| | |
|---|---|
| **eLearning run time:** | 25 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- List the steps to light a standing pilot.
- List the steps to startup electronic ignition systems.

# LIGHTING APPLIANCE PILOTS VIRTUAL REALITY PRACTICE



Created for field personnel who have completed PEP, CETP or equivalent training on Lighting Appliance Pilots. This module serves as a supplemental training resource for Lighting Appliance Pilots and can be used individually or in a classroom setting. Key Training Elements include:

- Job site personal risk assessment
- Proper PPE selection and usage
- Gas detection procedure
- Step-by-step pilot lighting process
- Troubleshooting common issues

For more information contact:
training@propane.com or
perc-support@nxr.nyc

| | |
|---|---|
| **eLearning run time:** | Unknown |
| **ILT run time:** | Unknown |
| **CEUs:** | N/A |
| **Spanish:** | No |

# MEASURING PRESSURE



An introduction to pressure - what it is, why it is important and how it is measured. Learn about gauge pressure, water column and vacuum and gain a basic understanding needed to use and read gauges.

| | |
|---|---|
| **eLearning run time:** | 21 minutes |
| **ILT run time:** | 75 minutes |
| **CEUs:** | No |
| **Spanish:** | Yes |

## MEASURING PRESSURE

| | |
|---|---|
| **eLearning run time:** | 21 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Describe pressure
- Describe negative pressure (vacuum)
- Describe differential pressure
- Define gauge pressure
- Define inches water column
- Describe the typical areas of use for inches water column (appliance controls)
- Describe the typical areas of use for gauge pressure (everything else)
- Identify the correct device based upon the pressure being measured
- Read a gauge
- Read a water manometer

# NEW GAS APPLIANCE STARTUP



The purpose of this course is to help learners identify the code requirements for starting up new appliances to be certain these appliances will operate safely once they are put into service.

**eLearning run time:** 53 minutes
**ILT run time:** 1 hour & 49 minutes
**CEUs:** 0.1
**Spanish:** No



## INTRODUCTION TO NEW GAS APPLIANCE: OPERATION SAFETY INSPECTION

**eLearning run time:** 3 minutes
**OJT worksheet:** No

**Objectives:**

- Identify NFPA 54 code requirements to safely start up new gas appliances put into service for the first time.
- Describe the importance of conducting proper startup procedures.

## OPERATION SAFETY INSPECTION

**eLearning run time:** 19 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify and verify the proper operation of appliance safety shutoff devices (includes 100% pilot safety devices as well as electronic ignition systems).
- Verify proper operation of safety protective devices.
- Perform a draft test to verify proper venting on any new draft hood equipped appliance.
- Identify any safety concern with the appliance performance and take steps to either correct the problem or remove the appliance from service.

## IDENTIFYING PROPER APPLIANCE BURNER OPERATION

**eLearning run time:** 31 minutes
**OJT worksheet:** No

**Objectives:**

- Identify products of complete combustion of propane.
- Define sources of air needed for combustion.
- Identify the parts of a flame.

# PURGING GAS PIPING SYSTEMS



The goal of this training is to help learners recognize the hazards that are present when purging piping systems and to learn the proper methods to safely purge a piping system of air before putting the system into service. Using safe methods while purging will help eliminate accidents and customer call backs.

**eLearning run time:** 47 minutes
**ILT run time:** 1 hour & 29 minutes
**CEUs:** 0.1
**Spanish:** No

## INTRODUCTION TO PURGING

**eLearning run time:** 8 minutes
**OJT worksheet:** No

**Objectives:**

- Define purging into service.
- Define purging out of service.
- Identify the importance of safely purging a new or existing gas piping system.
- Define Combustible Gas Detector (CGD).
- Define Combustible Gas Indicator (CGI).
- Define the difference between a small and large propane vapor piping system.

## PURGING RESIDENTIAL & SMALL COMMERCIAL PIPING SYSTEMS

**eLearning run time:** 26 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify NFPA 54 code requirements for purging small piping systems.
- Describe the steps to safely purge a small system using various methods.

## PURGING LARGE COMMERCIAL & INDUSTRIAL PIPING SYSTEMS

**eLearning run time:** 13 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify NFPA 54 code requirements for purging large piping systems.
- Describe the steps to safely purge a large system by conducting a remote purge on the outside of the building.

# REGULATOR OPERATION



Learn about regulators, the heart of the propane distribution system. This program reviews regulator components and why each one is important, types of regulators, pressure reduction stages, how overpressure and under-pressure protection works, and how a regulator works.

**eLearning run time:** 49 minutes
**ILT run time:** 1 hour & 19 minutes
**CEUs:** 0.1
**Spanish:** No

## INTRODUCTION TO REGULATOR OPERATION

**eLearning run time:** 2 minutes
**OJT worksheet:** No

**Objectives:**

- Define the regulator operations program.

## RESIDENTIAL & SMALL COMMERCIAL REGULATOR OPERATION

**eLearning run time:** 25 minutes
**OJT worksheet:** No

**Objectives:**

- Describe how a regulator works in small systems.
- Identify the components of a regulator used in small systems.
- Describe how overpressure and underpressure protection works in a small system.

## LARGE COMMERCIAL & INDUSTRIAL REGULATOR OPERATIONS

**eLearning run time:** 22 minutes
**OJT worksheet:** No

**Objectives:**

- Explain the difference between R&SC regulators and those that may be found in LC&I systems.
- Identify the types of regulators used in large systems.
- Identify the components of a regulator used in large systems.

# RESTORING SERVICE AFTER AN INTERRUPTION OF SERVICE



Restoring service to a propane system is done after an interruption of service or startup of a new system. This program will introduce the concept of restoring service after an interruption of service and then cover the steps needed to restore service to residential and small commercial systems.

**eLearning run time:** 16 minutes
**ILT run time:** 45 minutes
**CEUs:** 0.1
**Spanish:** Yes

## RESTORING SERVICE AFTER AN INTERRUPTION OF SERVICE

**eLearning run time:** 16 minutes
**OJT worksheet:** Yes

**Objectives:**

- List the steps to restore service after an interruption of service.
- Describe the conditions necessary to perform restoration of service after an interruption of service.
- Identify the code requirements for restoring service.
- Describe the importance of restoring service safely.
- List the steps to take if safety concerns are identified.

# TESTING GAS PIPING



This program was developed to ensure customer safety by making sure customer's propane piping doesn't leak. By applying pressure and testing new piping, it proves that the piping is safe to supply propane through it. The goal for this program is to educate the learners on how to test gas piping to verify the mechanical integrity of piping and to check for leaks.

**eLearning run time:** 1 hour & 42 minutes
**ILT run time:** 2 hours & 52 minutes
**CEUs:** 0.1
**Spanish:** Yes



## PRESSURE TESTING NEW GAS PIPING

**eLearning run time:** 36 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify when a pressure test is required.
- List the steps for pressure test of piping under the scope of NFPA 54.
- List the steps for pressure test of piping under the scope of NFPA 58.
- Explain the requirements for pressure testing when adding a new piece to an existing system.

## INTRODUCTION TO LEAK CHECK

**eLearning run time:** 14 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify what parts of the system are covered under which code.
- Identify when a leak check is required.

## LEAK CHECK: HIGH-PRESSURE METHOD

**eLearning run time:** 13 minutes
**OJT worksheet:** Yes

**Objectives:**

- List the steps for the leak check process when using a high-pressure method.

## LEAK CHECK: INTERMEDIATE-PRESSURE METHOD

**eLearning run time:** 12 minutes
**OJT worksheet:** Yes

**Objectives:**

- List the steps for the leak check process when using an intermediate-pressure method.

## LEAK CHECK: LOW-PRESSURE METHOD

**eLearning run time:** 12 minutes
**OJT worksheet:** Yes

**Objectives:**

- List the steps for the leak check process when using a low-pressure method

## LEAK CHECK: USING A VAPOR METER

**eLearning run time:** 6 minutes
**OJT worksheet:** Yes

**Objectives:**

- List the steps for the leak check process when using a low-pressure method

## TROUBLESHOOTING PROPANE LEAKS AFTER FAILED TESTING

**eLearning run time:** 9 minutes
**OJT worksheet:** Yes

**Objectives:**

- Identify the location of leaks.

# REFRESHERS

**Commercial Motor Vehicle Refreshers**

**Delivering Propane Refreshers**

**Installation Refreshers**

**Loading Refreshers**

**Regulatory Refreshers**

**Safety Basics Refreshers**

**System Layout and Design Refreshers**

**System Startup Refreshers**

# COMMERCIAL MOTOR VEHICLE REFRESHERS

# INSPECT COMMERCIAL MOTOR VEHICLES REFRESHER



The goal of this training is to remind bobtail drivers of what they learned in the Inspecting Bobtail Components course and has been developed in accordance with the requirements of NFPA 58. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

| | |
|---|---|
| **eLearning run time:** | 11 minutes |
| **ILT run time:** | 30 minutes |
| **CEUs:** | 0 |
| **Spanish:** | No |

## REFRESHER: INSPECT BOBTAIL COMPONENTS

| | |
|---|---|
| **eLearning run time:** | 11 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue inspecting various components of a bobtail in accordance with DOT regulations and NFPA 58 codes to ensure safe and optimal operation of the bobtail's propane system.

# DELIVERING PROPANE REFRESHERS

# EXCHANGING DOT CYLINDERS REFRESHER



This refresher program has been developed in accordance with the requirements of NFPA 58 and designed to reinforce the initial training. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

This refresher training program covers the following topics:

- What to Look for During an Installation Inspection
- How to Determine if an Interruption of Service Has Occurred
- How to Change Out Cylinders on Manual Changeover Manifolds
- How to Change Out Cylinders on Automatic Changeover Manifolds

**eLearning run time:** 21 minutes
**ILT run time:** 30 minutes
**CEUs:** 0
**Spanish:** No

## REFRESHER: CHANGING OUT RESIDENTIAL AND SMALL CYLINDERS

**eLearning run time:** 21 minutes
**OJT worksheet:** No

**Objectives:**

- Continue to change out residential and small commercial DOT exchange cylinders in accordance with NFPA 58 codes and DOT regulations to ensure safety.

# INSTALLATION REFRESHERS

# INSTALLING PROPANE CONTAINERS REFRESHER



This refresher program has been developed in accordance with the requirements of NFPA 58 and designed to reinforce the initial training. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

| | |
|---|---|
| **eLearning run time:** | 7 minutes |
| **ILT run time:** | 10 minutes |
| **CEUs:** | 0 |
| **Spanish:** | No |

## REFRESHER: INTRODUCTION TO INSTALLING PROPANE CONTAINERS

| | |
|---|---|
| **eLearning run time:** | 7 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Identify common NFPA 58 requirements for installing propane containers.
- List the activities that must be performed before installing a propane container.

# INSTALLING GAS PRESSURE REGULATORS REFRESHER



The goal of this training is to remind propane industry workers of what they learned in the Installing Gas Pressure Regulators program in accordance with NFPA 58 requirements.

| | |
|---|---|
| **eLearning run time:** | 7 minutes |
| **ILT run time:** | 10 minutes |
| **CEUs:** | 0 |
| **Spanish:** | No |



## REFRESHER: INSTALLING GAS PRESSURE REGULATORS

| | |
|---|---|
| **eLearning run time:** | 7 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue to identify the general recommendations for installing regulators,
- Continue to identify installation techniques for installing regulators,
- Continue to list NFPA 58 requirements for installing gas regulators



# PROPANE CONTAINER PRE-FILL PRE-EXCHANGE INSPECTION REFRESHER

This refresher program has been developed in accordance with the requirements of NFPA 58 and designed to reinforce the initial training. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

| | |
|---|---|
| **eLearning run time:** | 16 minutes |
| **ILT run time:** | 1 hour |
| **CEUs:** | 0 |
| **Spanish:** | No |



## INSPECTING PORTABLE DOT CYLINDERS

| | |
|---|---|
| **eLearning run time:** | 9 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue inspecting portable DOT cylinders to ensure they are fit for continued propane service.

## INSPECTING STATIONARY CONTAINERS UP TO 2,000 GALLONS W.C.

| | |
|---|---|
| **eLearning run time:** | 7 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue inspecting portable DOT cylinders to ensure they are fit for continued propane service.

# FILLING CUSTOMER CONTAINER WITH A BOBTAIL REFRESHER



This refresher program has been developed in accordance with the requirements of NFPA 58 and designed to reinforce the initial training. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

| | |
|---|---|
| **eLearning run time:** | 7 minutes |
| **ILT run time:** | 30 minutes |
| **CEUs:** | 0 |
| **Spanish:** | No |



## REFRESHER: FILLING CUSTOMER CONTAINERS WITH A BOBTAIL

| | |
|---|---|
| **eLearning run time:** | 7 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue safely filling customer propane containers in accordance with NFPA 58 codes and other regulations.

# LOADING REFRESHERS

# LOAD BOBTAILS REFRESHER



This refresher program has been developed in accordance with the requirements of NFPA 58 and designed to reinforce the initial training. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

| | |
|---|---|
| **eLearning run time:** | 11 minutes |
| **ILT run time:** | 30 minutes |
| **CEUs:** | 0 |
| **Spanish:** | No |



## REFRESHER: LOADING BOBTAILS WITH A PLANT LIQUID PUMP

| | |
|---|---|
| **eLearning run time:** | 11 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue preparing to load a bobtail in accordance with NFPA 58 codes to ensure safety while loading propane.
- Continue loading bobtails in accordance with NFPA 58 codes to ensure safety while loading and delivering propane.

# LOAD PROPANE CONTAINERS REFRESHER



This refresher program has been developed in accordance with the requirements of NFPA 58 and designed to reinforce the initial training. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

| | |
|---|---|
| **eLearning run time:** | 13 minutes |
| **ILT run time:** | 30 minutes |
| **CEUs:** | 0 |
| **Spanish:** | No |

## REFRESHER: LOAD PROPANE CONTAINERS

| | |
|---|---|
| **eLearning run time:** | 13 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue loading, securing, and unloading propane containers and DOT cylinders in accordance with NFPA 58 codes and DOT regulations to ensure safety.

# REGULATORY REFRESHER

# HAZARDOUS MATERIALS TRAINING REFRESHER




There is no customized refresher program for HazMat training. Learners can take the original program to comply with refresher training requirements. It is listed as a "refresher" in The Learning Center to distinguish on the transcript between learners who have taken the original program and those who are taking it as a refresher. It is included here to clarify the situation.

The refersher program containers the following modules:

- Refresher: DOT Hazmat Training Introduction
- Refresher: DOT Hazmat General Awareness and Familiarization
- Refresher: DOT Hazmat Function Specific Training
- Refresher: DOT Hazmat Safety Training
- Refresher: DOT Hazmat Security Awareness

| | |
|---|---|
| **eLearning run time:** | 2 hours & 43 minutes |
| **ILT run time:** | 9 hours |
| **CEUs:** | 0.3 |
| **Spanish:** | Yes |

# SAFETY BASICS REFRESHER

# CORROSION PREVENTION REFRESHER



This refresher program has been developed in accordance with the requirements of NFPA 58 and designed to reinforce the initial training. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

| | |
|---|---|
| **eLearning run time:** | 28 minutes |
| **ILT run time:** | 45 minutes |
| **CEUs:** | 0 |
| **Spanish:** | No |



## REFRESHER: INTRODUCTION TO CORROSION PREVENTION

| | |
|---|---|
| **eLearning run time:** | 7 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue describing corrosion prevention methods and how cathodic protection works.

## REFRESHER: CORROSION PREVENTION - COATINGS

| | |
|---|---|
| **eLearning run time:** | 7 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue to identify the types of coatings used for corrosion prevention
- Continue to explain the procedures to protect a pipe from corrosion using each coating type

## REFRESHER: INSTALLING CATHODIC PROTECTION SYSTEMS

**eLearning run time:** 7 minutes
**OJT worksheet:** No

**Objectives:**

- Continue to list the steps to install a cathodic protection system.

## REFRESHER: TESTING CATHODIC PROTECTION SYSTEMS

**eLearning run time:** 7 minutes
**OJT worksheet:** No

**Objectives:**

- Explain why testing cathodic protection systems is important
- Explain how to test cathodic protection systems

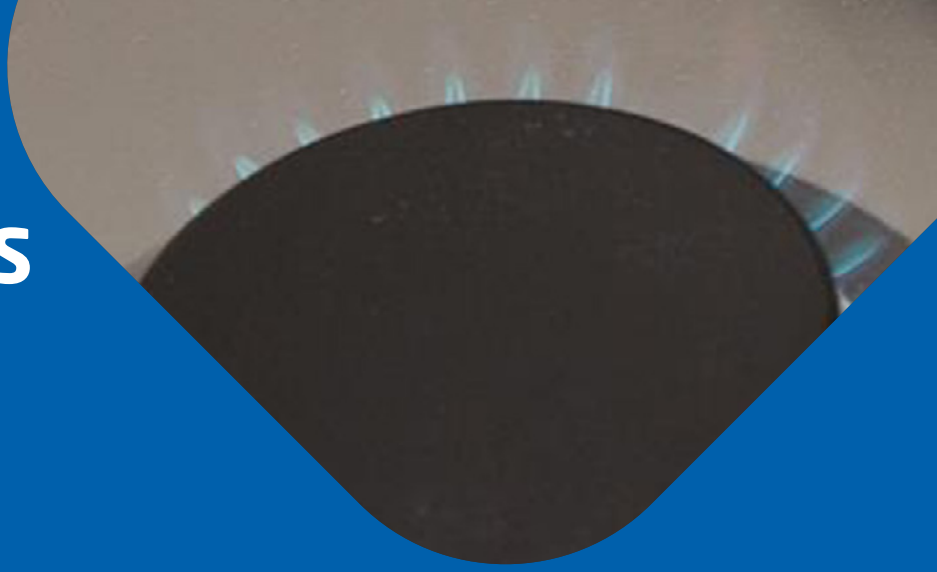
## REFRESHER: TROUBLESHOOTING AND RETROFITTING CATHODIC PROTECTION SYSTEMS

**eLearning run time:** 7 minutes
**OJT worksheet:** No

**Objectives:**

- Explain cathodic protection installation troubleshooting steps
- Explain retrofitting for corrosion protection and when it should be used

# FUNDAMENTALS OF PROPANE REFRESHER



This refresher program has been developed in accordance with the requirements of NFPA 58 and designed to reinforce the initial training. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

| | |
|---|---|
| **eLearning run time:** | 4 minutes |
| **ILT run time:** | 30 minutes |
| **CEUs:** | 0 |
| **Spanish:** | No |

## REFRESHER: FUNDAMENTALS OF PROPANE

| | |
|---|---|
| **eLearning run time:** | 4 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue explaining the behavior of propane as it changes from a liquid to a gas and back to a liquid.

