

NYCHA LEAK TRAINING

EEA

ENVIRONMENTAL
EDUCATION ASSOCIATES

Working to make our communities healthy

INTRODUCTION, OVERVIEW & POLICY



Welcome NYCHA Staff

- EEA is an accredited asbestos, lead & mold training provider.
- This training is presented by EEA under contract to NYCHA & is consistent with Standard Procedure 050:25:2, ***Leak & Moisture Control In NYCHA Residential Buildings.***
- It's critical to providing safe public housing in NYC & is consistent with Baez Consent Decree and HUD Agreement.



*NYCHA succeeds when **YOU** succeed!*

Welcome NYCHA Staff

- Registration & Sign-in/out
- Presentation & Training Workbook
 - *Review Questions*
 - *Standard Procedure 050:25:2*
 - *iWM App Slides*
 - *Root Cause Scavenger Hunt*
 - *iWM Work Order Scenarios*
 - *Leak Inspection Checklist*
- Training Agenda
- Training Goals
 - *Understand importance of detecting & repairing leaks*
 - *Be able to use tools & NYCHA procedures*

Link to Training
Resources



Course Agenda – Day 1

- Overview & Policy
- Roles & Responsibilities
- *Leak Detection: Equipment & Procedures*

Leak Inspections: Source of the Leak Within Impacted Apartment

- Inspection Requirements & Steps
- Creating Repair Work Orders
- Resident Communication
- ***iWM Work Order Simulations #1 - #2***



Course Agenda – Day 2

Leak Inspections: Source of the Leak Outside Impacted Apartment

- Inspection Requirements & Steps
 - Multi Apartment Inspection
 - Vertical Line Inspection
- Creating Repair Work Orders
- Resident Communication
- ***iWM Work Order Simulations #3 - #4***

Leak Repair Procedures

- *Wall Breaks & Temporary Leak Repairs*
- Standing Water Removal
- Structural Integrity Issues
- *Pipe Condensation: Insulation & Interim Controls*
- *Wall Break Repairs*
- QA Process for Leaks
- Case Studies/Course Review
- Outputs, Reports & Recordkeeping
- *Knowledge Assessment*

Why Are We Here Today?

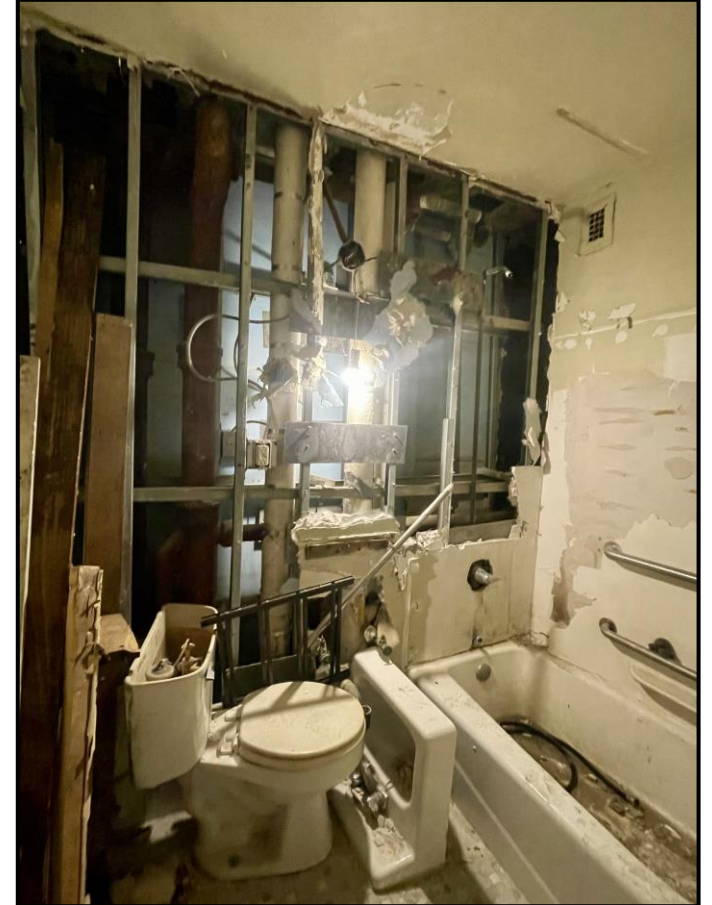
- Exposure to excessive moisture and mold have been associated with **increased risks for respiratory symptoms**, asthma, hypersensitivity pneumonitis, rhinosinusitis, bronchitis, and respiratory infections.
- Floods, leaks, and excessive moisture conditions, if not addressed in a timely manner, **can cause permanent damage to building components** and, in some instances, may lead to mold growth.



