

<p><b>NEW YORK CITY HOUSING AUTHORITY</b></p>	<p><b>EMERGENCY PROCEDURE MANUAL</b></p>	<p>Issued: <b>MARCH 15, 2001</b></p> <p>Revised: <b>JUNE 1, 2010</b></p>
<p><b>APPENDIX Q</b></p>	<p><b>GAS LINE SAFETY (S.P. 060:01:1)</b></p>	

## I. PURPOSE

This Standard Procedure establishes guidelines for the inspection, maintenance and repair of natural gas piping and equipment, and details the responsibilities of NYCHA staff for responding to and reporting natural gas leaks or natural gas equipment malfunction.

## II. POLICY

NYCHA staff must regularly inspect natural gas piping and equipment in basements, boiler rooms, and other areas for natural gas leaks or natural gas equipment malfunction.

All reports of gas leaks or damaged gas piping and equipment must be investigated immediately and upon verification, immediately reported to the development Superintendent, or designee, and, if necessary, to the Management Department Skilled Trades Deputy Director or Administrator.

## III. IDENTIFICATION OF GAS PIPELINES

- A. Development Superintendents and their staff must ascertain the location of **all** gas pipelines, both above and underground.
- B. All gas curb boxes are to be painted **yellow** and their location noted on the development plot plan. The distances (in feet) from the curb box to the point where the gas line enters a building are painted, in **yellow paint**, on the wall of the building, approximately five feet from ground level. Gas curb boxes must be kept free of debris.
- C. All gas piping throughout basement areas must be color-coded **yellow** or marked **GAS** in yellow letters. In addition, any piping carrying over 3 P.S.I. must be lettered **HIGH PRESSURE GAS PIPING** and such lettering must appear in every room, or in open areas, every 20 feet.
- D. Gas meter rooms and basement areas which enclose gas piping carrying over 3 P.S.I. must have painted on the entrance door the following: **WARNING, CAUTION** or **DANGER**, followed by the words: **GAS METER ROOM** or **GAS PIPING INSIDE**, as appropriate. Lettering must be **yellow** with a minimum size of 1 1/2" high and a 1/4" stroke.

## IV. INSPECTIONS AND TESTS

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Heating Plant Technicians (HPT), development Housing Managers, Superintendents, Assistant Superintendents, Supervising Housing Groundskeepers (SHG), and the Supervisors of Housing Caretakers (SOHC) regularly inspect, using gas detecting equipment, underground gas piping, vegetation above the underground gas piping, gas meter rooms, basement areas, gas boiler rooms, and outside gas vents.

If an emergency situation is discovered during an inspection or test, the development Superintendent, Assistant Superintendent or Maintenance Worker must take immediate action to abate the emergency, as indicated in the Emergency Gas Situation Actions Table in Section V.B.1. of this procedure. The development Superintendent, or designee, immediately reports all confirmed deficiencies to the Management Department Supervisor of Plumbers for a detailed inspection or repair.

### A. Underground Gas Piping

The SHG must perform **semi-annual** visual inspections of the vegetation over buried gas pipelines. This is done in the spring after initial growth has started and in the fall prior to the frost. This inspection searches for any dead or poor growth of grass, and dead trees and bushes over the buried gas pipelines. If the SHG finds these conditions, the SHG must immediately notify the development Housing Manager and Superintendent and enter the findings in the SHG Daily Log Book.

### B. Gas Meter Rooms and Basement Areas

HPTs perform a visual and gas odor inspection of gas meter rooms **twice per week** or as directed by the Management Department Heating Assistant Superintendent. HPTs must immediately notify the development Superintendent of any deficiencies found.

The development Housing Manager, Superintendent, Assistant Superintendent and SOHC check **monthly** all gas meter rooms and basement areas containing gas piping for damage, corrosion and leaks.