# INTRODUCTION TO THE PROPANE INDUSTRY REFRESHER



A review of the information in the original training program.

| | |
|---|---|
| **eLearning run time:** | 26 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |



## REFRESHER: INTRODUCTION TO THE PROPANE INDUSTRY

| | |
|---|---|
| **eLearning run time:** | 26 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Understand and commit to the propane industry's Safety Mission, and specific actions that protect customers, employees, and the environment.
- Appreciate the size of the propane industry and the many opportunities available for those making a career in propane.
- Be familiar with common propane terminology and industry groups that regulate and influence this industry.
- Be able to explain what propane is, where it comes from, and how it is used today.
- Have a clear picture of how propane is stored and moved across the country and be familiar with this terminology.
- Understand the keys to maintaining good customer relations with those you serve.

# HANDLING PROPANE LEAKS REFRESHER



This refresher program has been developed in accordance with the requirements of NFPA 58 and designed to reinforce the initial training. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

| | |
|---|---|
| **eLearning run time:** | 11 minutes |
| **ILT run time:** | 30 minutes |
| **CEUs:** | 0 |
| **Spanish:** | No |

## REFRESHER: UNCONTROLLED RELEASE OF PROPANE

| | |
|---|---|
| **eLearning run time:** | 11 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue responding to uncontrolled releases of propane safely and efficiently.

# SYSTEM LAYOUT AND DESIGN REFRESHERS

# CONDUCTING AN EXTERIOR CUSTOMER SITE ASSESSMENT REFRESHER



This refresher program has been developed in accordance with the requirements of NFPA 58 and designed to reinforce the initial training. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

| | |
|---|---|
| **eLearning run time:** | 31 minutes |
| **ILT run time:** | 2 hours |
| **CEUs:** | 0 |
| **Spanish:** | No |

## REFRESHER: INTRODUCTION TO EXTERIOR CUSTOMER SITE ASSESSMENT

| | |
|---|---|
| **eLearning run time:** | 12 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue conducting exterior site, personal risk, and equipment safety assessments to identify potential hazards at customer locations.

## REFRESHER: LOCATION REQUIREMENTS FOR DOT EXCHANGE CYLINDER CAGES

**eLearning run time:** 8 minutes
**OJT worksheet:** No

**Objectives:**

- Continue identifying indoor and outdoor DOT exchange cylinder cages that are in compliance with or in violation of the NFPA 58 code.

## REFRESHER: LOCATION REQUIREMENTS FOR DOT EXCHANGE CYLINDERS: RESIDENTIAL AND SMALL COMMERCIAL

**eLearning run time:** 4 minutes
**OJT worksheet:** No

**Objectives:**

- Continue identifying DOT exchange cylinder installations at small residential, commercial, and temporary heat sites that are in compliance with or in violation of the NFPA 58 code.



## REFRESHER: LOCATION REQUIREMENTS FOR DOT/ASME CONTAINERS UP TO 2,000 GALLONS W.C.

**eLearning run time:** 7 minutes
**OJT worksheet:** No

**Objectives:**

- Continue identifying container installations that are in compliance with or violation of the NFPA 58 code.

# INSTALLING PROPANE DISTRIBUTION SYSTEM PIPING REFRESHER



This refresher program has been developed in accordance with the requirements of NFPA 58 and designed to reinforce the initial training. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

| | |
|---|---|
| **eLearning run time:** | 14 minutes |
| **ILT run time:** | 30 minutes |
| **CEUs:** | 0 |
| **Spanish:** | No |



## REFRESHER: INTRODUCTION TO INSTALLING PIPING AND COMPONENTS

| | |
|---|---|
| **eLearning run time:** | 7 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue to identify the portions of piping on a propane distribution system that are covered by NFPA 54 and/or 58.
- Continue to explain how a piping plan is used when laying out a piping system before installation.

## REFRESHER: INSTALLING EXTERIOR PIPING AND COMPONENTS

| | |
|---|---|
| **eLearning run time:** | 7 minutes |
| **OJT worksheet:** | No |

**Objectives:**

- Continue to identify NFPA 58 requirements for installing exterior piping and tubing for vapor and liquid distribution systems.
- Continue to explain specific techniques for installing exterior metal pipe and tubing.
- Continue to explain specific techniques for installing exterior plastic pipe and tubing.

# JOINING GAS PIPING REFRESHER



This refresher program has been developed in accordance with the requirements of NFPA 58 and designed to reinforce the initial training. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

| | |
|---|---|
| **eLearning run time:** | unknown |
| **ILT run time:** | unknown |
| **CEUs:** | 0 |
| **Spanish:** | No |



## REFRESHER: INTRODUCTION TO JOINING GAS PIPING

| | |
|---|---|
| **eLearning run time:** | unknown |
| **OJT worksheet:** | No |

**Objectives:**

- Continue to identify NFPA 58 requirements for joining exterior piping and tubing for vapor and liquid distribution systems.
- Continue to explain specific techniques for joining exterior metal pipe and tubing.
- Continue to explain specific techniques for joining exterior plastic pipe and tubing.

# SYSTEM STARTUP REFRESHERS

# TESTING GAS PIPING REFRESHER



This refresher program has been developed in accordance with the requirements of NFPA 58 and designed to reinforce the initial training. If you would like to review training that is not in this refresher program, or review in more detail, please retake the original training modules.

**eLearning run time:** unknown
**ILT run time:** unknown
**CEUs:** 0
**Spanish:** No



## REFRESHER: PRESSURE TESTING NEW GAS PIPING

**eLearning run time:** unknown
**OJT worksheet:** No

**Objectives:**

- Continue to identify what parts of the system are covered under which code.
- Continue to identify when a leak check is required.

## REFRESHER: TROUBLESHOOTING PROPANE LEAKS

**eLearning run time:** unknown
**OJT worksheet:** No

**Objectives:**

- Continue to identify the location of leaks.

# PEP RECOGNITION TRAINING

## PEP Recognized Field Trainer

## PEP-Recognized Instructor Applicants

# PEP RECOGNIZED FIELD TRAINER



This program is designed to help On-the-Job Trainers have the tools to deliver effective OJT training. Successfully completing this program fulfills the training requirement to be a PEP Recognized Field Trainer. Review the complete requirements for a PEP Recognized Field Trainer in the Training & Education Policies.

**eLearning run time:** 2 hours & 51 minutes
**ILT run time:** N/A
**CEUs:** 0
**Spanish:** No

## PREPARING FOR OJT

**eLearning run time:** Unknown
**OJT worksheet:** No

**Objectives:**

- The learner will be able to explain the basics of how adults learn.
- The learner will be able to fill out a PERC OJT Worksheet.

## DELIVERING OJT

**eLearning run time:** Unknown
**OJT worksheet:** No

**Objectives:**

- The learner will be able to explain the eight training methods.

# PEP-RECOGNIZED INSTRUCTOR TRAINING ONLINE COURSE



This program is designed for instructors to "up their training game" by learning about adult learning theory and how to apply the theory to deliver engaging and effective training. The goal of this training is to give instructors teaching in the propane industry tools and strategies to become better instructors.

This program has two parts; the training and the evaluation. Both can be completed online. Once you have successfully completed the eLearning training portion sign up to attend the virtual review session. The virtual review session takes about 4 hours. This program and the evaluation fulfill the training portion of the PEP-Recognized Instructor requirements. See the full list of requirements in the PEP Recognized Instructor Policy.

The lessons and objectives for the eLearning training are listed below but cannot be taken as individual modules.

| | |
|---|---|
| **eLearning run time:** | 6 hours & 15 minutes |
| **ILT run time:** | N/A |
| **CEUs:** | 0 |
| **Spanish:** | No |

## WELCOME TO THE PEP-RECOGNIZED INSTRUCTOR TRAINING

**Objectives:**

- Explain the purpose and value of the PEP Recognized Instructor Course.
- List all required components to successfully complete the program.
- Describe some trends related to what has made other facilitators who have completed this course successful, and where some facilitators (regardless of their experience level) have struggled.
- Differentiate between "engaging" and "effective" learning.

## THE THEORY BEHIND EFFECTIVE LEARNING EXPERIENCES

**Objectives:**

- Differentiate between "engaging" and "effective" learning
- Make a connection between having familiarity with the work of Knowles, Gagne and Vella, and being able to intentionally replicate what learners say is their best learning experience, every time
- Replace the myth that people learn better if taught to a specific learning style with facts about how learners actually do learn better (when activities are suited to the context and skill level at which they're expected to perform)
- Make a connection between learning objectives, appropriate learning activities, and strategies to assess learning outcomes

## WHERE THEORY MEETS REAL-LIFE TRAINING AND FACILITATION

**Objectives:**

- Identify some sections of the PERC training curriculum that might have been inspired by Knowles, Gagne and/or Vella
- Identify strategies to demonstrate ownership over a curriculum, even if that curriculum was written by someone else (ie: supplementing the training materials with stories, anecdotes, research, etc)
- Come up with examples, stories and/or research that allows facilitators to demonstrate ownership of the PERC materials while also maintaining fidelity to the learning objectives

## INTRODUCTION TO A FACILITATOR EVALUATION RUBRIC AND EFFECTIVE FACILITATION STRATEGIES

**Objectives:**

- List and explain key components of a facilitator evaluation form.
- Describe or explain some of the most common mistakes or struggles that facilitators have when it comes to implementing effective learning strategies.
- Identify several go-to facilitation strategies that can be used to keep an audience engaged and/or assess their learning. (Ie: the pair/share, the boomerang, etc)

## EVALUATING TRAINING FACILITATION AND PREPARING FOR TEACHBACKS

**Objectives:**

- Use a form/rubric to evaluate and provide feedback on several facilitation examples.
- Compare those observations with those of a master trainer.
- List/explain the next steps to completing sign-off and certification.

# LEARNING PATHS

**Market and Industry Training Learning Paths**

**Safety and Technical Training Learning Paths**

**State Specific Learning Paths**



# MARKET AND INDUSTRY TRAINING LEARNING PATHS

## ALLIED PARTNERS BUILDING PROFESSIONALS

## CUSTOMER SERVICE REPRESENTATIVES

## LEADERSHIP IN ENERGY AMBASSADORS

## SELLING IN PROPANE

## UNDERSTANDING RENEWABLE FUELS

# ALLIED PARTNERS BUILDING PROFESSIONALS

| Program | Completion Requirements |
|---|---|
| Propane Tankless Water Heating in Commercial Building Applications | Required |
| Designing and Building High Performance Homes with Propane | Required |
| Propane-Enabled Solutions for Commercial Buildings in Rural Areas | Required |
| Renewable Propane and the Environment | Required |

# CUSTOMER SERVICE REPRESENTATIVES

## Learning Path for Customer Service Representatives

| Program | Module | Completion Requirements |
|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | Required |
| **2) Fundamentals of Propane** | Fundamentals of Propane | Required |
| **3) Office Personnel** | Safety Basics Introduction | Required |
| | Handling Safety Related Calls | Required |
| | Expanding Residential Sales Through Customer Service | Required |
| **4) Consumer Safety Education** | Consumer Safety Education-Residential & Small Commercial | Required |
| **5) Connecting With Your Customers** | Uncovering Customers' Propane Needs | Required |
| | The Art of the Propane Partnership | Required |
| | Creating Win-Win Negotiations | Required |
| | Buyer Types | Required |
| | Buyer Types in Action | Required |
| | A Conversation Framework | Required |
| | Handling Difficult Conversations | Required |
| | Customer Journey Mapping | Required |
| | Customer Service Scenarios | Required |

## Learning Path for Customer Service Representatives

| Program | Module | Completion Requirements |
|---|---|---|
| **6) Introduction To Strategic Partnerships** | Be Their Trusted Advisor | Required |
| | Strategic Peer Networks | Required |
| **7) Defining Your Business Growth Strategy** | Your Customer's Point of View | Required |
| | Customer Segmentation | Required |
| **8) An Introduction To Selling In The Propane Market** | The Many Uses of Propane | Required |
| | Listening to Build Relationships | Required |
| | Sales Process for All Markets | Required |
| | Manage the Conversation | Required |
| **9) Environmental** | How to Talk About Propane and the Environment | Required |
| | Environmental Impacts: Propane vs. Electricity | Required |

# LEADERSHIP IN ENERGY AMBASSADORS

| Module | Completion Requirements |
|---|---|
| What Does It Take to Grow? | Required |
| Be Their Trusted Advisor | Required |
| Expand Your Impact Over Time with Strategic Relationships | Required |
| Strategic Peer Networks | Required |
| The Competitor Series: Electricity | Required |
| Environmental Impacts: Propane VS Electricity | Required |
| Marketer Math: In the Numbers with Propane & Electricity | Required |
| How to Talk about Propane and the Environment | Required |
| Renewable Propane and the Environment | Required |
| A Business Strategy Self- Assessment Checklist | Required |
| Introduction to Combined Heat and Power (CHP) | Required |
| Combined Heat and Power: Partnerships for Selling Solutions | Required |
| Pathway to Renewable Propane | Required |

# SELLING IN PROPANE

## Learning Path for Selling in Propane

| Program | Module | Completion Requirements |
|---|---|---|
| **1) Propane Basics** | Introduction to the Propane Industry | Required |
| | Fundamentals of Propane | Required |
| | Consumer Safety Education-Residential & Small Commercial | Required |
| **2) Introduction To Strategic Partnerships** | Be Their Trusted Advisor | Required |
| | Strategic Peer Networks | Required |
| | Influencers in the Market | Required |
| | Expand Your Impact Over Time with Strategic Relationships | Required |
| | A Business Strategy Self-Assessment Checklist | Required |
| **3) Connecting With Your Customers** | Uncovering Customers' Propane Needs | Required |
| | The Art of the Propane Partnership with PDF | Required |
| | Creating Win-Win Negotiations with PDF | Required |
| | Buyer Types | Required |
| | Buyer Types in Action | Required |
| | Checklist: A Conversation Framework | Required |
| | Customer Journey Mapping | Required |

## Learning Path for Selling in Propane

| Program | Module | Completion Requirements |
|---|---|---|
| **4) Defining Your Business Growth Strategy** | Your Customer's Point of View | Required |
| | Customer Segmentation | Required |
| | Marketing in the Digital Age | Required |
| | Data in Action | Required |
| | Develop a Growth Strategy Using Trending Opportunities | Required |
| | Tips for Your Growth Strategy Checklist | Required |
| **5) An Introduction To Selling In The Propane Market** | The Many Uses of Propane | Required |
| | Listening to Build Relationships | Required |
| | Sales Process for all markets | Required |
| | Manage the Conversation | Required |
| | What Does it Take to Grow | Required |
| **6) Environmental** | How to Talk About Propane and the Environment | Required |
| | Environmental Impacts: Propane vs. Electricity | Required |
| | The Competitor Series: Electricity | Required |
| **7) Autogas Sales Training** | The Introduction to the Autogas Sales Series | Required |
| | Fleet Prospects and the Power of Autogas | Required |
| | Current Technology and Fueling Options | Required |
| | Before the Sale | Required |
| | Using the Skills for Success | Required |
| **8) Opportunities In The Equipment Rental Market** | Opportunities in the Equipment Rental Market | Required |
| **9) Combined Heat & Power (CHP)** | Introduction to Combined Heat and Power (CHP) | Required |
| | Combined Heat and Power: Partnerships for Selling Solutions | Required |

# UNDERSTANDING RENEWABLE FUELS

## Learning Path for Understanding Renewable Fuels

| Program | Module | Completion Requirements |
|---|---|---|
| **1) Leadership in Energy Ambassadors** | The Competitor Series: Electricity | Required |
| | Environmental Impacts: Propane VS Electricity | Required |
| | Marketer Math: In the Numbers with Propane & Electricity | Required |
| | How to Talk about Propane and the Environment | Required |
| | Renewable Propane and the Environment | Required |
| **2) The Basics of Renewable Fuel** | A Low Carbon Fuel Standard: In Brief | Required |
| | Pathways to Renewable Propane | Required |
| | Renewable Propane Trading Market | Required |
| | Fuel vs. Feedstock- The Renewable Propane Tradeoff for a Biorefinery | Required |
| | Techno-economic, Feasibility, and Life Cycle Analysis of Renewable Propane | Required |
| **3) Propane Presents Webinar Series** | Propane Presents Webinar Series: Power Generation | Required |
| | Propane Presents Webinar Series: Energy Planning Analysis Tool | Required |
| | Renewable Propane and Renewable DME | Required |
| **4) Path to Zero Podcast** | Do fossil fuel interests deserve a seat at the table? GreenBiz's Sarah Golden's Gloves Off | Optional |
| | Renewable Fuels Innovation | Optional |
| | Global Clean Energy's Richard Palmer on Camelina: Is it the wonder crop for renewable fuels? | Optional |
| | Energy Transition Complexities with Geologist Dr. Scott Tinker | Optional |

# SAFETY AND TECHNICAL TRAINING LEARNING PATHS

**Bobtail Drivers**

**Bulk Plant Maintenance Technician**

**Cylinder Delivery Driver**

**Dispensing Propane Safety: Autogas**

**Dispensing Propane Safety: Refueling Motorhomes & ASME Mounted Tanks**

**Dispensing Propane Safetly: Small Cylinder**

**DOT Cylinder Visual Requalifier**

**Exterior Gas Piping, Regulator, and Meter Installer**

**Gas System Startup Service Technician**

**Gas Vaporizer Installation and Service Technician**

**Interior Gas Piping Installer**

**Propane Container Evacuation Person**

**Propane Container Installer**

**Propane Container Preparation Person**

**Propane Container Servicing Person**

**Propane System Layout and Design**

**Refresher Bobtail Driver**

**Refresher Cylinder Delivery Driver**

# About "Required" in PERC Learning Paths

In PERC Safety Learning Paths, the term "Required" identifies modules that are included as part of a structured path based on a specific job task within the PERC Learning Center. These modules are designated to support a recommended sequence and to track progress toward completion of a learning path.