Why Are We Here Today?

NYCHA is required to establish procedures for mold and excessive moisture under two Federal lawsuits.

- The *Baez et. al. v. NYCHA* Modified Amended Stipulation and Order of Settlement (***Baez Consent Decree***).
- Settlement agreement between HUD, the U.S. Attorney's Office for the Southern District of New York (SDNY), NYCHA, and the City of New York (**HUD Agreement**).

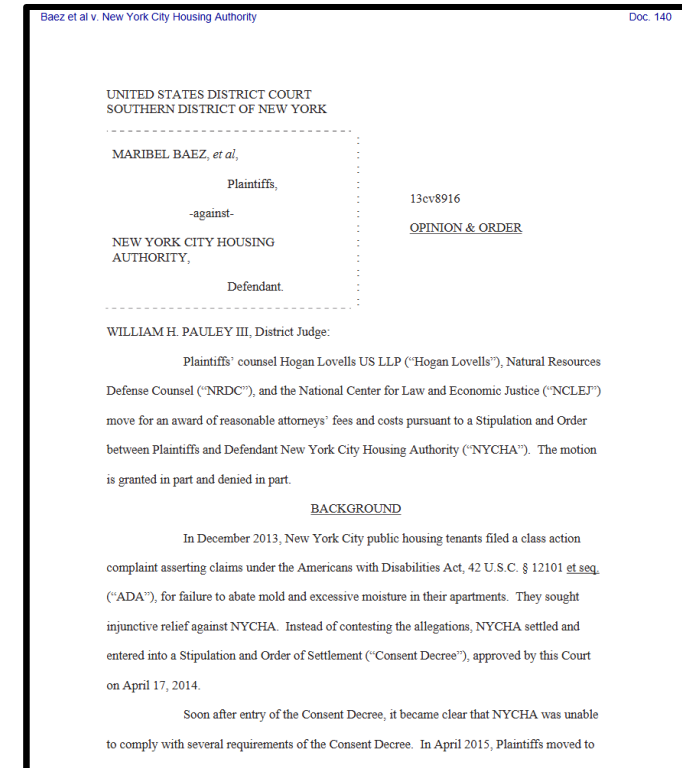


Baez Lawsuit

Maribel Baez vs. NYCHA (“Baez”) is a class action lawsuit filed in December 2013, alleging a violation of the Americans with Disabilities Act for the conditions of mold and excessive moisture for residents suffering from asthma. The case never went to trial – it was filed with a settlement agreement. In July 2018, the parties filed a **Revised Consent Decree**.

The Court appointed a Special Master and independent experts:

- The Ombudsperson and Ombudsperson Call Center (OCC)
- The Independent Data Analyst (IDA)
- The Independent Mold Analyst (IMA)



HUD Agreement

In January 2019, the U.S. Department of Housing and Urban Development, NYCHA, and the City of New York, entered the Agreement which established HUD Monitor and outlined the following requirements for NYCHA:



Within 2 years:

- For 95% of the verified mold complaints, clean visible mold and provide a written plan to address root causes **within 5 days**, remediate root causes within **7 days for simple repairs** and **15 days for complex repairs**.
- For leaks from above or floods, abate the condition **within 24 hours** and remove any standing water **within 48 hours**.

Why Are We Here Today?

In May 2025, NYCHA published *Leak & Excessive Moisture Control Standard Procedure* to improve and standardize NYCHA response to leaks.

- Learn how to **identify and document** the source of leaks.
- Ensure leaks are **properly traced to their origin**.
- Ensure **repair work orders are properly created** for all impacted units.
- **Keep residents informed** and guide them through next steps.



How We Could Do Better?

64% of Leak From Above (LFA) work orders were not properly traced during 2024–2025 according to Independent Mold Analyst. Main issues include:

- Work orders **closed as “unfounded”** even when **moisture or water damage** was present.
- **Hidden moisture** frequently **not identified** during inspections.
- The **true root cause** of leaks often **not properly determined**.
- Follow-up or root cause repair work orders to **address the issue** are **not created** or **created for the wrong apartment**.



How We Could Do Better?



