

195 Liquids Catalog



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195 Abnormal Operating Conditions

MEA Certificate Numbers **TNG - MEA1485**
 KNT - MEA1484

Continuing Education Unit (CEU) **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.

195-0060 General Abnormal Operating Conditions (CT60)

MEA Certificate Numbers **TNG – MEA1485**
 KNT – MEA1484

Continuing Education Unit (CEU) **0.1**

Course Description

This course provides information on general Abnormal Operating Conditions (AOCs)

Objectives

- Define and understand an abnormal operating condition.
- Recognize and respond to the malfunction or failure of pipeline components.
- Recognize and respond to physical damage to the pipeline system.
- Recognize and respond to the unexpected activation of a safety device.
- Recognize and respond to abnormal facility conditions.
- Prevention of accidental ignition.

195-0000 Documentation & Reporting

MEA Certificate Numbers **TNG - MEA1363**
 KNT - MEA1242

Continuing Education Unit (CEU) 0.1**Course Description**

The course provides information on the procedures and methods of documenting, reporting, and OQ recordkeeping for DOT pipelines.

Objectives

- Identify and maintain required documentation.
- Identify safety related conditions that require reporting.
- Identify Operator Qualifications (OQ) record keeping requirements.

195-0403 Monitoring for Internal Corrosion (CT09)

MEA Certificate Numbers **TNG - MEA1358**
 KNT - MEA1243
 PEF - MEA1194

Continuing Education Unit (CEU) 0.1**Course Description**

The purpose of this module is to evaluate an individual with regard to locating and accurately collecting data from corrosion probes, coupons, and samples to monitor corrosion conditions in a pipeline.

Objectives

- Extract or insert corrosion coupons.
- Extract or insert corrosion probes.
- Collect sample of pipeline contents.
- Recognize and react to abnormal operating conditions.

195-0404 Prevention of Atmospheric Corrosion (CT06)

MEA Certificate Numbers **TNG - MEA1359**
 KNT - MEA1244
 PEF - MEA1195

Continuing Education Unit (CEU) 0.1**Course Description**

The purpose of this module is to evaluate an individual with reference to prevention of atmospheric corrosion as it relates to a DOT pipeline system.

Objectives

- Preventing atmospheric corrosion.
- Inspection of coatings.
- Perform surface preparation.

- Coating application.
- Recognize and properly react to abnormal operating conditions.

195-0405 Measure Wall Thickness of Pipe (CT07)

MEA Certificate Numbers TNG - MEA1360
 KNT - MEA1245
 PEF - MEA1196

Continuing Education Unit (CEU) 0.1

Course Description

The purpose of this module is to evaluate an individual with regard to measuring the wall thickness of a pipe using various methods.

Objectives

- Measuring wall thickness of pipe.
- Measure pit depth with pit gauge.
- Measure pipe thickness with ultrasonic thickness meter.
- Collect RSTRENG data.
- Recognize and properly react to abnormal operating conditions.

195-0406 Inspect Internal Pipe Surfaces (CT13)

MEA Certificate Numbers TNG - MEA1361
 KNT - MEA1246
 PEF - MEA1197

Continuing Education Unit (CEU) 0.1

Course Description

This course provides information on internal inspections of pipe surfaces for evidence of corrosion.

Objectives

- Recognize different types of internal corrosion and their mechanisms.
- Possess a working knowledge of tools used for internal corrosion evaluation.
- Recognize and react to abnormal operating conditions when inspecting internal pipe surfaces.

195-0407 Application and Repair of External Coatings (CT14)

MEA Certificate Numbers TNG - MEA1362
 KNT - MEA1247
 PEF - MEA1198

Continuing Education Unit (CEU) 0.1**Course Description**

The purpose of this module is to evaluate an individual with regards to Application and Repair of External Coating as it relates to a DOT pipeline system.

Objectives

- Identify and describe the different types of external coatings and how they are applied.
- Identify and describe the actions that must be taken in order to apply and repair external coating.
- Recognize and react to abnormal operating conditions when applying and repairing external coatings.