PERC does not establish mandatory training requirements. All training programs and learning paths are provided as resources for the propane industry. Companies and organizations may determine their own training requirements and may choose to use, modify, or supplement PERC Safety Learning Paths based on their operational needs. State agencies and other Authorities Having Jurisdiction (AHJs) may establish training requirements; companies should consult their AHJ for applicable requirements.

The "Required" designation applies only to module completion within the PERC Learning Center and does not indicate a regulatory or industry-wide requirement.

# BOBTAIL DRIVERS

## Bobtail Driver Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | | Required |
| **2) Fundamentals of Propane** | Fundamentals of Propane | | Required |
| **3) Handling Propane Leaks** | Uncontrolled Release of Propane | | Required |
| | Gas Leak and Odor Call Response | Yes | Optional |
| **4) Consumer Safety Education** | Consumer Safety Education | | Choose One |
| | Ag Consumer Safety Education | | Choose One |
| **5) Propane Personal Safety** | Introduction to Propane Personal Safety | | |
| | Personal Safety When Working Around Vehicles | Yes | Required |
| | Bulk Delivery Safety | Yes | Required |
| **6) Hazardous Materials Training** | DOT Hazmat Training Introduction | | Required |
| | DOT Hazmat General Awareness & Familiarization | | Required |
| | DOT Hazmat Function Specific Training | | Required |
| | DOT Hazmat Safety Training | | Required |
| | DOT Hazmat Security Awareness | | Required |
| | OSHA Hazard Communication | | Required |

## Bobtail Driver Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **7) Inspect Commercial Motor Vehicles** | Conduct Pre-and Post-trip Vehicle Chassis Inspections | | Required |
| | Inspect Bobtail Components | | Required |
| **8) Load Bobtails** | Preparing to Load a Bobtail | Yes | Required |
| | Loading Bobtails with a Liquid Pump | Yes | Required |
| | Loading Bobtails with a Plant Vapor Compressor | Yes | Optional |
| | Loading Bobtails With a Pump Auxiliary Inlet Connection | Yes | Optional |
| **9) Safe Driving** | Introduction to Safe Driving | | Required |
| | Prevent Rear-End Accidents | | Required |
| | Prevent Rollover Accidents | | Required |
| | Prevent Backing Accidents | | Required |
| | Safe Driving Assessment | | Required |
| **10) Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | Yes | Required |
| | Delivery Truck Hazard Assessment | | Required |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | Yes | Required |
| | Location Requirements: ASME Tank (AG/UG) Over 2,000 Gallon WC | Yes | Optional |
| **11) Propane Container Pre-Fill Pre-Exchange Inspection** | Inspect Stationary Containers up to 2,000 gal. W.C. | Yes | Required |
| | Inspect Potable DOT Cylinders | Yes | Optional |
| **12) Filling Customer Containers Using a Bobtail** | Filling Customer Containers Using a Bobtail | Yes | Required |

## Bobtail Driver Learning Path – Electives

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **13) Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | Yes | Optional |
| **14) Measuring Pressure** | Measuring Pressure | Yes | Optional |
| **15) Testing Gas Piping** | Introduction to Leak Check | Yes | Optional |
| | Leak Check: High-Pressure Method | Yes | Optional |
| | Leak Check: Intermediate-Pressure Method | Yes | Optional |
| | Leak Check: Low-Pressure Method | Yes | Optional |
| | Leak Check: Using a Vapor Meter | Yes | Optional |
| | Troubleshooting Propane Leaks | Yes | Optional |
| **16) Lighting Appliance Pilots** | Residential & Small Commercial | Yes | Optional |
| | Large Commercial & Industrial | Yes | Optional |
| **17) Handling Propane Leaks** | Gas Leak & Odor Call Response | Yes | Optional |

# BULK PLANT MAINTENANCE TECHNICIAN

## Bulk Plant Maintenance Technician Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | | Required |
| **2) Fundamentals of Propane** | Fundamentals of Propane | | Required |
| **3) Handling Propane Leaks** | Uncontrolled Release of Propane | | Required |
| | Gas Leak and Odor Call Response | | Required |
| **4) Consumer Safety Education** | Residential & Commercial | | Choose One |
| | Ag Consumer Safety Education | | Choose One |
| **5) Propane Personal Safety** | Introduction to Propane Personal Safety | | Required |
| | Personal Safety When Working Around Vehicles | Yes | Required |
| | Handling Cylinders Safely | Yes | Required |
| **6) Hazardous Material Training** | DOT Hazmat Training Introduction | | Required |
| | DOT Hazmat General Awareness & Familiarization | | Required |
| | DOT Hazmat Function Specific Training | | Required |
| | DOT Hazmat Safety Training | | Required |
| | DOT Hazmat Security Awareness | | Required |
| | OSHA Hazard Communication | | Required |

## Bulk Plant Maintenance Technician Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **7) Install, Startup, Shutdown, and Maintain Vaporizers** | Install, Startup, Shutdown, and Maintain Vaporizers | | Optional |
| **8) Corrosion Prevention** | Introduction to Corrosion Prevention | | Required |
| | Corrosion Prevention - Coatings | | Required |
| | Installing Cathodic Protection Systems | | Optional |
| | Testing Cathodic Protection Systems | | Optional |
| | Troubleshooting and Retrofitting Cathodic Protection Systems | | Optional |
| **9) Measuring Pressure** | Measuring Pressure | | Required |
| **10) Propane Container and Valves** | Introduction to Propane Containers and Valves | | Required |
| | DOT/TC Cylinders and Valves | | Optional |
| | AG/UG ASME Tanks and Valves up to 2,000 gallon W.C. | | Optional |
| | AG/UG ASME Tanks and Valves over 2,000 gallon W.C. | | Required |
| **11) Bulk and Industrial Plant Maintenance** | Introduction to Bulk & Industrial Plant Maintenance | | Required |
| | Maintaining Bulk & Industrial Plant Storage Tanks & Equipment | | Required |
| | Maintaining Bulk and Industrial Plant Railcar Facility | | Optional |

# CYLINDER DELIVERY DRIVER

## Cylinder Delivery Driver Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | | Required |
| **2) Fundamentals of Propane** | Fundamentals of Propane | | Required |
| **3) Handling Propane Leaks** | Uncontrolled Release of Propane | | Required |
| | Gas Leak and Odor Call Response | Yes | Optional |
| **4) Consumer Safety Education** | Consumer Safety Education | | Choose One |
| | Ag Consumer Safety Education | | Choose One |
| **5) Propane Personal Safety** | Introduction to Propane Personal Safety | | Required |
| | Personal Safety When Working Around Vehicles | Yes | Required |
| | Handling Cylinders Safely | Yes | Required |
| **6) Hazardous Material Training** | DOT Hazmat Training Introduction | | Required |
| | DOT Hazmat General Awareness & Familiarization | | Required |
| | DOT Hazmat Function Specific Training | | Required |
| | DOT Hazmat Safety Training | | Required |
| | DOT Hazmat Security Awareness | | Required |
| | OSHA Hazard Communication | | Required |

## Cylinder Delivery Driver Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **7) Inspect Commercial Motor Vehicles** | Conduct Pre-and Post-trip Vehicle Chassis Inspections | Yes | Required |
| | Inspect Cylinder Delivery Vehicle | Yes | Required |
| **8) Load Propane Containers** | Introduction to Load, Secure, and Unload Propane Containers | Yes | Required |
| | Load, Secure, & Unload DOT Cylinders | Yes | Required |
| **9) Safe Driving** | Introduction to Safe Driving | | Required |
| | Prevent Rear-End Accidents | | Required |
| | Prevent Rollover Accidents | | Required |
| | Prevent Backing Accidents | | Required |
| | Safe Driving Assessments | | Required |
| **10) Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | Yes | Required |
| | Delivery Truck Hazard Assessment | | Required |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | Yes | Required |
| | Location Requirements: DOT Exchange Cylinders –Cages | Yes | Required |
| | Location Requirements: DOT Exchange Cylinder – Residential and Small Commercial | Yes | Required |
| **11) Propane Container Pre-Fill Pre-Exchange Inspection** | Inspect Stationary Containers up to 2,000 gal. W.C. | Yes | Required |
| | Inspect Portable DOT Cylinders | Yes | Required |

## Cylinder Delivery Driver Learning Path – Electives

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **12) Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | Yes | Optional |
| **13) Measuring Pressure** | Measuring Pressure | | Optional |
| **14) Testing Gas Piping** | Introduction to Leak Check | | Optional |
| | Leak Check: High-Pressure Method | | Optional |
| | Leak Check: Intermediate-Pressure Method | | Optional |
| | Leak Check: Low-Pressure Method | | Optional |
| | Leak Check: Using a Vapor Meter | | Optional |
| | Troubleshooting Propane Leaks | | Optional |
| **15) Lighting Appliance Pilots** | Residential & Small Commercial | Yes | Optional |
| | Large Commercial & Industrial | Yes | Optional |

# DISPENSING PROPANE SAFETY: AUTOGAS

## Autogas Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **Dispensing Propane Safely** | Introduction to the Propane Industry for Dispenser Operators | | Required |
| | Dispensing Station Autogas | Yes | Required |
| | Uncontrolled Release of Propane for Dispenser Operations | Yes | Required |
| | Dispensing Autogas | Yes | Required |
| | Quiz: Dispensing Propane Safely Autogas | Yes | Required |

# DISPENSING PROPANE SAFETY: REFUELING MOTORHOMES & ASME MOUNTED TANKS

## Refueling Motorhomes & ASME Mounted Tanks Learning Path

| Program | Module | Required OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **Dispensing Propane Safely** | Introduction to the Propane Industry for Dispenser Operators | | Required |
| | Dispensing Station Equipment | Yes | Required |
| | Uncontrolled Release of Propane for Dispenser Operations | Yes | Required |
| | Refueling Motorhomes & Other ASME Mounted Tanks | Yes | Required |
| | Quiz: Refueling Motorhomes | Yes | Required |

# DISPENSING PROPANE SAFETY: SMALL CYLINDER

## Small Cylinder Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **Dispensing Propane Safely: Small Cylinder** | Introduction to Propane for Dispenser Operations | | Required |
| | Dispensing Station Equipment | Yes | Required |
| | Uncontrolled Release of Propane for Dispenser Operations | Yes | Required |
| | Cylinder Components | Yes | Required |
| | Pre-Fill Inspection | Yes | Required |
| | Filing Cylinders by Volume | Yes | Choose One |
| | Filing Cylinders by Weight | Yes | Choose One |
| | Filling Cylinders by Weight & Volume | Yes | Choose One |
| | Post Filling Cylinders | Yes | Required |
| | Transporting DOT Cylinders | Yes | Required |
| | Purging New Cylinders | Yes | Optional |
| | Small Cylinder Quiz: Filling by Volume | | Choose One |
| | Small Cylinder Quiz: Filling by Weight | | Choose One |
| | Small Cylinder Quiz: Filling by Weight & Volume | | Choose One |

# DOT CYLINDER VISUAL REQUALIFIER

## DOT Cylinder Visual Requalifier Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | | Required |
| **2) Fundamentals of Propane** | Fundamentals of Propane | | Required |
| **3) Handling Propane Leaks** | Uncontrolled Release of Propane | | Required |
| **4) Consumer Safety Education** | Residential & Commercial | | Choose One |
| | Agriculture | | Choose One |
| **5) Propane Personal Safety** | Introduction to Propane Personal Safety | | Required |
| | Personal Safety When Working Around Vehicles | Yes | Optional |
| | Handling Cylinders Safely | Yes | Required |
| **6) Hazardous Material Training** | DOT Hazmat Training Introduction | | Required |
| | DOT Hazmat General Awareness & Familiarization | | Required |
| | DOT Hazmat Function Specific Training | | Required |
| | DOT Hazmat Safety Training | | Required |
| | DOT Hazmat Security Awareness | | Required |
| | OSHA Hazard Communication | | Required |

## DOT Cylinder Visual Requalifier Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **7) Propane Containers and Valves** | Introduction to Propane Containers and Valves | | Required |
| | DOT/TC Cylinders and Valves | | Required |
| **8) Requalify DOT Cylinders** | Introduction to Requalifying DOT Cylinders | | Required |
| | Preparing and Inspecting Cylinders | Yes | Required |
| | Testing, Processing, and Special Cylinder Types | Yes | Required |

# EXTERIOR GAS PIPING, REGULATOR, AND METER INSTALLER

## Exterior Gas Piping, Regulator, and Meter Installer Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | | Required |
| **2) Fundamentals of Propane** | Fundamentals of Propane | | Required |
| **3) Handling Propane Leaks** | Uncontrolled Release of Propane | | Required |
| | Gas Leak and Odor Call Response | Yes | Required |
| **4) Consumer Safety Education** | Consumer Safety Education | | Choose One |
| | Ag Consumer Safety Education | | Choose One |
| **5) Propane Personal Safety** | Introduction to Propane Personal Safety | | Required |
| | Personal Safety When Working Around Vehicles | Yes | Required |
| **6) Hazardous Material Training** | OSHA Hazard Communication | | Required |
| **7) Safe Driving** | Introduction to Safe Driving | | Required |
| | Prevent Rear-End Accidents | | Required |
| | Prevent Rollover Accidents | | Required |
| | Prevent Backing Accidents | | Required |
| | Safe Driving Assessment | | Required |
| **8) Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | Yes | Required |

## Exterior Gas Piping, Regulator, and Meter Installer Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **9) Determine Total Connected BTU Load** | Determining BTU System Demand: Introduction | | Required |
| | Determining BTU System Demand: Residential & Small Commercial | | Choose One |
| | Determining BTU System Demand: Large Commercial & Industrial Systems | | Choose One |
| **10) Installing Propane Distribution System Piping** | Introduction to Installing Gas Piping & Components | | Required |
| | Installing Exterior Gas Piping & Components | Yes | Required |
| **11) Joining Gas Piping** | Introduction to Joining Gas Piping | | Required |
| | Joining Copper Tubing & Components | Yes | Required |
| | Joining Steel Piping & Components | Yes | Required |
| | Joining CSST Tubing & Components | Yes | Required |
| | Joining Polyethylene Piping: Mechanical Fittings | Yes | Required |
| | Joining Polyethylene Piping: Heat Fusion | Yes | Optional |
| **12) Installing Gas Pressure Regulators** | Installing Gas Pressure Regulators | Yes | Required |
| **13) Installing Vapor Meters** | Introduction to Installing Vapor Meters | | Required |
| | Installing Vapor Meters | Yes | Required |
| **14) Corrosion Prevention** | Introduction to Corrosion Prevention | | Required |
| | Corrosion Prevention – Coatings | Yes | Required |
| | Installing Cathodic Protection Systems | Yes | Required |
| | Testing Cathodic Protection Systems | Yes | Required |
| | Troubleshooting & Retrofitting Cathodic Protection Systems | Yes | Required |

## Exterior Gas Piping, Regulator, and Meter Installer Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **15) Regulators Operations** | Introduction to Regulator Operation | | Required |
| | Residential & Small Commercial Regulator Operations | | Required |
| | Large Commercial & Industrial Regulator Operation | | Optional |
| **16) Measuring Pressure** | Measuring Pressure | | Required |
| **17) Testing Gas Piping** | Pressure Testing New Gas Piping | Yes | Required |
| | Introduction to Leak Check | Yes | Required |
| | Leak Check: High-Pressure Method | Yes | Choose One |
| | Leak Check: Intermediate-Pressure Method | Yes | Choose One |
| | Leak Check: Low-Pressure Method | Yes | Choose One |
| | Leak Check: Using a Vapor Meter | Yes | Choose One |
| | Troubleshooting Propane Leaks After a Failed Testing | Yes | Required |

