



Yellow Book – Updates with Op Qual related work

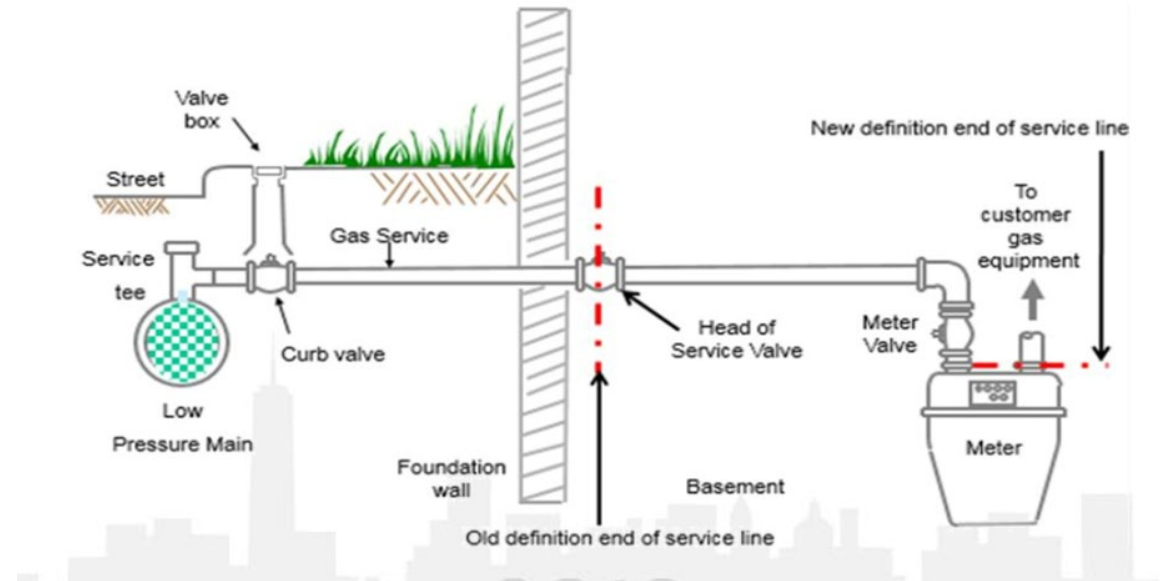


Gas SME Group
Luke Monaghan
Peter N Giasemis, PE

Gas Service Line Definition and Operator Qualification (OQ) Requirements

The **New York State Public Service Commission** (NYSPSC) has adopted a new gas service line definition to align New York States “service line definition” with the **Federal** definition in 49 CFR Part 192 – Code of Federal Regulations for the Transportation of Natural Gas- *follow the trail, Fed, State, Local Jurisdiction*

Gas Service Line as defined by the New York State Public Service Commission (NYSPSC) Part 255.

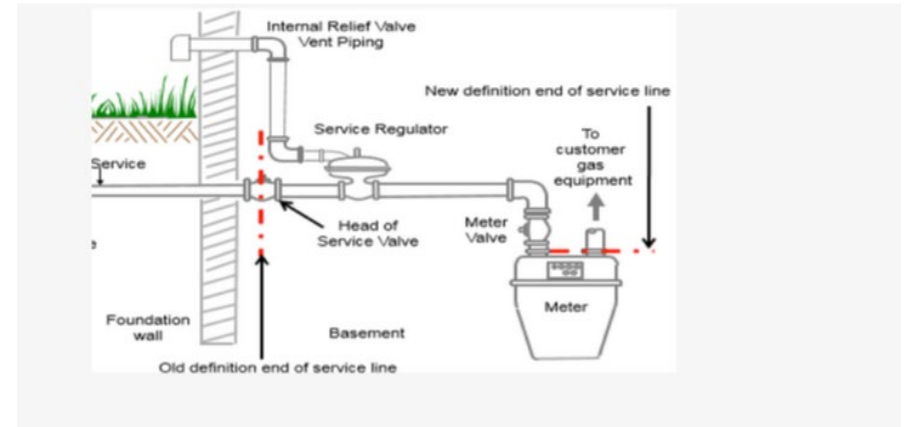


Meter piping repairs- This is Jurisdictional piping – Who does this? the Utility?

Minor/screw type repairs by Con Edison during emergency conditions only limited to regulator (on a high pressure service) and meter to make the condition safe

All repairs on the meter piping (piping between the head of service Valve and meter) to be done by a licensed master plumber that is **Operator Qualified – OQ** and hired by the customer

All Utility OQ Requirements and AHJ (NYCDOB) requirements apply



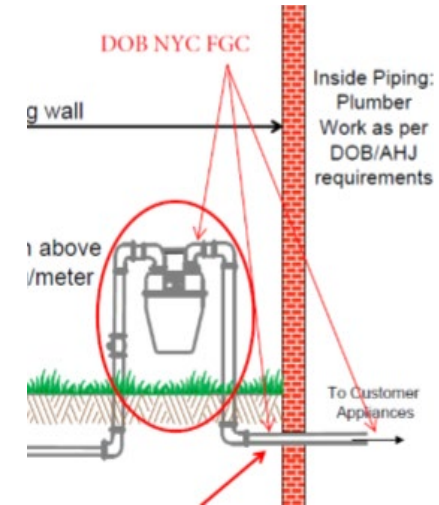
Gas Service Line Definition and Operator Qualification requirements for pipe installation, repair or replacement

If a meter is located **outside** the building, the utility service line jurisdiction terminates outside the building foundation wall

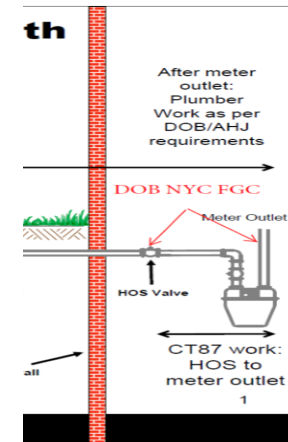
If a meter is located **inside** the building, the utility service line jurisdiction terminates at the outlet of the meter

What happens after the meter? The responsibility past the gas meter outlet is the
Authority Having Jurisdiction – **NYCDOB or Local Authority Having Jurisdiction. Additional Utility Requirements may also need to be followed**

FOLLOW DIRECTIONS RELATING TO OP QUAL IN THE YELLOW BOOK - new sketches and FAQs, and Con Edison procedures.



