SECTION 8, OPERATIONS AND MAINTENANCE

8.750 GAS LEAK CLASSIFICATION AND CONTROL

1.0 SCOPE

1.1 This procedure covers classification, surveillance, and repair of all outside above and below ground leaks within the gas distribution system.

2.0 REFERENCES

2.1 16 NYCRR Parts 255.805, 255.807, 255.809, 255.811, 255.813, 255.815, 255.817, 255.819, 255.821, 255.829

3.0 ACRONYMS

3.1 Combustible Gas Indicator (CGI)
3.2 Flame Ionization (FI)
3.3 Lower Explosive Limit (LEL)
3.4 Manager of Regional Operations (MRO)
3.5 Quality Assurance (QA)
3.6 Customer Owned and Maintained (COM)
3.7 Public Service Commission (PSC)

4.0 DEFINITIONS

4.1 Arrival Time: Arrival time of a crew or first responder qualified to use a FI unit or CGI unit, quantify a leak, and evacuate a building.

4.2 Building: Any structure which is regularly or occasionally occupied by people. Each separate dwelling unit in a multiple dwelling building is counted as a separate building.

4.3 Classifying Reading: The reading which determines the grade/class of a below grade leak, associated with a distance to a nearby structure. The classifying reading may not be the highest reading within the plume. The classifying reading may also be determined by gas in a subsurface structure and not always the distance to an above ground structure.

4.4 Curbline/Shoulder: The division between a street (paved or unpaved) and property (dirt, grassy, paved).

4.5 Dispatched To: Person and time at which the company sends a qualified individual to investigate a leak or odor complaint.

4.6 Highest Bar Hole Reading: The highest bar hole reading (gas-in-air) found during an outside leak investigation.

4.7 Indication: Any deviation, which is not a sustained reading, read on a CGI which has been properly calibrated.

4.8 Inside Building Check: The inspection inside buildings for natural gas entering, where the source of the leak is originating from an outside leak. All buildings with readings or indications of natural gas within five feet of the building wall shall be checked inside for natural gas. This includes buildings without natural gas service.

4.9 Inside Leak: Any leak originating from inside the foundation or building wall (service line, meter piping, or fuel line).

4.10 Investigation: The process of pinpointing and classifying an underground leak.

4.11 Made Safe Time: The time at which an operator qualified individual, who is properly equipped and trained, determines that a hazard to the public or property does not exist. The made safe time is never the same as the arrival time.

4.12 Manhole: A subsurface structure that a person can enter.

4.13 Outside Leak: Leaks originating from mains, service piping, meter piping, or customer owned and maintained fuel lines (above or below grade) outside the foundation or building wall.

4.14 Paved: An area between the curbline/shoulder and a building where a leak cannot vent through the soil before migrating to the building wall.

4.15 Pending Leaks: Classified but unrepaired gas leaks.

4.16 Plastic Failure: Any leak on a plastic pipe, plastic fitting or a fitting that transitions to plastic after it is placed in service, excluding 3rd party hits. Plastic leaks found during a soap test where the pipe or fitting is energized with natural gas are considered plastic failures. Leaks on plastic pipe or plastic fittings during the air test are NOT considered plastic failures.

4.17 Reading: Any sustained deviation on a properly calibrated CGI or approved equivalent instrument taken at a sample point expressed in percent LEL or percent gas-in-air.

4.18 Received By: Time that the designated company official first receives notification of a gas leak or odor complaint.

4.19 Recheck: A leakage investigation 14 to 30 days after the repair to determine the effectiveness of repair and to verify that no hazardous conditions still exist.

4.20 Repaired By: Person and time at which a qualified individual makes a repair on the leak.

4.21 Sign On Time: The sign on time is the time the operator qualified crew/fitter leaves the previous job site and is ready to go to the next job site. The call may have been received by a crew/fitter before the completion of a previous job.

4.22 Surveillance: Continual inspection and evaluation of a pending leak to assure the hazard (leak classification) has not worsened.

4.23 Tunnel: A subsurface passageway large enough for a person to enter.

4.24 Unpaved: An area between the curbline/shoulder and a building where a leak can vent out through the soil before the building wall.

4.25 Vault: Any enclosure below the ground, which operator qualified employees may enter, and which is used for the purpose of installing, operating, and/or maintaining utility equipment.