195-0501 Cathodic Protection Rectifier Maintenance and Repair (CT04)

MEA Certificate Numbers **TNG - MEA1364**
 KNT - MEA1248
 PEF - MEA1199

Continuing Education Unit (CEU) 0.1**Course Description**

The purpose of this module is to evaluate an individual with reference to cathodic protection rectifier maintenance and repair as they relate to a DOT pipeline system.

Objectives

- Troubleshoot and repair rectifiers.
- Recognize and react to abnormal operating conditions when troubleshooting and repairing rectifiers.

195-0503 Maintain Test Leads (CT02)

MEA Certificate Numbers **TNG - MEA1365**
 KNT - MEA1249
 PEF - MEA1200

Continuing Education Unit (CEU) 0.1**Course Description**

The purpose of this module is to evaluate an individual with reference to the procedures and methods involved in assessing and maintaining test leads as they relate to a DOT pipeline system.

Objectives

- Define and understand the function of a test lead and the equipment used to maintain it.
- Correctly inspect and verify test lead continuity.
- Repair or replace damaged test leads.
- Recognize and react to abnormal conditions.

195-0505 Inspect Cathodic Protection Rectifiers (CT03)

MEA Certificate Numbers **TNG - MEA1366**
 KNT - MEA1250
 PEF - MEA1201

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with reference to the procedures and methods involved in inspecting cathodic protection rectifiers as they relate to a DOT pipeline system.

Objectives

- Obtain voltage and current output readings from rectifier and check for proper rectifier operations.
- Perform cathodic protection rectifiers on/off test.
- Recognize and react to abnormal conditions when inspecting cathodic protection rectifiers.

195-0514 Conducting Annual Cathodic Protection Surveys (CT01)

MEA Certificate Numbers **TNG - MEA1367**
 KNT - MEA1251
 PEF - MEA1202

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with reference to the procedures and methods involved with conducting annual cathodic protection surveys as they relate to a DOT pipeline system.

Objectives

- Define and understand the function of conducting annual cathodic protection surveys.
- Determine the measurement of structure-to-electrolyte potential.
- Perform close interval survey.
- Perform testing to detect interference.
- Ensure electrical isolation from foreign structures.
- Perform an inspection and electrical test of bonds.
- Complete a visual atmospheric inspection.
- Recognize and react to abnormal operating conditions when conducting annual cathodic protection surveys.

195-0515 Conducting Cathodic Protection Remediation (CT08)

MEA Certificate Numbers TNG - MEA1369
 KNT - MEA1253
 PEF - MEA1204

Continuing Education Unit (CEU) 0.1

Course Description

The purpose of this module is to evaluate an individual with reference cathodic protection remediation as it relates to a DOT pipeline system.

Objectives

- Install electrical bonds.
- Install galvanic and impressed current anodes.
- Perform transformer/rectifier installations.
- Perform test station installations.
- Perform thermite welding procedure.
- Locate, monitor and clear shorted casings.
- Recognize and react to abnormal conditions when conducting cathodic protection remediation.

195-0516 Electrically Inspect Bare Pipe (CT05)

MEA Certificate Numbers TNG - MEA1368
 KNT - MEA1252
 PEF - MEA1203

Continuing Education Unit (CEU) 0.1

Course Description

The purpose of this module is to evaluate an individual with reference to electrical inspection of bare pipe without cathodic protection as it relates to a DOT pipeline system.

Objectives

- Understand the definitions and functions of electrical inspection of bare pipe.
- Conduct Soil Resistivity Measurements.
- Perform Pipe-to-Soil Potential Surveys.
- Recognize and react to abnormal operating conditions when electrically inspecting bare pipe.

195-0721 Joining of Pipe: Threaded Joints (CT0721)

MEA Certificate Numbers TNG - MEA11998
 KNT - MEA11859
 PEF - MEA11984

Continuing Education Unit (CEU) 0.1**Course Description**

The purpose of this module is to evaluate an individual with reference to the procedures and methods of joining of pipe with threaded joints.