Outside or
inside



Different Scenarios of OQ Piping

In the current version Yellow Book Exhibit M pages 89-99

Gas Service Line Definition examples Exhibit M in the Yellow Book

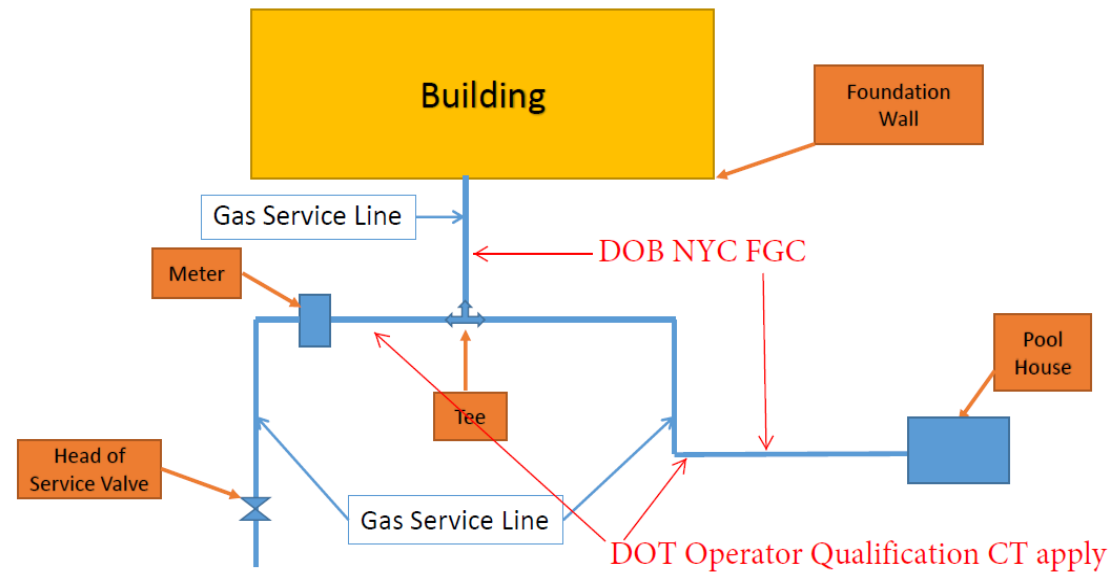
Color Key:

■ = Gas Service Line

■ = Customer Piping

Service Line Definition

Diagram #1



Note: The purpose of this diagram is to depict the jurisdiction of Gas Service Line vs. Customer Piping. It does not identify areas along the Gas Service Line for which the customer is responsible, per Con Edison's tariff agreements.

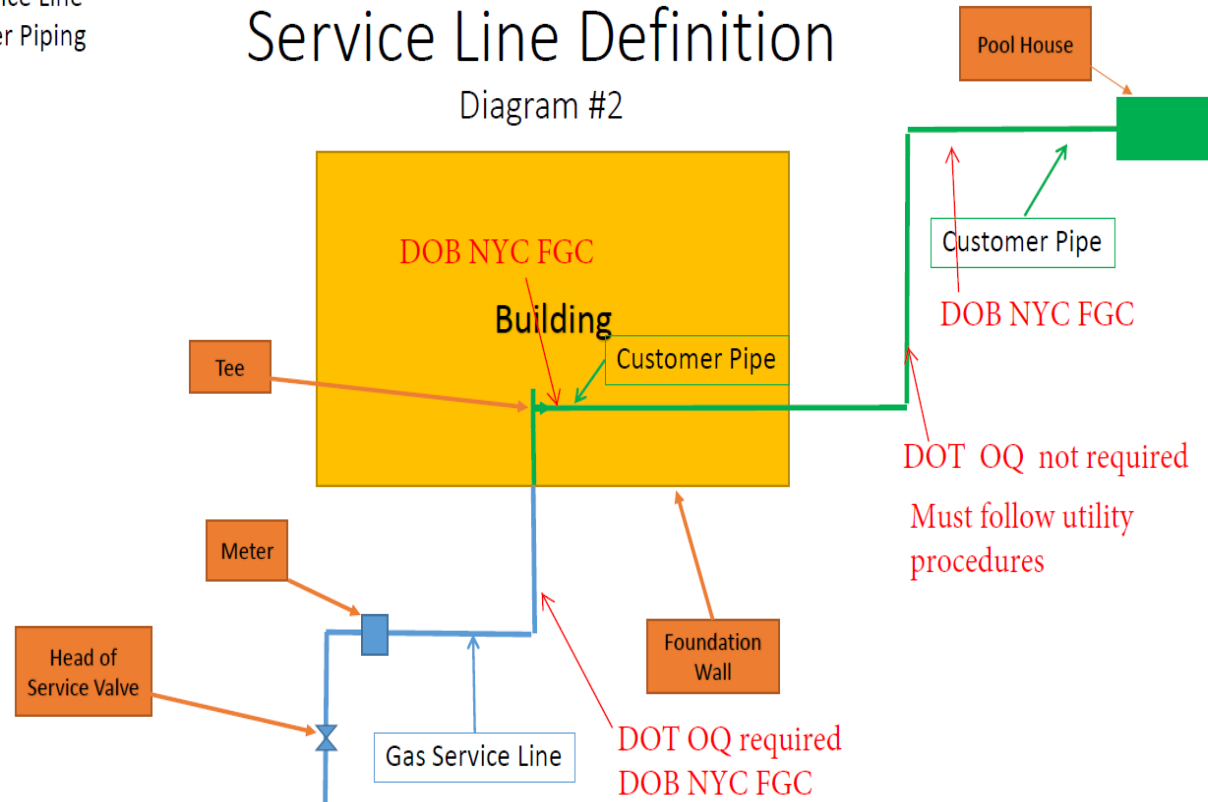
Gas Service Line Definition examples Exhibit M in the Yellow Book

Color Key:

- = Gas Service Line
- = Customer Piping

Service Line Definition

Diagram #2



Note: The purpose of this diagram is to depict the jurisdiction of Gas Service Line vs. Customer Piping. It does not identify areas along the Gas Service Line for which the customer is responsible, per Con Edison's tariff agreements.