5.0 RESPONSIBILITIES

5.1 Gas Operations is responsible for:

5.1.1 The classification, surveillance, and repair of all outside leaks.

5.2 The Gas Supervisor is responsible for:

5.2.1 Reporting frost conditions to the MRO.

5.2.2 Reviewing all pending and repaired Outside Leak Reports (form #8750A).

5.3 The MRO is responsible for:

5.3.1 Implementing and terminating the frost plan.

6.0 GENERAL

6.1 The leak classification system is used to determine the degree or extent of the potential hazard resulting from gas leakage on buried gas facilities.

6.2 The intent of the leak classification system is protecting the public first, then property, and to prescribe remedial actions.

6.3 Each district within Team NY is responsible for classifying each outside buried natural gas leak in their service territory, as described in this section.

6.4 Only operator qualified individuals shall classify leaks.

6.5 Leak investigations resulting from odor complaints shall begin at the odor location or structure identified by the caller.

6.6 Leaks found on aboveground facilities and exposed piping shall not be classified, but shall be handled as described in section 11.0 of this procedure.

6.7 During leak investigations, a CGI shall be used to quantify a leak once it's discovered. If needed, a FI unit may be utilized to find an outside leak. Whatever unit is used, it shall be used at its most sensitive scale.

6.7.1 Instruments used during leak investigations and surveys shall be calibrated in accordance with procedure 8.975 (Gas Detection Equipment).

6.8 If readings are found in below ground structures (manholes, vaults, or catch basins), adjacent below ground structures (manholes, vaults, and catch basins) shall be checked to determine the extent of migration and zeroed out.

6.8.1 In the case of below ground structures that are found to have type 1 gas readings, the first responder, if qualified shall ventilate the

structure before performing any additional leak investigations. If the first responder is not qualified a request for immediate assistance from a qualified person shall be made before moving on with the leak investigation.

6.9 An inside building check shall be performed for any building (including those without natural gas service) with a sustained reading or indication of natural gas within five feet of the building wall to check for the presence of natural gas and determine if it is migrating into the building. If it is suspected that gas may be entering a building by other means as the result of an outside leak, an inside building check shall be performed.

6.9.1 A gas plume may encompass more than one wall of a building and more than one building. In these cases, all walls of buildings with readings or indications of natural gas shall be checked inside.

6.9.2 Immediate steps to eliminate the hazard shall be taken. These can include, but are not limited to, shutting off gas service, digging a vent hole, and/or purging the soil of natural gas.

6.9.3 In the case of below ground structures that are found to have type-1 gas readings, the first responder, if qualified should ventilate the structure before performing any additional leak investigations. If the first responder is not qualified a request for immediate assistance from a qualified person shall be made before moving on with the leak investigation.

6.10 The diagram on the Outside Leak Report (form #8750A) shall be used to adequately depict the extent of the plume.

6.10.1 The leak plume shall be zeroed out in all directions (approximately north, south, east, and west), where applicable, from the classifying bar hole reading to determine the extent of the leak. These zero reading bar holes shall be depicted on the sketch. The distances to zero out the classifying bar hole reading shall be recorded on the sketch area of the form. In addition, where applicable, enough bar holes shall be placed over any gas facilities adjacent to the structure.

6.10.2 The bar hole designated (BH #1) on the Outside Leak Report shall be used as the within 5 foot of building wall reading.

- If a within 5 foot read is not required to clearly depict the plume, the bar hole reading can indicate “NA” (not applicable) or it can be used at another location.

6.10.3 Enough bar holes shall be depicted on the sketch to determine the correct grade/class of the leak. All bar holes depicted on the sketch shall be dimensioned.

- Example: For an unpaved area, if 40 percent gas in air is found at 30 feet from a building wall and 0 percent gas in air is found at 5

feet from the same building wall, at least one other bar hole is required at 20 feet to determine if a Type 2A leak or Type 2 leak exists. If the reading at 20 feet is 10 percent, the leak is a Type 2, and that bar hole is now the classifying reading. The additional bar holes shall be depicted on the sketch. This leak still needs to be zeroed out between 5 feet and 20 feet.

6.10.4 The percent gas in air, distance from building wall and bar hole number for the classifying reading shall be recorded on the Outside Leak Report (form #8750A). The distance from building wall to classifying bar hole shall be depicted on the sketch, where applicable.

