

Liquid Propane Course Catalog



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LP Abnormal Operating Conditions

MEA Certificate Numbers **TNG - MEA1615**
 KNT – MEA1548

Course Credit **0.1**

Course Description

This course provides basic information on how to recognize and react to Abnormal Operating Conditions (AOCs) both on the job and during the evaluation process.

Objectives

- Relate the OQ Rule to Abnormal Operating Conditions (AOCs)
- Apply the OQ Rule on the job
- Provide examples of AOCs
- Classify AOCs within categories
- Take appropriate action when reacting to AOCs
- Describe your role in the evaluation for qualification procedure
- Identify responsibilities of qualified individuals

LP-0401 Corrosion Monitoring – Atmospheric, External, and Internal

MEA Certificate Numbers **TNG - MEA1584**
 KNT - MEA1547

Course Credit **0.1**

Course Description

This course provides information identifying the requirements for inspecting external & internal pipe for corrosion.

Objectives

- Identify methods of inspection
- Identify requirements for pipe inspection
- Understand the cause of corrosion

LP-0402 Coating Maintenance

MEA Certificate Numbers **TNG - MEA1583**
 KNT - MEA1549

Course Credit **0.1**

Course Description

This course provides a basic overview of coatings, coating inspection, and coating maintenance.

Objectives

- Identify deteriorated, damaged, or disbanded pipeline coating
- Identify requirements for removing deteriorated, damaged, or disbanded coating without damaging the pipe
- Identify methods for repairing, replacing, or altering pipe coating
- Recognize and react to Abnormal Operating Conditions (AOC)

LP-0501 Cathodic Protection System Maintenance

MEA Certificate Numbers **TNG - MEA1585**
 KNT - MEA1550

Course Credit **0.1**

Course Description

This course covers cathodic protection system maintenance requirements, corrosion monitoring, preserving and maintaining cathodic protection, removal and application of protective coatings, cathodic protection system wiring, leak testing, and testing of cathodic protection systems.

Objectives

- List the facilities that require cathodic protection
- Identify cathodic protection requirements
- Identify corrosion inspection requirements
- Explain how to perform a leak test
- Explain how to perform cathodic system testing
- Describe how to apply protective coating

LP-0503 Cathodic Protection Systems: Electrical Connections

MEA Certificate Numbers **TNG - MEA1586**
 KNT - MEA1551

Course Credit **0.1**

Course Description

This course covers the requirements for connecting electrical wires to pipelines, evaluation of electrical connections, and making electrical connections to pipelines.

Objectives

- Identify the requirements for connecting wires and cables to pipe using thermite welding, solder, and mechanical connections
- Determine if electrical connection requirements are met
- Identify required steps for making electrical connections using a thermite weld
- Identify required steps for making electrical connections using solder

LP-0505 Cathodic Protection System Testing

MEA Certificate Numbers **TNG - MEA1587**
 KNT - MEA1552

Course Credit **0.1**

Course Description

This course covers the testing of cathodic protection systems including: system requirements, monitoring for corrosion, how and when to evaluate cathodic protection systems, and how to preserve cathodic protection systems.

Objectives

- List the facilities that require cathodic protection
- Identify cathodic protection requirements
- Identify corrosion inspection requirements
- Identify methods for inspecting pipe and coating
- Describe procedures for performing test equipment operation checks
- Describe steps for evaluating a cathodic protection system
- Recognize Abnormal Operating Conditions (AOC) and take corrective action
- Explain how to preserve cathodic protection

LP-0512 Pipe-to-Soil Testing

MEA Certificate Numbers **TNG - MEA1588**
 KNT - MEA1553

Course Credit **0.1**

Course Description

This course covers testing requirements, pipeline locating, performing an equipment check, and test step procedures.

Objectives

- Identify the requirements for pipe-to-soil testing
- Describe the procedure for a pipe-to-soil test equipment check
- List steps for performing pipe locating equipment checks
- Identify and describe the three general methods of locating a pipeline
- List the required steps for conducting a pipe-to-soil test
- Identify the Abnormal Operating Conditions (AOC) related to conducting a pipe-to-soil test

LP-0701 Locating, Installing, and Protecting Customer Meters and Regulators

MEA Certificate Numbers **TNG - MEA1589**
 KNT - MEA1554

Course Credit **0.1**

Course Description

This course covers requirements for design and selection of meters, regulators, and pressure relief and limiting devices; location requirements, protection from damage, installation and system uprating procedures.