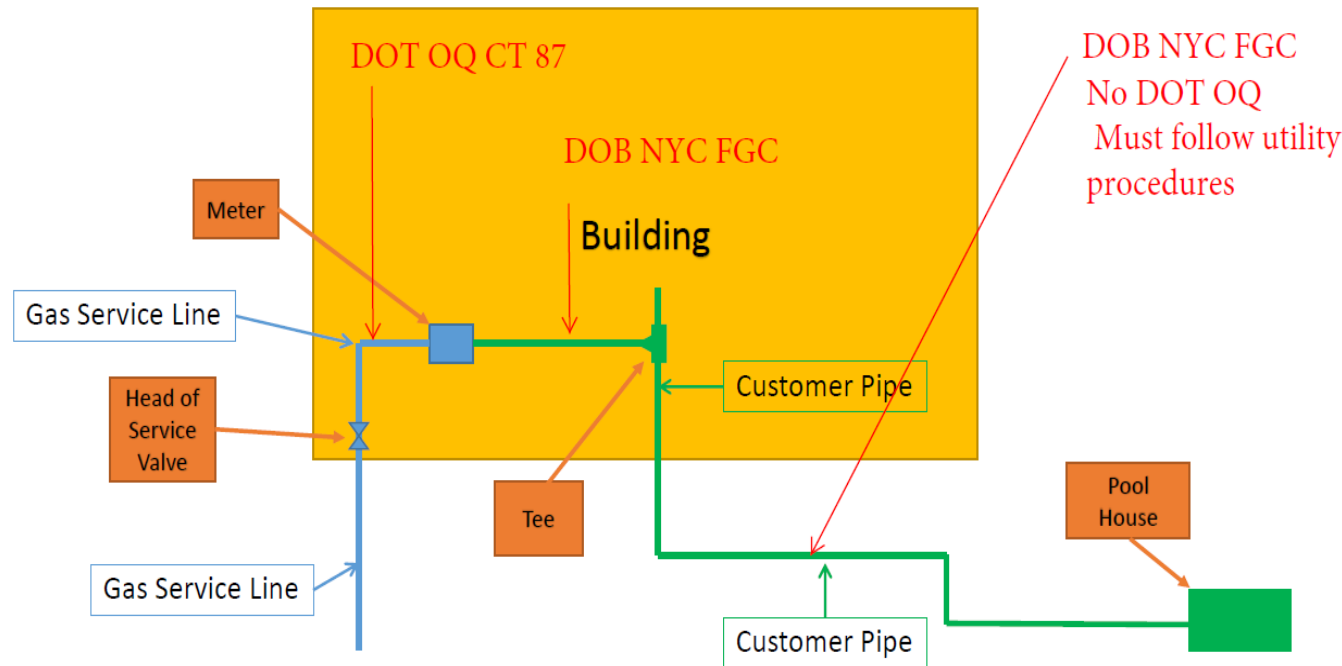
Gas Service Line Definition examples Exhibit M in the Yellow Book

Color Key:

- = Gas Service Line
- = Customer Piping

Service Line Definition

Diagram #3



Note: The purpose of this diagram is to depict the jurisdiction of Gas Service Line vs. Customer Piping. It does not identify areas along the Gas Service Line for which the customer is responsible, per Con Edison's tariff agreements.

Gas Service Line Definition examples Exhibit M in the Yellow Book

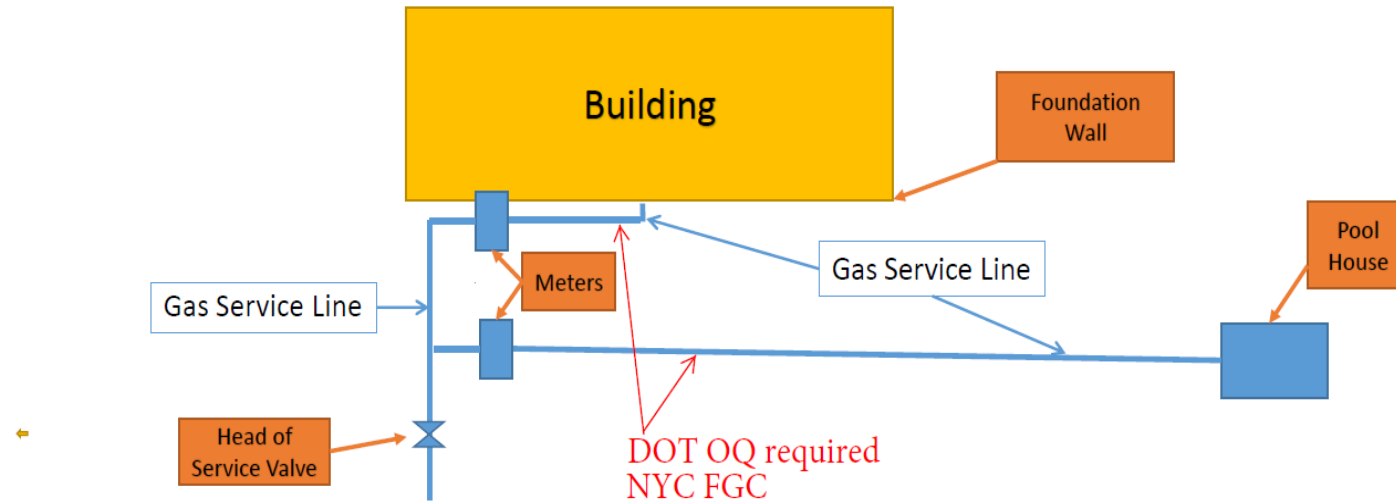
Color Key:

■ = Gas Service Line

■ = Customer Piping

Service Line Definition

Diagram #4



Note: The purpose of this diagram is to depict the jurisdiction of Gas Service Line vs. Customer Piping. It does not identify areas along the Gas Service Line for which the customer is responsible, per Con Edison's tariff agreements.

