



Part 5 Class- Stopping Gas Flow/Leak Repair

NY

Training- 4 Day Session..... (Hands-On 12 Hours) 32 Hours
Testing (48 Hours after Training)- 1 Day Session..... 8 Hours

PA

Training- 3 Day Session..... (Hands-On 12 Hours) 24 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:

- 08- Visually Inspecting for Internal Corrosion
- 23/24- Inspecting the Condition of Exposed Pipe
- 29/30A- Repairing a Plastic, Steel and Cast Iron Distribution Pipe
- 35- Stopping Gas Flow
- 36 & 47- Abandonment of Facilities
- 37- Tapping a Cast Iron, Steel & Plastic Pipe
- 39A- Removing a Service Tee from a Steel and Cast Iron Main
- National Fuel Procedure Manual Sections Referring to Material Listed Above.

Hands-On Training:

- Pit Depth Gauge
- Bagging
- Stopping-Williamson
- Tapping- Williamson/Footage
- Squeezing- Manual/ Hydraulic
- Leak Repair- Live Steel/Plastic Leaks (Group Activity)Tapping
- Tapping- Steel Punch Tee
- Anaerobic Injection
- Encapsulation



Testing:

- Written Test (WE)-08-Visually Inspecting for Internal Corrosion
- WE-23/24-Inspecting the Condition of Exposed Pipe
- WE-29A/30A- Repairing a Plastic, Steel and Cast Iron Distribution Main
- WE-35.1B- Stopping Gas Flow (Squeeze-off Mains and Services)
- WE-35.2/35.3- Stopping Gas Flow (Bagging, Valves and Mechanical Only)
- WE-36/47- Abandonment of Facilities
- WE-37B-Tapping Cast Iron Pipe
- WE-37C-Tapping Steel Pipe
- WE-39A-Removing Service Tee from a Steel and Cast Iron Main
- WE-805- Part 5 Operating and Maintenance Procedures
- Performance Evaluation (PE) 35.1- Squeeze-off
- PE-35.2- Bagging
- PE-35.3- Mechanical
- PE-37B.1 & 37C.1 – Tapping Cast Iron and Steel Pipe with Specialized Equipment

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

COVERED TASK #08: Visually Inspecting for Internal Corrosion

1. Identifying Internal Corrosion
 - a. Know how to recognize internal corrosion
 - b. Know ways of detecting the presence of internal corrosion
 - c. Know requirements for inspecting for internal corrosion
2. Responding to Internal Corrosion
 - a. Know what to do when internal corrosion is found
 - b. Know how to properly document internal corrosion



COVERED TASK #23/24: Inspecting the Condition of Exposed Pipe

1. Types of Pipe and Coating
 - a. Knowledge of the different types of pipe materials
 - b. Knowledge of the different types of coating materials
2. Inspecting for Pipe and Coating Damage
 - a. Knowledge of external pipe inspection practices
 - b. Know how to identify gouges, nicks and scratches
 - c. Know how to identify actual or potential facility damage due to improper installation
 - d. Know how to identify coating damage
3. Abnormal Operating Conditions Involving Exposed Pipe
 - a. Know how to respond to damage found on exposed pipe

COVERED TASK #29/30A: Repairing a Plastic, Steel and Cast Iron Distribution Main

1. Assessment of Distribution Pipeline Damage
 - a. Know how to determine the type of pipe and pipeline uncovered
 - b. Know actions to take when pipeline damage is identified
2. Repair of Plastic Pipe
 - a. Know how to identify gouges, kinks and scratches
 - b. Knowledge of potential sources of ignition
 - c. Knowledge of static electricity and steps to prevent it
 - d. Knowledge of the repair clamp process
 - e. Know-when to replace vs. repair a segment of plastic pipe
3. Repair of Steel Pipe
 - a. Know how to identify cause of damage
 - b. Know-how to select a repair method
 - c. Knowledge of the clamp installation process
 - d. Knowledge of the coupling installation process
 - e. Knowledge of the split sleeve installation process
 - f. Know-when to replace vs. repair a segment of steel pipe
4. Repair of Cast Iron Pipe
 - a. Know how to identify cause of damage
 - b. Know how to select a repair method
 - c. Knowledge of the joint clamp installation process
 - d. Knowledge of the joint anaerobic sealing process
 - e. Know when to replace vs. repair a segment of cast iron pipe