Water Infiltration

- Major cause of **building damage & mold growth**.
- Leading cause of **damage claims** (\$13+ billion/year).
- Significant source of **excessive moisture** in NYCHA:
 - Can lead to **electrical shorts and fire hazards** if it reaches wiring and electrical systems.
 - Can **compromise insulation** reducing its effectiveness and leading to higher energy costs.
 - Can affect the **appearance and value of a property** (e.g., water stains, peeling paint, and warped materials).



Natural and weather-related damage are not included in this training!

Terms to Know

- **Leak:** An unintended escape of liquid (commonly water) from the building supply or waste piping, building fixtures, or penetration of water through any gaps or damages in the building envelope.
- **Leak From Above (LFA):** Floods, leaks, or water penetration into a resident's apartment **from another apartment(s), above or adjacent to it**, including apartments above the adjacent apartment.
 - *60,000+ leak from above complaints created per year.*



Terms to Know

- **Emergency Leak:** Floods, leaks from above and other conditions (e.g., **burst pipes, overflowing toilets, running faucets, etc.**) that cause sustained or recurrent moisture to flow into a resident's apartment or the walls of the apartment.
 - **Maximo priority:** 9 7
- **Non-Emergency Leak:** Leaks that do not cause sustained or recurrent moisture to flow into a resident's apartment or the walls of the apartment (e.g., **leaky faucets, continuously running toilets, and clogged sink or shower drains**).
 - **Maximo priority:** 4 3

Terms to Know

- **Flooding:** A visible, continuous, and uncontrolled flow of water or wastewater into an apartment that may result in standing water.
- **Condensation:** Moisture that forms on a cold surface when it encounters warmer humid air. Condensation may commonly occur on inadequately insulated cold-water pipes, toilet tanks, toilet bowls and lead bends.



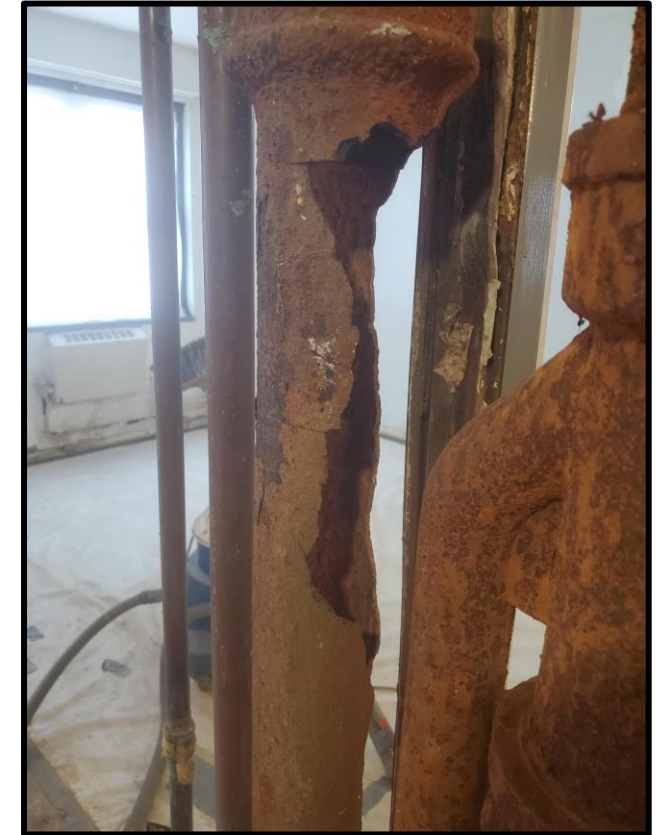
Terms to Know

- **Leak Inspection:** A process by which maintenance worker:
 - Responds to leak work orders.
 - Traces the leak up to the source (root cause).
 - Makes repairs (temporary or permanent).
 - Documents findings in the iWM App.
 - Creates follow-up repairs, if needed.
 - Communicates findings and next steps to the residents, if needed.