Objectives

- Appropriate action prior to connecting threaded joints.
- Define a threaded joint.
- Straight threads vs. tapered threads.
- Connect and tightening NPT tapered threads.
- Inspecting the completed threaded joint.

195-0801 Provide Temporary Marking of Buried Pipeline Prior to Excavation (CT19)

MEA Certificate Numbers **TNG - MEA1370**
 KNT - MEA1254
 PEF - MEA1205

Continuing Education Unit (CEU) 0.1**Course Description**

The purpose of this module is to evaluate an individual with regard to procedures and methods performed to provide the temporary marking of buried pipelines prior to excavation activity.

Objectives

- Define and understand the function of providing temporary marking of buried pipeline prior to excavation and the equipment used to mark it.
- Locate the designated line.
- Install appropriate temporary markers identifying the line.
- Determine the depth of the pipeline.
- Recognize and react to abnormal operating conditions.

195-0804 Inspection Following Excavation Activities and Leak Survey After Blasting (CT20)

MEA Certificate Numbers **TNG - MEA1371**
 KNT - MEA1255
 PEF - MEA1206

Continuing Education Unit (CEU) 0.1**Course Description**

The purpose of this module is to evaluate an individual with reference to the procedures and methods for inspecting a pipeline following excavation activities and performing leak surveys after blasting.

Objectives

- Define and demonstrate knowledge of inspection procedures performed following excavation activities and leak survey performed after blasting.
- Utilize leak survey techniques.
- Monitor for pressure loss.
- Recognize and react to abnormal conditions for inspection following excavation activities and leak survey after blasting.

195-0805 Inspect Existing Pipe Following Movement (CT30)

MEA Certificate Numbers **TNG - MEA1372**
 KNT - MEA1256
 PEF - MEA1207

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of inspecting existing pipe following a movement.

Objectives

- Define and demonstrate working knowledge of inspecting an existing pipe following movement.
- Inspect the pipeline for secondary stresses, physical damage, corrosion, and coating damage.
- Recognize and react to abnormal operating conditions when inspecting existing pipe following movement.

**195-0806 Inspection Activities for Tie-ins, Pipeline Replacements or Other Components
Connecting to an Existing Pipeline (CT34)**

MEA Certificate Numbers **TNG - MEA1373**
 KNT - MEA1257
 PEF - MEA1208

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of inspecting activities for tie-ins, pipeline replacements, or other components connecting to an existing pipeline.

Objectives

- Define and demonstrate working knowledge of inspection activities for tie-ins, pipe replacements, or other components connecting to an existing pipeline.
- Visually inspect pipe and pipe components.
- Verify welder & NDT personnel qualifications.

- Ensure proper installation.
- Recognize and react to abnormal operating conditions when inspecting clearance of existing pipe to underground structures.

195-0808 Inspect Buried Pipe When Exposed (CT10)

MEA Certificate Numbers **TNG - MEA1374**
 KNT - MEA1258
 PEF - MEA1209

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with regard to practices performed when inspecting buried pipe as it relates to a DOT pipeline system.

Objectives

- Inspect for physical damage.
- Inspect the condition of the pipe coating.
- Inspect for corrosion.
- Recognize and react to abnormal operating conditions for inspecting and examining buried pipe when exposed.

195-0809 Inspect, Test and Calibrate Overfill Protective Devices (CT11)

MEA Certificate Numbers **TNG - MEA1375**
 KNT - MEA1259
 PEF - MEA1210

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with regard to practices performed to prevent overfilling of break out tanks.

Objectives

- Inspect for physical damage.
- Inspect, test and calibrate overfill protective devices.
- Recognize and react to abnormal operating conditions for inspecting and calibrating overfill protective devices.