Objectives

- Identify the components that comprise a meter set, including meters, regulators, and relief valves
- List location considerations for proper installation and protection from damage of meter sets
- Identify general meter set installation requirements
- Identify correct procedures for the installation of customer meters, regulators, and where required, relief valves
- Identify Abnormal Operating Conditions
- Identify correct procedures for the testing of installed customer meters, regulators, and where required relief valves

LP-0702 Customer Pressure Reg, Limiting, and Relief Devices – Ops & Maint

MEA Certificate Numbers **TNG - MEA1590**
 KNT - MEA1560

Course Credit **0.1**

Course Description

This course covers requirements for customer pressure regulating, limiting, and relief devices, including: location and installation, inspection, testing, maintenance, and pressure adjustment requirements.

Objectives

- Identify general location and installation requirements
- Explain inspecting and testing
- Describe maintenance
- Describe adjustments
- Recognize and react to Abnormal Operating Conditions (AOC)

LP-0801 Locating Pipelines

MEA Certificate Numbers **TNG - MEA1591**
 KNT - MEA1561

Course Credit **0.1**

Course Description

This course covers preliminary activities required for successful locates, and how to properly locate and mark facilities.

Objectives

- Identify the preliminary activities required for successful locates
- Describe proper locate and marking procedures
- Explain how locating pipelines before excavating can stop damage from occurring
- Recognize and react to Abnormal Operating Conditions (AOCs)

LP 0802 Protection During Disturbance of Segment Support

MEA Certificate Numbers **TNG - MEA1591**
 KNT – MEA1555

Course Credit **0.1**

Course Description

This course covers requirements and methods for protection during disturbance of segment support and installation of suitable support.

LP-0901 System Patrolling

MEA Certificate Numbers **TNG - MEA1595**
 KNT - MEA1558

Course Credit **0.1**

Course Description

This course covers patrolling methods, requirements, record keeping, and identification of soil disturbance.

Objectives

- Identify patrol method
- Identify scope and requirements
- Perform system patrols
- Identify soil subsidence

LP-1002 Plastic Pipe - Electrofusion

MEA Certificate Numbers **TNG - MEA1597**
 KNT - MEA1562

Course Credit **0.1**

Course Description

This course covers electrofusion preparation steps, the electrofusion process, and electrofusion inspection procedures.

Objectives

- List requirements for plastic pipe electrofusion
- Explain preparation of joints and fittings for fusion operations
- Verify pipe preparation
- Describe how to perform general electrofusing for couplings and sidewall fittings
- Observe safety precautions
- Explain how to inspect electrofused joints
- Recognize and react to Abnormal Operating Conditions (AOC)

LP-1003 Plastic Pipe – Butt Heat Fusion

MEA Certificate Numbers **TNG - MEA1598**
 KNT - MEA1563

Course Credit **0.1**

Course Description

This course provides information on conventional butt heat fusion requirements, and preparation of pipe ends prior to fusing, the fusion procedure, and inspection requirements.

Objectives

- List requirements for plastic pipe butt heat fusion
- Explain how to prepare pipe for fusion operation
- Verify pipe preparation
- Describe general butt heat fusion of pipe and fittings
- Observe safety precautions
- Explain how to inspect butt fused joints
- Recognize and react to Abnormal Operating Conditions (AOCs)

LP-1004 Plastic Pipe – Sidewall Heat Fusion

MEA Certificate Numbers **TNG - MEA1599**
 KNT - MEA1564

Course Credit **0.1**

Course Description

This module provides information on conventional sidewall heat fusion requirements and preparation of pipe and fittings prior to fusing, the fusion procedure, and inspection requirements.

Objectives

- List requirements for plastic pipe sidewall heat fusion
- Explain how to prepare pipe and fittings for fusion operation
- Verify pipe preparation
- Describe general sidewall heat fusion of pipe and fittings
- Observe safety precautions
- Explain how to inspect sidewall fused joints
- Recognize and react to Abnormal Operating Conditions (AOC)

LP-1005 Mechanical Joints

MEA Certificate Numbers **TNG - MEA1600**
 KNT - MEA1565

Course Credit **0.1**

Course Description

This course covers: identification of mechanical joint requirements; general design requirements, coupling/fitting selection, pipe preparation, protection of joining procedure from adverse weather, installation, inspection, and removal.