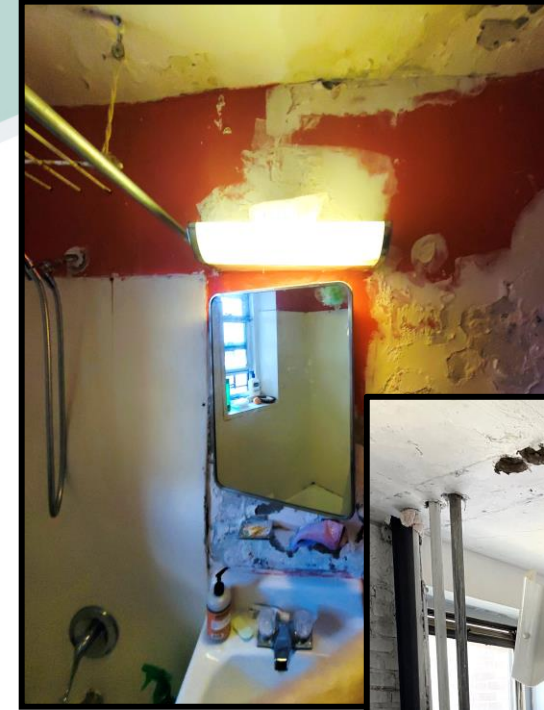
Terms to Know

- **Root Cause:** The fundamental reason for the occurrence of flooding, leak or excessive moisture. Common root causes:
 - Leaks and overflows from plumbing fixtures (sinks, toilets, tubs).
 - Leaks from domestic water riser and branch pipes.
 - Leaks in drainage, waste riser and branch pipes.
 - Deterioration of building envelope (façade, roofs, window lintels).
 - Improperly insulated or uninsulated cold-water pipes.



Terms to Know

- **Impacted Apartment:** The apartment which initially reported a leak complaint. The root cause of the leak may be inside or outside of the impacted apartment.
 - **Additional Impacted Apartments:** Any additional apartment(s) either in the line or adjacent to it that is impacted by the same leak.
- **Root Cause Apartment:** Apartment where the source (root cause) of the leak is located.



Terms to Know

- **Multi-Apartment Leak Inspection:** An inspection of multiple apartments to identify the root cause(s).
 - *This includes apt(s) up the line, adjacent apt(s) and/or apt(s) above adjacent apartments.*
- **Vertical Line Leak Inspection:** A follow-up inspection of multiple apartments in the line, if the root cause(s) wasn't identified during initial multi-apartment inspection.
 - *This includes the impacted apt. and **all apt(s) above it up to the first apt. which does not exhibit** wet conditions or water damage.*



Terms to Know

- **Chase Wall (or Wet Wall):** A structural wall designed to house plumbing pipes for fixtures including sinks, showers, and toilets. Each kitchen and bathroom is served by a chase wall. Chase walls at NYCHA may serve:
 - **One set of fixtures** (bathroom or kitchen). In this case, the rear of the wall would be a room without fixtures.
 - **Two sets of fixtures** (back-to-back bathrooms, back-to-back kitchens, or back-to-back bathroom-kitchens). It is possible that the rear of the chase wall is in a different apartment than the front of the chase wall.



Terms to Know

- **Simple Repairs** - Repairs that can be fully completed by property management staff (e.g., **maintenance workers** and **caretakers**).
- **Complex Repairs** - Repairs that need **skilled trades** or **other specialized staff** to address and may require multiple visits (e.g., plumbers, carpenters or vendors).



Terms to Know

Leak Service Level Agreement (SLA):

- Floods and emergency leaks are to be abated **within 24 hours** after condition is reported.
- Standing water is to be removed **within 48 hours**.
- Simple repairs are to be completed within **7 calendar days**.
- Complex repairs are to be completed **within 15 calendar days**.



Top Ten Things to Know

1

1. When responding to leak or excessive moisture complaints, first step is to identify their root cause(s). Ensure that the root cause(s) are identified and addressed before making any cosmetic repair.

A cosmetic repair made without the elimination of the root cause(s) will be temporary, while a repair made after the root cause(s) has been identified and addressed will have a long-lasting effect.



Top Ten Things to Know



2

2. Leak and excessive moisture conditions may have multiple root causes. Inspect for all possible sources and ask for assistance if you are unsure about the origins and/or appropriate remediation methods.

*There are **seventeen root causes** to choose from in the IWM App.*

Top Ten Things to Know

3. Some of the most common root causes(s) of leaks are:

- *Damage to the plumbing pipes and fixtures*
- *Ill-fitting connectors*
- *Blockages*
- *Cracks in sinks and tubs*
- *Improperly connected in-unit equipment (e.g., washing machines and dishwashers)*
- *Damage to flashing and roofing materials*
- *Aging facades, damage to window frames and lintels, and other conditions caused by building deterioration.*



Top Ten Things to Know

4. Use moisture meter to inspect the in-unit surfaces (e.g., ceiling, floors, walls) and trace the leaks up to its source. Inspect kitchen sink cabinets and bathroom vanities.
- *Areas of water damage that are localized and are present on **lower portions** of the wall are typically caused by a leak **within the local chase wall**.*
 - *If wet/or water damaged areas extend to the **top of the wall and/or ceiling**, it is likely that the root cause(s) of the water damage is located **above the current apartment**.*



4

Top Ten Things to Know

5

5. Investigate beyond the initial unit, when needed. Root cause(s) are frequently located in apartment(s) above or adjacent to the initial unit exhibiting leak or water damage.