Gas Service Line Definition examples Exhibit M in the Yellow Book

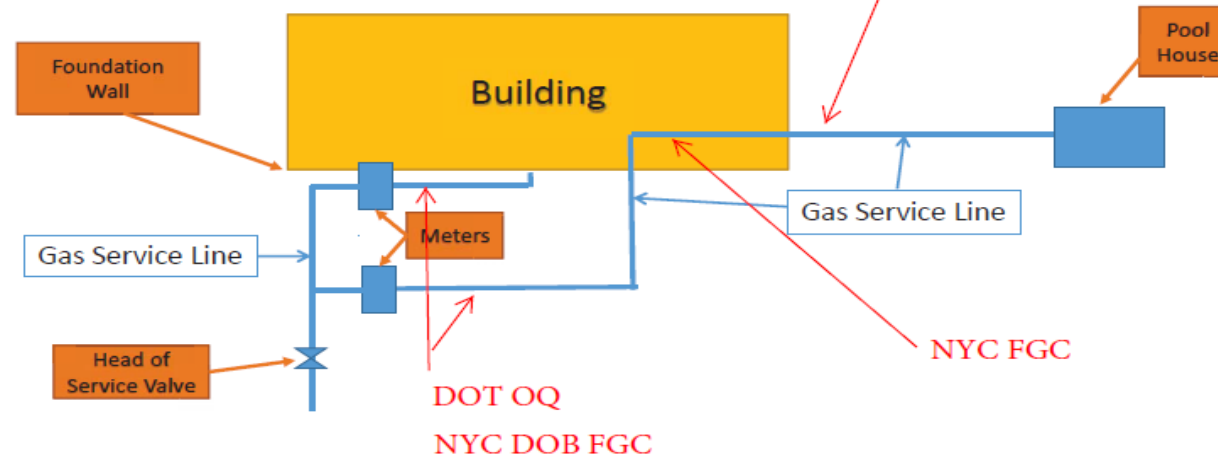
Color Key:

■ = Gas Service Line

■ = Customer Piping

Service Line Definition

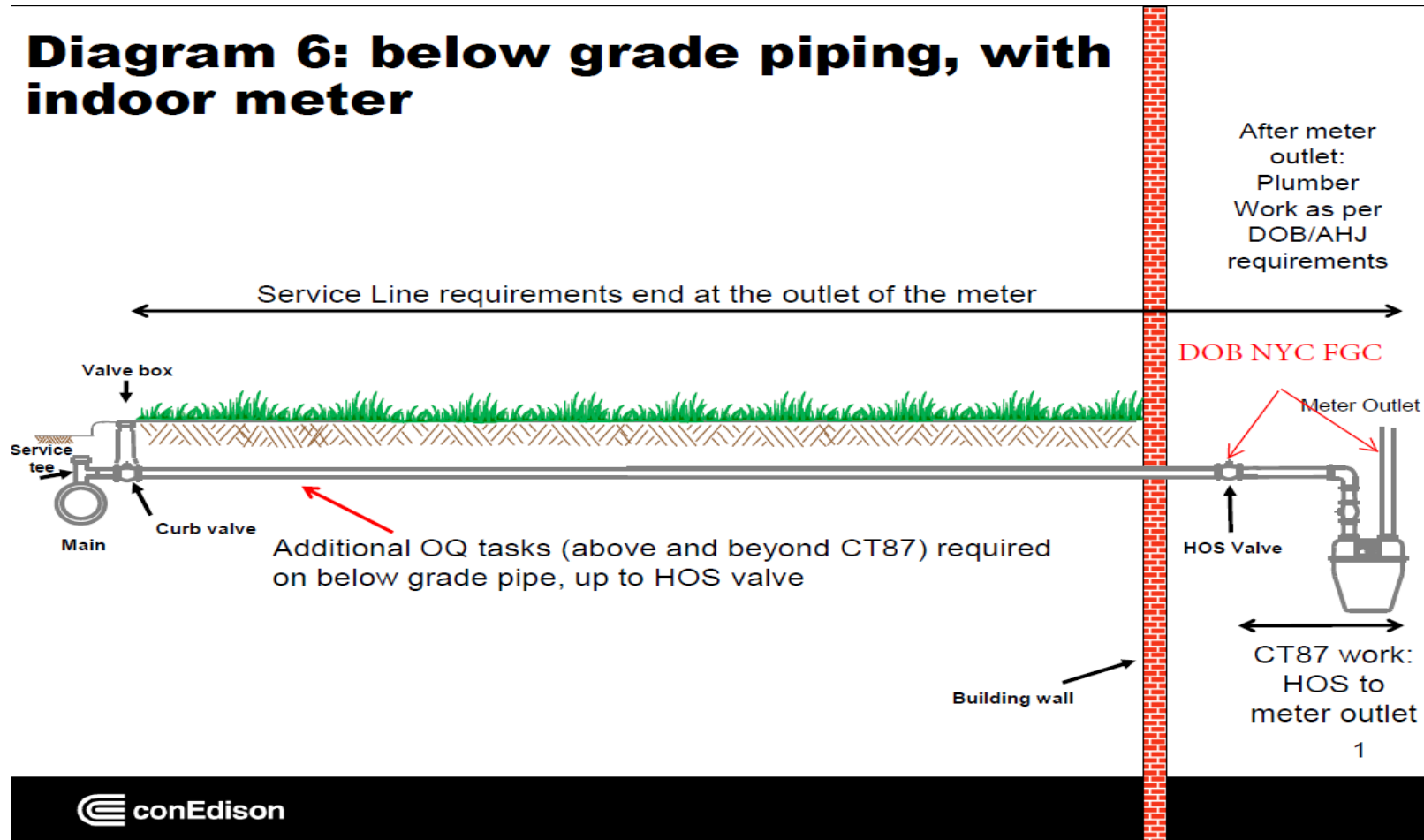
Diagram #5



Note: The purpose of this diagram is to depict the jurisdiction of Gas Service Line vs. Customer Piping. It does not identify areas along the Gas Service Line for which the customer is responsible, per Con Edison's tariff agreements.