195-0810 Inspection of Breakout Tanks (CT18)

MEA Certificate Numbers TNG - MEA1376
 KNT - MEA1260
 PEF - MEA1211

Continuing Education Unit (CEU) 0.1

Course Description

The purpose of this module is to evaluate an individual with regard to procedures and methods performed during the inspection of breakout tanks.

Objectives

- Define and demonstrate a working knowledge of regulatory compliance and inspection requirements for breakout tanks.
- Inspect breakout tanks in accordance with API Standard 653.
- Inspect breakout tanks in accordance with API Standard 510.
- Inspect other breakout tanks.
- Recognize and react to abnormal operating conditions when inspecting breakout tanks.

195-1204 Inspect Surface Conditions of Right-of-Way and Perform Leak Surveys for Liquid Pipelines (CT16)

MEA Certificate Numbers TNG - MEA1377
 KNT - MEA1261
 PEF - MEA1212

Continuing Education Unit (CEU) 0.1

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of inspecting surface conditions of right-of-way and performing leak surveys for liquid pipelines.

Objectives

- Inspect surface conditions of right-of-way.
- Follow the company's reporting protocols.
- Recognize and react to abnormal operating conditions when inspecting surface conditions of right-of-way and performing leak surveys.

195-1205 Inspect Navigable Waterway Crossings (CT17)

MEA Certificate Numbers TNG - MEA1378
 KNT - MEA1262
 PEF - MEA1213

Continuing Education Unit (CEU) 0.1**Course Description**

The purpose of this module is to evaluate an individual with reference to the procedures and methods involved with inspecting navigable waterway crossings.

Objectives

- Define and demonstrate working knowledge of inspecting navigable waterway crossings.
- Use probes and sonar devices to determine the depth of cover and verify the location of a pipeline.
- Recognize and react to abnormal operating conditions.

195-1206 Perform Leakage Survey (CT45)

MEA Certificate Numbers **TNG - MEA1379**
 KNT - MEA1263
 PEF - MEA1214

Continuing Education Unit (CEU) 0.1**Course Description**

The purpose of this module is to evaluate an individual with regard to the procedures and methods of performing a leakage survey.

Objectives

- Define and demonstrate a working knowledge of leakage surveys and the equipment used to perform them.
- Perform visual surveys.
- Perform a pipeline leakage survey using a combustible gas detector.
- Perform a pipeline leakage survey using a flame ionization detector.
- Recognize and react to abnormal operating conditions when performing leakage surveys.

195-1301 Conduct Pressure Test (CT37)

MEA Certificate Numbers **TNG - MEA1380**
 KNT - MEA1264
 PEF - MEA1215

Continuing Education Unit (CEU) 0.1**Course Description**

The purpose of this module is to evaluate an individual with regard to the procedures and methods of conducting a pressure test to prove the integrity of the pipeline.

Objectives

- Define and understand the function of a pressure test and the equipment used to perform it.

- Conduct a pressure test and record the results.
- Recognize and react to abnormal operating conditions when conducting a pressure test.

195-1401 Abandoning, Safe Disconnect, Purging and Sealing of Pipeline Facilities (CT32)

MEA Certificate Numbers **TNG - MEA1381**
 KNT - MEA1265
 PEF - MEA1216

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of abandoning, safely disconnecting, purging, and sealing of pipeline facilities.

Objectives

- Define and understand the function of requirements for permanently or temporarily decommissioning or removing a pipeline facility from service.
- Safely disconnect pipeline facilities.
- Purge pipeline facilities.
- Seal a disconnected portion of pipeline.
- Recognize and react to abnormal operating conditions when abandoning, safely disconnecting, purging, and sealing of pipeline facilities.

195-1402BF Backfilling a Trench Following Maintenance (CT35)

MEA Certificate Numbers **TNG - MEA1382**
 KNT - MEA1266
 PEF - MEA1217

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of backfilling a trench following maintenance.