*If leaks affect multiple apartments, make sure to locate the root cause(s) impacting multiple units and **create follow-up work orders for each impacted apartment**, as needed.*



Top Ten Things to Know

6

6. Address emergency leaks within 24 hours (or less, if indicated by its hazardous status) and remove all standing water within 48 hours of a report of the condition to NYCHA.

*If a resident reports water leak impacting electrical systems (e.g., switch or circuit box), the work order will be assigned a hazardous status **(Priority 9)** and should be responded to **in one hour**.*



7. Clean and dry damp (or wet) building materials or areas within hours to prevent mold growth. Advise residents to clean and dry any damp furnishings and other personal property within 48 hours.

7

Top Ten Things to Know



8

8. Prevent condensation from forming on cold water pipe surfaces. Condensation on inadequately insulated supply pipes, waste or drainpipes inadvertently receiving a continuous flow of cold water, windows and exterior walls can cause significant moisture accumulation and lead to saturated and water damaged building.

*Ensure that **leaky faucets and faulty toilet tank parts** (e.g., flappers, float valves, and speedy connectors) **are repaired** so that cold water does not continuously flow into waste lines.*

Top Ten Things to Know

9. Ask questions and communicate your findings to the residents.

- *Residents have the most up-to-date information on the history of occurrence (e.g., frequency of the leak, odor, location, and other valuable information).*
- *NYCHA staff should clearly communicate with residents inspection findings, scope of repairs needed, and next steps in completing the work.*



9

Top Ten Things to Know

10



10. Inform the residents with disabilities and medical conditions that:

- *They may seek a reasonable accommodation to transfer to another apartment, if the disability or medical condition is caused or worsened by the presence of leaks.*
- *The resident may also be transferred temporarily to another apartment during abatement of the conditions.*

Summary

- Exposure to excessive moisture and mold have been associated with **increased risks for respiratory symptoms**, asthma, hypersensitivity pneumonitis, rhinosinusitis, bronchitis, and respiratory infections.
- NYCHA staff and its **residents must work together** to detect the source(s) of floods, leaks, and excessive moisture as soon as conditions are observed and take timely actions to remediate the root cause(s).