# GAS SYSTEM STARTUP SERVICE TECHNICIAN

## Gas System Startup Service Technician Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | | Required |
| **2) Fundamentals of Propane** | Fundamentals of Propane | | Required |
| **3) Handling Propane Leaks** | Uncontrolled Release of Propane | | Required |
| | Gas Leak and Odor Call Response | Yes | Required |
| **4) Consumer Safety Education** | Consumer Safety Education | | Choose One |
| | Ag Consumer Safety Education | | Choose One |
| **5) Propane Personal Safety** | Introduction to Propane Personal Safety | | Required |
| | Personal Safety When Working Around Vehicles | Yes | Required |
| **6) Hazardous Material Training** | OSHA Hazard Communication | | Required |
| **7) Safe Driving** | Introduction to Safe Driving | | Required |
| | Prevent Rear-End Accidents | | Required |
| | Prevent Rollover Accidents | | Required |
| | Prevent Backing Accidents | | Required |
| | Safe Driving Assessment | | Required |
| **8) Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | Yes | Required |

## Gas System Startup Service Technician Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **9) Measure Pressure** | Measure Pressure | | Required |
| **10) Testing Gas Piping** | Pressure Testing New Gas Piping | Yes | Required |
| | Introduction to Leak Check | Yes | Required |
| | Leak Check: High-Pressure Method | Yes | Choose One |
| | Leak Check: Intermediate-Pressure Method | Yes | Choose One |
| | Leak Check: Low-Pressure Method | Yes | Choose One |
| | Leak Check: Using a Vapor Meter | Yes | Choose One |
| | Troubleshooting Propane Leaks | Yes | Required |
| **11) Gas Regulator Operations** | Introduction to Regulator Operations | | Required |
| | Residential & Small Commercial Regulator Operation | Yes | Choose One |
| | Large Commercial & Industrial Regulator Operation | Yes | Choose One |
| **12) Conducting Gas System Performance Testing** | Introduction to Conducting Gas System Performance Testing | | Required |
| | Conducting Gas System Performance Testing | Yes | Required |
| **13) Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | Yes | Required |
| **14) Conducting a New System Interior Site Assessment** | Introduction to Conducting a New System Interior Site Assessment | | Required |
| | Validating Gas Piping | Yes | Required |
| | Validating Gas Appliances | Yes | Required |
| | Validating Appliance Combustion Air | | Required |
| | Validating Appliance Venting | Yes | Required |

## Gas System Startup Service Technician Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **15) Purging Gas Piping Systems** | Introduction to Purging | | Required |
| | Purging Residential & Small Commercial Piping Systems | Yes | Choose One |
| | Purging Large Commercial & Industrial Piping Systems | Yes | Choose One |
| **16) New Gas Appliance Startup** | Introduction to New Gas Appliance Startup | | Required |
| | New Gas Appliance Startup | | Required |
| | Identifying Burning Characteristics of Propane | | Required |
| **17) Lighting Appliance Pilots** | Residential & Small Commercial | Yes | Choose One |
| | Large Commercial & Industrial | Yes | Choose One |

# GAS VAPORIZER INSTALLATION & SERVICE TECHNICIAN

## Gas Vaporizer Installation & Service Technician Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | | Required |
| **2) Fundamentals of Propane** | Fundamentals of Propane | | Required |
| **3) Handling Propane Leaks** | Uncontrolled Release of Propane | | Required |
| | Gas Leak and Odor Call Response | Yes | Required |
| **4) Consumer Safety Education** | Consumer Safety Education | | Choose One |
| | Ag Consumer Safety Education | | Choose One |
| **5) Propane Personal Safety** | Introduction to Propane Personal Safety | | Required |
| | Personal Safety When Working Around Vehicles | Yes | Required |
| **6) Hazardous Material Training** | OSHA Hazard Communication | | Required |
| **7) Safe Driving** | Introduction to Safe Driving | | Required |
| | Prevent Rear-End Accidents | | Required |
| | Prevent Rollover Accidents | | Required |
| | Prevent Backing Accidents | | Required |
| | Safe Driving Assessment | | Required |
| **8) Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | Yes | Required |

## Gas Vaporizer Installation & Service Technician Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **9) Determine Total Connected BTU Load** | Determining BTU System Demand: Introduction | | Required |
| | Determining BTU System Demand: Residential & Small Commercial | | Choose One |
| | Determining BTU System Demand: Large Commercial & Industrial Systems | | Choose One |
| **10) Joining Gas Piping** | Introduction to Joining Gas Piping | Yes | Required |
| | Joining Copper Tubing & Components | Yes | Required |
| | Joining Steel Piping & Components | Yes | Required |
| | Joining CSST Tubing & Components | Yes | Required |
| | Joining Polyethylene Piping: Mechanical Fittings | Yes | Required |
| | Joining Polyethylene Piping: Heat Fusion | Yes | Optional |
| **11) Installing Gas Pressure Regulators** | Installing Gas Pressure Regulators | Yes | Required |
| **12) Sizing & Selecting Propane Vaporizers** | Sizing & Selecting Propane Vaporizers | | Required |
| **13) Installing, Startup, Shutdown, & Maintain Vaporizers** | Installing, Startup, Shutdown, & Maintain Vaporizers | Yes | Required |
| **14) Measuring Pressure** | Measuring Pressure | | Required |
| **15) Gas Regulator Operations** | Introduction to Regulator Operations | | Required |
| | Residential & Small Commercial Regulator Operation | Yes | Choose One |
| | Large Commercial & Industrial Regulator Operation | Yes | Choose One |

## Gas Vaporizer Installation & Service Technician Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **16) Conducting Gas System Performance Testing** | Introduction to Conducting Gas System Performance Testing | | Required |
| | Conducting Gas System Performance Testing | Yes | Required |
| **17) Testing Gas Piping** | Pressure Testing New Gas Piping | Yes | Required |
| | Introduction to Leak Check | Yes | Required |
| | Leak Check: High-Pressure Method | Yes | Choose One |
| | Leak Check: Intermediate-Pressure Method | Yes | Choose One |
| | Leak Check: Low-Pressure Method | Yes | Choose One |
| | Leak Check: Using a Vapor Meter | Yes | Choose One |
| | Troubleshooting Propane Leaks | Yes | Required |
| **18) Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | Yes | Required |
| **19) Purging Gas Piping Systems** | Introduction to Purging | | Required |
| | Purging Residential & Small Commercial Piping Systems | Yes | Choose One |
| | Purging Large Commercial & Industrial Piping Systems | Yes | Choose One |
| **20) New Gas Appliance Startup** | Introduction to New Gas Appliance Startup | | Required |
| | Operational Safety Inspection | Yes | Required |
| | Identifying Proper Appliance Burner Operation | | Required |
| **21) Lighting Appliance Pilots** | Residential & Small Commercial | Yes | Choose One |
| | Large Commercial & Industrial | Yes | Choose One |

# INTERIOR GAS PIPING INSTALLER

## Interior Gas Piping Installer Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | | Required |
| **2) Fundamentals of Propane** | Fundamentals of Propane | | Required |
| **3) Handling Propane Leaks** | Uncontrolled Release of Propane | | Required |
| | Gas Leak and Odor Call Response | Yes | Required |
| **4) Consumer Safety Education** | Consumer Safety Education | | Choose One |
| | Ag Consumer Safety Education | | Choose One |
| **5) Propane Personal Safety** | Introduction to Propane Personal Safety | | Required |
| | Personal Safety When Working Around Vehicles | Yes | Required |
| **6) Hazardous Material Training** | OSHA Hazard Communication | | Required |
| **7) Safe Driving** | Introduction to Safe Driving | | Required |
| | Prevent Rear-End Accidents | | Required |
| | Prevent Rollover Accidents | | Required |
| | Prevent Backing Accidents | | Required |
| | Safe Driving Assessment | | Required |
| **8) Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | Yes | Required |

## Interior Gas Piping Installer Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **9) Determine Total Connected BTU Load** | Determining BTU System Demand: Introduction | | Required |
| | Determining BTU System Demand: Residential & Small Commercial | | Choose One |
| | Determining BTU System Demand: Large Commercial & Industrial Systems | | Choose One |
| **10) Installing Propane Distribution System Piping** | Introduction to Installing Piping & Components | | Required |
| | Installing Interior Gas Piping & Components | Yes | Required |
| **11) Joining Gas Piping** | Introduction to Joining Gas Piping | | Required |
| | Joining Copper Tubing & Components | Yes | Required |
| | Joining Steel Piping & Components | Yes | Required |
| | Joining CSST Tubing & Components | Yes | Required |
| | Joining Polyethylene Piping: Mechanical Fittings | Yes | Required |
| | Joining Polyethylene Piping: Heat Fusion | Yes | Optional |
| **12) Measuring Pressure** | Measuring Pressure | | Required |
| **13) Testing Gas Piping** | Pressure Testing New Gas Piping | Yes | Required |
| | Introduction to Leak Check | Yes | Required |
| | Leak Check: High-Pressure Method | Yes | Choose One |
| | Leak Check: Intermediate-Pressure Method | Yes | Choose One |
| | Leak Check: Low-Pressure Method | Yes | Choose One |
| | Leak Check: Using a Vapor Meter | Yes | Choose One |
| | Troubleshooting Propane Leaks | Yes | Required |

# PROPANE CONTAINER EVACUATION PERSON

## Propane Container Evacuation Person Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | | Required |
| **2) Fundamentals of Propane** | Fundamentals of Propane | | Required |
| **3) Handling Propane Leaks** | Uncontrolled Release of Propane | | Required |
| **4) Consumer Safety Education** | Residential & Commercial | | Choose One |
| | Agriculture | | Choose One |
| **5) Propane Personal Safety** | Introduction to Propane Personal Safety | | Required |
| | Personal Safety When Working Around Vehicles | Yes | Required |
| **6) Hazardous Material Training** | OSHA Hazard Communication | | Required |
| | Hazardous Materials Introduction | | Required |
| | General Awareness and Familiarization | | Required |
| | Function-Specific Training | | Required |
| | Safety Training | | Required |
| | Security Awareness | | Required |
| | OHSA Hazard Communication | | Required |

## Propane Container Evacuation Person Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **7) Propane Containers and Valves** | Introduction to Propane Containers and Valves | | Required |
| | DOT/TC Cylinders and Valves | | Required |
| | AG/UG ASME Tanks and Valves up to 2,000 gallon W.C. | | Required |
| | ASME Vehicle Mounted Tanks and Valves: Motorhomes and Engine Fuel Tanks | | Optional |
| | AG/UG ASME Tanks and Valves over 2,000 gallon W.C. | | Optional |
| **8) Evacuating Propane Containers** | Introduction to Evacuating Propane Containers | | Required |
| | Evacuating Containers Using a Vapor Compressor | Yes | Required |
| | Evacuating Containers Using a Flare | Yes | Required |
| | Evacuating Containers Using a Liquid Pump | Yes | Optional |
| | Troubleshooting Evacuation Issues | | Required |

# PROPANE CONTAINER INSTALLER

## Propane Container Installer Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | | Required |
| **2) Fundamentals of Propane** | Fundamentals of Propane | | Required |
| **3) Handling Propane Leaks** | Uncontrolled Release of Propane | | Required |
| **4) Consumer Safety Education** | Consumer Safety Education | | Choose One |
| | Ag Consumer Safety Education | | Choose One |
| **5) Propane Personal Safety** | Introduction to Propane Personal Safety | | Required |
| | Personal Safety When Working Around Vehicles | Yes | Required |
| | Handling Cylinders Safely | Yes | Required |
| **6) Hazardous Material Training** | DOT Hazmat Training Introduction | | Required |
| | DOT Hazmat General Awareness & Familiarization | | Required |
| | DOT Hazmat Function Specific Training | | Required |
| | DOT Hazmat Safety Training | | Required |
| | DOT Hazmat Security Awareness | | Required |
| | OSHA Hazard Communication | | Required |

## Propane Container Installer Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **(7) Inspect Commercial Motor Vehicles** | Conduct Pre-and Post-trip Vehicle Chassis Inspections | Yes | Required |
| | Inspect Cylinder Delivery Vehicle | Yes | Choose One |
| | Inspect Crane Truck | Yes | Choose One |
| | Inspect Tank Setting Trailer | Yes | Choose One |
| | Inspect Trailers: Transport & Flat Bed | Yes | Choose One |
| **8) Safe Driving** | Introduction to Safe Driving | | Required |
| | Prevent Rear-End Accidents | | Required |
| | Prevent Rollover Accidents | | Required |
| | Prevent Backing Accidents | | Required |
| | Safe Driving Assessment | | Required |
| **9) Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | Yes | Required |
| | Delivery Truck Hazard Assessment | | Required |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | Yes | Choose One |
| | Location Requirements: DOT Exchange Cylinder –Cages | Yes | Choose One |
| | Location Requirements: DOT Exchange Cylinder - Residential & Small Commercial | Yes | Choose One |
| | Location Requirements: ASME Tank (AG/UG) Over 2,000 gal. W.C. | Yes | Choose One |
| **10) Determine Total Connected BTU Load** | Determining BTU System Demand: Introduction | | Required |
| | Determining BTU System Demand: Residential & Small Commercial | | Choose One |
| | Determining BTU System Demand: Large Commercial & Industrial Systems | | Choose One |

## Propane Container Installer Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **11) Propane Container Sizing & Selecting** | Propane Container Sizing & Selecting | | Required |
| **12) Mobile Cranes** | Mobile Crane Introduction & Safety | | Required |
| | Lift Safety, Rigging, & Hand Signals | Yes | Required |
| | Mobile Crane Operation | Yes | Required |
| **13) Load Propane Containers** | Introduction to Load, Secure, & Unload Propane Containers | Yes | Required |
| | Load, Secure, & Unload DOT Cylinders | Yes | Choose One |
| | Load, Secure & Unload Large Propane Containers up to 2000 gal W.C. | Yes | Choose One |
| | Load, Secure, & Unload ASME Tanks onto a Tank Setting Trailer | Yes | Choose One |
| **14) Installing Propane Containers** | Introduction to Installing Propane Containers | | Required |
| | Install AG Stationary Propane Containers up to 125 gal W.C. | Yes | Choose One |
| | Install AG & UG ASME Tanks Greater than 125-gallon W.C. up to 2,000 gal W.C. | Yes | Choose One |
| | Install AG & UG ASME Tanks over 2,000 gal W.C. | Yes | Choose One |
| **15) Corrosion Prevention** | Introduction to Corrosion Prevention | | Required |
| | Corrosion Prevention – Coatings | Yes | Required |
| | Installing Cathodic Protection Systems | Yes | Required |
| | Testing Cathodic Protection Systems | Yes | Required |
| | Troubleshooting & Retrofitting Cathodic Protection Systems | Yes | Required |

# PROPANE CONTAINER PREPARATION PERSON

## Propane Container Preparation Person Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | | Required |
| **2) Fundamentals of Propane** | Fundamentals of Propane | | Required |
| **3) Handling Propane Leaks** | Uncontrolled Release of Propane | | Required |
| **4) Consumer Safety Education** | Residential & Commercial | | Choose One |
| | Agriculture | | Choose One |
| **5) Propane Personal Safety** | Introduction to Propane Personal Safety | | Required |
| | Personal Safety When Working Around Vehicles | Yes | Required |
| | Handling Cylinders Safely | Yes | Required |
| **6) Hazardous Material Training** | Hazardous Materials Introduction | | Required |
| | General Awareness and Familiarization | | Required |
| | Function-Specific Training | | Required |
| | Safety Training | | Required |
| | Security Awareness | | Required |
| | OHSA Hazard Communication | | Required |

## Propane Container Preparation Person Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **7) Propane Containers and Valves** | Introduction to Propane Containers and Valves | | Required |
| | DOT/TC Cylinders and Valves | | Required |
| | AG/UG ASME Tanks and Valves up to 2,000 gallon W.C. | | Required |
| | ASME Vehicle Mounted Tanks and Valves: Motorhomes and Engine Fuel Tanks | | Optional |
| | AG/UG ASME Tanks and Valves over 2,000 gallon W.C. | | Optional |
| **8) Preparing Containers for Service** | Introduction to Preparing Containers for Service | Yes | Required |
| | Purging Containers | Yes | Required |
| | Adding or Injecting Methanol into Propane Containers | Yes | Required |
| **9) Filling Propane Containers at a Bulk Plant** | Introduction to Filling Propane Containers at a Bulk Plant | | Required |
| | Filling DOT Cylinders by Weight | Yes | Required |
| | Filling DOT and ASME Containers by Volume | Yes | Required |

# PROPANE CONTAINER SERVICING PERSON

## Propane Container Servicing Person Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | | Required |
| **2) Fundamentals of Propane** | Fundamentals of Propane | | Required |
| **3) Handling Propane Leaks** | Uncontrolled Release of Propane | | Required |
| **4) Consumer Safety Education** | Residential & Commercial | | Choose One |
| | Agriculture | | Choose One |
| **5) Propane Personal Safety** | Introduction to Propane Personal Safety | | Required |
| | Personal Safety When Working Around Vehicles | Yes | Required |
| | Handling Cylinders Safely | Yes | Required |
| **6) Hazardous Material Training** | Hazardous Materials Introduction | | Required |
| | General Awareness and Familiarization | | Required |
| | Function-Specific Training | | Required |
| | Safety Training | | Required |
| | Security Awareness | | Required |
| | OHSA Hazard Communication | | Required |
| **7) Corrosion Prevention** | Introduction to Corrosion Prevention | | Required |
| | Corrosion Prevention - Coatings | Yes | Required |