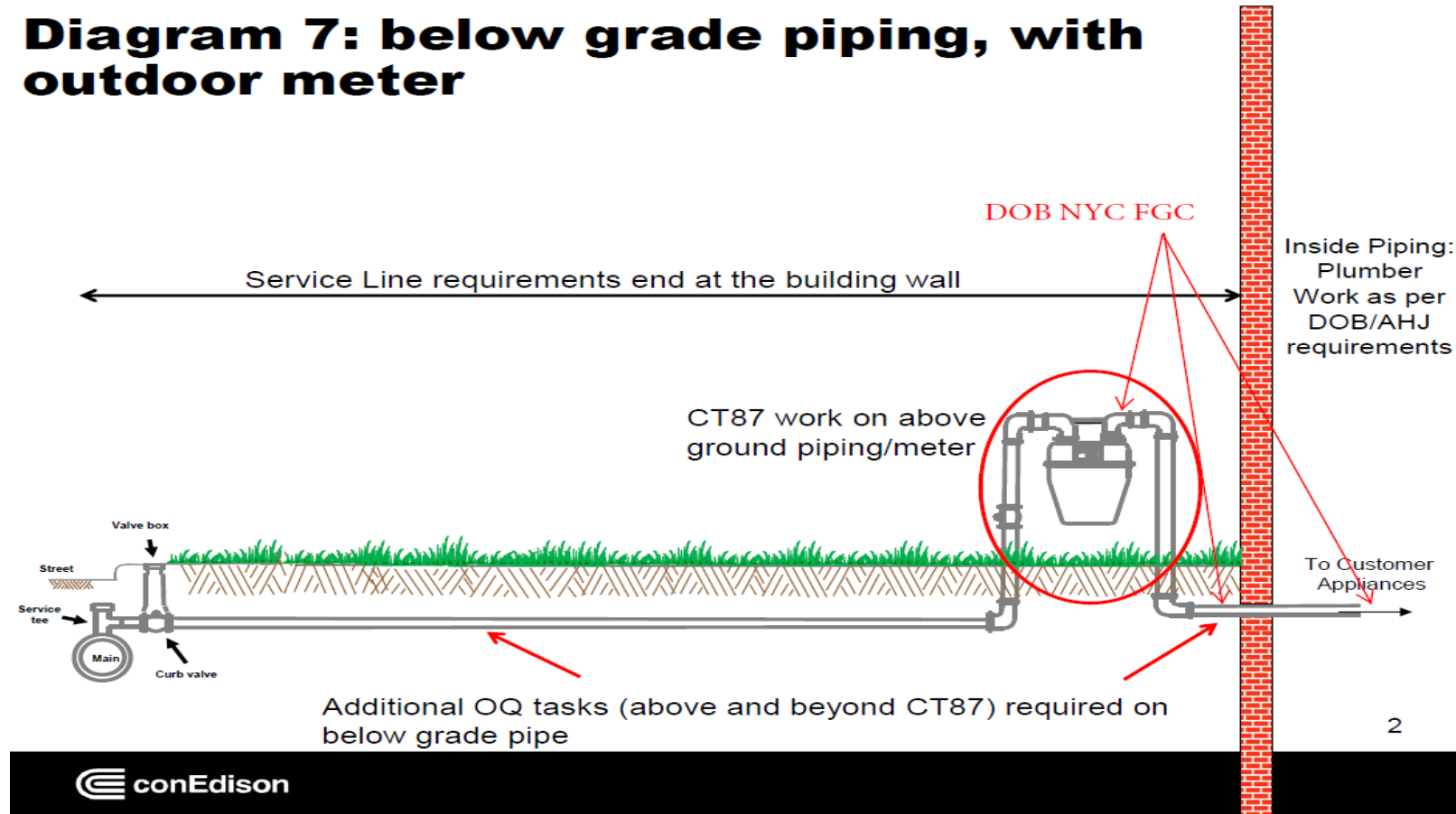
Gas Service Line Definition examples Exhibit M in the Yellow Book

Diagram 6: below grade piping, with indoor meter



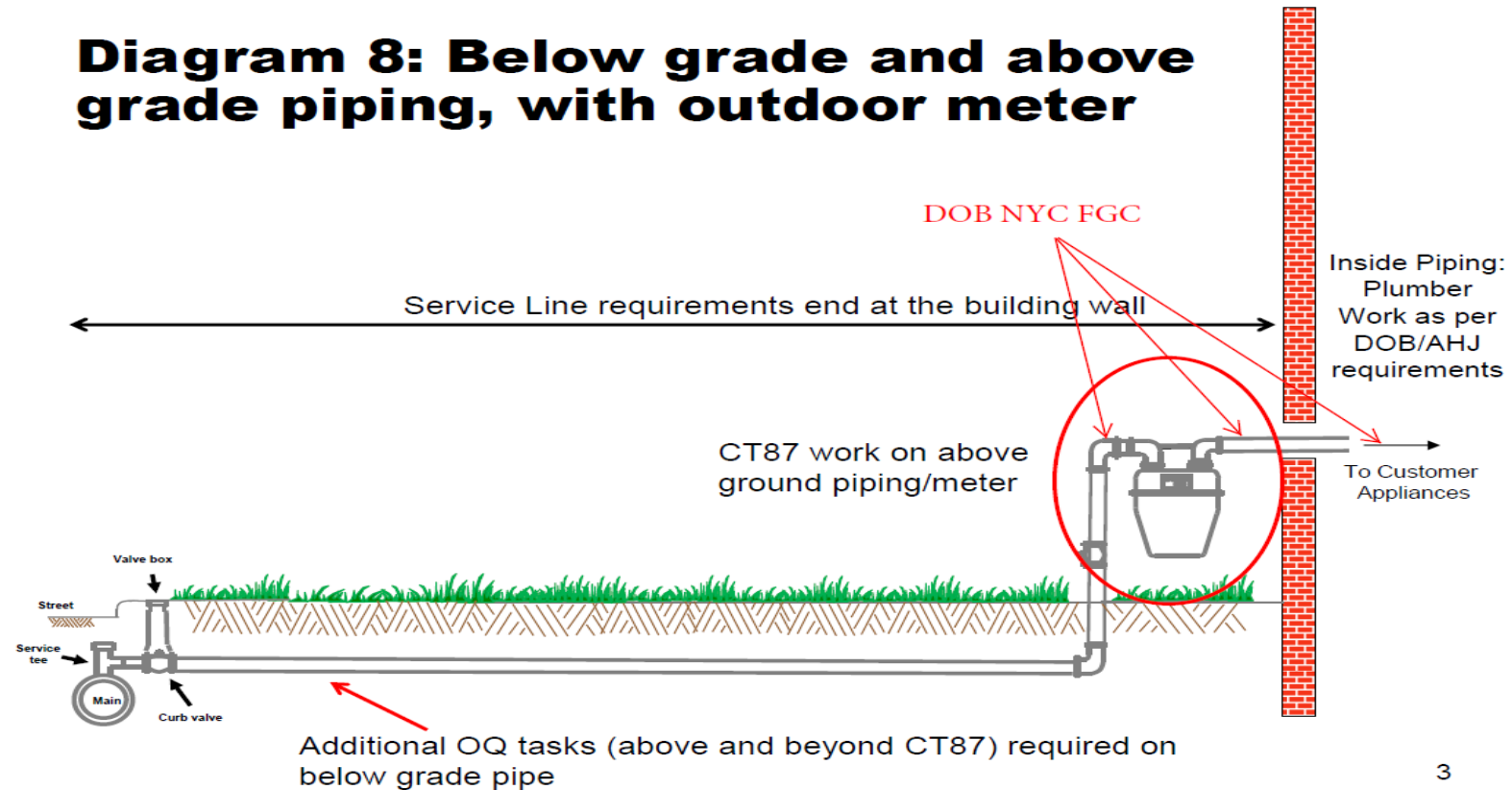
Gas Service Line Definition examples Exhibit M in the Yellow Book

