



Part 4 Class- Corrosion/Purging

NY

Training- 1 Day Session..... (Hands-On 2 Hours) 8 Hours
Testing (48 Hours after Training)- 1 Day Session..... 8 Hours

PA

Training- 1 Day Session..... (Hands-On 2 Hours) 8 Hours
Testing (12 Hours after Training)- 1 Day Session..... 8 Hours

NOTE: NY will qualify in the **NFG HYB** series and PA will qualify in the **NFGPA** series. NFG Trainer will discuss the specifics/differences of each series during class.

Classroom Training:

- Class Overview
- Safety/PPE

Covers Tasks:

- 11/12/17A – Basic (Paint and Wax Tape)
- 14- Installing/Replacing an Anode including Exothermic Welding
- 15B- Installing and Replacing Electrical Isolation Couplings
- 16- Install/Replace a Corrosion Test Station **(PA Only)**
- 32/33- Purging a Pipeline in and out of Service
- 34- Performing a Pressure Test on a Pipeline
- 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/Kuhlman)

Testing:

- Written Test (WE) 11/12/17A Basic – Paint and Wax Tape
- WE-14-Installing/Replacing an Anode
- WE-15B- Installing and Replacing Electrical Isolation Couplings
- WE-16-Install/Replace a Corrosion Test Station **(PA Only)**
- WE-32/33-Purging a Pipeline in and out of Service
- WE-34-Performing a Pressure Test on a Pipeline
- WE-Task 804 - Part 4 - Operating & Maintenance Procedures
- Performance Evaluation (PE) 14/16-Exothermic Welding



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

COVERED TASK #11/12/17A Basic: 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

COVERED TASK #14: Installing/Replacing an Anode

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

COVERED TASK #15B: Installing and Replacing Electrical Isolation Couplings

1. Insulating Fittings
 - a. Knowledge of the different types of insulating fittings
 - b. Knowledge of proper assembly and installation of insulating fittings
 - c. 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



COVERED 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
 - d. Demonstrate how to perform an exothermic weld
3. Repairing a Test Station
 - a. Knowledge of wire splicing
 - b. Knowledge of wire insulating

COVERED TASK #32: Purging a Pipeline into Service

COVERED 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

COVERED 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



- c. Knowledge of Testing Duration
- d. 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