### C. Gas Boiler Rooms

#### 1. Development Superintendents / Assistant Superintendents

Development Superintendents / Assistant Superintendents should familiarize themselves with the proper normal operation pressure required during the boiler firing. If pressure varies from the norm, the burner is shut down and qualified personnel are notified.

During inspection of the boiler room, the development Superintendent / Assistant Superintendent:

- a. Listens to the sound of the light off at the time of burner ignition to ascertain a proper light off period. If there is any slight backfire or uneven light off, the boiler must be shut down until qualified personnel checks the controls.
- b. Observes all vents in boiler rooms, louvers, and secondary air passages, barometric

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or automatic dampers to ascertain their operation and remove obstructions, if any exist (Louvers or dampers cannot be blocked.)

- c. Checks the linkage on dampers and secondary air sources for proper operation
- d. Views the flame in boiler on each visit to ascertain its proper shape and color
- e. Performs a gas valve lock out test monthly on each boiler and logs the results in the boiler log book

### 2. Heating Plant Technicians (HPTs)

- a. HPTs perform a visual and gas odor inspection **daily** of gas booster pump area, gas train and gas vents. The visual inspection notes any gas leaks, missing valve handles, damaged piping and controls, and overall electrical conduit and wire condition. The condition of doors in gas meter rooms and boiler rooms is checked as to their security and operation. The odor inspection is performed using gas detecting equipment.

- b. High Pressure and Low Pressure Switch Tests

High pressure and low pressure switch tests must be performed **monthly** by HPTs to ensure that the controls and gas trains are operating properly. The Management Department Heating Assistant Superintendent, or designee, should be present for these tests.

#### (1) High Pressure Switch Test

The last gas valve on the gas train at the burner, after all other controls, must be turned off while the burner is firing. This action results in the high pressure switch locking out and consequently, requiring resetting.

#### (2) Low Pressure Switch Test

The first or main gas valve on the gas train at the burner, before all other controls, must be turned off while the burner is firing. This action results in the low pressure switch locking out and consequently, requiring resetting.

### D. Outside Gas Vents

Using gas detecting equipment, the HPTs check the outside gas vents **monthly** for gas odor. Gas escapes only when two (2) safety valves on the gas train shut down, thereby releasing the gas trapped between them. The odor of gas **must not** be noticed at **any other time**. The inspection of gas vents from the outside of buildings also includes the proper pitch of vent piping (no traps), any obstruction of the vent cap and vent cap screening, and general condition of piping for damage or corrosion.

<p><b>NOTE:</b> For any information or advice concerning gas equipment or the fuel supply and control, supervisors must contact the Technical Services Department Supervisor of Plumbers at 718-707-5803 or 5705.</p>
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## V. EMERGENCY GAS SITUATIONS

A. An "Emergency Situation" exists when one of the following conditions is present:

1. Gas is detected inside or near a building.
2. Fire is located near or directly involving a gas pipe or an appliance.
3. An explosion occurs near or directly involving a gas pipe or an appliance.

**NOTE** In an "Emergency Situation" as defined above, if there is any doubt whatsoever about the gravity of the situation, the development Superintendent immediately shuts down the entire building, and subsequently notifies the Management Department Director, Skilled Trades Deputy Director / Administrator, Emergency Services Department, and Tenant Association President.

B. Preliminary Actions to be taken NYCHA Personnel

1. Determine location of leak and perform the required action(s) as indicated in the Emergency Gas Situation Actions Table. If the location of leak cannot be determined immediately, shut down the building.