6.10.5 If additional bar holes or structures are required to be depicted on the Outside Leak Report (form #8750A), distances shall be depicted on the sketch.

6.11 Regardless of the number of leak clamps installed in an excavation, the leaks found in the excavation shall be counted as one leak.

6.11.1 If further investigation results in additional excavations, each additional excavation where a leak is found shall be counted as one leak.

6.11.2 A new leak ticket shall be filled out for each additional excavation.

6.11.3 Each leak ticket shall be cross referenced.

7.0 TYPE 1 LEAKS

7.1 A Type 1 leak constitutes a potentially hazardous condition to the public or buildings. Type 1 leaks include, but are not limited to:

7.1.1 Damage by contractors or outside sources resulting in leakage.

7.1.2 Any indication on a CGI of natural gas entering buildings or tunnels.

7.1.3 Any reading on a CGI within five feet of a building wall.

7.1.4 Any reading of four percent or greater gas in air on a CGI within manholes, vaults, or catch basins. Sampling shall be conducted with the structure in its normal condition when physically possible (cover left on). In some cases, a manhole cover may have to be lifted slightly to obtain a reading.

7.1.5 Any below grade leak which, in the judgment of the qualified personnel on site, is regarded as potentially hazardous.

8.0 TYPE 2A LEAKS

8.1 A Type 2A leak does not present an immediate hazardous condition to the public or buildings, but requires surveillance every two weeks, except under frost conditions, and scheduled repair. Type 2A leaks include, but are not limited to:

8.1.1 Any reading of ten percent or greater gas in air in any area **continuously paved** from the curb to the building wall which is more than five feet but within 30 feet of the building and inside the curbline or shoulder of the road.

8.1.2 Any reading of 20 percent or greater gas in air in any **unpaved** area from the curb to the building wall which is more than five feet but within 20 feet of the building and inside the curbline or shoulder of the road.

8.1.3 Any leak, other than a Type 1, which under frost conditions, in the judgment of the qualified personnel on site, shall be classified as a Type 2A.

8.1.4 Any reading less than four percent gas in air, but greater than one percent gas in air, within manholes, vaults, or catch basins. Sampling shall be conducted with the structure in its normal condition when possible (cover left on). In some cases, a manhole cover may have to be lifted slightly to obtain a reading.

9.0 TYPE 2 LEAKS

9.1 A Type 2 leak does not present an immediate hazardous condition to the public or buildings, but requires surveillance every two months, except under frost conditions, and scheduled repair. Type 2 leaks include, but are not limited to:

9.1.1 Any reading of less than ten percent gas in air in any area **continuously paved** from the curb to the building wall which is more than five feet but within 30 feet of the building and inside the curbline or shoulder of the road.

9.1.2 Any reading of less than 20 percent gas in air in any **unpaved** area from the curb to the building wall which is more than five feet but within 20 feet of the building and inside the curbline or shoulder of the road.

9.1.3 Any reading of 30 percent or greater gas in air in any area **continuously paved** from the curb to the building wall which is more than 30 feet but within 50 feet of the building and inside the curbline or shoulder of the road.

9.1.4 Any reading of 30 percent or greater gas in air in any **unpaved** area from the curb to the building wall which is more than 20 feet but within 50 feet of the building and inside the curbline or shoulder of the road.

10.0 TYPE 3 LEAKS

10.1 A Type 3 leak is not an immediate hazardous condition to the public or buildings at the time of detection and can be reasonably expected to remain that way.

10.2 Any below grade leak not classified as a Type 1, Type 2A, or Type 2 shall be classified as a Type 3 leak.

11.0 ABOVEGROUND/EXPOSED PIPING LEAKS

11.1 The qualified person that discovers the aboveground/exposed piping leak shall determine if the leak requires immediate attention based on the amount of gas escaping and the degree of hazard the leak is causing. If the leak requires immediate attention, the Gas Supervisor shall be notified.

11.2 At the discretion of the Supervisor/First Responder, any above grade leak may be repaired immediately.

11.3 Leaks at meter sets shall NOT be classified.

11.3.1 If a leak is found at a meter set by a qualified individual during routine work, a temporary repair is to be made after notification is given to their Supervisor/Chief. For non-repaired leaks a Maintenance Order shall be generated in accordance with procedure 7.600 (Priorities for Correcting Deficiencies Found During Inspections and Surveys).