Objectives

- Define and demonstrate working knowledge about the function of backfilling a trench following pipeline maintenance.
- Perform backfilling operations on the pipeline following maintenance.
- Determine if a tamping tool and backhoe are used properly.
- Determine the amount of cover required according to 49 CFR 195.248.
- Recognize and react to abnormal conditions when backfilling a trench following maintenance.

195-1402MP Moving In-Service Pipe (CT29)

MEA Certificate Numbers TNG - MEA1383
 KNT - MEA1267
 PEF - MEA1218

Continuing Education Unit (CEU) 0.1

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods involved with moving in-service pipe. This task is for field supervisory personnel who will be coordinating and managing the pipeline movement process. Field personnel performing tasks such as pipeline location, excavation, backfilling, inspection and temporary marking will need qualification in each of these tasks prior to assisting in the movement of in-service pipe.

Objectives

- How to determine the allowable line pressure in a section of pipe to be moved.
- How to prepare for pipeline movement activities.
- How to move in-service pipe.
- Recognize and react to abnormal operating conditions.

195-1405CG Measurement Clearance from Existing Pipe to Underground Structures Installed by Excavation, Boring, Directional Drilling (CT31)

MEA Certificate Numbers TNG - MEA1384
 KNT - MEA1268
 PEF - MEA1219

Continuing Education Unit (CEU) 0.1

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of measuring clearances from existing pipe to new underground structures installed by excavation, boring, and directional drilling.

Objectives

- Define and demonstrate working knowledge of inspecting clearances between existing pipes and underground structures as well as equipment used to perform the inspection.
- Assure minimum clearances are maintained and that interference and corrosion control testing are performed during the installation of foreign pipelines or structures.
- Recognize and react to abnormal operating conditions when measuring clearance from existing pipe to underground structures installed by excavation, boring, or directional drilling.

195-1413 Place and Maintain Line Markers (CT15)

MEA Certificate Numbers **TNG - MEA1385**
 KNT - MEA1269
 PEF - MEA1220

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual on the procedures and methods of marking a pipeline.

Objectives

- Place and maintain line markers.
- Locate a pipeline.
- Install a line marker.
- Inspect and maintain line markers and aerial line markers.
- Recognize and react to abnormal operating conditions when placing and maintaining line markers.

195-1414PS Operations of a Pipeline System (CT39.2)

MEA Certificate Numbers **TNG - MEA1388**
 KNT - MEA1272
 PEF - MEA1223

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of operating a pipeline system.

Objectives

- Identify the activities associated with the safe start-up of a pipeline.
- Identify the steps necessary for the safe shutdown of a pipeline.
- Demonstrate knowledge of monitoring and maintenance of pressures, flows, communications, and line integrity.
- Identify the necessary steps for the manual or remote opening and/or closing of a valve or other equipment.
- Recognize and react to abnormal operating conditions for the task.

195-1414LR Operate Pressure Relieving Devices for Launching and Receiving Facilities (CT41)

MEA Certificate Numbers **TNG - MEA1387**
 KNT - MEA1265
 PEF - MEA1222

Continuing Education Unit (CEU) 0.1**Course Description**

The purpose of this module is to evaluate an individual with regard to the procedures and methods of operating pressure relieving devices for launching and receiving facilities.

Objectives

- Identify the names and operation of the valves used on a launching facility.
- Explain the sequence of events needed to isolate, relieve pressure, and drain fluids from the launcher barrel.
- Understand the procedures involved with launching a pig.
- Identify the names and operations of the valves used on a receiving facility.
- Understand the procedures involved with receiving a pig.
- Explain the sequence of events needed to isolate, relieve pressure, and drain fluids from the receiver barrel.
- Recognize and react to abnormal operating conditions during launching and receiving activities.

195-1418PG Purge a Pipeline (CT48)

MEA Certificate Numbers **TNG - MEA1389**
 KNT - MEA1273
 PEF - MEA1224

Continuing Education Unit (CEU) 0.1**Course Description**

The purpose of this module is to evaluate an individual with regard to the procedures and methods of purging a pipeline.

