



Part 4 Class- Corrosion/Purging

Training- 1 Day Session.....\$200/Person
Testing (48 Hours after Training)- 1 Day Session.....\$200/Person

NOTE: Failed Hands-On Evaluations will be charged a retesting fee of \$110/Student, and must be done by a NGA evaluator (Minimum time is 48 Hours after a failed evaluation)

Classroom Training:

- Class Overview
- Safety/PPE

Covers Tasks:

- 11/12/17-Pipe Coatings
 - D – Wax Tape
 - H - Paint
- 14- Install/Replace an Anode
- 15B- Install and Replacing Electrical Isolation Couplings
- 16- Install/Replace a Corrosion Test Station
- 32- Purging a Pipeline into Service
- 33- Purging a Pipeline out of Service
- 34- Performing a Pressure Test on a Pipeline
- 45- Restore Service
- National Fuel Procedure Manual Sections Referring to Material Listed Above.

Hands-On Training:

- Pipe Coatings (Wax Tape/Paint)
- Thermite Welding
- Purging/Pigging Operations (Stacks/Pigs/Pig Catcher)
- Pressure Testing (Gauges/Manometers/Kulhman)



Testing:

- NGA-WE-11/12/17A-General Knowledge
- NGA-WE-11/12/17D-Wax Tape
- NGA-WE-11/12/17H- Paint
- NGA-WE-14-Installing/Replacing an Anode
- NGA-WE-15B- Install and Replacing Electrical Isolation Couplings
- NGA-WE-16-Installing/Replacing a Corrosion Test Station
- NGA-WE-32-Purging a Pipeline into Service
- NGA-WE-33-Purging a Pipeline out of Service
- NGA-WE-34-Performing a Pressure Test on a Pipeline
- NGA-WE-45-Restore Service
- NGA- HANDS-ON- Thermite Welding

Below is the Covered Tasks Listing the Domains and Elements that will be covered during Training Class.

TASK #11: Applying Pipe Coating in the Field

1. Measurements

- a. Knowledge of the measurement tools used

2. Coating Failures and Repairs

- a. Knowledge of proper surface preparation
- b. Know how to recognize and correct defects in coatings

3. Wax Tape Pipe Coatings

- a. Knowledge of proper wax tape application methods
- b. Knowledge of appropriate uses of wax tape pipe coatings

4. Paint Pipe Coatings (Spray and Brush)

- a. Knowledge of proper paint pipe coating application methods
- b. Knowledge of proper uses of paint pipe coatings



#14: Installing/Replacing an Anode on a Pipeline

1. Anode Installation and Replacement
 - a. Know How to Handle an Anode
 - b. Know Where to Place an Anode Relative to a Pipe
 - c. Know How to Install and Replace an Anode
 - d. Knowledge of Documentation Requirements

TASK #15: Installing, Replacing and Testing Electrical Isolation Couplings on a Pipeline

1. Insulating Fittings
 - a. Knowledge of the different types of insulating fittings
 - b. Knowledge of proper assembly and installation of insulating fittings
 - a. Knowledge of factors that could cause insulating fittings to fail
2. Ensuring Electrical Isolation
 - a. Knowledge of tools used for verifying isolation and locating shorts
 - b. Know how to use tools to test for electrical isolation
 - c. Know how to interpret readings from an isolation test

TASK #16: Install/Replace a Corrosion Test Station on a Pipeline

1. **Purpose and Type of Test Stations**
 - a. Knowledge of test station purpose and function
 - b. Knowledge of test station types
2. **Installing a Test Station**
 - a. Know how to use exothermic welding to connect test station wires to a pipeline
 - b. Know how to use mechanical means of connecting test station wires to a pipeline
 - c. Knowledge of where to locate test stations
 - c. Demonstrate how to perform an exothermic weld
2. **Repairing a Test Station**
 - a. Knowledge of wire splicing
 - b. Knowledge of wire insulating



TASK #32: Purging a Pipeline into Service

TASK #33: Purging a Pipeline Out of Service

1. Purging Fundamentals
 - a. Knowledge of the Purging Purpose
 - b. Knowledge of Hazards of Static Electricity in Purging a Pipeline
 - c. Knowledge of the Components to Ground
 - d. Knowledge of the Communication Requirements
 - e. Knowledge of the Purging Medium
2. Purging Process
 - a. Knowledge of Vent Stack Requirements
 - b. Knowledge of the Vent Stack Location
 - c. Knowledge of the Inert Gas Process
 - d. Knowledge of the Purge Velocity
 - e. Know how to Secure the Required Sample Readings
3. Abnormal Operating Conditions
 - a. Know how to identify and respond to an activated EFV
 - b. Know how to identify and respond to inadequate odorization
 - a. Know how to respond to an incomplete purge

TASK #34: Performing Pressure Test on a Pipeline

1. Pressure Testing Fundamentals
 - a. Knowledge of the Equipment Required for Pressure Testing
 - b. Knowledge of the Appropriate Test Pressure
 - a. Knowledge of Testing Duration
 - b. Knowledge of the Medium Used
2. Pressure Testing Process
 - a. Knowledge of the Pressure Testing Process
 - b. Knowledge of the Documentation Requirements
3. Abnormal Operating Conditions
 - a. Know How to Identify and Respond to a Leak During a Pressure Test
 - b. Know How to Identify and Respond to a Gauge Malfunction



TASK #45: Restoring Service

1. Procedure for Isolating and Reactivating a Customer's Meter
 - a. Know actions to take when preparing to restore service
 - b. Know how operate valves to shut off a customer's meter
 - c. Know how to operate valves to reactivate a customer's service
 - d. Know how to verify pressure when isolating or reactivating service

2. Valves
 - a. Know how to identify types of valves used in isolating and restoring service
 - b. Know how to identify the operating position of a valve

3. Abnormal Operating Conditions
 - a. Know how to respond when a customer's facility is inaccessible
 - b. Know how to identify and respond to an activated excess flow valve