11.3.2 If a leak is found at a meter set by a qualified individual during a leak investigation:

11.3.2.1 For NYSEG, Form #8700 (Gas Emergency Order – OD35-G) shall be completed describing the conditions found and the repair work performed.

11.3.2.2 For RG&E, the investigation and repair information shall be entered electronically.

11.4 For all leaks on exposed piping (bridges, structures, vaults), no Outside Leak Report is required. A Maintenance Order shall be created in accordance with procedure 7.600 (Priorities for Correcting Deficiencies Found During Inspections and Surveys) for the above grade leak.

11.5 All other above grade leaks shall be scheduled for repair, not to exceed one calendar year.

12.0 NON-REPORTABLE READINGS

12.1 Any sustained reading of four percent or less gas in air on a CGI at an isolated test point outside the curbline/shoulder of the road (within street) may be considered as a non-reportable reading except where found in manholes, vaults, or catch basins, only if found during a normally

scheduled leak survey in accordance with procedure 7.150 (Leak Surveys).

12.1.1 No leak ticket is required for non-reportable readings.

13.0 LEAK SURVEILLANCE

13.1 Normal Surveillance of pending leaks is as follows:

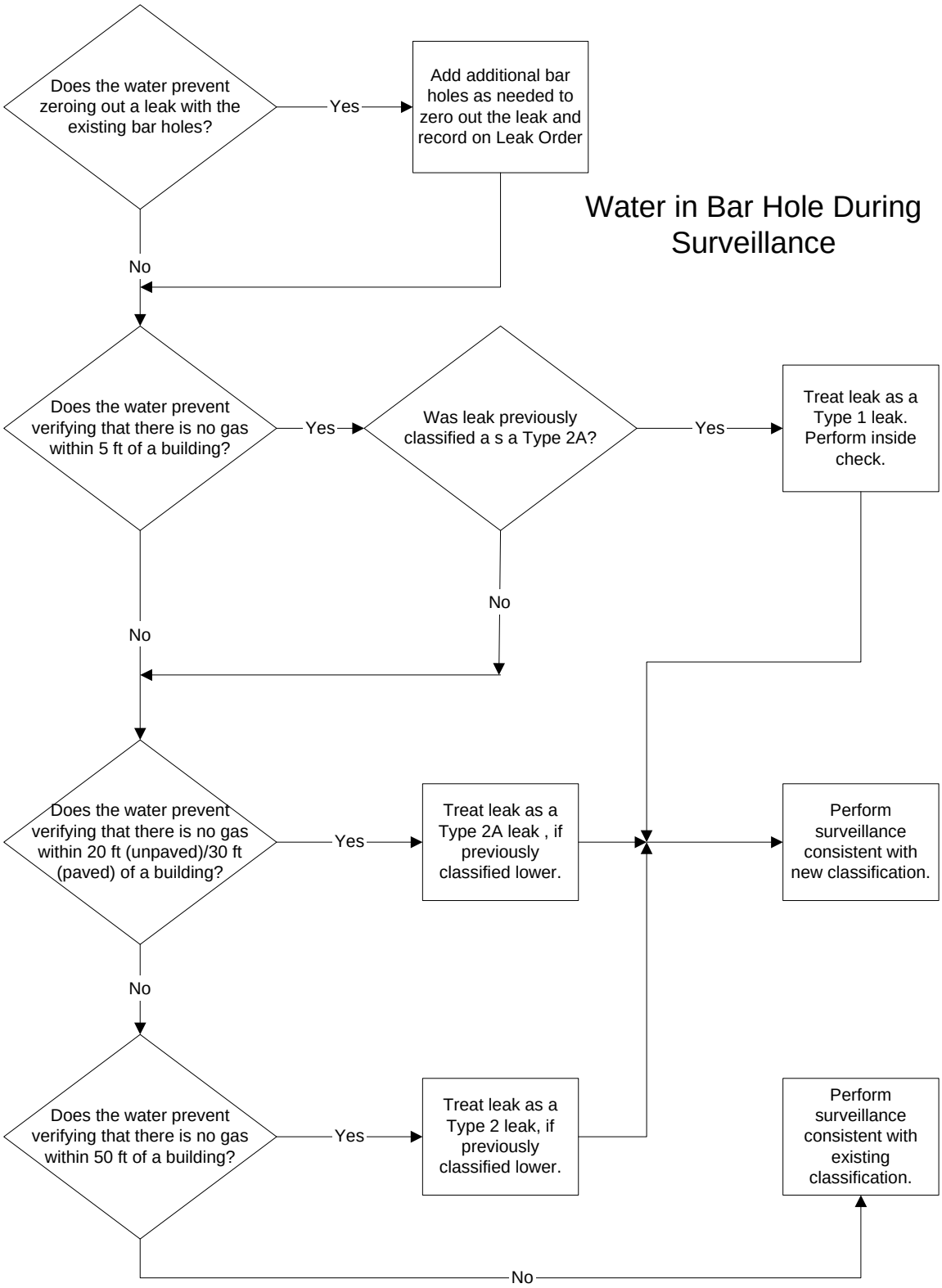
13.1.1 Type 1: Survey daily until the repair is completed.