Objectives

- Identify the general design requirements
- Describe how to protect the mechanical joint installation from adverse weather
- Select the appropriate coupling or fitting
- Explain how to inspect for proper installation
- Describe how to remove defective joints
- Describe how to replace defective joints

LP 1006 Plastic Pipe: Socket Heat Fusion

MEA Certificate Numbers **TNG - MEA1601**
 KNT - MEA1566

Course Credit **0.1**

Course Description

This course provides information on conventional socket heat fusion requirements and preparation of pipe and fittings prior to fusing, the fusion procedure, and inspection requirements.

Objectives

- List requirements for plastic pipe socket heat fusion
- Explain how to prepare pipe and fittings for fusion operations
- Verify pipe preparation
- Describe fuse socket fitting to pipe
- Observe safety precautions
- Explain how to inspect socket fused joints
- Recognize and react to Abnormal Operating Conditions (AOC)

LP-1007 Flaring Copper Tubing

MEA Certificate Numbers **TNG - MEA1582**
 KNT - MEA1546

Course Credit **0.1**

Course Description

When you need to connect one end of soft copper tubing to another piece of tubing, the end of the copper tube must be flared to meet the conical shape of the fitting that will be used.

Objectives

This course covers common practices used in working with copper tubing, including:

- Unrolling
- Cutting
- Bending
- Flaring
- Connecting

LP-1201 Leakage Survey: Distribution and Transmission

MEA Certificate Numbers **TNG - MEA1602**
 KNT - MEA1567

Course Credit **0.1**

Course Description

This course covers how to prepare for and perform leak surveys.

Objectives

- Identify the types of facilities and leakage surveys required
- List and describe the methods of leakage survey
- Identify the requirements for leakage according to DOT regulations
- Describe how to perform specified leakage survey equipment checks
- Identify and describe general procedures for performing leakage surveys on gas systems
- Explain how to operate leakage detection equipment
- Explain how to perform leakage survey methods
- Describe how to properly perform outside leakage investigation, pinpointing, & grading
- Describe how to properly perform inside leakage investigation, pinpointing, & grading
- Describe how to properly perform system patrolling in conjunction with leakage survey
- Recognize and react to Abnormal Operating Conditions (AOC)

LP-1202 Outside Gas Leakage Investigation, Pinpointing, and Grading

MEA Certificate Numbers **TNG - MEA1603**
 KNT - MEA1568

Course Credit **0.1**

Course Description

This course covers responding to and investigating a reported gas leak, precautionary actions in hazardous situations, outside leak investigation procedure, visual inspection and identification of buried service locations, and how to pinpoint and classify leaks.

Objectives

- Describe how to respond to and investigate a reported gas leakage
- Explain how to investigate suspected gas leakage found during surveys, patrols, or by other means
- Identify equipment operation checks in accordance with manufacturer's instructions
- Take precautionary actions in hazardous leakage situations
- Identify location of buried pipelines in area of leakage
- Identify location of foreign facilities in area of leakage
- Describe how to pinpoint leaks
- Explain how to grade leaks Recognize and react to Abnormal Operating Conditions (AOCs)

LP-1203 Inside Gas Leakage Investigation

MEA Certificate Numbers **TNG - MEA1604**
 KNT - MEA1569

Course Credit **0.1**

Course Description

This course covers performing inside gas leakage investigations, checking for migration of gas at entry points, initiating precautionary actions, and verifying inside service line and fuel line integrity.

Objectives

- Describe how to perform inside gas leakage investigation until the leakage is found or no leakage is confirmed
- Explain how to check for migration of gas at entry points
- Describe service line penetration
- Identify foreign facility penetrations
- Explain how to initiate precautionary actions at any time that hazardous gas leakage is found
- Describe how to perform an inside leakage survey
- Identify how to verify inside service line and fuel line integrity
- Recognize and react to Abnormal Operating Conditions (AOC)

LP-1401 Abandonment or Inactivation of Facilities

MEA Certificate Numbers **TNG - MEA1605**
 KNT - MEA1570

Course Credit **0.1**

Course Description

This course covers some of the basic requirements for deactivating and abandoning pipelines, including cast iron and steel. Disconnecting piping from a gas system, purging gas and liquids, sealing open outlets in an abandoned pipe, removal of above ground facilities, and monitoring for corrosion will be covered.

Objectives

- Describe how to abandon pipelines, service lines, and pipeline facilities
- Identify how to make pipelines and service lines inactive

LP-1402 Backfilling

MEA Certificate Numbers **TNG - MEA1606**
 KNT - MEA1571

Course Credit **0.1**

Course Description

This course covers backfilling steps and requirements, compaction basics, and support and protection of facilities during backfilling.