EMERGENCY GAS SITUATION ACTIONS	
CONDITIONS	REQUIRED ACTIONS
Apartment oven gas leak	<ul style="list-style-type: none"><li>• Shut off gas cock behind oven – Superintendent, Assistant Superintendent, Maintenance Worker or Skilled Trades Plumbers</li></ul>
Riser Leak	<ul style="list-style-type: none"><li>• Shut off gas riser – Superintendent, Assistant Superintendent, Maintenance Worker or Skilled Trades Plumbers</li><li>• Isolate gas riser – Skilled Trades Plumbers only!</li></ul>
Wide dispersion of gas	<ul style="list-style-type: none"><li>• Shut off gas main (which cuts off gas to entire building) – Superintendent, Assistant Superintendent, Maintenance Worker or Skilled Trades Plumbers</li><li>• Isolate building gas system – Skilled Trades Plumbers only!</li></ul>

2. The development Housing Manager, Superintendent, or designee, notifies the Management Department Supervisor of Plumbers, and Skilled Trades Deputy Director / Administrator immediately by telephone and e-mail.
3. The Management Department Supervisor of Plumbers notifies the Management Department Director, Technical Services Department Licensed Master Plumber, New York City Fire Department (FDNY), and the New York City Police Department (NYPD).
4. The Technical Services Licensed Master Plumber notifies the appropriate utility company (Con Edison, National Grid, and LIPA).

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- C. In the event of a gas leak, “**during normal business hours**” (8:00 a.m. – 4:30 p.m., Monday through Friday), reported to the NYPD or FDNY and / or the utility company, the gas lines may or may not have been shut down before NYCHA development staff or Skilled Trades Plumbers arrive.
1. If gas **is** shut down, NYCHA development staff or Skilled Trades Plumbers perform additional follow-up safety measures, including, but not limited to, the following:
    - a. Ensure that gas valves are shut down – Development staff or Skilled Trades Plumbers
    - b. Isolate gas lines from gas main so that no gas entering the damaged riser exits – Skilled Trades Plumbers
  2. If the gas **is not** shut down, NYCHA development staff / Skilled Trades Plumbers take the required action(s), as indicated in the Emergency Gas Situation Actions Table in Section V.B.1. of this procedure.
- D. In the event of a gas leak, “**after normal business hours**” (4:30 P.M. to 8:00 A.M., Monday through Friday, on Weekends, or on Holidays), reported to the FDNY, NYPD, the appropriate utility company, or to the Emergency Services Department (ESD), the gas lines may or may not have been shut down before NYCHA Skilled Trades Plumbers arrive.
3. Upon notification of a confirmed gas leak, ESD staff completes the following:
    - a. Notifies the area Supervisor of Plumbers **via telephone** and e-mail
    - b. E-mails Technical Services Department Director, Deputy Director and Licensed Master Plumber
    - c. E-mails Management Department Director and Deputy Director for Skilled Trades
  2. A Supervisor of Plumbers and Plumbing Team respond to the affected building(s):
    - a. If gas **is** shut down, NYCHA Skilled Trades Plumbers perform additional follow-up safety measures, including, but not limited to, the following:
      - (1) Ensure that gas valves are shut down
      - (2) Isolate the lines from gas main so that no gas entering the damaged riser exits
    - b. If the gas **is not** shut down, NYCHA Skilled Trades Plumbers take the required action(s), as indicated in the Emergency Gas Situation Actions Table in Section V.B.1. of this procedure.
  2. The Supervisor of Plumbers reports all findings and actions taken to the Technical Services Department Licensed Plumber immediately the following morning.

**NOTE:** In the event of an “**after normal business hours**” call out to isolate gas risers, it may be necessary to obtain entry into gas meter rooms. Development personnel or ESD must provide access into gas meter rooms and other basement areas, as required.

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## VI. INTERRUPTION OF GAS SERVICES

In the event of a gas line outage, the following actions must be taken by the development, Management Department and Technical Services Department staff after completion of preliminary actions as noted in Section V.B. of this procedure.

### A. Development

#### 1. Hot Plate Distribution

All developments must have in stock a sufficient number of hot plates for distribution during gas outages. The number of hot plates that must be stored on location is determined as follows:

- Multiplying the number of floors in a development's highest building by two. For example, if the number of floors in Development A's highest building is 16, the number of hot plates that must be stored at Development A is 32.