13.1.2 Type2A: Survey at least every two weeks until the repair is completed.

13.1.3 Type 2: Survey at least every two months until the repair is completed.

13.1.4 Type 3: Re-evaluate at the time of the next leak survey or within one year of the time it was classified as a Type 3, whichever is less.

13.1.5 If water is found in bar holes during surveillance, refer to the following flowchart.


Water in Bar Hole During Surveillance
Does the water prevent zeroing out a leak with the existing bar holes?
Yes
Add additional bar holes as needed to zero out the leak and record on Leak Order
No
Does the water prevent verifying that there is no gas within 5 ft of a building?
Yes
Was leak previously classified a s a Type 2A?
Yes
Treat leak as a Type 1 leak. Perform inside check.
No
No
Does the water prevent verifying that there is no gas within 20 ft (unpaved)/30 ft (paved) of a building?
Yes
Treat leak as a Type 2A leak , if previously classified lower.
Perform surveillance consistent with new classification.
No
Does the water prevent verifying that there is no gas within 50 ft of a building?
Yes
Treat leak as a Type 2 leak, if previously classified lower.
Perform surveillance consistent with existing classification.
No

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14.0 LEAK REPAIR

14.1 Below grade leaks shall be repaired within the following time frames:

14.1.1 Type 1: Type 1 leaks shall be given immediate and continuous attention until it is no longer hazardous. Completion of repairs shall be scheduled on a regular day-after-day basis until the source of the leak has been repaired.

14.1.2 Type 2A: Repairs shall be completed within a period not to exceed six months.

14.1.3 Type 2: Repairs shall be completed within a period not to exceed one year.

14.1.4 Type 3: Repairs are not required, however Type 3 leaks will be scheduled for repair based upon workload priorities.

Note: Team NY goals and PSC mandates may require the repair of pending leaks within a more prompt timeframe.

15.0 THE FROST PLAN

15.1 Once frost conditions are discovered within a district, the Gas Supervisor shall report the frost conditions to the MRO. The report shall include the depth of frost. Anytime there is greater than six inches of frost, the MRO shall declare that the region is operating under the Frost Plan and shall notify the appropriate personnel, including the QA group.

15.1.1 The Frost Plan is initiated because of the increased leak hazard caused by frost conditions (gas migrating under the frost cap).

15.2 After initiating the Frost Plan within a region, all pending below grade leaks shall require additional surveillance starting the following day.

15.3 Each region operating under the Frost Plan shall survey its pending below grade leaks in the following manner:

15.3.1 Type 1: Survey daily until repairs are completed.

15.3.2 Type 2A: Survey weekly during frost conditions.

15.3.3 Type 2: Survey monthly during frost conditions.

15.3.4 Type 3: Survey every other month during frost conditions.

15.4 The winter cast iron leak survey shall be conducted during the Frost Plan in accordance with procedure 7.150 (Leak Surveys).

15.5 The MRO shall terminate the Frost Plan in the region when the frost has completely left the ground. After terminating the Frost Plan, the MRO shall notify the appropriate personnel, including the QA group.

16.0 UPGRADING/ DOWNGRADING LEAKS

16.1 If a leak is upgraded to a higher classification level, the time period for repair is the remaining time based upon the original classification or the time allowed for the new classification, whichever is less. This does not

apply to leaks surveyed at a higher hazard level when the Frost Plan is initiated.