Objectives

- State the requirements for backfilling
- Evaluate backfill material
- Describe how to support and brace pipe during backfilling
- Identify cleanup and restoration tasks
- Recognize and react to Abnormal Operating Conditions (AOCs)

LP-1408 Installation of Plastic Pipe

MEA Certificate Numbers **TNG - MEA1607**
 KNT - MEA1572

Course Credit **0.1**

Course Description

This course provides information on plastic pipe storage and handling, site preparation and inspection requirements, and installation and joining methods and procedures.

Objectives

- List site considerations and preparation necessary before installing plastic pipe
- Describe pre-installation inspection criteria for plastic pipe
- Describe pipe handling precautions (to avoid damage to plastic pipe)
- Describe the process of joining plastic pipe
- Describe the process of installing plastic pipe
- Recognize and react to Abnormal Operating Conditions (AOCs)

LP-1418 Purging

MEA Certificate Numbers **TNG - MEA1608**
 KNT - MEA1573

Course Credit **0.1**

Course Description

This course provides information on purging of natural gas facilities, into and out of service.

Objectives

- Safely perform all fundamentals associated with purging
- Purge with natural gas, air, and inert gas
- Properly vent discharge
- Test for a complete purge

LP-1421 Installation of Steel Pipe – Repair of Imperfections or Damage

MEA Certificate Numbers **TNG - MEA1609**
 KNT - MEA1574

Course Credit **0.1**

Course Description

This course covers the repair of steel pipe imperfections or damage.

Objectives

- Identify factors that determine required repair
- Identify methods and requirements of repair
- Describe methods of repair

LP-1422 Segment Repair, Replace, Etc. (Svc Lines, Mains, and Trans lines)

MEA Certificate Numbers **TNG - MEA1610**
 KNT - MEA1575

Course Credit **0.1**

Course Description

This course covers segment repair and replacement of service lines, mains, and transmission lines.

Objectives

- Procedures for inspecting pipeline segments for damage
- Signs of external corrosion
- Pipeline shutdown, purging and replacement activities
- Inspection requirements for repairs
- How to perform leak and strength tests
- How to monitor internal corrosion on pipeline segments
- Key elements necessary to safely place a pipeline segment back in service

LP-1426 Tapping Steel and Plastic Pipe

MEA Certificate Numbers **TNG - MEA1611**
 KNT - MEA1576

Course Credit **0.1**

Course Description

This course covers preparation steps for tapping steel and plastic pipe, safety procedures, equipment inspection, evaluating operating conditions, requirements for connecting equipment to main, and general installation of mechanical and bag stoppers.

Objectives

- Describe how to evaluate and identify tap location
- Describe how to verify pressure of pipeline segment
- Describe how to select appropriate fittings
- Explain how to safely perform tapping and stopping procedures
- Identify Abnormal Operating Conditions

LP-1427 Valve Maintenance

MEA Certificate Numbers **TNG - MEA1612**
 KNT - MEA1577

Course Credit **0.1**

Course Description

This course covers inspection and maintenance of transmission line and distribution line valves.

Objectives

- Identify valves to be maintained
- Identify requirements and steps to perform: valve inspection, partial operation, maintenance and documentation
- Remove/return a valve from/to service as required
- Recognize and react to Abnormal Operating Conditions (AOCs)

LP-1428 Setting Propane Tanks

MEA Certificate Numbers **TNG - MEA1613**
 KNT - MEA1578

Course Credit **0.1**

Course Description

This course covers proper setting of propane tanks according to National Fire Protection Association requirements.

Objectives

- Understand general container requirements
- Identify aboveground container installation requirements
- Identify underground and mounded container installation requirements
- Describe abnormal operation conditions

LP-1803 Press Reg, Limiting, Relief Device – Ops & Maintenance

MEA Certificate Numbers **TNG - MEA1614**
 KNT - MEA1579

Course Credit **0.1**

Course Description

This course will cover installations commonly referred to as "station" or "regulator station" installations. (Customer installations are covered in course 192-0702.)

Objectives

- Identify installation requirements for pressure regulating, limiting, and relief devices
- Identify capacity requirements
- Inspect and test devices
- Maintain associated valves
- Perform required adjustments
- Recognize and react to Abnormal Operating Conditions (AOCs)