Objectives

- Define and understand how to safely purge hydrocarbons or air from a pipeline.
- Remove hydrocarbons from a pipeline.
- Remove air from the pipeline.
- Recognize and react to abnormal operating conditions when purging a pipeline.

195-1422 Internal Corrosion Remediation (CT12)

MEA Certificate Numbers **TNG - MEA1390**
 KNT - MEA1274
 PEF - MEA1225

Continuing Education Unit (CEU) 0.1

Course Description

The purpose of this module is to evaluate an individual with regard to Internal Corrosion Remediation as it relates to a DOT pipeline system.

Objectives

- Adjust inhibitor injection rates to achieve an acceptable industry and company standard to prevent internal corrosion.
- Recognize and react to abnormal operating conditions for internal corrosion remediation.

195-1424 Installation or Replacement/Repair of Support Structures on Existing or New Aboveground Components (CT33)

MEA Certificate Numbers **TNG - MEA1391**
 KNT - MEA1275
 PEF - MEA1226

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of installing, replacing or repairing of support structures on existing or new aboveground components.

Objectives

- Define and demonstrate working knowledge of replacement or repair of support structures on existing or new aboveground components.
- Explain activities required to install additional or revised support structure elements to existing aboveground structures.
- Recognize and react to abnormal operating conditions when installing, replacing, or repairing support structures on existing or new aboveground components.

195-1427VI Inspect Valves (CT22)

MEA Certificate Numbers **TNG - MEA1392**
 KNT - MEA1276
 PEF - MEA1227

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with reference to the procedures and methods involved with inspecting all in-service valves, excluding relief valves, physically connected to a DOT pipeline system. Examples of valves that are considered to be part of this task include the following: pump suction, pump discharge, manifold valves, pressure control valves, block valves, check valves and tank valves.

Objectives

- Inspect valves.
- Conduct a routine walk-around inspection.
- Conduct an external integrity inspection of the valve.
- Perform a function test of the valve.
- Recognize and react to abnormal operating conditions when inspecting valves.

195-1427VM Performing Maintenance on Valves (CT42)

MEA Certificate Numbers **TNG - MEA1393**
 KNT - MEA1277
 PEF - MEA1228

Continuing Education Unit (CEU) **0.1**

Course Description

This course provides information on the procedures and methods of performing maintenance on all valves (except relief valves).

Objectives

- Identify components and maintenance of valves
- Perform valve maintenance.
- Perform actuator/operator maintenance.
- Recognize and react to abnormal operating conditions.

195-1427VR Repair Valves (CT23)

MEA Certificate Numbers **TNG - MEA1394**
 KNT - MEA1278
 PEF - MEA1229

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with reference to the procedures and methods involved with repairing valves, excluding relief valves.

Objectives

- Understand valve types and components.
- Repair valves
- Repair actuators/operators.
- Recognize and react to abnormal operating conditions.

195-1443 Perform Flange Bolting Procedures (CT43)

MEA Certificate Numbers TNG - MEA11999
 KNT - MEA11860
 PEF - MEA11985

Continuing Education Unit (CEU) 0.1

Course Description

The purpose of this module is to evaluate an individual with reference to the procedures and methods involved in performing flange bolting procedures as they relate to a DOT pipeline system.

Objectives

- Identify hazards and perform hot bolting.
- Perform flange disassembly procedures (make-up).
- Perform flange disassembly procedures (break-out).
- Recognize and properly react to abnormal operating conditions.

195-1444 Tubing and Tube Fitting, Handling and Installation (CT44)

MEA Certificate Numbers TNG - MEA12000
 KNT - MEA11861
 PEF - MEA11986

Continuing Education Unit (CEU) 0.1

Course Description

This course identifies practices that are necessary for handling and installing metal tubing. Elements of this task include understanding the design of tubing systems, handling tubing products, and installing tubing and tubing components.