Diagram 7: below grade piping, with outdoor meter



Gas Service Line Definition examples Exhibit M in the Yellow Book

Diagram 8: Below grade and above grade piping, with outdoor meter

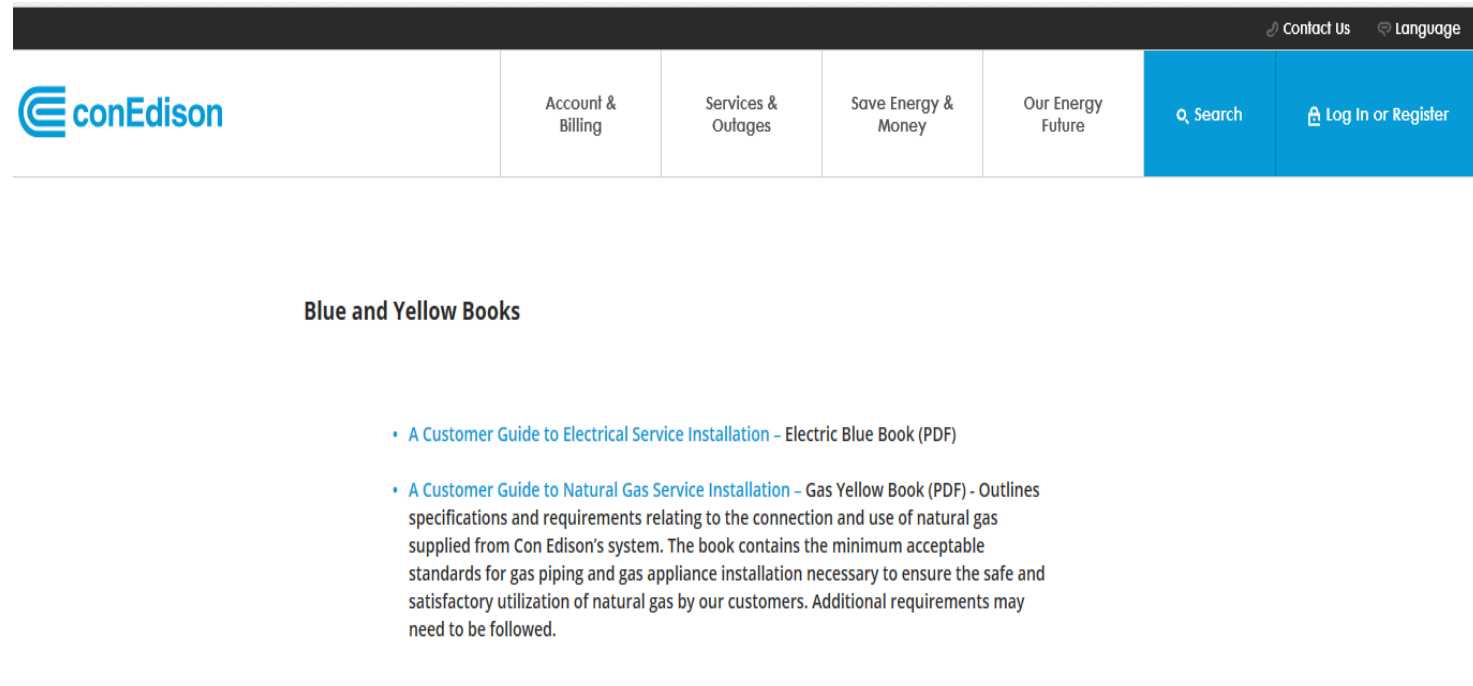


3

Current Yellow Book

Revision 12 - Updated April 2019

Accessed on line, or in CPMS



Always check for the most current gas referenced specification. The Yellow Book is a guide. Gas Specifications may be updated after the Yellow Book release

What is in the Yellow Book

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- K. Information Inquiries
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- U. Drug and Alcohol (D&A) Requirements

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Revision 12

Updates, Additions and Omissions – April, 2019

Page No.	Section	Description
6	1.U	Table of contents; added Drug and Alcohol Requirements
7	7.M	Table of contents; added Exhibit M Gas Service Line Scenario Sketches
15	1- G	Added Exhibit M diagrams and description
19-20	1-T	Updated Operator Qualification Requirements
20-21	Appendix A, B	Updated Appendix A&B for repair or replacement
22	Section 1	Added section U for Drug and Alcohol Requirements
26	Section 2 C.7	Added language on second PE Joint Inspection

Revision 12**Updates, Additions and Omissions – April, 2019**

Page No.	Section	Description
27	Section 2 C.8	Added OQ requirements for steel service pipe
29	Section 2 D	Added OQ requirements for welding
37	Section 2 N	Added Odor Fade Section
38	Section 3	Clarified provision for low pressure supply
58	Section 7 - Definitions	Added Service pipe definitions for Inside and Outside Meter(s)
79	Welder Affidavit Exhibit -E	Added Contractor OQ# field
83	Interim Gas Checklist	Added Contractor OP Qual Requirements field
84	Final Gas Checklist	Added Contractor OP Qual Requirements field
85	PE Joint Visual Inspection Exhibit I	Added note on scheduling inspections through the Con Edison representative

Revision 12**Updates, Additions and Omissions – April, 2019**

Page No.	Section	Description
89	Gas Service Line Scenario Sketches Exhibit M	Added Diagrams 1- 5 for various gas pipe location scenarios Diagrams 6 through 8 for Operator Qualification Requirements
97	General questions and CT87 requirements	Added general questions and Op Qual requirements.
98-99	Op Qual FAQs	Added OP Qual descriptions for new and existing construction

Op Qual Requirements

- DOT Gas Qualification requirements went into affect on April 15, 2019 – required when work is done on utility jurisdictional piping
- Work can be identified as gas service line installation, replacement or repair
- Work defined in Operator Qualification requirements developed by Northeast Gas Association (NGA) with covered tasks and listed on a transcript
- Additional information found in the Yellow Book **in section 1 T. and Exhibit – M**
- Updates to Affidavits - What changed?
 - ❑ Meter Piping Affidavit – Exhibit B
 - ❑ Welder Affidavit – Exhibit E
 - ❑ Interim Gas Check List – Exhibit H
 - ❑ Final Gas Check List – Exhibit H
 - ❑ PE Joint Visual Inspection - Exhibit I

Op Qual Requirements

Gas Service Pipe installation on pages 19-22

Read the sections!

