

Titles and Descriptions of Training Materials

The training materials are designed as a learning resource and career development resource for the individual employee. Training materials should be supplied for each participating employee for each certification area being taught. The only other material needed by the employee is a copy of NFPA 58 for *Basic Principles and Practices of Propane* and NFPA 54 and 58 for the other certification areas. The certification areas are described below.

Basic Principles and Practices in Propane

Basic Principles and Practices is a prerequisite to the more advanced classes. The full-color CETP *Basic Principles and Practices of Propane* course offers an "entry level" course that provides pre-requisite instruction about propane's physical and combustion properties, and how propane is produced and transported. Some of the other topics covered are: - Organizations that influence publish or enforce codes and standards - How basic functions are performed in a bulk plant, including primary safety concerns, and customer service - Odorants and service interruptions - Complete and incomplete combustion characteristics, and much more.

Basic Principles & Practices of Propane is available in a textbook format or an in an interactive E-Learning program. (Updated 2019)

Propane Delivery

Propane Delivery includes inspecting, maintaining and operating propane delivery vehicles, filling propane storage containers, and making customer deliveries of propane.

Cylinder Delivery Operations This course is primarily designed to train propane delivery personnel who operate cylinder delivery vehicles. The course provides information, practices, and procedures that support many general delivery tasks. The course is updated to NFPA 54, 2015 edition and NFPA 58, 2018 edition. *Cylinder Delivery Operations* is available in a textbook format or an in an interactive E-Learning program. (Updated 2019)

The certifications offered in **Propane Delivery** are:

- Cylinder Delivery
- Bobtail Delivery Operations

Bobtail Delivery Operations course provides information for drivers who operate commercial motor vehicles to deliver propane. This course also covers: Bobtail equipment and systems. Explains a bobtail's basic equipment and systems, including the cargo tank, gauges, valves, pumps, meters, delivery hoses and emergency discharge control equipment. Presents detailed procedures for safely loading a bobtail using the plant pump. Discusses DOT requirements for bobtail inspections. Reviews the features and installation requirements of ASME tanks at customer locations. *Bobtail Delivery Operations* is available in a textbook format or an in an interactive E-Learning program. (Updated 2019)

Operating a Transport to Deliver Propane is no longer a CETP Certification area. It is now a standalone training program that includes a Handbook, video and certificate of completion.

Operating a Truck, Tank Trailer or Tractor/Trailer to Deliver or Relocate ASME is no longer a CETP Certification area. The Mobile Crane Safety in the Propane Industry program now replaces the CETP textbook, and includes;

- Video. The 75-minute video highlighting best practices for mobile crane safety in the propane industry is available on DVD. The video is organized into modules that allow you to view the entire program or individual sections based on your job responsibilities and training requirements.
- Training Manual. A training manual that summarizes all the activities and instructions featured in the video is available on CD. A quiz covering all major areas of crane operation is included in the workbook.
- Instructor Guide. An instructor guide and PowerPoint® presentation of the entire program, suitable for classroom instruction, is available on CD. The guide includes tips and instructions for the trainer.
- Safety Talk Handouts. A series of “Crane Safety Talk” handouts are available on CD. These one-page handouts discuss important crane safety topics. They are designed to be a resource for safety meetings and training sessions.

Plant Operations

The updated, full-color Basic Plant Operations textbook provides information for employees working in propane bulk plants. It provides information, practices, and procedures that support many general plant operations tasks. This course is primarily designed to train employees who: Inspect and fill DOT cylinders and ASME tanks at the bulk plant, requalify DOT cylinders, maintain cylinders, tanks, and bulk plant equipment systems, and other propane employees who could benefit from particular sections of this course include plant managers and plant office personnel.

Basic Plant Operations will offer one standard certification area with optional specialized certifications. (Updated 2019)

The standard certification area in Basic Plant Operations consists of the following:

- Maintaining ASME Tanks
- Maintaining DOT Cylinders
- Operating Dispensing Equipment to Fill Containers
- Maintaining Bulk Plant Equipment
- Performing Cargo Tank Product Transfers

The optional specialized certification areas in **Plant Operations** are:

- Performing Railcar Product Transfers
- Maintaining DOT Intermodal (IM) Tanks

Performing Railcar Product Transfers and Maintaining DOT Intermodal (IM) Tanks course provides an overview of key concepts and strategies for field personnel and will aid in preparing for NPGA’s CETP certification. Performing Railcar Product Transfers and Maintaining DOT Intermodal (IM) Tanks is an essential tool for ensuring employee safety and continuing success. (Updated 2019)

Course Objectives:

- Identify the hazards associated with handling and transferring propane and the appropriate personal protective equipment.
- Explain railcar documentation, condition requirements and spotting procedures.
- Identify bulk plant railcar unloading systems and components.
- Verify the presence of odorant.
- Unload a railcar using the plant compressor.
- Load a railcar
- Identify railcar security procedures.
- Explain testing and inspection requirements for DOT intermodal (IM) tanks.
- Prepare DOT intermodal tanks for transport.
- Safely handle flammable and combustible liquids.
- Perform maintenance tasks on DOT intermodal tanks.