Objectives

- Demonstrate knowledge of instrumentation tubing, tube fittings and tubing components.
- Demonstrate the correct methods for handling tubing, tube fittings, and tubing components.
- Design or verify a correct layout of a tubing system
- Correctly cut and de-burr metal tubing.
- Perform a correct 90 degree bend of metal tubing.
- Perform installation of small diameter compression tube fittings.
- Recognize and properly react to abnormal operating conditions.

195-1465 Damage Prevention During Excavation of In-Service Pipe (CT65)

MEA Certificate Numbers TNG - MEA12002
 KNT - MEA11992
 PEF - MEA11993

Continuing Education Unit (CEU) 0.1

Course Description

This course provides information on damage prevention during excavation of in-service pipe.

Objectives

- Prepare for excavation activities.
- Perform inspection activities during excavation.
- Inspection activities following excavation.
- Abnormal operating conditions.

195-1506 Operate Odorant Equipment (CT52)

MEA Certificate Numbers TNG - MEA1395
 KNT - MEA1279
 PEF - MEA1230

Continuing Education Unit (CEU) 0.1

Course Description

The purpose of this module is to evaluate an individual with reference to the procedures and methods involved with operating odorant equipment.

Objectives

- Understand the characteristics of odorants and the requirements for odorants in natural gas pipelines.
- Determine odorization injection rates and test for odorant levels.
- Recognize the different types of odorant injection equipment.
- Operate and maintain an odorant injection system.
- Recognize and react to abnormal operating conditions when operating odorant equipment.

195-1804 Inspect, Test, and Calibrate Relief Valves (CT24)

MEA Certificate Numbers TNG - MEA1396
 KNT - MEA1280
 PEF - MEA1231

Continuing Education Unit (CEU) 0.1

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of inspecting, testing and calibrating relief valves.

Objectives

- Recognize the purpose and function of relief valves.
- Understand the terminology associated with inspecting, testing, and calibrating relief valves.
- Identify the procedures for the inspection, testing, and calibration of relief valves.
- Recognize and react to abnormal operating conditions when inspecting, testing, and calibrating relief valves.

195-1805 Maintain/Repair Relief Valves (CT25)

MEA Certificate Numbers **TNG - MEA1397**
 KNT - MEA1281
 PEF - MEA1232

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of maintaining and repairing pressure relief valves.

Objectives

- Identify critical parts associated with a relief valve.
- Disassemble, clean, inspect, repair, and replace internal components of a relief valve.
- Repair and calibrate the sensing device and reassemble and reinstall the valve.
- Recognize and react to abnormal operating conditions when maintaining and repairing relief valves.

195-1806 Inspect, Test and Calibrate Pressure Limiting Devices (CT26)

MEA Certificate Numbers **TNG - MEA1398**
 KNT - MEA1282
 PEF - MEA1233

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of inspecting, testing and calibrating pressure limiting devices.

Objectives

- Recognize and locate pressure limiting devices.
- Identify procedures for isolation or removal of a pressure limiting device.

- Inspect, test, and calibrate pressure limiting devices.
- Repair and reinstall pressure limiting devices.
- Recognize and react to abnormal operating conditions.

195-1807 Inspect, Test and Calibrate Pressure Switches and Transmitters (CT27)

MEA Certificate Numbers **TNG - MEA1399**
 KNT - MEA1283
 PEF - MEA1234

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of inspecting, testing, and calibrating pressure switches and transmitters.

Objectives

- Identify types of testing methods and when they are used.
- Inspect, test, and calibrate pressure switches and transmitters.
- Recognize and react to abnormal operating conditions when inspecting, testing, and calibrating pressure switches and transmitters.

195-1808 Verify or Set Protection Parameters for Programmable Controllers and/or other Instrumentation Control Loopsollers (CT28)

MEA Certificate Numbers **TNG - MEA1400**
 KNT - MEA1284
 PEF - MEA1235

Continuing Education Unit (CEU) **0.1**

Course Description

This course provides information on procedures and methods involved with verifying or setting protection parameters for programmable controllers and/or instrumentation control loops as they relate to a DOT pipeline system.