16.2 Prior to downgrading a leak without any repair, at least two additional surveys at the normal interval are required to verify that a lower class of hazard exists. Except for leaks downgraded to a Type 3 classification, the original date of discovery determines the time period for repair. In no case shall the time for leaks requiring repair exceed one year from the date of discovery.

16.2.1 It is not recommended to reclassify or downgrade leaks when saturated soil conditions exist. The yearly rechecks for Type 3 leaks should not be conducted in the Spring and Fall (primarily low pressure) when saturated soil conditions exist.

16.2.2 Type 1 leaks cannot be downgraded to Type 2A or Type 2 leaks by digging a vent hole. A repair shall be made.

17.0 READINGS AFTER REPAIR

17.1 After repairing a below grade leak, a reading with a CGI shall be taken at the repair location and recorded on the Outside Leak Report (form #8750A).

17.2 If any readings still exist within five feet of a building wall, the soil shall be purged to eliminate any hazardous conditions.

17.2.1 If purging doesn't eliminate hazardous conditions, refer to Section 14.0 of this Procedure.

18.0 RECHECKS

18.1 Leak repairs on underground facilities shall require verification of repair by conducting a recheck at least 14 days after but within 30 days from the date of repair.

18.2 The following types of leaks do not require a recheck:

18.2.1 Leaks (Type 1, 2A, and 2 leaks) repaired by replacing or inserting an entire length of main or service line, provided a complete reevaluation of the leak area after completion of repairs verifies that no further readings exist (zero percent LEL). Refer to section 17.0 of this procedure.

- The entire length of main is defined on the Team NY gas quad/operating maps.
- The entire length of service line is defined as the entire service line from the main to the building wall.
- Type 3 leaks.

18.2.2 Leaks repaired by routine maintenance, such as lubricating valves or tightening packing nuts on valves.

18.2.3 Leaks caused by contractor or 3rd party damage in which the area is re-evaluated for leakage directly after repair, and no further readings exist (zero percent LEL). Refer to section 17.0 of this procedure.

18.3 A maximum of two follow-up rechecks shall be performed for each Outside Leak Report (form #8750A). Each will be performed within 14 to 30 days of the most recent check.

18.3.1 If readings still exist after two follow-up rechecks, the Outside Leak Report shall be closed out. A new Outside Leak Report shall be created based on readings from the second follow up recheck. The new Outside Leak Report shall cross-reference the old leak number. EXCEPTION: If readings are still found because of highly saturated soil and both re-checks contain lower readings, **NO** new leak ticket is required. The existing open ticket shall be used to continue rechecks until a zero percent reading is found.

18.3.2 If a second repair is made after any re-check, a new Outside Leak Report shall be filled out and treated as a new leak.

18.4 Documentation of the re-checks shall be recorded on the Outside Leak Report.

19.0 RECORDS

19.1 An Outside Leak Report (form #8750A), identified by a number, shall be used to depict the entire history of a leak from the time of discovery through the follow-up recheck.

19.1.1 For all below grade leaks resulting in excavation of facilities the Excavation/Condition Report (form #4150A) shall be completed.

19.1.2 For all below grade leaks that are the result of a plastic or mechanical fitting failure as defined in Procedure 8.725 (Plastic/Mechanical Fitting Failure Reporting), the Plastic/Mechanical Fitting Failure Report (form #8725) shall be completed.

19.1.3 In the event that either or both of the above mentioned forms are completed in conjunction with the Outside Leak Report (form #8750A) they shall be identified by a matching number for proper tracking and reporting purposes.

19.2 One Outside Leak Report shall be used to depict multiple leaks on one service.

19.3 An Outside Leak Report shall be generated for each main leak discovered. If multiple leaks are discovered in a single excavation, a single leak report can be used to record the leaks.

19.3.1 When additional readings are found beyond a zeroed out leak plume, another Outside Leak Report shall be generated.

19.4 Definitions for Cause of Leak on Team NY Outside Leak Report:

19.4.1 **Corrosion**: Leak resulting from a hole in the pipe or other component caused by galvanic, bacterial, chemical, stray current, or other corrosive action.
NOTE: Cast iron graphitization and unprotected steel seam leaks are included. Leaks caused by disbonded coating, improper installation of coating/wraps, or wrap damaged during transport or installation are CORROSION caused leaks.