Vapor Distribution Systems

Vapor Distribution Systems covers installing propane tanks and cylinders, vapor regulation and metering systems, vapor distribution systems, and vaporizer systems, inspecting and pressure testing propane piping systems, and installing and testing cathodic protection systems. The certification areas in **Vapor Distribution Systems Operations** are:

- Designing and Installing Exterior Vapor Distribution Systems
- Placing Vapor Distribution Systems and Appliances into Operation
- Installing Appliances and Interior Vapor Distribution Systems (Book 4.3)
- Basic Electricity for Propane Appliances (4.4)
- Basic Appliance Service and Troubleshooting (4.5)
- Advanced Propane Appliance Service and Troubleshooting(4.6)

Designing and Installing Exterior Vapor Distribution Systems (Book 4.1) focuses on designing and installing the exterior portions of a vapor distribution system for both residential and small commercial markets. This course addresses how to select and install containers, prevent corrosion, size and install regulators and meters, and select and install outdoor piping and tubing. (Updated 2019)

Placing Vapor Distribution Systems and Appliances into Operation (Book 4.2) focuses primarily on the procedure of placing a vapor distribution system into operation. This course addresses the different system tests required for vapor distribution systems and appliances; validating the container, piping, and regulator; how and when to make the final connections; how to purge the system of air, appliance controls and safety devices; and how to adjust the burner. (Updated 2019)

Installing Appliances and Interior Vapor Distribution Systems (Book 4.3) focuses on the interior of a piping system as well as the installation of gas appliances. This course addresses how to select and install appliances, design and install interior venting systems, and design and install interior piping and tubing. It also addresses how to perform a pressure test. This updated book replaces book 6.0 Appliance Installation. (Updated 2019)

Basic Electricity for Propane Appliance Service (4.4)

Basic Electricity for Propane Appliance Service enables participants to interpret electrical components and diagrams, and measure electrical quantities, and will aid in preparing for

NPGA's CETP certification. Basic Electricity for Propane Appliance Service is an essential tool for ensuring employee safety and continuing success.

Course Goals include;

- Follow safety procedures.
- Interpret electrical control circuit diagrams for basic appliances.
- Use a digital multimeter.
- Measure voltage, resistance and current at any point in an electrical circuit.
- Identify functions of common sensing devices in basic appliances.
- Identify functions of common controls and components in basic propane appliances, including:
 - Transformers.
 - Relays and contactors.
 - Motors and capacitors.
 - Wall thermostats.
 - Limit and fan controls.
 - Ignition systems.
 - Gas control valves.
 - Troubleshoot electrical circuits.

REPLACES Book 7 - Basic Appliance Service (PRC-004535).

Basic Appliance Service and Troubleshooting (4.5)

The course focuses primarily on safely and efficiently servicing, troubleshooting, and repairing basic propane appliances. This course will instruct you on the specific steps in these important tasks.

For the purpose of this course, basic propane appliances are defined as simple appliances that do not have advanced controls and complex electronic ignition systems. They may have simple electronic ignition systems, such as those found in many ranges. They include 120/24 V and DC millivolt systems.

Advanced Propane Appliance Service and Troubleshooting(4.6)

This course enables participants to efficiently service, troubleshoot, and repair advanced propane appliances with electronic ignition systems. The course will aid in preparing for NPGA's CETP certification. 4.6 Advanced Propane Appliance Service and Troubleshooting is an essential tool for ensuring employee safety and continuing success.

Liquid Distribution Systems

Designing & Installing Dispenser Transfer Systems covers all of the general knowledge that a propane employee would need to use and operate a dispenser. The book includes information on dispenser tank valves, fittings and locations; and installing, start up and, shut down procedures of a dispenser transfer system. (Book 5.1, Updated 2007)

Large Industrial/Commercial Gas-Fired Equipment

Large Industrial/Commercial Gas-Fired Equipment 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. (Book 8.0, updated 1998).

Blended learning and e-Learning

PERC has 7 e-learning programs on-line that are available at no charge,

- Basic Principles and Practices
- Cylinder Delivery Operations
- Bobtail Delivery Operations
- Basic Plant Operations
- 4.1 Designing and Installing Exterior Vapor Distribution Systems
- 4.2 Placing Vapor Distribution Systems and Appliances into Operation
- Initial OSHA & DOT Training

To access E-Learning on-line visit <https://perc.its-training.com>

- •Login on-line or Register if you have never visited the site.
- •Click on Learn > My Assignments
- •Click on voucher number and enter 84220 to access the training for free.
- •You may be asked to also enter a Voucher Owner ID: PERC1075.
- •Choose which e-learning program you'd like to access for free and start the review.

If you are looking for certification, visit <https://www.npga.org/industry/cetp-certification/> for more information.