T. Operator Qualification (OQ) Requirements

- a) Different OQ requirements exist, depending on the type of work and location of work being performed. The following scenarios are provided:
- Work on below grade service line piping
 - Work on indoor service line piping and meters
 - Work on above grade service line piping and meters

See applicable sketches in Exhibit M, Diagrams 6 through 8

b) OQ Instructions:

The following instructions are for customers (or their representatives) to follow, if required to gain Operator Qualifications when working on jurisdictional piping (aka- service pipe)².

When working on below grade gas service pipe on customer property, the person performing the work is required to meet all local jurisdictional licensing requirements and in addition, be Operator Qualified per Subpart N in 49 CFR Part 192. In order to gain Operator Qualifications, the contractor must comply with the Con Edison Operator Qualification (OQ) Plan which incorporates principle elements contained in the Northeast Gas Association (NGA) OQ Program.

In order to gain Operator Qualifications (OQ) to work on Con Edison's gas system, you must:

1. Identify the required covered tasks needed for your project (see Appendix A and/or B).
2. Ensure technicians seeking qualification have had the necessary technical training, including instructor led training and/or equivalent on-the-job experience, to perform the work.
3. If working in NYC, contact the Plumbing Foundation City of New York, Inc. This organization will facilitate the process to obtain the required training and qualification requirements are met. Visit the Plumbing Foundation's website at: www.plumbingfoundation.nyc/gas-operator-qualification

² Per The Yellow Book, service pipe is defined as: all piping, tubing and fittings that transport the gas from the main to:

- For inside meter(s) – the outlet of the meter
- For outside meter(s) – outside the building wall

Op Qual Requirements

Construction Activities as identified in section 1 Part T. - page 19 - 22 of the Yellow Book

Appendix A: Plastic Pipe Installation Covered Task List

The following list of covered tasks encompasses all possible tasks needed for a new, below-grade plastic pipe installation, repair or replacement.

Please note: not all tasks may be required for every single job. If you do not plan to perform one of the following tasks, then you do not need to be operator qualified in that task.

Appendix B: Steel Pipe Installation Covered Task List

The following list of covered tasks encompasses all possible tasks needed for a new, below-grade non-welded steel pipe installation, repair or replacement.

Please note: not all tasks may be required for every single job. If you do not plan to perform one of the following tasks, then you do not need to be operator qualified in that task.

Gas Service Line Installation and OQ Requirements

Appendix A: Plastic Pipe Installation Covered Task List

The following list of covered tasks encompasses all possible tasks needed for a new, below-grade plastic pipe installation, repair or replacement.

Please note: not all tasks may be required for every single job. If you do not plan to perform one of the following tasks, then you do not need to be operator qualified in that task.

Task #:	Task Name:	Notes:
31A	Installation of Pipe: Storage, Handling and Inspection of Pipe: General Knowledge	
31B	Installation of Pipe: Install Pipe in a Ditch	
31E	Installation of Pipe: Installing Pipe by Dead Insertion	<i>Required if inserting through any type of sleeve</i>
34	Performing pressure test on a pipeline	
40	Install/Replace tracer wire	<i>Required to install tracer wire on buried plastic gas pipe and electronic markers (i.e. marker balls) on buried plastic, steel, and copper gas pipe</i>
50/51/52 Electrofusion Saddle	Joining and Inspecting Plastic Pipe Saddle Electrofusion	<i>Only required if this is the type of pipe joining being performed</i>
50/52 Electrofusion Coupling	Joining and Inspecting Plastic Pipe Coupling Electrofusion	<i>Only required if this is the type of pipe joining being performed</i>
50/52 Hydraulic Butt Fusion	Joining and Inspecting Plastic Pipe Hydraulic Butt Fusion	<i>Only required if this is the type of pipe joining being performed</i>
50/51 Mechanical Bolt On	Joining and Inspecting Plastic Pipe Mechanical Bolt On	<i>Only required if this is the type of pipe joining being performed</i>
50/51 Mechanical Compression	Joining and Inspecting Plastic Pipe Mechanical Compression	<i>Only required if this is the type of pipe joining being performed</i>
50/51 Mechanical Nut Follower	Joining and Inspecting Plastic Pipe Mechanical Nut Follower	<i>Only required if this is the type of pipe joining being performed</i>
50/52 Manual Butt Fusion	Joining and Inspecting Plastic Pipe Manual Butt Fusion	<i>Only required if this is the type of pipe joining being performed</i>
70	Properties of Natural Gas and Abnormal Operating Conditions	
71	Excavation & Backfill	<i>1. Not required during excavating, if digging an open trench (with no gas facilities in the area) 2. Is required during backfill</i>

Gas Service Line Installation and OQ Requirements

Appendix B: Steel Pipe Installation Covered Task List

The following list of covered tasks encompasses all possible tasks needed for a new, below-grade non-welded steel pipe installation, repair or replacement.

Please note: not all tasks may be required for every single job. If you do not plan to perform one of the following tasks, then you do not need to be operator qualified in that task.

Task #:	Task Name:	Notes:
11E/12E/17E	Pipe Coatings (Mastic)	Only required if this is the type of coating being utilized
11F/12F/17F	Pipe Coatings (Cold Applied Tape)	Only required if this is the type of coating being utilized
11H/12H/17H	Pipe Coatings (Paint)	Only required if this is the type of coating being utilized
14A	Installing/Replacing an Anode on a Pipeline including Exothermic Welding	
15A	Installing, Replacing and Testing Electrical Isolation Couplings	
16A	Installing or Replacing a Corrosion Test Station on a Pipeline including Exothermic Welding	
31A	Installation of Pipe: Storage, Handling and Inspection of Pipe: General Knowledge	
31B	Installation of Pipe: Install Pipe in a Ditch	
31E	Installation of Pipe: Installing Pipe by Dead Insertion	Required if inserting through any type of sleeve
34	Performing pressure test on a pipeline	
40	Install/Replace tracer wire	Required to install electronic markers (i.e. marker balls) on buried plastic, steel, and copper gas pipe
49.1/49.2 Threaded and Flange	Mechanical Joining of Pipe other than plastic: Threaded and Flange	Only required if this is the type of pipe joining being performed
49.3 Compression	Mechanical Joining of Pipe other than plastic: Compression	Only required if this is the type of pipe joining being performed
70	Properties of Natural Gas and Abnormal Operating Conditions	
71	Excavation & Backfill	1. Not required during excavating, if digging an open trench (with no gas facilities in the area) 2. Is required during backfill

Op Qual required Repairs

Repairs need to be done by an **OQ** Plumber- that has passed the NGA (Northeast Gas Association) Training, made up of a number of tasks, listed in a transcript

Check the Yellow Book Exhibit M and Operator Qualification Information and Facts section starting on page 97 for repairs.