#### 2. Tenant Association and Resident Notification

When a gas outage occurs, the development Housing Manager must immediately proceed as follows:

- a. Notify the Tenant Association (TA) President
  - b. Post an appropriate Notice in the lobby and every floor in the affected building(s)
  - c. Schedule a stair hall meeting with the residents of the affected building(s) within twenty-four (24) hours, apprising the residents of:
    - Need for NYCHA staff to access apartments to disconnect stoves, search for leaks, install vertical risers and reconnect stoves
    - Availability of hot plates for use by residents
    - Dissemination of related information
3. The development Housing Manager must conduct bi-weekly update meetings with the residents of the affected building(s) and the TA President, if available, concerning the progress of the repairs and the projected date of gas service restoration and availability to residents. The development Housing Manager must maintain a record of all meetings conducted.
  4. Apartment Access
    - a. When initial access to apartments is required, NYCHA form 040.783, *Notice of Gas*

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*Service Repairs*, must be placed under the apartment door of each affected resident and posted in the lobby forty-eight (48) hours prior to the required date of access.

The notice must include:

- (1) The reason access is required
  - (2) The need for the resident, or representative, to be home to ensure access
  - (3) The right of the Authority to drill out apartment door locks, if necessary
- a. If access to an apartment is not granted after 48 hours and all efforts to contact the resident have failed, including personal visits to the apartment and telephoning emergency contacts and places of employment, the development Housing Manager must contact the Management Department Director, or designee, to request permission to drill out the apartment door lock.

### B. Management Department

The Management Department Director must provide weekly updates, every Monday, to the General Manager, Deputy General Manager for Operations and Assistant Deputy General Manager of Operations for Support Services, for all gas shutdowns involving an entire building.

### C. Technical Services Department

Technical Services Department staff:

1. Maintains a database of all gas shutdowns for tracking purposes
2. Submits a weekly report, every Friday, on active gas shutdown jobs to Management Department Directors, the Assistant Deputy General Manager of Operations for Support Services, Deputy General Manager for Operations, and ESD.

### D. Repairs

1. Department of Buildings (DOB) Required Permit
  - a. Physical repairs may only begin after confirmation by the Licensed Master Plumber that the Department of Buildings (DOB) had provided a permit or reference number.
  - b. If permit problems are encountered, all responsible parties are immediately notified so that corrective measures may be taken.
  - c. All repairs to gas lines are filed by the Licensed Master Plumber with the DOB, and require a DOB inspection.
  - d. The Management Department Supervisor of Plumbers:
    - (1) Monitors all repairs closely

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(2) Prepares the air integrity test and has it ready for witnessing by the Licensed Master Plumber and DOB Inspector

### 2. Department of Building Inspection

- a. Once repairs are finished, an integrity test is completed on all affected gas piping and performed in the presence of the Management Department Supervisor of Plumbers.
- b. Upon satisfactory test results, the Management Department Supervisor of Plumbers notifies the Licensed Master Plumber of record that the system is ready for DOB inspection.
- c. Upon notification that the system is ready for DOB inspection, the Licensed Master Plumber, or designee:
  - (1) Schedules the DOB inspection
  - (2) Notifies the Management Department Supervisor of Plumbers of the DOB inspection date and time

## VII. RESTORING GAS SERVICE

After completing all necessary repairs but prior to the restoration of service, NYCHA staff is prohibited from restoring gas service, **under any condition**, once the main valve or valves are closed, until proper authorization is received from the DOB and Con Edison or National Grid. The Licensed Master Plumber, or designee, notifies the Management Department Supervisor of Plumbers to schedule a DOB inspection and / or a Utility company Gas Turn-On, if applicable.

### A. Department of Buildings Inspection

Prior to the restoration of service, the DOB Inspector and the Technical Services Department Licensed Master Plumber, or designee, must witness and inspect all repairs. After successfully completing the DOB inspection, the Licensed Master Plumber, or designee, notifies the Management Department Supervisor of Plumbers to schedule a turn-on with the utility company.