5. Abnormal Operating Conditions
 - a. Know how to identify and respond to records discrepancies

COVERED TASK #35: Stopping Gas Flow

1. Stopping Gas Flow Fundamentals
 - a. Knowledge of system flow and pressures
 - b. Knowledge of system monitoring during stopping operations
 - c. Knowledge of reasons for stopping gas flow
2. Stopping Gas Flow by Use of Valves
 - a. Requisite – Inspect and Operate Valves
 - b. Know how to identify and use valves for gas stopping work

COVERED TASK #35: Stopping Gas Flow (cont.)

3. Stopping Gas Flow by Squeeze-off
 - a. Knowledge of squeeze-off tool selection, inspection and use
 - b. Know how to verify pipe specifications
 - c. Knowledge of where to squeeze off
 - d. Knowledge of the plastic squeeze-off process
 - e. Knowledge of steel pipe and hydraulic squeeze-off process
 - f. Demonstrate squeeze-off and release process
4. Stopping Gas Flow by Bagging
 - a. Knowledge of bag/diaphragm selection and inspection
 - b. Knowledge of bagging process, including bag installation and removal
 - c. Demonstrate bag installation and removal process
5. Stopping Gas Flow by Use of Stopping Equipment
 - a. Knowledge of equipment and fitting selection
 - b. Knowledge of stopping equipment installation and removal process
 - c. Demonstrate equipment installation and use process
6. Abnormal Operating Conditions
 - a. Know how to identify and respond to insufficient shutoff
 - b. Know how to identify and respond to pipe damaged in stopping off gas
 - c. Know how to respond to a missing coupon



COVERED TASK #36/47: Abandonment of Facilities

1. Fundamentals of Abandonment
 - a. Know the differences between abandoned and inactive pipelines
2. Abandonment Process
 - a. Knowledge of procedures for abandoning a pipeline
 - b. Knowledge of appropriate locations for abandoning a pipeline
 - c. Knowledge of abandoned end sealing process
3. Abandonment Documentation
 - a. Knowledge of documentation requirements

COVERED TASK #37BC: Tapping Cast Iron and Steel Pipe with Specialized Equipment

1. Tapping a Plastic Pipeline with Specialized Equipment
 - a. Knowledge of the fittings used for tapping
 - b. Knowledge of the tapping process
 - c. Know how to identify and respond to a tapping failure
 - d. Know how respond to a dropped coupon
 - e. Demonstrate the tapping process
2. Tapping a Cast Iron / Ductile Pipeline with Specialized Equipment
 - a. Knowledge of the fittings used for tapping
 - b. Knowledge of the tapping process
 - c. Know how to respond to a tapping failure
 - d. Demonstrate the tapping process
3. Tapping a Steel Pipeline with Specialized Equipment
 - a. Knowledge of the fittings used for tapping
 - b. Knowledge of the tapping process
 - c. Know how to identify and respond to a tapping failure
 - d. Know how respond to a dropped coupon
 - e. Know how to identify and respond to wall thickness irregularities
 - f. Demonstrate the tapping process



COVERED TASK #39A: Removing Service Tee or Fitting from Steel and Cast Iron Pipe

1. Distribution System
 - a. Know-How and Why to Measure System Pressure
 - b. Knowledge of Pipe Material and Fittings
 - c. Know-the Importance of System Pipe Size
2. Fitting Removal Process
 - a. Knowledge of the Process to Remove a Fitting on Cast Iron Pipe
 - b. Knowledge of the Process to Remove a Fitting on Steel Pipe
3. Abnormal Operating Conditions
 - a. Know How to Respond to a Cracked Cast Iron Pipe
 - b. Know How to Respond to Corrosion on the Pipe Surface or Hole