19.4.2 **Natural Forces**: Leaks resulting from earth movements, earthquakes, landslides, subsidence (ground settlement), lightning, heavy rains/floods, washouts, flotation, mudslide, scouring, temperature, frost heave, high winds, ice, or similar natural causes.

19.4.3 **Excavation**: Leaks resulting from damage caused by earth moving or other equipment, tools, or vehicles. This includes homeowners, company contractors, company personnel, and other 3rd parties.

19.4.4 **Other Outside Force Damage**: Leaks caused by fires, explosions, and deliberate or willful acts, such as vandalism.
NOTE: Include motor vehicle accidents.

19.4.5 **Materials and Welds**: Leaks resulting from faulty wrinkle bends, faulty field welds, and damage sustained during transportation to the construction or fabrication site. This includes leaks from dents, gouges, excessive stress, etc., occurring on originally sound material. It also includes manufacturing defects in the pipe material, components, or the longitudinal welds/seams.

19.4.6 **Equipment**: Leak resulting from malfunctioning control/relief equipment including valves, regulators, or other instrumentation. Examples include, but are not limited to:

- Greasing a valve or tightening the packing on a valve.
- Stripped threads or broken pipe couplings on nipples, valves, or mechanical couplings.
- Seal failures on gaskets, O-rings, seal/pump packing.
- Loose bolts/studs on steel couplings.
- Loose service tee caps.

19.4.7 **Operations**: Leaks resulting from inadequate procedures, safety practices, failure to follow correct procedures, operator error, frozen components due to water in a main, and installation error.
NOTE: This includes operations by company personnel or contractors.

19.4.8 **Other**: Leaks resulting from any other cause **not attributable to the above causes,** such as exceeding the service life. Examples include: cast iron joint leaks including permabond failures.

19.4.9 For cast iron breaks use table below to determine leak cause:

Cause of Cast Iron Break	Cause of Leak
Frost	Natural forces. Note: Current frost line does not have to be at pipe depth. If break was caused by freeze/thaw cycle, the cause of break is still frost and the cause of the leak is natural forces.
Settlement	This depends on cause of settlement. For example, the cause may be: excavation, natural forces, or operations.
Object Under Main	This depends on object. For example, the cause may be: excavation, natural forces, or operations.
Tree Root	Natural forces.
Graphitization	Corrosion.
Not Blocked Properly	Operations.
Undermine Washout	Excavation or natural forces.
3rd Party Damage	Excavation.
Unknown	Other.

19.5 The “Comments” section on the front side of the Outside Leak Report (form #8750A) shall contain detail on what was leaking and the nature of the repair.

19.6 The Outside Leak Report Continuation Sheet (form #8750B) can be used for additional surveys or rechecks and to depict additional bar holes for more complex leaks.

19.7 For leaks on services where the main is exposed, both the “Service Data” and “Main Data” areas shall be entered on the front page of the Excavation/Condition Report (form #4150A). The depth of cover shall be recorded for both the main and the service.

19.8 For leaks on services where the main is not exposed, the “Main Data” areas (size, material, and year), “Coating Type”, “Coating Condition”, External Corrosion”, “Internal Corrosion”, and “Pitting Areas”, N/A shall be checked off. Only record the depth of cover for the leaking service.

19.9 For leaks on mains, the “Service Data” area (size, material, and year), NA shall be checked off. Only record the depth of cover for the leaking main.

19.10 For this procedure, a leak on a service tee used to feed a service shall be classified as a service leak.

19.11 For this procedure, a leak on a service tee used as a main fitting (purge point, by-pass, etc.) shall be classified as a main leak.