### B. Gas Turn-On

#### 1. Utility Company Gas Turn-On

After successfully completing the DOB inspection, if applicable, the Management Department Supervisor of Plumbers schedules a turn-on with the utility company as follows:

- a. Con Edison

For **all Con Edison** gas turn-ons, a Con Edison company staff member and the



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Management Department Supervisor of Plumbers MUST be present.

b. National Grid

- (1) If National Grid performed the shutdown, a National Grid company staff member and the Management Department Supervisor of Plumbers MUST be present during the gas turn-on.
- (2) If National Grid did not perform the shut down, the NYCHA Licensed Master Plumber authorizes the gas turn-on.

<b>NOTE:</b> The testing equipment used remains on-site for possible use by the utility company.
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2. In-House Gas Turn-On

After successfully completing the DOB inspection, if applicable, and if a utility company gas turn-on is not required, NYCHA staff restores service as follows:

- a. For a turn-on performed by in-house staff, the Licensed Master Plumber, or designee, and the Management Department Supervisor of Plumbers MUST be present.
- b. The Supervisor of Plumbers assigns two teams of plumbers for each riser or gas supply line (boiler) restored to service at a given time.
- c. Plumbing teams MUST be in possession of two way radios or cell telephones to facilitate communications during the gas turn-on process.
- d. The first team is responsible for the control of gas to the riser and the second team is positioned in the top floor apartment of the riser to be restored. The second team is responsible for performing the purging and flame testing (connecting and ensuring proper operation) of the riser or supply line to be restored.
- e. The purging of gas lines MUST be conducted by utilizing an electronic gas detecting instrument.
- f. After confirmation that the gas riser is purged and the first stove is hooked up and operational, the first team may assist in completing stove hook-ups for the other apartments in the restored line.

C. When required, the following gas out procedure MUST be performed by plumbers only:

1. Replace all gas cocks
2. Retest all damaged lines
3. Install locking riser valves
4. Vent out gas lines
5. Connect and relight stoves

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**NOTE:** For further assistance or advice, contact the Technical Services Department Supervisor of Plumbers at 718-707-5803 or 5705.

### D. Training

Technical Services Department schedules and performs training on gas outage procedures for Management Department supervisory and plumbing staff.

## VIII. PERSONNEL, EQUIPMENT, TOOLS AND MATERIAL AVAILABLE FOR EMERGENCIES

### A. Personnel

The following personnel may respond to gas line emergencies:

1. Housing Manager / Assistant Manager
2. Superintendent / Assistant Superintendent
3. Management Department Skilled Trades / ESD
4. Technical Services Department Licensed Master Plumber

### B. Equipment and Tools

1. Development Storeroom Materials
2. Central Shops 718-707-7846 or 5708

### C. Material

- Central Shops and local plumbing supply houses

## IX. COMMUNICATION WITH FIRE, POLICE, UTILITY COMPANY AND EMERGENCY SERVICES DEPARTMENT PERSONNEL

A list of current telephone numbers must be posted on the *Emergency Call List*, displayed in or near the Superintendent or Assistant Superintendent's Office. This list must include the following:

- FDNY (local firehouse)
- NYPD (local precinct)
- Utility company (Con Edison, National Grid, LIPA)
- ESD - for after-hours calls
- Emergency Listing Chart

## X. NON-EMERGENCY SITUATIONS – SCHEDULED ACTIONS

"Scheduled Action" is a situation not requiring shut down of the building or evacuation of the population. Repairs conducted under "Scheduled Action" are not urgent, and are added to the regular repair schedule.

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All occurrences classified as "Scheduled Action" by development personnel are reported to the Management Department Supervisor of Plumbers by telephone, followed by a written report e-mailed to the Management Department Supervisor of Plumbers and Skilled Trades Deputy Director / Administrator. The Supervisor of Plumbers makes the final decision(s) regarding action to be taken.