## Propane Container Servicing Person Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **8) Propane Containers and Valves** | Introduction to Propane Containers and Valves | | Required |
| | DOT/TC Cylinders and Valves | | Choose One |
| | ASME Vehicle Mounted Tanks and Valves: Motorhomes and Engine Fuel Tanks | | Choose One |
| | AG/UG ASME Tanks and Valves up to 2,000 gallon W.C. | | Choose One |
| | AG/UG ASME Tanks and Valves over 2,000 gallon W.C. | | Choose One |
| **9) Preparing Containers for Service** | Introduction to Preparing Containers for Service | Yes | Required |
| | Purging Containers | Yes | Required |
| | Adding or Injecting Methanol into Propane Containers | Yes | Required |
| **10) Filling Propane Containers at a Bulk Plant** | Introduction to Filling Propane Containers at a Bulk Plant | | Required |
| | Filling DOT Cylinders by Weight | Yes | Required |
| | Filling DOT and ASME Containers by Volume | Yes | Required |
| **11) Repair & Replace Container Valves & Components** | Repair & Replace Container Valves & Components | Yes | Required |

# PROPANE SYSTEM LAYOUT & DESIGN

## Propane System Layout & Design Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **1) Introduction to the Propane Industry** | Introduction to the Propane Industry | | Required |
| **2) Fundamental of Propane** | Fundamental of Propane | | Required |
| **3) Handling Propane Leaks** | Uncontrolled Release of Propane | | Required |
| **4) Determine Total Connected BTU Load** | Determining BTU System Demand: Introduction | | Required |
| | Determining BTU System Demand: Residential & Small Commercial | | Choose One |
| | Determining BTU System Demand: Large Commercial & Industrial Systems | | Choose One |
| **5) Propane Container Sizing and Selecting** | Propane Container Sizing & Selecting | | Required |
| **6) Design, Size, and Select Propane Distribution Piping** | Introduction to Designing Propane Distribution Piping Systems | | Required |
| | Sizing and Selecting Exterior Vapor Piping Systems | | Choose One |
| | Sizing and Selecting Interior Vapor Piping Systems | | Choose One |
| | Sizing and Selecting Liquid Piping Systems | | Choose One |

## Propane System Layout & Design Learning Path

| Program | Module | OJT Worksheet | Completion Requirements |
|---|---|---|---|
| **7) Gas Regulator Operations** | Introduction to Regulator Operation | | Required |
| | Residential & Small Commercial Regulator Operation | | Choose One |
| | Large Commercial & Industrial Regulator Operation | | Choose One |
| **8) Sizing & Selecting Gas Regulators** | Sizing & Selecting Gas Regulators | | Required |
| **9) Sizing and Selecting Vapor Meters** | Introduction to Sizing & Selecting Vapor Meters | | Required |
| | Practice Sizing & Selecting Vapor Meters | | Required |
| **10) Sizing and Selecting Propane Vaporizers** | Sizing & Selecting Propane Vaporizers | | Required |
| **11) Corrosion Prevention** | Introduction to Corrosion Prevention | | Required |

# REFRESHER: BOBTAIL DRIVER

## Refresher: Bobtail Driver Learning Path

| Program | Module | Completion Requirements |
|---|---|---|
| **1) REFRESHER: Fundamentals of Propane** | Refresher: Fundamentals of Propane | Required |
| **2) REFRESHER: Handling Propane Leaks** | Refresher: Uncontrolled Release of Propane | Required |
| **3) REFRESHER: Hazardous Materials Training** | DOT Hazmat Training Introduction | Required |
| | DOT Hazmat General Awareness & Familiarization | Required |
| | DOT Hazmat Function Specific Training | Required |
| | DOT Hazmat Safety Training | Required |
| | DOT Hazmat Security Awareness | Required |
| | OSHA Hazard Communication | Required |
| **4) REFRESHER: Inspect Commercial Motor Vehicles** | Refresher: Inspect Bobtail Components | Required |
| **5) REFRESHER: Load Bobtails** | Refresher: Loading Bobtails with a Liquid Pump | Required |
| **6) REFRESHER: Conducting an Exterior Customer Site Assessment** | Refresher: Introduction to Conducting an Exterior Site Assessment | Required |
| | Refresher: Location Requirements: DOT & ASME Stationary Containers up to 2,000 Gallons W.C. | Required |
| **7) Propane Container Pre-Fill Pre-Exchange Inspection** | Refresher: Inspecting Stationary Containers Up To 2,000 Gallons W.C. | Required |
| | Refresher: Inspecting Portable DOT Cylinders | Optional |
| **8) Filling Customer Containers** | Refresher: Filling Customer Containers with a Bobtail | Required |

# REFRESHER: CYLINDER DELIVERY DRIVER

## Refresher: Cylinder Delivery Drivers Learning Path

| Program | Module | Completion Requirements |
|---|---|---|
| **1) REFRESHER: Fundamentals of Propane** | Refresher: Fundamentals of Propane | Required |
| **2) REFRESHER: Handling Propane Leaks** | Refresher: Uncontrolled Release of Propane | Required |
| **3) REFRESHER: Hazardous Materials Training** | DOT Hazmat Training Introduction | Required |
| | DOT Hazmat General Awareness & Familiarization | Required |
| | DOT Hazmat Function Specific Training | Required |
| | DOT Hazmat Safety Training | Required |
| | DOT Hazmat Security Awareness | Required |
| | OSHA Hazard Communication | Required |
| **4) REFRESHER: Load Propane Containers** | Refresher: Load, Secure, & Unload DOT Cylinders | Required |
| **5) REFRESHER: Conducting an Exterior Customer Site Assessment** | Refresher: Introduction to Conducting an Exterior Customer Site Assessment | Required |
| | Refresher: Location Requirements: DOT & ASME Stationary Containers up to 2,000 Gallons W.C. | Required |
| | Refresher: Location Requirements: DOT Exchange Cylinders - Cages | Optional |
| | Refresher: Location Requirements: Residential & Small Commercial | Optional |
| **6) Propane Container Pre-Fill Pre-Exchange Inspection** | Refresher: Inspecting Stationary Containers Up To 2,000 Gallons W.C. | Required |
| | Refresher: Inspecting Portable DOT Cylinders | Optional |
| **7) Exchange DOT Cylinders** | Refresher: Changing Out Residential & Small Commercial DOT Exchange Cylinders | Optional |

# STATE SPECIFIC LEARNING PATHS

**Connecticut**

**Maine**

**Maryland**

**Missouri**

**Nebraska**

**New Hampshire**

**New Jersey**

**New York Propane Gas Association**

**Vermont**

# CONNECTICUT

## PEP Basics Program

## G-2 Limited Heating Piping and Cooling Journeyperson

### CT: PEP Basics Program

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |

## CT: G-2 Limited Heating Piping and Cooling Journeyperson

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Determining BTU System Demand** | Introduction | | |
| | Residential & Small Commercial | | |
| | Large Commercial & Industrial Systems | | |
| **Propane Container Sizing and Selecting** | Propane Container Sizing and Selecting | | |
| **Conduct an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | | |
| | Delivery Truck Hazard Assessment | | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal W.C. | | |
| | Location Requirements: DOT Exchange Cylinder - Cages | | |
| | DOT Exchange Cylinder - Residential and Small Commercial | | |
| | Location Requirements: ASME Tank (AG/UG) over 2000 gal. WC | | |
| **Design, Size & Select Distribution Piping** | Introduction to Designing Propane Distribution Piping Systems | | |
| | Sizing and Selecting Exterior Vapor Piping Systems | | |
| | Sizing and Selecting Liquid Piping Systems | | |
| **Gas Pressure Regulator Operation** | Introduction | | |
| | Residential & Small Commercial Regulator Operation | | |

## CT: G-2 Limited Heating Piping and Cooling Journeyperson

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Corrosion Prevention** | Introduction to Corrosion Prevention | | |
| | Corrosion Prevention - Coatings | | Y |
| | Installing Cathodic Protection Systems | | Y |
| | Testing Cathodic Protection Systems | | Y |
| | Troubleshooting and Retrofitting Cathodic Protection Systems | | Y |
| **Sizing and Selecting Gas Vapor Meters** | Introduction to Sizing and Selecting Vapor Meters | | |
| | Practice Sizing and Selecting Vapor Meters | | |
| **Load Propane Containers** | Introduction to Load, Secure, and Unload Propane Containers | | Y |
| | Load, Secure, and Unload DOT Cylinders | | Y |
| | Load, Secure and Unload Large Propane Containers up to 2000 gal W.C. | | Y |
| | Load Secure, and Unload ASME Tanks onto a Tank Setting Trailer | | |
| **Installing Propane Containers** | Introduction to Installing Propane Containers | | |
| | Install AG Stationary Propane Containers up to 125 gal W.C. | | Y |
| | Install AG & UG ASME Tanks Greater than 125 gal W.C. up to 2,000 gal W.C. | | Y |
| | Install AG & UG ASME Tanks over 2,000 gal W.C. | | |
| **Installing Propane Distribution System Piping** | Introduction to Installing Gas Piping and Components | | |
| | Installing Exterior Gas Piping and Components | Y | |

## CT: G-2 Limited Heating Piping and Cooling Journeyperson

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Joining Gas Piping** | Introduction to Joining Gas Piping | | |
| | Joining Copper Tubing & Components | Y | |
| | Joining Steel Piping & Components | Y | |
| | Joining CSST Tubing & Components | Y | |
| | Joining Polyethylene Piping: Mechanical Fittings | Y | |
| | Joining Polyethylene Piping: Heat Fusion | | |
| **Installing Gas Pressure Regulators** | Installing Gas Pressure Regulators | Y | |
| **Installing Gas Vapor Meters** | Introduction to Installing Gas Vapor Meters | | |
| | Installing Gas Vapor Meters | | Y |
| **Consumer Safety Education** | Residential & Commercial | | |
| | Agriculture | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **Testing Gas Piping** | Pressure Testing New Gas Piping | | |
| | Introduction to Leak Check | | |
| | Leak Check: High-Pressure Method | | Y |
| | Leak Check: Intermediate-Pressure Method | | Y |
| | Leak Check: Low-Pressure Method | | Y |
| | Leak Check: Vapor Meter Method | Y | |
| | Troubleshooting Propane Leaks After a Failed Leak Check | | Y |

## CT: G-2 Limited Heating Piping and Cooling Journeyperson

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Conducting Gas System Performance Testing** | Introduction to Conducting Gas System Performance Testing | | |
| | Conducting Gas System Performance Testing | Y | |
| **Restoring Service After an Interruption in Service** | Restoring Service After an Interruption in Service | Y | |
| **Conducting a New System Interior Site Assessment** | Introduction to Conducting a New System Interior Site Assessment | | |
| | Validating Gas Piping | | |
| | Validating Gas Appliances | | |
| | Validating Appliance Combustion Air | | |
| | Validating Appliance Venting | | |
| **Purging Gas Piping** | Introduction to Purging | | |
| | Purging Residential & Small Commercial Piping Systems | Y | |
| | Purging Large Commercial & Industrial Piping systems | | |
| **New Gas Appliance Startup** | Introduction to New Gas Appliance Startup: Operational Safety Inspection | | |
| | New Gas Appliance Startup: Operational Safety Inspection | Y | |
| | Identifying Burning Characteristics of Propane | | |
| **Lighting Appliance Pilots** | Lighting Appliance Pilots: Residential & Small Commercial | Y | |
| | Lighting Appliance Pilots: Large Commercial & Industrial | Y | |

# MAINE

## Fuel Gas Technician

## Basics Propane Program

## Delivery Technician Learning Path

## Tank Setter and Outside Piping Technician Learning Path

### Fuel Gas Technician – Maine Natural Gas Operated Equipment In-Service Online Exam

GT 1.1 Identify Gas Properties, Procedures for Installing House Piping and Placing Natural Gas Operated Equipment In-Service - Online Exam

### ME: Basics Propane Program

| Program | Module | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Handling Propane Leaks** | Gas Leak and Odor Call Response | | |
| **Consumer Safety** | Residential & Commercial | | |
| | Agriculture | | |
| **Propane Personal Safety** | Safety: Make it Personal | | |
| | Techniques for Personal Injury Prevention | | |

## ME: Delivery Technician Learning Path

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **Consumer Safety** | Residential & Commercial | | |
| | Agriculture | | |
| **Propane Personal Safety** | Safety: Make it Personal | | |
| | Techniques For Personal Injury Prevention | | |
| | Scenario: Bulk Propane Delivery | | |
| | Scenario: Cage Deliveries | | |
| | Scenario: Forklift Cylinder Delivery | | |
| | Scenario: Handling 420 Cylinders | | |
| **Hazardous Materials Training** | DOT Hazardous Materials (HazMat) Training: Introduction | | |
| | DOT Hazardous Materials: General Awareness and Familiarization | | |
| | DOT Hazardous Materials: HazMat Function-Specific Training | | |
| | DOT Hazardous Materials: Safety Training | | |
| | DOT Hazardous Materials: Security Awareness | | |
| | OSHA Hazard Communication | | |
| **Inspect Commercial Motor Vehicles** | Conduct Pre and Post-trip Vehicle Chassis Inspections | | |
| | Inspecting Bobtail Components | Yes | |
| | Inspect Cylinder Delivery Vehicle | | |

## ME: Delivery Technician Learning Path

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Load Bobtails** | Preparing to Load a Bobtail | | |
| | Loading Bobtails with a Plant Liquid Pump | | |
| | Loading Bobtails with a Plant Vapor Compressor | | |
| | Loading Bobtails with an Auxiliary Pump Inlet Compressor | | |
| **Load Propane Containers** | Introduction to Load, Secure, and Unload Propane Containers | | |
| | Load, Secure, and Unload Propane Cylinders | | |
| | Load, Secure, and Unload Propane Containers up to 2000 gal W.C. | | |
| | Load & Secure ASME Tanks onto a Tank Setting Trailer | | |
| **Safe Driving** | Introduction to Safe Driving | | |
| | Prevent Rear-End Accidents | | |
| | Prevent Rollover Accidents | | |
| | Prevent Backing Accidents | | |
| | Safe Driving Assessment | | |
| **Conducting An Exterior Customer Site Assessment** | Introduction to Conducting An Exterior Customer Site Assessment | | |
| | Delivery Truck Hazard Assessment | | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | | |
| | Location Requirements: ASME Tank (AG/UG) over 2000 Gallon WC | | |
| | Location Requirements: DOT Exchange Cylinder Cages | | |
| | Location Requirements: DOT Exchange Cylinder - Residential & Small Commercial | | |

## ME: Delivery Technician Learning Path

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Propane Container Pre-Fill Pre-Exchange Inspection** | Inspect Stationary Containers up to 2,000 gal. W.C. | Yes | |
| | Inspect Portable DOT Cylinders | Yes | |
| **Filling Customer Containers Using a Bobtail** | Filling Customer Containers Using a Bobtail | | |
| **Exchanging DOT Cylinders** | Changing Out Residential and Small Commercial DOT Exchange Cylinders | | |
| **Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | Yes | |
| **Measuring Pressure** | Measuring Pressure | | |
| **Testing Gas Piping** | Pressure Testing New Gas Piping | | |
| | Introduction to Leak Check | | |
| | Leak Check: High-Pressure Method | | |
| | Leak Check: Intermediate-Pressure Method | | |
| | Leak Check: Low-Pressure Method | Yes | |
| | Leak Check: Using a Vapor Meter | | |
| | Troubleshooting Propane Leaks after Failed Testing | | |
| **Lighting Appliance Pilots** | Lighting Appliance Pilots - Large Commercial & Industrial | | |
| | Lighting Appliance Pilots - Residential & Small Commercial | Yes | |

## ME: Tank Setter and Outside Piping Technician Learning Path

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **Consumer Safety** | Residential & Commercial | | |
| | Agriculture | | |
| **Propane Personal Safety** | Safety: Make it Personal | | |
| | Techniques For Personal Injury Prevention | | |
| | Scenario: Handling 420 Cylinders | | |
| **Hazardous Materials Training** | DOT Hazardous Materials (HazMat) Training: Introduction | | |
| | DOT Hazardous Materials: General Awareness and Familiarization | | |
| | DOT Hazardous Materials: HazMat Function-Specific Training | | |
| | DOT Hazardous Materials: Safety Training | | |
| | DOT Hazardous Materials: Security Awareness | | |
| | OSHA Hazard Communication | | |
| **Inspect Commercial Motor Vehicles** | Conduct Pre and Post-trip Vehicle Chassis Inspections | | |
| | Inspect Cylinder Delivery Vehicle | | |
| | Inspect Trailers: Transport and Flatbed | | |
| | Inspect Tank Setting Trailer | | |
| | Inspect Crane Truck | | |

## ME: Tank Setter and Outside Piping Technician Learning Path

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Safe Driving** | Introduction to Safe Driving | | |
| | Prevent Rear-End Accidents | | |
| | Prevent Rollover Accidents | | |
| | Prevent Backing Accidents | | |
| | Safe Driving Assessment | | |
| **Conducting An Exterior Customer Site Assessment** | Introduction to Conducting An Exterior Customer Site Assessment | Yes | |
| | Delivery Truck Hazard Assessment | | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | Yes | |
| | Location Requirements: ASME Tank (AG/UG) over 2000 Gallon WC | Yes | |
| | Location Requirements: DOT Exchange Cylinder Cages | | |
| | Location Requirements: DOT Exchange Cylinder - Residential & Small Commercial | Yes | |
| **Determine Total Connected BTU Load** | Determining BTU System Demand: Introduction | | |
| | Determining BTU System Demand: Residential & Small Commercial | | |
| | Determining BTU System Demand: Large Commercial & Industrial Systems | | |
| **Propane Container Sizing and Selection** | Propane Container Sizing and Selection | | |

