



Line Locating Class

NY

Training- 3 Day Session..... (Hands-On 4 Hours) 24 Hours
Testing (48 Hours after Training)- 1 Day Session..... 8 Hours

PA

Training- 2 Day Session..... (Hands-On 2 Hours) 16 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:

- 21 - Line Locating and Mark Out
- 22B - Inspecting of 3rd Party Excavations for Damage Prevention (**NFG PERSONAL ONLY**)
- 23/24 – Inspecting the Condition of Exposed Pipe
- 40 – Install/Replace Tracer Wire (**ONLY IF NOT QUALIFIED IN 31A**)
- State Specific Damage Prevention

Hands-On Training:

- Line Locating Equipment
- Tracer Wire Installation
- National Fuel Mapping System

Testing:

- Written Evaluation (WE) -21 - Line Locating and Mark out
- WE - State Specific NY/PA
- WE-22B - Inspecting of 3rd Party Excavations for Damage Prevention (**NFG ONLY**)
- WE-23/24 – Inspecting the Condition of Exposed Pipe
- WE-40 – Install/Replace Tracer Wire (**ONLY IF NOT QUALIFIED IN 31A**)
- Performance Evaluation (PE) -21.1 Line Locating and Mark Out



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

COVERED TASK #21: Line Locating and Mark Out

1. Marking

- a. Knowledge of marking colors
- b. Knowledge of where to mark

2. Fundamentals of Locating

- a. Demonstrate ability to read maps
- b. Knowledge of alternate methods used when maps are not available or are not correct
- c. Knowledge of the effects of soil characteristics on locating
- c. Knowledge of electromagnetic characteristics
- d. Knowledge of documentation requirements

3. Conductive Locating

- a. Knowledge of the conductive method
- b. Knowledge of grounding techniques
- c. Demonstrate locating process using the conductive method

4. Inductive Locating

- a. Knowledge of the inductive method
- b. Demonstrate locating process using the inductive method

5. Abnormal Operating Conditions

- a. Know how to identify and respond to missing or broken tracer wire
- b. Know how to respond to difficulty locating pipeline



TASK #22: Inspection of 3rd Party Excavations for Damage Prevention

1. Pipe Separation and Depth
 - a. Know how to identify perpendicular and parallel trench conditions of encroachment
 - b. Knowledge of pipe depth requirements
 - c. Knowledge of utility separation requirements
2. Inspecting for Adequate Pipeline Support
 - a. Know how to identify inadequate bracing of a pipeline
 - b. Know how to identify undermined pipelines
 - c. Knowledge of proper blasting operations around a pipeline facility
3. Excavator and Operator Practices
 - a. Knowledge of requirements and exemptions for notification of excavations and demolitions
 - b. Knowledge of directional bore practices
 - c. Knowledge of excavator responsibilities for protecting underground utility lines and locate markings
 - d. Know facility information needed by an operator for facility locating
 - e. Knowledge of operator practices related to abandoned lines
4. Damage Investigation for Root Cause Determination (Evaluation A ONLY)
 - a. Knowledge of information to be gathered and reported
 - b. Know how and when to report a reportable incident
 - c. Know how to perform a root cause investigation
5. Abnormal Operating Conditions
 - a. Know how to respond to potential pipe damage resulting from excavation or demolition
Know how to respond to damage prevention violations



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

TASK #40: Install/Replace Tracer Wire

1. Pipe Locating Material Installation
 - a. Knowledge of the materials used to assist with pipe locating and the installation process
 - b. AOC - Know how to respond to tracer wire failure