OQ Requirements – New Pipe Installation, Repair or Replacement

Exhibit M pp. 89-99

Read the sections!

Gas Service Line scenario
sketches

Exhibit-M

General Questions:

Who is required to be CT87 qualified on a site when CT87 work is being performed?

OP QUAL FAQ's

New Construction: *defined as a brand new out of the ground building*

Existing construction: *defined as any existing building*

Gas Service Line Inspections by the Utility

What gets inspected? The **inside piping** from the head of service valve to the outlet of the meter
ONLY EXISTING GAS SERVICE PIPING GETS INSPECTED

How often?

Business Districts (BD) - Annually

Non Business Districts (NBD) – Every three years

Who does the inspections?

Con Edison qualified contractors

What happens when a problem (leak) is found?

Utility is notified and con Edison personnel follow up with the customer to do the appropriate repairs. May involve shutting off the gas, generating a project center case and turning on the gas.

In addition to OQ requirements for service line work and repairs, local Jurisdictional requirements need to be followed; NYCDOB, Westchester, other jurisdiction if required

Gas Service Line Inspections by the Utility

File a Gas Case in Project Center/Mobile App

Who does the repair work? **OQ** Licensed Master Plumber

Are NYCDOB permits required for this work? Yes an EWN/LAA will be required

Gas Service Line Inspection and Repairs on Existing Gassed in Piping Task 86 and 87

Task 86 - Conducting Interior Jurisdictional Piping safety inspections

Task 87 - Conducting Interior Jurisdictional piping construction and maintenance activities

These may be referred as CT86 and CT 87

The CT stands for Covered Task

Gas Service Line Inspection and Repairs on Existing Piping

Corrosion Levels:

Level 3 – Medium Corrosion Severity

Field Examples



bare



coated

Level 4 - High Corrosion Severity

Field Examples



bare



coated

OP Qual requirements on Jurisdictional Piping Repairs:

The Con Edison operator qualified pressure test witness (name, employee #):

When do we use this?

- For delivery pressures of 1psig but no more than 40 psig
- For CT87 piping repairs between the Head of Service Valve and the Outlet of the meter
- ESD staff will coordinate with Gas Operations to schedule and witness the pressure test
- Pressure test requirements: 2 inch diameter and smaller, minimum 50 psig for 15 minutes
larger than 2 inch minimum 50 psig for 30 minutes

Gas Meter Piping Pressure Test Verification

(Note: This Affidavit does NOT replace Gas Authorization)

Exhibit-B

AFFIDAVIT

This certifies that the gas meter piping installed between the gas service head valve and the gas meter connection.

Located at: _____
Lot No: _____
Block No: _____
Owner: _____
Has successfully passed a leakage test for _____ hour(s) at pressure of _____ psig
On _____ (See instructions from section 2.C.10)
(Date)

For services with service regulators supplying outlet pressures of at least 1 psig, when repair/replacement work is conducted:

The Con Edison operator qualified pressure test witness (name, employee #):

TEST PERFORMED BY

Plumber's Signature: _____
License No.: _____
Plumber Contractor: _____
Accepted for Con Edison By: _____
Date: _____

Note: Form is to be used for company documentation by the performing plumber of record for all oil-to-gas conversion, natural gas generators, upgrades and or swing over work, certification, new business installations, repairs or replacement work, etc.

Important Update - Odor Fade

- **What is it? Odorant introduced in the gas pipes may no longer be noticeable after the meter**
- **A number of factors may cause this: size, length, condition of the pipe, minimal flow and or use**
- **Pp. 37 in the Yellow Book provides guidance**

General Questions

- ✓ Do we need a REQ-GA-Approved (Gas Authorization) in NYC if the plumber replaces a meter bar?

Yes, this requires a REQ-GA- Approved (gas authorization) and all required gas inspections from the DOB in NYC. NYC DOB requires that because it signifies increased loads and rehab/new work. Check with Westchester County for Gas Authorization requirements

- ✓ Who supplies the Meter bar? - **The Plumber/owner**

- ✓ Do we ask for OQ Cards in the field? No, LMP will upload in project center, when the case requires that repair, replacement or new construction activities are to be addressed by a covered task - **Effective 4/15/19**

- ✓ How will the OQ cases be identified? In project center, when the B-ticket/Warning Tag Case identifies existing gas service piping repairs relating to utility jurisdictional piping, or new or replacement work. Refer to Yellow Book Exhibit M for further clarification of the service line

- ✓ ***New Requirements – Construction or Repair Activities: Tasks needed for new pipe installation, repair or replacement***

- Meter Piping Affidavit Exhibit B identifies that con Ed – OQ personnel witness the pressure test on OQ Repairs (Task 87). These may be from Level 3 and 4 corrosion inspection warning tag generated cases
- **Welder Affidavit, Initial and Final Gas Check List and PE Joint Visual Inspection Form all have been updated to require OQ verification**

Additional Information

- ✓ ***New Requirements – Construction or Repair Activities : Tasks needed for new pipe installation, repair or replacement***
 - Appendix A and B of section 1.T of Yellow Book – Operator Qualification Requirements for EXTERNAL pipe installation
 - Task 87 needed for meter piping work
 - Meter Piping Affidavit Exhibit B identifies that con ed OQ personnel witness the pressure test on OQ repairs n piping greater than 1 psig in pressure
 - **Welder Affidavit, Initial and Final Gas Check List and PE Joint Visual Inspection Form all have been updated to require OQ verification**
 - **New Warning Tag released by con Edison to address new requirements**

Questions ?

Remember



Work Safely, be vigilant and follow the rules!

Thank you!