## ME: Tank Setter and Outside Piping Technician Learning Path

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Load Propane Containers** | Introduction to Load, Secure, and Unload Propane Containers | | |
| | Load, Secure, and Unload Propane Containers up to 2000 gal W.C. | | |
| | Load, Secure, and Unload Propane Cylinders | | |
| | Load & Secure ASME Tanks onto a Tank Setting Trailer | | |
| **Installing Propane Containers** | Introduction to Installing Propane Containers | | |
| | Install Stationary & Exchange Propane Containers up to 125 gal WC | Yes | |
| | Install AG & UG ASME Tanks Greater than 125 gallon WC up to 2,000 gal WC | Yes | |
| | Install AG & UG ASME Tanks over 2,000 gal WC | Yes | |
| **Corrosion Prevention** | Introduction to Corrosion Prevention | | |
| | Corrosion Prevention - Coatings | Yes | |
| | Installing Cathodic Protection Systems | Yes | |
| | Testing Cathodic Protection Systems | Yes | |
| | Troubleshooting and Retrofitting Cathodic Protection Systems | Yes | |
| **Design, Size, and Select Propane Distribution Piping Systems** | Introduction to Designing Propane Distribution Piping Systems | | |
| | Sizing and Selecting Exterior Vapor Piping Systems | | |
| | Sizing and Selecting Interior Vapor Piping Systems | | |
| | Sizing and Selecting Liquid Piping Systems | | |

## ME: Tank Setter and Outside Piping Technician Learning Path

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Installing Propane Distribution System Piping** | Introduction to Installing Gas Piping and Components | | |
| | Installing Exterior Gas Piping and Components | Yes | |
| **Joining Gas Piping** | Introduction to Joining Gas Piping | | |
| | Joining Copper Tubing & Components | Yes | |
| | Joining CSST Tubing & Components | Yes | |
| | Joining Polyethylene Piping: Mechanical Fittings | Yes | |
| | Joining Steel Piping & Components | Yes | |
| | Joining Polyethylene Piping: Heat Fusion | | |
| **Installing Gas Pressure Regulators** | Installing Gas Pressure Regulators | Yes | |
| **Regulator Operation** | Introduction to Regulator Operation | | |
| | Residential & Small Commercial Regulator Operation | | |
| | Large Commercial & Industrial Regulator Operation | | |
| **Sizing and Selecting Gas Regulators** | Sizing and Selecting Gas Regulators | | |
| **Sizing and Selecting Vapor Meters** | Introduction to Sizing and Selecting Vapor Meters | | |
| | Practice Sizing and Selecting Vapor Meters | | |
| **Installing Vapor Meters** | Introduction to Installing Vapor Meters | | |
| | Installing Vapor Meters | | |
| **Sizing and Selecting Propane Vaporizers** | Sizing and Selecting Propane Vaporizers | | |
| **Install, Startup, Shutdown and Maintain Vaporizers** | Install, Startup, Shutdown and Maintain Vaporizers | Yes | |
| **Measuring Pressure** | Measuring Pressure | | |

## ME: Tank Setter and Outside Piping Technician Learning Path

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Conducting Gas System Performance Testing** | Introduction to Conducting Gas System Performance Testing | | |
| | Conducting Gas System Performance Testing | Yes | |
| **Testing Gas Piping** | Pressure Testing New Gas Piping | Yes | |
| | Introduction to Leak Check | Yes | |
| | Leak Check: High-Pressure Method | Yes | |
| | Leak Check: Intermediate-Pressure Method | Yes | |
| | Leak Check: Low-Pressure Method | Yes | |
| | Leak Check: Using a Vapor Meter | Yes | |
| | Troubleshooting Propane Leaks after Failed Testing | Yes | |
| **Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | | |
| **Purging Gas Piping Systems** | Introduction to Purging | | |
| | Purging Residential & Small Commercial Piping Systems | Yes | |
| | Purging Large Commercial & Industrial Piping Systems | Yes | |

# MARYLAND

## Designing & Installing Exterior Vapor Distribution Systems

## Introduction to Propane

## Placing Vapor Distribution Systems & Appliance into Operation

### MD: Designing & Installing Exterior Vapor Distribution Systems

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Determine Total Connected BTU load** | Determining BTU System Demand: Introduction | | |
| | Determining BTU System Demand: Residential & Small Commercial | | |
| | Determining BTU System Demand: Large Commercial & Industrial Systems | | |
| **Propane Container Sizing and Selecting** | Propane Container Sizing and Selecting | | |

## MD: Designing & Installing Exterior Vapor Distribution Systems

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Conducting an Exterior Customer Site Assessment** | Introduction to Conducting An Exterior Customer Site Assessment | | |
| | Location Requirements: ASME Tank (AG/UG) over 2000 Gallon WC | | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | | |
| | Location Requirements: DOT Exchange Cylinder - Residential & Small Commercial | | |
| | Location Requirements: DOT Exchange Cylinder Cages | | |
| **Design, Size, and Select Propane Distribution Piping Systems** | Introduction to Designing Propane Distribution Piping Systems | | |
| | Sizing and Selecting Exterior Vapor Piping Systems | | |
| | Sizing and Selecting Interior Vapor Piping Systems | | |
| | Sizing and Selecting Liquid Piping Systems | | |
| **Corrosion Prevention** | Introduction to Corrosion Prevention | | |
| | Testing Cathodic Protection Systems | | |
| | Corrosion Prevention - Coatings | | |
| | Installing Cathodic Protection Systems | | |
| | Troubleshooting and Retrofitting Cathodic Protection Systems | | |
| **Gas Regulator Operations** | Introduction to Regulator Operation | | |
| | Residential & Small Commercial Regulator Operation | | |
| | Large Commercial & Industrial Regulator Operation | | |
| **Sizing and Selecting Gas Vapor Meters** | Introduction to Sizing and Selecting Vapor Meters | | |
| | Practice Sizing and Selecting Vapor Meters | | |

## MD: Designing & Installing Exterior Vapor Distribution Systems

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Load Propane Containers** | Introduction to Load, Secure, and Unload Propane Containers | | |
| | Load, Secure, and Unload Propane Cylinders | | |
| **Installing Propane Containers** | Install AG & UG ASME Tanks Greater than 125 gallon WC up to 2,000 gal WC | | |
| | Install AG & UG ASME Tanks over 2,000 gal WC | | |
| | Install Stationary & Exchange Propane Containers up to 125 gal WC | | |
| **Joining Gas Piping** | Introduction to Joining Gas Piping | | |
| | Joining Copper Tubing & Components | | |
| | Joining CSST Tubing & Components | | |
| | Joining Polyethylene Piping: Heat Fusion | | |
| | Joining Polyethylene Piping: Mechanical Fittings | | |
| | Joining Steel Piping & Components | | |
| **Installing Gas Pressure Regulators** | Installing Gas Pressure Regulators | | |
| **Installing Gas Vapor Meters** | Introduction to Installing Vapor Meters | | |
| | Installing Vapor Meters | | |
| **Evacuating Propane Containers** | Introduction to Evacuating Propane Containers | | |
| | Evacuating Containers Using a Liquid Pump | | |
| | Evacuating Containers Using a Vapor Compressor | | |
| | Evacuating Containers Using a Flare | | |

## MD: Designing & Installing Exterior Vapor Distribution Systems

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Testing Gas Piping** | Introduction to Leak Check | | |
| | Leak Check: High-Pressure Method | | |
| | Leak Check: Intermediate-Pressure Method | | |
| | Leak Check: Low-Pressure Method | | |
| | Leak Check: Using a Vapor Meter | | |
| | Pressure Testing New Gas Piping | | |
| | Troubleshooting Propane Leaks after Failed Testing | | |

## MD: Introduction to Propane

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| | Gas Leak and Odor Call Response | | |
| **Consumer Safety Education** | Consumer Safety Education: Residential & Commercial | | |
| **Propane Personal Safety** | Introduction to Propane Personal Safety | | |
| | Personal Safety When Working Around Vehicle | | |
| | Handling Cylinders Safely | | |
| | Bulk Delivery Safety | | |

## MD: Introduction to Propane

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Hazardous Materials Training** | OSHA Hazard Communication | | |
| | DOT Hazardous Materials (HazMat) Training: Introduction | | |
| | DOT Hazardous Materials: General Awareness and Familiarization | | |
| | DOT Hazardous Materials: HazMat Function-Specific Training | | |
| | DOT Hazardous Materials: Safety Training | | |
| | DOT Hazardous Materials: Security Awareness | | |

## MD: Placing Vapor Distribution Systems & Appliance into Operation

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Testing Gas Piping** | Introduction to Leak Check | | |
| | Leak Check: High-Pressure Method | | |
| | Leak Check: Intermediate-Pressure Method | | |
| | Leak Check: Low-Pressure Method | | |
| | Leak Check: Using a Vapor Meter | | |
| | Pressure Testing New Gas Piping | | |
| | Troubleshooting Propane Leaks after Failed Testing | | |

## MD: Placing Vapor Distribution Systems & Appliance into Operation

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Conducting a New System Interior Site Assessment** | Introduction to Conducting a New System Interior Site Assessment | | |
| | Validating Appliance Combustion Air | | |
| | Validating Appliance Venting | | |
| | Validating Gas Appliances | | |
| | Validating Gas Piping | | |
| **Purging Gas Piping Systems** | Introduction to Purging | | |
| | Purging Residential & Small Commercial Piping Systems | | |
| | Purging Large Commercial & Industrial Piping Systems | | |
| **Lighting Appliance Pilots** | Lighting Appliance Pilots - Residential & Small Commercial | | |
| | Lighting Appliance Pilots - Large Commercial & Industrial | | |
| **Conducting Gas System Performance Testing** | Introduction to Conducting Gas System Performance Testing | | |
| | Conducting Gas System Performance Testing | | |
| **New Gas Appliance Startup** | Introduction to New Gas Appliance: Operational Safety Inspection | | |
| | Identifying Proper Appliance Burner Operation | | |
| | Operational Safety Inspection | | |

# MISSOURI

## Introduction - Bobtail Emphasis

## Introduction - Customer Service Emphasis

## Introduction - Cylinder Emphasis

## Introduction – Service Emphasis

### MO: Introduction - Bobtail Emphasis

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **Propane Personal Safety** | Introduction to Safety | | |
| | Personal Risk Assessments | | |
| | Entering & Exiting the Truck | | |
| | Body Mechanics | | |
| | Slips, Trips and Falls | | |
| | Bulk Propane Delivery | | |
| | Summary | | |

## MO: Introduction - Bobtail Emphasis

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Load Bobtails** | Preparing to Load Bobtails | | |
| | Loading a Bobtail with a Liquid Pump | | |
| **Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | | |
| **Propane Container Pre-Fill Pre-Exchange Inspection** | Inspect Stationary Containers up to 2,000 gal. W.C. | | |
| | Inspect Portable DOT Cylinders | | |
| **Filling Customer Containers Using a Bobtail** | Filling Customer Containers Using a Bobtail | | |
| **Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | | |
| **Testing Gas Piping** | Introduction to Leak Check | | |
| | Leak Check: High-Pressure Method | | |
| | Leak Check: Intermediate-Pressure Method | | |
| | Leak Check: Low-Pressure Method | | |
| | Leak Check: Using a Vapor Meter | | |
| | Troubleshooting Propane Leaks | | |

## MO: Introduction - Bobtail Emphasis

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Missouri Specific Laws and Regulations** | Missouri Propane Safety Commission | | |
| | Registration | | |
| | Financial Responsibility | | |
| | Training | | |
| | Installation Notification | | |
| | Storage | | |
| | Incident Reporting | | |
| **Consumer Safety Education** | Consumer Safety Education | | |

## MO: Introduction - Customer Service Emphasis

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **Office Personnel** | Handling Safety Related Calls | | |
| **Propane Personal Safety** | Introduction to Safety | | |
| | Personal Risk Assessments | | |
| | Entering & Exiting the Truck | | |
| | Body Mechanics | | |
| | Slips, Trips and Falls | | |
| | Handling Cylinders | | |
| | Summary | | |
| **Missouri Specific Laws and Regulations** | Missouri Propane Safety Commission | | |
| | Registration | | |
| | Financial Responsibility | | |
| | Training | | |
| | Installation Notification | | |
| | Storage | | |
| | Incident Reporting | | |
| **Consumer Safety Education** | Consumer Safety Education | | |

## MO: Introduction - Cylinder Emphasis

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **Propane Personal Safety** | Introduction to Safety | | |
| | Personal Risk Assessments | | |
| | Entering & Exiting the Truck | | |
| | Body Mechanics | | |
| | Slips, Trips and Falls | | |
| | Handling Cylinders | | |
| | Forklift Cylinder Delivery | | |
| | Cage Deliveries | | |
| | Summary | | |
| **Load Propane Containers** | Introduction to Load, Secure, and Unload Propane Containers | | |
| | Load, Secure, and Unload DOT Cylinders | | |
| **Conducting an Exterior Customer Site Assessment** | Introduction to Conducting a Customer Site Assessment | | |
| | Location Requirements: DOT Exchange Cylinder - Cages | | |
| | Location Requirements: DOT Exchange Cylinder - Residential and Small Commercial | | |
| **Propane Container Pre-Fill Pre-Exchange Inspection** | Inspect Portable DOT Containers | | |
| **Exchanging DOT Cylinders** | Changing Out Residential and Small Commercial Cylinders | | |

## MO: Introduction - Cylinder Emphasis

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Missouri Specific Laws and Regulations** | Missouri Propane Safety Commission | | |
| | Registration | | |
| | Financial Responsibility | | |
| | Training | | |
| | Installation Notification | | |
| **Consumer Safety Education** | Consumer Safety Education | | |

## MO: Introduction - Service Emphasis

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **Propane Personal Safety** | Introduction to Safety | | |
| | Personal Risk Assessments | | |
| | Entering & Exiting the Truck | | |
| | Body Mechanics | | |
| | Slips, Trips and Falls | | |
| | Summary | | |

## MO: Introduction - Service Emphasis

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | | |
| | Location Requirements: DOT Exchange Cylinder - Cages | | |
| | Location Requirements: DOT Exchange Cylinder - Residential and Small Commercial | | |
| **Conducinting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | | |
| **Installing Propane Distribution System Piping** | Introduction to Installing Piping and Components | | |
| | Installing Exterior Gas Piping and Components | | |
| **Joining Gas Piping** | Joining Copper Tubing and Components | | |
| | Joining Steel Piping and Components | | |
| | Joining Polyethylene Piping: Mechanical Fittings | | |
| **Corrosion Prevention** | Introduction to Corrosion Prevention | | |
| | Coatings | | |
| | Installing Cathodic Protection | | |
| | Testing Cathodic Protection | | |
| **Regulator Operation** | Introduction to Regulator Operation | | |
| | Residential & Small Commercial | | |
| | Large Commercial and Industrial | | |
| **Installing Gas Pressure Regulators** | Installing Gas Pressure Regulators | | |
| **Measuring Pressure** | Measuring Pressure | | |

## MO: Introduction - Service Emphasis

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Testing Gas Piping** | Pressure Testing New Gas Piping | | |
| | Introduction to Leak Check | | |
| | Leak Check: High-Pressure Method | | |
| | Leak Check: Intermediate-Pressure Method | | |
| | Leak Check: Low-Pressure Method | | |
| | Leak Check: Using a Vapor Meter | | |
| | Troubleshooting Propane Leaks | | |
| **Conducting Gas System Performance Testing** | Introduction to Conducting Gas System Performance Testing | | |
| | Conducting Gas System Performance Testing | | |
| **Restoring Service after an Interruption of Service** | Restoring Service after an Interruption of Service | | |
| **Ligting Appliance Pilots** | Residential & Small Commercial | | |
| | Large Commercial and Industrial | | |
| **Missouri Specific Laws and Regulations** | Missouri Propane Safety Commission | | |
| | Registration | | |
| | Financial Responsibility | | |
| | Training | | |
| | Installation Notification | | |
| | Storage | | |
| | Incident Reporting | | |
| **Consumer Safety Education** | Consumer Safety Education | | |

# NEBRASKA

## Bobtail Delivery Driver Learning Path

### NE: Bobtail Delivery Driver Learning Path

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **Consumer Safety Education** | Consumer Safety Education: Residential & Commercial | | |
| | Consumer Safety Education: Agriculture | | |
| **Propane Personal Safety** | Safety: Make it Personal | | |
| | Techniques For Personal Injury Prevention | | |
| | Scenario: Bulk Propane Delivery | | |

## NE: Bobtail Delivery Driver Learning Path

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Hazardous Materials Training** | DOT Hazardous Materials (HazMat) Training: Introduction | | |
| | DOT Hazardous Materials: General Awareness and Familiarization | | |
| | DOT Hazardous Materials: HazMat Function-Specific Training | | |
| | DOT Hazardous Materials: Safety Training | | |
| | DOT Hazardous Materials: Security Awareness | | |
| | OSHA Hazard Communication | | |
| **Inspect Commercial Motor Vehicles** | Conduct Pre and Post-trip Vehicle Chassis Inspections | | |
| | Inspecting Bobtail Components | | |
| **Load Bobtails** | Preparing to Load a Bobtail | | |
| | Loading Bobtails with a Plant Liquid Pump | | |
| **Load Bobtails *Optional** | Loading Bobtails with a Plant Vapor Compressor | | |
| | Loading Bobtails with an Auxiliary Pump Inlet Compressor | | |
| **Safe Driving** | Introduction to Safe Driving | | |
| | Prevent Rear-End Accidents | | |
| | Prevent Rollover Accidents | | |
| | Prevent Backing Accidents | | |
| | Safe Driving Assessment | | |
| **Conducting an Exterior Customer Site Assessment** | Introduction to Conducting AN EXTERIOR Customer Site Assessment | | |
| | Delivery Truck Hazard Assessment | | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | | |

## NE: Bobtail Delivery Driver Learning Path

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Conducting an Exterior Customer Site Assessment *Optional** | Location Requirements: ASME Tank (AG/UG) over 2000 Gallon WC | | |
| **Propane Container Pre-Fill Pre-Exchange Inspection** | Inspect Stationary Containers up to 2,000 gal. W.C. | | |
| **Propane Container Pre-Fill Pre-Exchange Inspection *Optional** | Inspect Portable DOT Cylinders | | |
| **Filling Customer Containers Using a Bobtail** | Filling Customer Containers Using a Bobtail | | |
| **Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | | |
| **Measuring Pressure** | Measuring Pressure | | |
| **Testing Gas Piping** | Pressure Testing New Gas Piping | | |
| | Introduction to Leak Check | | |
| | Leak Check: High-Pressure Method | | |
| | Leak Check: Intermediate-Pressure Method | | |
| | Leak Check: Low-Pressure Method | | |
| | Leak Check: Using a Vapor Meter | | |
| | Troubleshooting Propane Leaks after Failed Testing | | |
| **Lighting Appliance Pilots** | Lighting Appliance Pilots - Large Commercial & Industrial | | |
| | Lighting Appliance Pilots - Residential & Small Commercial | | |

# NEW HAMPSHIRE

## Fuel Gas Installation Technician

## Fuel Gas Service Technician

## Fuel Gas Piping Installer

## PEP Basics Program

### NH: Fuel Gas Installation Technician, Service Technician, Piping Installer

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Determine Total Connected BTU Load** | Determining BTU System Demand: Introduction | | |
| | Determining BTU System Demand: Residential & Small Commercial | | |
| | Determining BTU System Demand: Large Commercial & Industrial Systems | | |
| **Propane Container Sizing & Selecting** | Propane Container Sizing & Selecting | | |

## NH: Fuel Gas Installation Technician, Service Technician, Piping Installer

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Conduct an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | Yes | |
| | Delivery Truck Hazard Assessment | | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | Yes | |
| | Location Requirements: DOT Exchange Cylinder - Residential & Small Commercial | Yes | |
| | Location Requirements: DOT Exchange Cylinder Cages | Yes | |
| **Design, Size, & Select Distribution Piping** | Introduction to Designing Propane Distribution Piping Systems | | |
| | Sizing and Selecting Exterior Vapor Piping Systems | | |
| | Sizing and Selecting Interior Vapor Piping Systems | | |
| | Sizing and Selecting Liquid Piping Systems | | |
| **Corrosion Prevention** | Introduction to Corrosion Prevention | | |
| | Corrosion Prevention - Coatings | Yes | |
| | Installing Cathodic Protection Systems | Yes | |
| | Testing Cathodic Protection Systems | Yes | |
| | Troubleshooting and Retrofitting Cathodic Protection Systems | Yes | |
| **Sizing & Selecting Gas Regulators** | Sizing & Selecting Gas Regulators | | |
| **Sizing & Selecting Gas Vapor Meters** | Introduction to Sizing and Selecting Vapor Meters | | |
| | Practice Sizing and Selecting Vapor Meters | | |

## NH: Fuel Gas Installation Technician, Service Technician, Piping Installer

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Load Propane Containers** | Introduction to Load, Secure, and Unload Propane Containers | Yes | |
| | Load, Secure, and Unload Propane Containers up to 2000 gal W.C. | Yes | |
| | Load, Secure, and Unload Propane Cylinders | Yes | |
| | Load & Secure ASME Tanks onto a Tank Setting Trailer | Yes | |
| **Installing Propane Containers** | Introduction to Installing Propane Containers | | |
| | Install Stationary & Exchange Propane Containers up to 125 gal WC | Yes | |
| | Install AG & UG ASME Tanks Greater than 125 gallon WC up to 2,000 gal WC | Yes | |
| | Install AG & UG ASME Tanks over 2,000 gal WC | Yes | |
| **Installing Propane Distribution System Piping** | Introduction to Installing Gas Piping and Components | | |
| | Installing Exterior Gas Piping and Components | Yes | |
| | Installing Interior Gas Piping and Components | Yes | |
| **Joining Gas Piping** | Introduction to Joining Gas Piping | | |
| | Joining Copper Tubing & Components | Yes | |
| | Joining CSST Tubing & Components | Yes | |
| | Joining Steel Piping & Components | Yes | |
| | Joining Polyethylene Piping: Mechanical Fittings | Yes | |
| | Joining Polyethylene Piping: Heat Fusion | Yes | |
| **Installing Gas Pressure Regulators** | Installing Gas Pressure Regulators | Yes | |
| **Installing Gas Vapor Meters** | Introduction to Installing Vapor Meters | | |
| | Installing Vapor Meters | Yes | |

## NH: Fuel Gas Installation Technician, Service Technician, Piping Installer

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Consumer Safety Education** | Consumer Safety Education: Residential & Commercial | | |
| | Consumer Safety Education: Agriculture | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **Testing Gas Piping** | Pressure Testing New Gas Piping | Yes | |
| | Introduction to Leak Check | Yes | |
| | Leak Check: High-Pressure Method | Yes | |
| | Leak Check: Intermediate-Pressure Method | Yes | |
| | Leak Check: Using a Vapor Meter | Yes | |
| | Troubleshooting Propane Leaks after Failed Testing | Yes | |
| **Conducting Gas System Performance Testing** | Introduction to Conducting Gas System Performance Testing | | |
| | Conducting Gas System Performance Testing | Yes | |
| **Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | Yes | |
| **Conducting a New System Interior Site Assessment** | Introduction to Conducting a New System Interior Site Assessment | | |
| | Validating Gas Piping | Yes | |
| | Validating Gas Appliances | Yes | |
| | Validating Appliance Combustion Air | | |
| | Validating Appliance Venting | Yes | |
| **Purging Gas Piping** | Introduction to Purging | | |
| | Purging Residential & Small Commercial Piping Systems | Yes | |
| | Purging Large Commercial & Industrial Piping systems | | |

## NH: Fuel Gas Installation Technician, Service Technician, Piping Installer

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **New Gas Appliance Startup** | Introduction to New Gas Appliance: Operational Safety Inspection | Yes | |
| | Identifying Proper Appliance Burner Operation | | |
| | Operational Safety Inspection | | |
| **Lighting Appliance Pilots** | Lighting Appliance Pilots - Residential & Small Commercial | Yes | |
| | Lighting Appliance Pilots - Large Commercial & Industrial | Yes | |

## NH: PEP Basics Program

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |

# NEW JERSEY

## Bobtail Delivery Driver PEP Pathway

## Cylinder Delivery Driver PEP Pathway

## Exterior Container and Piping System Installation Pathway

## Online Learning Path: Basic Pathway

## Vapor Delivery System Operation and Appliance Start-up Pathway

### NJ: Bobtail Delivery Driver PEP Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **DOT Hazardous Materials (HazMat) Training** | DOT Hazardous Materials (HazMat) Training: Introduction | | |
| | DOT Hazardous Materials: General Awareness and Familiarization | | |
| | DOT Hazardous Materials: HazMat Function-Specific Training | | |
| | DOT Hazardous Materials: Safety Training | | |
| | DOT Hazardous Materials: Security Awareness | | |
| | OSHA Hazard Communication | | |

## NJ: Bobtail Delivery Driver PEP Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Inspect Commercial Motor Vehicles** | Conduct Pre and Post-trip Vehicle Chassis Inspections | | |
| | Inspecting Bobtail Components | Yes | |
| **Loading Bobtails** | Preparing to Load a Bobtail | | |
| | Loading Bobtails with a Plant Liquid Pump | | |
| | Loading Bobtails with an Auxiliary Pump Inlet Compressor | | |
| | Loading Bobtails with a Plant Vapor Compressor | | |
| **Safe Driving** | Introduction to Safe Driving | | |
| | Prevent Rear-End Accidents | | |
| | Prevent Rollover Accidents | | |
| | Prevent Backing Accidents | | |
| | Safe Driving Assessment | | |
| **Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | Yes | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | Yes | |
| | Location Requirements: ASME Tank (AG/UG) over 2000 Gallon WC | Yes | |
| | Delivery Truck Hazard Assessment | | |
| **Filling Customer Containers Using a Bobtail** | Filling Customer Containers Using a Bobtail | Yes | |
| **Propane Container Pre-Fill Pre-Exchange Inspection** | Inspect Stationary Containers up to 2,000 gal. W.C. | Yes | |
| | Inspect ASME Tanks Over 2,000 Gallon Water Capacity | | |
| | Inspect Portable DOT Cylinders | Yes | |

## NJ: Bobtail Delivery Driver PEP Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | Yes | |
| **Testing Gas Piping** | Introduction to Leak Check | | |
| | Leak Check: High-Pressure Method | | |
| | Leak Check: Intermediate-Pressure Method | | |
| | Leak Check: Low-Pressure Method | | |
| | Leak Check: Using a Vapor Meter | | |
| **Lighting Appliance Pilots** | Lighting Appliance Pilots – Residential & Small Commercial | | |
| | Lighting Appliance Pilots – Large Commercials* Industrial | | |
| **Consumer Safety Education** | Consumer Safety Education: Residential & Commercial | | |
| | Consumer Safety Education: Agriculture | | |
| **Injecting Methanol and Evacuating Containers** | Injecting Methanol and Evacuating Containers | | |
| **Dispensing Propane Safely: Autogas** | Introduction to Propane for Dispenser Operations | | |
| | Dispensing Station Autogas | Yes | |
| | Uncontrolled Release of Propane for Dispenser Operators | | |
| | Dispensing Autogas | | |
| | Quiz: Dispensing Propane Safely Autogas | | |

## NJ: Cylinder Delivery Driver PEP Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **DOT Hazardous Materials (HazMat) Training** | DOT Hazardous Materials (HazMat) Training: Introduction | | |
| | DOT Hazardous Materials: General Awareness and Familiarization | | |
| | DOT Hazardous Materials: HazMat Function-Specific Training | | |
| | DOT Hazardous Materials: Safety Training | | |
| | DOT Hazardous Materials: Security Awareness | | |
| | OSHA Hazard Communication | | |
| **Inspect Commercial Motor Vehicles** | Conduct Pre and Post-trip Vehicle Chassis Inspections | | |
| | Inspect Cylinder Delivery Vehicle | Yes | |
| **Load Propane Containers** | Introduction to Load, Secure, and Unload Propane Containers | Yes | |
| | Load, Secure, and Unload Propane Cylinders | Yes | |
| **Safe Driving** | Introduction to Safe Driving | | |
| | Prevent Rear-End Accidents | | |
| | Prevent Rollover Accidents | | |
| | Prevent Backing Accidents | | |
| | Safe Driving Assessment | | |

## NJ: Cylinder Delivery Driver PEP Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | Yes | |
| | Location Requirements: DOT Exchange Cylinder - Residential & Small Commercial | | |
| | Location Requirements: DOT Exchange Cylinder Cages | | |
| | Delivery Truck Hazard Assessment | | |
| **Exchanging DOT Cylinders** | Changing Out Residential and Small Commercial DOT Exchange Cylinders | Yes | |
| **Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | Yes | |
| **Propane Container Pre-Fill Pre-Exchange Inspection** | Inspect Portable DOT Cylinders | Yes | |
| | Inspect Stationary Containers up to 2,000 gal. W.C. | Yes | |
| **Testing Gas Piping** | Introduction to Leak Check | | |
| | Leak Check: High-Pressure Method | Yes | |
| | Leak Check: Intermediate-Pressure Method | Yes | |
| | Leak Check: Low-Pressure Method | Yes | |
| | Leak Check: Using a Vapor Meter | Yes | |
| **Lighting Appliance Pilots** | Lighting Appliance Pilots - Residential & Small Commercial | | |
| | Lighting Appliance Pilots - Large Commercials* Industrial | | |
| **Injecting Methanol and Evacuating Containers** | Injecting Methanol and Evacuating Containers | | |

## NJ: Cylinder Delivery Driver PEP Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Dispensing Propane Safely - Small Cylinder** | Introduction to Propane for Dispenser Operations | | |
| | Dispensing Station Equipment | | |
| | Uncontrolled Release of Propane for Dispenser Operators | | |
| | Cylinder Components | | |
| | Pre-Fill Steps | | |
| | Filling Cylinders by Volume | | |
| | Filling Cylinders by Weight | | |
| | Filling Cylinders by Weight & Volume | Yes | |
| | Post Filling Steps | | |
| | Transporting Dot Cylinders | | |
| | Purging New Cylinders | | |
| | Quiz - Filling by Volume | | |
| | Quiz - Filling by Weight | | |
| | Quiz - Filling by Weight and Volume | | |
| **Maintain Cylinder and ASME Tanks** | Maintain Cylinder and ASME Tanks | | |

## NJ: Exterior Container and Piping System Installation Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Determining Total Connected BTU Load** | Determining BTU System Demand: Introduction | | |
| | Determining BTU System Demand: Residential & Small Commercial | | |
| | Determining BTU System Demand: Large Commercial & Industrial Systems | | |
| **Propane Container Sizing and Selection** | Propane Container Sizing and Selection | | |
| **Conducting and Exterior Site Assessment** | Introduction to Conducting AN EXTERIOR Customer Site Assessment | Yes | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | Yes | |
| | Location Requirements: DOT Exchange Cylinder Cages | | Yes |
| | Location Requirements: DOT Exchange Cylinder - Residential & Small Commercial | | Yes |
| | Location Requirements: ASME Tank (AG/UG) over 2000 Gallon WC | Yes | |
| **Design, Size & Select Distribution Piping Systems** | Introduction to Designing Propane Distribution Piping Systems | | |
| | Sizing and Selecting Exterior Vapor Piping Systems | | |
| | Sizing and Selecting Liquid Piping Systems | | |
| **Corrosion Prevention** | Introduction to Corrosion Prevention | | |
| | Installing Cathodic Protection Systems | Yes | |
| | Testing Cathodic Protection Systems | Yes | |
| | Corrosion Prevention - Coatings | Yes | |
| | Troubleshooting and Retrofitting Cathodic Protection Systems | Yes | |

## NJ: Exterior Container and Piping System Installation Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Sizing and Selecting Gas Regulators** | Sizing and Selecting Gas Regulators | | |
| **Sizing and Selecting Gas Vapor Meters** | Introduction to Sizing and Selecting Vapor Meters | | |
| | Practice Sizing and Selecting Vapor Meters | | |
| **Load Propane Containers** | Introduction to Load, Secure, and Unload Propane Containers | Yes | |
| | Load, Secure, and Unload Propane Cylinders | Yes | |
| | Load, Secure, and Unload Propane Containers up to 2000 gal W.C. | Yes | |
| | Load & Secure ASME Tanks onto a Tank Setting Trailer | | Yes |
| **Installing Propane Containers** | Introduction to Installing Propane Containers | | |
| | Install Stationary & Exchange Propane Containers up to 125 gal WC | Yes | |
| | Install AG & UG ASME Tanks Greater than 125 gallon WC up to 2,000 gal WC | Yes | |
| | Install AG & UG ASME Tanks over 2,000 gal WC | Yes | |
| **Installing Propane Distribution System Piping** | Introduction to Installing Gas Piping and Components | | |
| | Installing Exterior Gas Piping and Components | Yes | |
| **Joining Gas Piping** | Introduction to Joining Gas Piping | | |
| | Joining Copper Tubing & Components | Yes | |
| | Joining Steel Piping & Components | Yes | |
| | Joining Polyethylene Piping: Heat Fusion | | Yes |
| | Joining Polyethylene Piping: Mechanical Fittings | Yes | |
| | Joining CSST Tubing & Components | Yes | |

## NJ: Exterior Container and Piping System Installation Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Installing Gas Pressure Regulators** | Installing Gas Pressure Regulators | Yes | |
| **Installing Gas Vapor Meters** | Introduction to Installing Vapor Meters | | |
| | Installing Vapor Meters | Yes | |
| **Testing Gas Piping** | Introduction to Leak Check | | |
| **Consumer Safety Education** | Consumer Safety Education: Residential & Commercial | | |
| | Consumer Safety Education: Agriculture | | |
| **Measuring Pressure** | Measuring Pressure | | |
| **Evacuating Propane Containers** | Introduction to Evacuating Propane Containers | | |
| | Evacuating Containers Using a Vapor Compressor | | |
| | Evacuating Containers Using a Liquid Pump | | |
| | Evacuating Containers Using a Flare | | |
| | Troubleshooting Evacuation Issues | | |

## NJ: Online Learning Path: Basic Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Handling Safety Related Phone Calls** | Handling Safety Related Phone Calls | | |

## NJ: Online Learning Path: Basic Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Propane Personal Safety** | Introduction to Propane Personal Safety | | |
| | Personal Safety When Working Around Vehicle | | |
| | Handling Cylinders Safely | | |
| | Bulk Delivery Safety | | |
| **Static Electricity** | Static Electricity | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |

## NJ: Vapor Delivery System Operation and Appliance Start-up Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Testing Gas Piping** | Leak Check: High-Pressure Method | Yes | |
| | Leak Check: Intermediate-Pressure Method | Yes | |
| | Leak Check: Low-Pressure Method | Yes | |
| | Leak Check: Using a Vapor Meter | | Yes |
| | Pressure Testing New Gas Piping | Yes | |
| | Troubleshooting Propane Leaks after Failed Testing | Yes | |
| **Conducting a New System Interior Site Assessment** | Introduction to Conducting a New System Interior Site Assessment | | |
| | Validating Gas Piping | Yes | |
| | Validating Appliance Combustion Air | | |
| | Validating Appliance Venting | Yes | |
| | Validating Gas Appliances | Yes | |

## NJ: Vapor Delivery System Operation and Appliance Start-up Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Purging Gas Piping Systems** | Introduction to Purging | | |
| | Purging Residential & Small Commercial Piping Systems | Yes | |
| | Purging Large Commercial & Industrial Piping systems | | |
| **Lighting Appliance Pilots** | Lighting Appliance Pilots – Residential & Small Commercial | | |
| | Lighting Appliance Pilots – Large Commercials* Industrial | | |
| **Conducting Gas System Performance Testing** | Introduction to Conducting Gas System Performance Testing | | |
| | Conducting Gas System Performance Testing | Yes | |
| **New Gas Appliance Startup** | Introduction to New Gas Appliance: Operational Safety Inspection | Yes | |
| | Identifying Proper Appliance Burner Operation | | |
| | Operational Safety Inspection | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| | Gas Leak and Odor Call Response | Yes | |

# NEW YORK PROPANE GAS ASSOCIATION

## Bobtail Driver Path

## Foundations Path

## Propane Container Installer Path

### NYPGA: Bobtail Driver Path

| Program | Module | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Inspect Commercial Motor Vehicles** | Conduct Pre and Post-trip Vehicle Chassis Inspections | | |
| | Inspecting Bobtail Components | | |
| **Load Bobtails** | Preparing to Load a Bobtail | | |
| | Loading Bobtails with a Plant Liquid Pump | | |
| | Loading Bobtails with a Plant Vapor Compressor | | |
| | Loading Bobtails with an Auxiliary Pump Inlet Compressor | | |
| **Safe Driving** | Introduction to Safe Driving | | |
| | Prevent Rear-End Accidents | | |
| | Prevent Rollover Accidents | | |
| | Prevent Backing Accidents | | |
| | Safe Driving Assessment | | |

## NYPGA: Bobtail Driver Path

| Program | Module | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | | |
| | Delivery Truck Hazard Assessment | | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | | |
| | Location Requirements: ASME Tank (AG/UG) over 2,000 Gallon W.C. | | |
| **Propane Container Pre-Fill Pre-Exchange Inspection** | Inspect Stationary Containers up to 2,000 gal. W.C. | | |
| | Inspect Portable DOT Cylinders | | |
| **Filling Customer Containers Using a Bobtail** | Filling Customer Containers Using a Bobtail | | |
| **Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | | |
| **Measuring Pressure** | Measuring Pressure | | |
| **Testing Gas Piping** | Pressure Testing New Gas Piping | | |
| | Introduction to Leak Check | | |
| | Leak Check: High-Pressure Method | | |
| | Leak Check: Intermediate-Pressure Method | | |
| | Leak Check: Low-Pressure Method | | |
| | Leak Check: Using a Vapor Meter | | |
| | Troubleshooting Propane Leaks after Failed Testing | | |
| **Lighting Appliance Pilots** | Lighting Appliance Pilots - Residential & Small Commercial | | |
| | Lighting Appliance Pilots - Large Commercial & Industrial | | |

## NYPGA: Foundations Path

| Program | Module | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **Consumer Safety Education** | Consumer Safety Education: Residential & Commercial | | |
| | Consumer Safety Education: Agriculture | | |
| **Propane Personal Safety** | Safety: Make it Personal | | |
| | Techniques For Personal Injury Prevention | | |
| | Scenario: Bulk Propane Delivery | | |
| **Hazardous Materials Training** | DOT Hazardous Materials (HazMat) Training: Introduction | | |
| | DOT Hazardous Materials: General Awareness and Familiarization | | |
| | DOT Hazardous Materials: HazMat Function-Specific Training | | |
| | DOT Hazardous Materials: Safety Training | | |
| | DOT Hazardous Materials: Security Awareness | | |
| | OSHA Hazard Communication | | |

## NYPGA: Propane Container Installer Path

| Program | Module | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Inspect Commercial Motor Vehicles** | Conduct Pre and Post-trip Vehicle Chassis Inspections | | |
| | Inspect Cylinder Delivery Vehicle | | |
| | Inspect Crane Truck | | |
| | Inspect Tank Setting Trailer | | |
| | Inspect Trailers: Transport and Flatbed | | |
| **Safe Driving** | Introduction to Safe Driving | | |
| | Prevent Rear-End Accidents | | |
| | Prevent Rollover Accidents | | |
| | Prevent Backing Accidents | | |
| | Safe Driving Assessment | | |
| **Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | | |
| | Delivery Truck Hazard Assessment | | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | | |
| | Location Requirements: DOT Exchange Cylinder Cages | | |
| | Location Requirements: DOT Exchange Cylinder - Residential & Small Commercial | | |
| | Location Requirements: ASME Tank (AG/UG) over 2000 Gallon WC | | |
| **Determine Total Connected BTU Load** | Determining BTU System Demand: Introduction | | |
| | Determining BTU System Demand: Residential & Small Commercial | | |
| | Determining BTU System Demand: Large Commercial & Industrial Systems | | |

## NYPGA: Propane Container Installer Path

| Program | Module | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Propane Container Sizing and Selection** | Propane Container Sizing and Selection | | |
| **Mobile Crane** | Mobile Crane Introduction and Safety | | |
| | Lift Safety, Rigging and Hand Signals | | |
| | Mobile Crane Operation | | |
| **Load Propane Containers** | Introduction to Load, Secure, and Unload Propane Containers | | |
| | Load, Secure, and Unload Propane Cylinders | | |
| | Load, Secure, and Unload Propane Containers up to 2000 gal W.C. | | |
| | Load & Secure ASME Tanks onto a Tank Setting Trailer | | |
| **Installing Propane Containers** | Introduction to Installing Propane Containers | | |
| | Install Stationary & Exchange Propane Containers up to 125 gal WC | | |
| | Install AG & UG ASME Tanks Greater than 125 gallon WC up to 2,000 gal WC | | |
| | Install AG & UG ASME Tanks over 2,000 gal WC | | |
| **Corrosion Prevention** | Introduction to Corrosion Prevention | | |
| | Corrosion Prevention - Coatings | | |
| | Installing Cathodic Protection Systems | | |
| | Testing Cathodic Protection Systems | | |
| | Troubleshooting and Retrofitting Cathodic Protection Systems | | |

# VERMONT

## Installation, Inspection, & Service of LP Gas Appliances

## Basics Pathway

## Delivery of LP Gas

## Limited Interior Certification – HVAC Technicians

### VT: Installation, Inspection, & Service of LP Gas Appliances

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Determine Total Connected BTU Load** | Determining BTU System Demand: Introduction | | |
| | Determining BTU System Demand: Residential & Small Commercial | | |
| | Determining BTU System Demand: Large Commercial & Industrial Systems | | |
| **Propane Container Sizing & Selecting** | Propane Container Sizing & Selecting | | |

## VT: Installation, Inspection, & Service of LP Gas Appliances

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Conducting an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | Yes | |
| | Location Requirements: DOT Exchange Cylinder Cages | Yes | |
| | Location Requirements: DOT Exchange Cylinder - Residential & Small Commercial | Yes | |
| | Delivery Truck Hazard Assessment | | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | Yes | |
| **Design, Size, & Select Distribution Piping** | Introduction to Designing Propane Distribution Piping Systems | | |
| | Sizing and Selecting Exterior Vapor Piping Systems | | |
| | Sizing and Selecting Liquid Piping Systems | | |
| | Sizing and Selecting Interior Vapor Piping Systems | | |
| **Corrosion Prevention** | Introduction to Corrosion Prevention | | |
| | Installing Cathodic Protection Systems | Yes | |
| | Corrosion Prevention - Coatings | Yes | |
| | Testing Cathodic Protection Systems | Yes | |
| | Troubleshooting and Retrofitting Cathodic Protection Systems | Yes | |
| **Sizing & Selecting Gas Regulators** | Sizing & Selecting Gas Regulators | | |
| **Sizing & Selecting Gas Vapor Meters** | Introduction to Sizing and Selecting Vapor Meters | | |
| | Practice Sizing and Selecting Vapor Meters | | |

## VT: Installation, Inspection, & Service of LP Gas Appliances

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Load Propane Containers** | Introduction to Load, Secure, and Unload Propane Containers | Yes | |
| | Load, Secure, and Unload Propane Containers up to 2000 gal W.C. | Yes | |
| | Load, Secure, and Unload Propane Cylinders | Yes | |
| | Load & Secure ASME Tanks onto a Tank Setting Trailer | Yes | |
| **Installing Propane Containers** | Introduction to Installing Propane Containers | | |
| | Install Stationary & Exchange Propane Containers up to 125 gal WC | Yes | |
| | Install AG & UG ASME Tanks Greater than 125 gallon WC up to 2,000 gal WC | Yes | |
| | Install AG & UG ASME Tanks over 2,000 gal WC | Yes | |
| **Installing Propane Distribution System Piping** | Introduction to Installing Gas Piping and Components | | |
| | Installing Exterior Gas Piping and Components | Yes | |
| | Installing Interior Gas Piping and Components | Yes | |
| **Joining Gas Piping** | Introduction to Joining Gas Piping | | |
| | Joining Copper Tubing & Components | Yes | |
| | Joining CSST Tubing & Components | Yes | |
| | Joining Steel Piping & Components | Yes | |
| | Joining Polyethylene Piping: Mechanical Fittings | Yes | |
| | Joining Polyethylene Piping: Heat Fusion | Yes | |
| **Installing Gas Pressure Regulators** | Installing Gas Pressure Regulators | | |
| **Installing Gas Vapor Meters** | Introduction to Installing Vapor Meters | | |
| | Installing Vapor Meters | Yes | |

## VT: Installation, Inspection, & Service of LP Gas Appliances

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Consumer Safety Education** | Consumer Safety Education: Residential & Commercial | | |
| | Consumer Safety Education: Agriculture | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **Testing Gas Piping** | Introduction to Leak Check | Yes | |
| | Pressure Testing New Gas Piping | Yes | |
| | Leak Check: High-Pressure Method | Yes | |
| | Leak Check: Intermediate-Pressure Method | Yes | |
| | Leak Check: Using a Vapor Meter | Yes | |
| | Troubleshooting Propane Leaks after Failed Testing | Yes | |
| **Conducting Gas System Performance Testing** | Introduction to Conducting Gas System Performance Testing | | |
| | Conducting Gas System Performance Testing | Yes | |
| **Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | Yes | |
| **Conducting a New System Interior Site Assessment** | Introduction to Conducting a New System Interior Site Assessment | | |
| | Validating Gas Piping | Yes | |
| | Validating Gas Appliances | Yes | |
| | Validating Appliance Venting | Yes | |
| | Validating Appliance Combustion Air | | |
| **Purging Gas Piping** | Introduction to Purging | | |
| | Purging Residential & Small Commercial Piping Systems | Yes | |
| | Purging Large Commercial & Industrial Piping Systems | | |

## VT: Installation, Inspection, & Service of LP Gas Appliances

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **New Gas Appliance Startup** | Introduction to New Gas Appliance: Operational Safety Inspection | Yes | |
| | Identifying Proper Appliance Burner Operation | | |
| | Operational Safety Inspection | | |
| **Lighting Appliance Pilots** | Lighting Appliance Pilots – Residential & Small Commercial | Yes | |
| | Lighting Appliance Pilots – Large Commercial & Industrial | Yes | |

## VT: Basics Pathway

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Handling Propane Leaks** | Gas Leak and Odor Call Response | | |
| **Consumer Safety Education** | Consumer Safety Education: Residential & Commercial | | |
| | Consumer Safety Education: Agriculture | | |
| **Propane Personal Safety** | Introduction to Propane Personal Safety | | |
| | Personal Safety When Working Around Vehicle | | |
| | Handling Cylinders Safely | | |
| | Bulk Delivery Safety | | |

## VT: Delivery of LP Gas

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |
| **Handling Propane Leaks** | Uncontrolled Release of Propane | | |
| **Consumer Safety Education** | Consumer Safety Education: Residential & Commercial | | |
| | Consumer Safety Education: Agriculture | | |
| **Propane Personal Safety** | Introduction to Propane Personal Safety | | |
| | Personal Safety When Working Around Vehicle | | |
| | Handling Cylinders Safely | | |
| | Bulk Delivery Safety | | |
| **Hazardous Materials Training** | DOT Hazardous Materials Security Awareness | | |
| **Inspect Commercial Motor Vehicles** | Conduct Pre and Post-trip Vehicle Chassis Inspections | Yes | |
| | Inspect Cylinder Delivery Vehicle | Yes | |
| | Inspecting Bobtail Components | Yes | |
| **Load Bobtails** | Preparing to Load a Bobtail | Yes | |
| | Loading Bobtails with a Plant Liquid Pump | Yes | |
| **Load Propane Containers** | Introduction to Load, Secure, and Unload Propane Containers | Yes | |
| | Load, Secure, and Unload Propane Cylinders | Yes | |

## VT: Delivery of LP Gas

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Safe Driving** | Introduction to Safe Driving | | |
| | Prevent Rear-End Accidents | | |
| | Prevent Backing Accidents | | |
| | Prevent Rollover Accidents | | |
| | Safe Driving Assessment | | |
| **Conduct an Exterior Customer Site Assessment** | Introduction to Conducting an Exterior Customer Site Assessment | Yes | |
| | Location Requirements: DOT & ASME Stationary Containers up to 2,000 gal. W.C. | Yes | |
| | Location Requirements: ASME Tank (AG/UG) over 2000 Gallon WC | Yes | |
| | Location Requirements: DOT Exchange Cylinder - Residential & Small Commercial | Yes | |
| | Location Requirements: DOT Exchange Cylinder Cages | Yes | |
| | Delivery Truck Hazard Assessment | | |
| **Propane Container Pre-Fill/ Pre-Exchange Inspection** | Inspect Stationary Containers up to 2,000 gal. W.C. | Yes | |
| | Inspect Portable DOT Cylinders | Yes | |
| **Filling Customer Containers** | Filling Customer Containers | Yes | |
| **Exchanging DOT Cylinders** | Changing Out Residential and Small Commercial DOT Exchange Cylinders | | |
| **Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | Yes | |
| **Measuring Pressure** | Measuring Pressure | | |

## VT: Delivery of LP Gas

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Testing Gas Piping** | Pressure Testing New Gas Piping | | |
| | Introduction to Leak Check | | |
| | Leak Check: High-Pressure Method | | |
| | Leak Check: Intermediate-Pressure Method | | |
| | Leak Check: Low-Pressure Method | Yes | |
| | Leak Check: Using a Vapor Meter | | |
| | Troubleshooting Propane Leaks after Failed Testing | | |
| **Lighting Appliance Pilots** | Lighting Appliance Pilots – Residential & Small Commercial | Yes | |
| | Lighting Appliance Pilots – Large Commercial & Industrial | Yes | |

## VT: Limited Interior Certification – HVAC Technicians

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Introduction to the Propane Industry** | Introduction to the Propane Industry | | |
| **Fundamentals of Propane** | Fundamentals of Propane | | |

## VT: Limited Interior Certification – HVAC Technicians

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **Testing Gas Piping** | Pressure Testing New Gas Piping | Yes | |
| | Introduction to Leak Check | Yes | |
| | Leak Check: High-Pressure Method | Yes | |
| | Leak Check: Intermediate-Pressure Method | Yes | |
| | Leak Check: Low-Pressure Method | | |
| | Leak Check: Using a Vapor Meter | Yes | |
| | Troubleshooting Propane Leaks after Failed Testing | Yes | |
| **Conducting Gas System Performance Testing** | Introduction to Conducting Gas System Performance Testing | | |
| | Conducting Gas System Performance Testing | Yes | |
| **Restoring Service After an Interruption of Service** | Restoring Service After an Interruption of Service | Yes | |
| **Conducting a New System Interior Site Assessment** | Introduction to Conducting a New System Interior Site Assessment | | |
| | Validating Gas Piping | Yes | |
| | Validating Gas Appliances | Yes | |
| | Validating Appliance Venting | Yes | |
| | Validating Appliance Combustion Air | | |
| **Purging Gas Piping** | Introduction to Purging | | |
| | Purging Residential & Small Commercial Piping Systems | Yes | |
| | Purging Large Commercial & Industrial Piping systems | | |

## VT: Limited Interior Certification – HVAC Technicians

| Program | Description | Required OJT Worksheet | Optional OJT Worksheet |
|---|---|---|---|
| **New Gas Appliance Startup** | Introduction to New Gas Appliance: Operational Safety Inspection | Yes | |
| | Identifying Proper Appliance Burner Operation | | |
| | Operational Safety Inspection | | |
| **Lighting Appliance Pilots** | Lighting Appliance Pilots – Residential & Small Commercial | Yes | |
| | Lighting Appliance Pilots – Large Commercial & Industrial | Yes | |