Objectives

- Understanding the functions of a PLC and elements that are involved.
- Know how to verify data set points, parameters and data location within PLC program.
- Perform calibration, testing, and document of system set points.
- Recognize and react to abnormal operating conditions when verifying or setting protection for programmable controllers and/or other instrumentation control loops.

195-1819 Testing an Emergency Shutdown Device (CT50)

MEA Certificate Numbers TNG - MEA1401
 KNT - MEA1285
 PEF - MEA1236

Continuing Education Unit (CEU) 0.1

Course Description

This purpose of this module is to evaluate an individual with reference to the procedures and methods involved with testing an emergency shutdown device, including remote control shutdown devices.

Objectives

- Define and understand the function of testing emergency shutdown systems.
- Test emergency shutdown systems.
- Recognize and react to abnormal operating conditions when testing an emergency shutdown system.

195-2301 Perform Incremental Pressure Increases to Uprate MAOP(CT51)

MEA Certificate Numbers TNG - MEA1402
 KNT - MEA1286
 PEF - MEA1237

Continuing Education Unit (CEU) 0.1

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of performing incremental pressure increases to uprate maximum allowable operating pressure on an existing line segment.

Objectives

- Identify and demonstrate a working knowledge of performing incremental pressure increases to uprate maximum allowable operating pressure.
- Perform incremental pressure increases.
- Recognize and react to abnormal operating conditions when performing incremental pressure increases in order to uprate MAOP.

195-2401 Maintenance Welding on Pipelines (CT38)

MEA Certificate Numbers TNG - MEA1403
 KNT - MEA1287
 PEF - MEA1238

Continuing Education Unit (CEU) 0.1

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of maintenance welding on pipelines.

Objectives

- Supervise, inspect and/or perform maintenance welding on pipelines.
- Repair arc burns.
- Repair defective welds other than welds containing cracks.
- Repair a cover pass on a weld containing a defect other than a crack.
- Repair butt welds containing cracks.
- Repair previously repaired areas.
- Replace welds or cylinders of pipe.
- Recognize and react to abnormal operating conditions when performing maintenance welding on pipelines.

195-2705 Computational Pipeline Monitoring (CPM) Leak Detection (CT40)

MEA Certificate Numbers **TNG - MEA1404**
 KNT - MEA1288
 PEF - MEA1239

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of performing leak detection with Computational Pipeline Monitoring.

Objectives

- Understand functions of CPM equipment.
- Test, calibrate, repair, replace, and maintain CPM equipment.
- Verify that the leak detection system meets design specifications.
- Recognize and react to abnormal operating conditions when performing CPM leak detection techniques that assist in maintaining the integrity of a pipeline system.

195-3001 Provide Security for Pipeline Facilities (CT21)

MEA Certificate Numbers **TNG - MEA1405**
 KNT - MEA1289
 PEF - MEA1240

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with reference to the procedures and methods involved with providing protection to pipeline facilities.

Objectives

- Provide protection to the pipeline facilities.
- Recognize and react to abnormal operating conditions when providing security for pipeline facilities.

195-3605 Performing General Pipeline Repair Activities (CT36)

MEA Certificate Numbers **TNG - MEA1406**
 KNT - MEA1290
 PEF - MEA1241

Continuing Education Unit (CEU) **0.1**

Course Description

The purpose of this module is to evaluate an individual with regard to the procedures and methods of performing general pipeline repair.

Objectives

- Identify and demonstrate knowledge of procedures used for general pipeline repair activities.
- Install tight fitting sleeves.
- Install oversleeves.
- Install composite wrap sleeves.
- Install mechanical split repair sleeves.
- Install mechanical couplings.
- Perform hot tapping.
- Install pipeline plugs.
- Install completion plugs.
- Recognize and respond to abnormal operating conditions for general pipeline repair activities.