20.0 FORMS

20.1 For the Team NY Outside Leak Report, refer to Appendix 3, Form #8750A.

20.2 For the Team NY Outside Leak Report Continuation Sheet, refer to Appendix 3, Form #8750B.

20.3 For the Excavation/Condition Report, refer to Appendix 3, Form #4150A.

20.4 For the Plastic/Mechanical Fitting Failure Report, refer to Appendix 3, Form #8725.

21.0 GRAPHICAL REPRESENTATION OF THE CLASSIFICATION OF HAZARDS RESULTING FROM GAS LEAKAGE (SEE NEXT PAGE)

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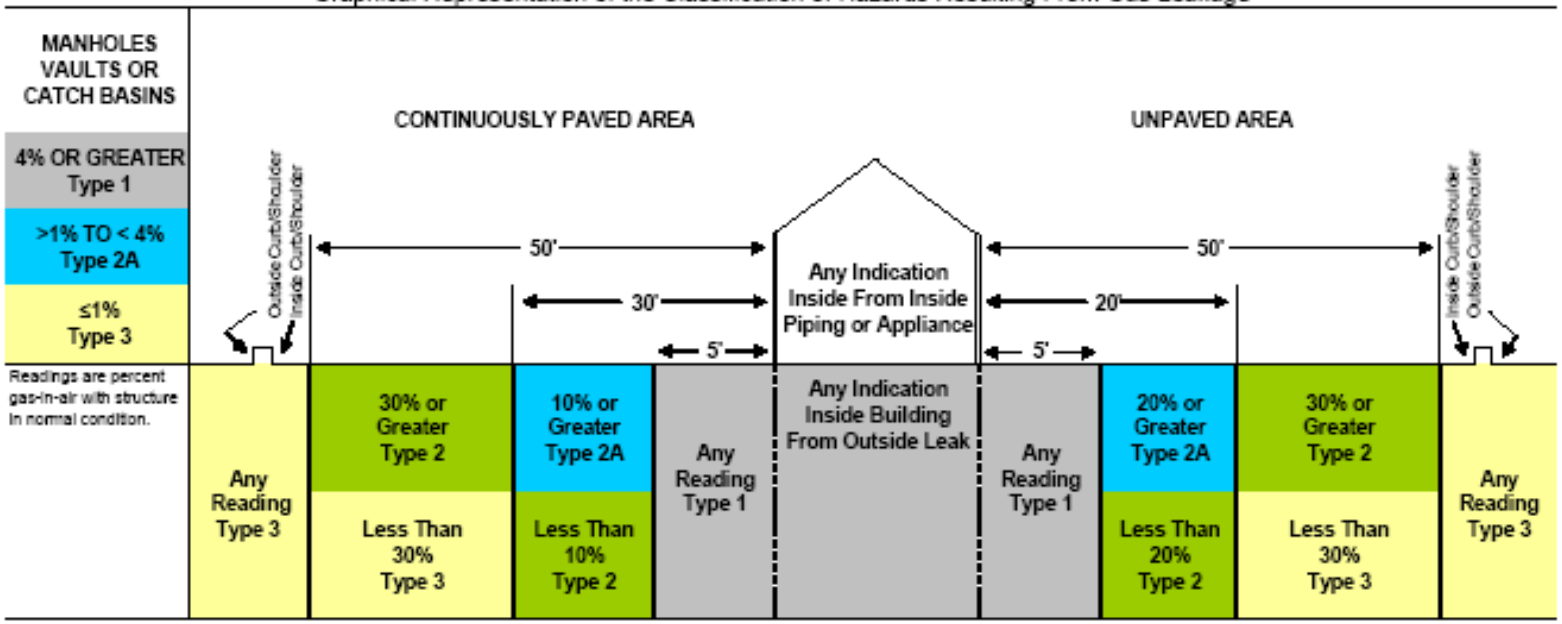
NYSEG/RG&E Gas Operating and Maintenance Manual

Graphical Representation of the Classification of Hazards Resulting From Gas Leakage



Classification	Additional Classifications	Required Action	Note
Inside Buildings		Inside leaks shall not be classified, but shall be handled in accordance with O&M Procedure 10.150 (Warning Tags).	Type 1, 2A, 2 repair requires follow-up inspection after 14 days but not more than 30 days, unless repaired by replacement or insertion of an entire length of pipe or service line and 3rd party hits repaired by routine maintenance and no readings exist after repair.
Type 1	Any leak judged to be potentially hazardous at the scene by the operating personnel, third party damage causing leakage, gas entering tunnels or buildings.	Immediate effort to protect life and property; continuous effort to remove hazard; daily surveillance until source has been corrected.	
Type 2A		Surveillance at least every 2 weeks; repair within 6 months.	
Type 2		Surveillance at least every 2 months; repair within 1 year.	
Type 3	Any leak not classified as Type 1, 2A or 2.	Surveillance at next survey or within one year (whichever is less).	

All readings are in percent gas-in-air and are "readings" as defined in the NYSEG/RG&E Gas Operating and Maintenance Procedure Manual 8.750.