NYCHA LEAK TRAINING

ROLES & RESPONSIBILITIES

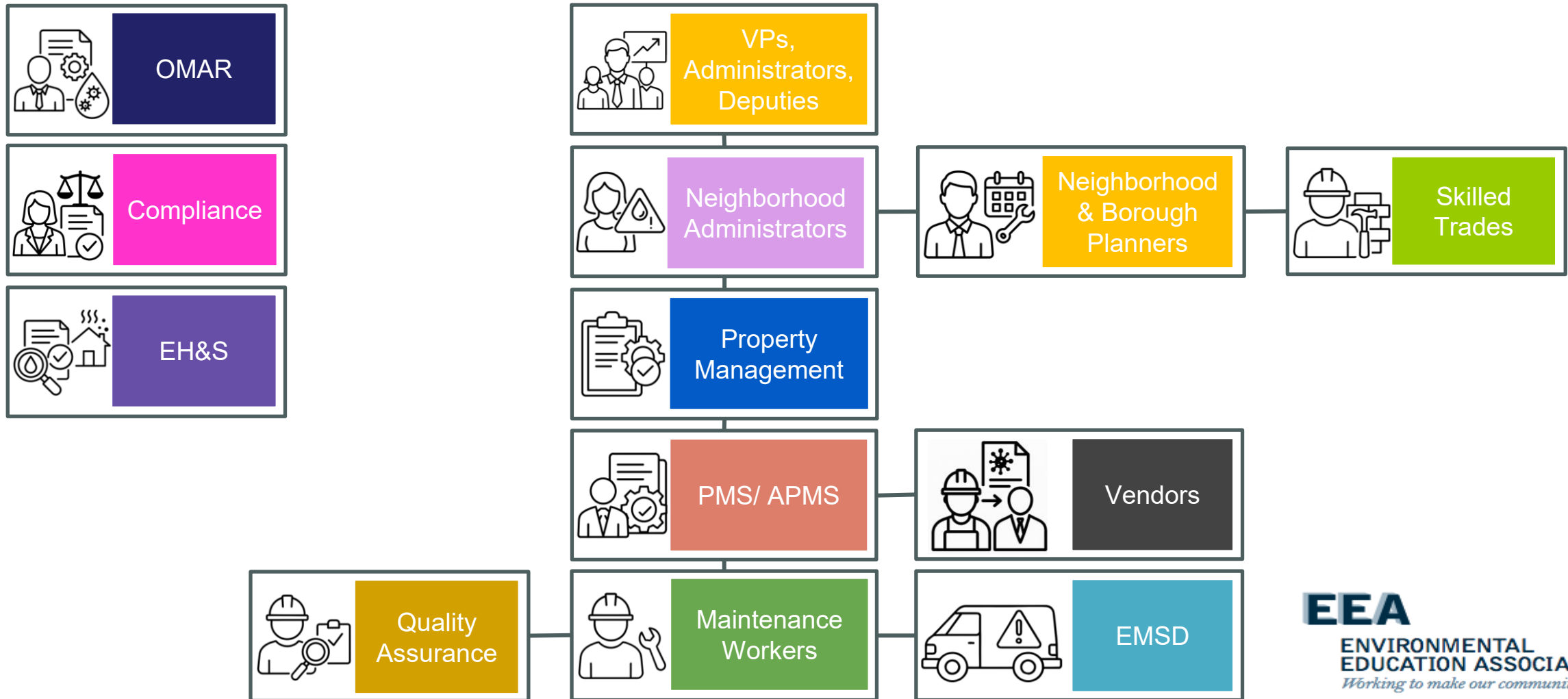
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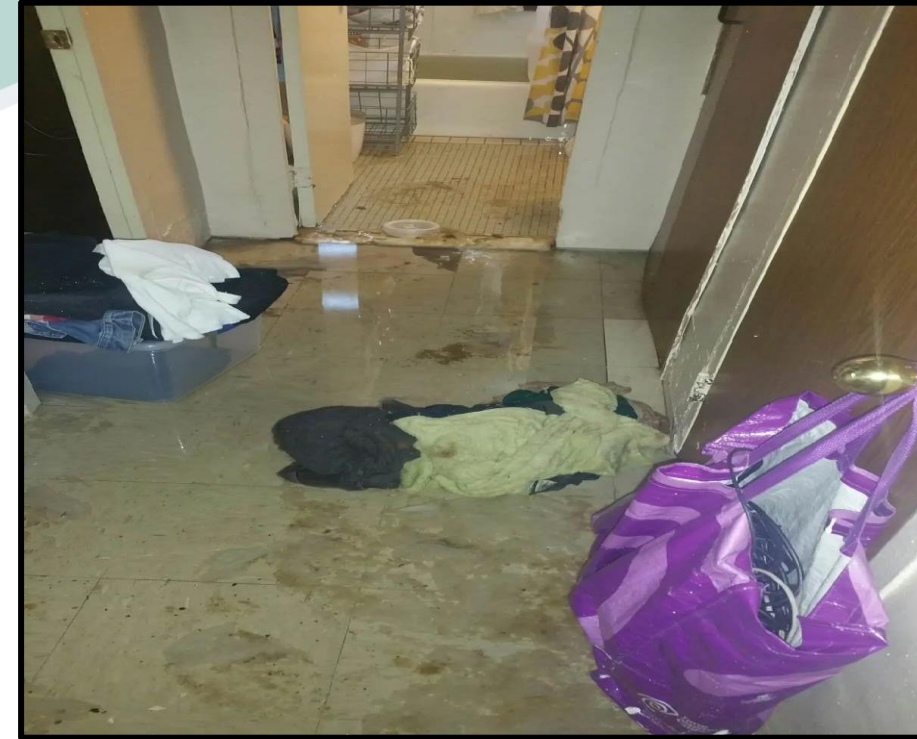


Roles Supporting Leak Repairs



Maintenance Workers

- Address emergency and non-emergency leaks.
- Perform work in accordance with Leak Standard Procedure:
 - Bring required tools and supplies.
 - Make sure the root cause(s) is identified.
 - Document work in the iWM App.
 - Create all necessary repair work orders.
- Might use ***Right of Entry*** to address any emergency conditions.



If an adult resident is not home, see *NYCHA Standard Procedure 040:17:3, Accessing Public Housing Apartments When Tenant Not Home to Address Deficiencies Related to Leaks, Mold, and Lead-Based Paint.*

Maintenance Workers

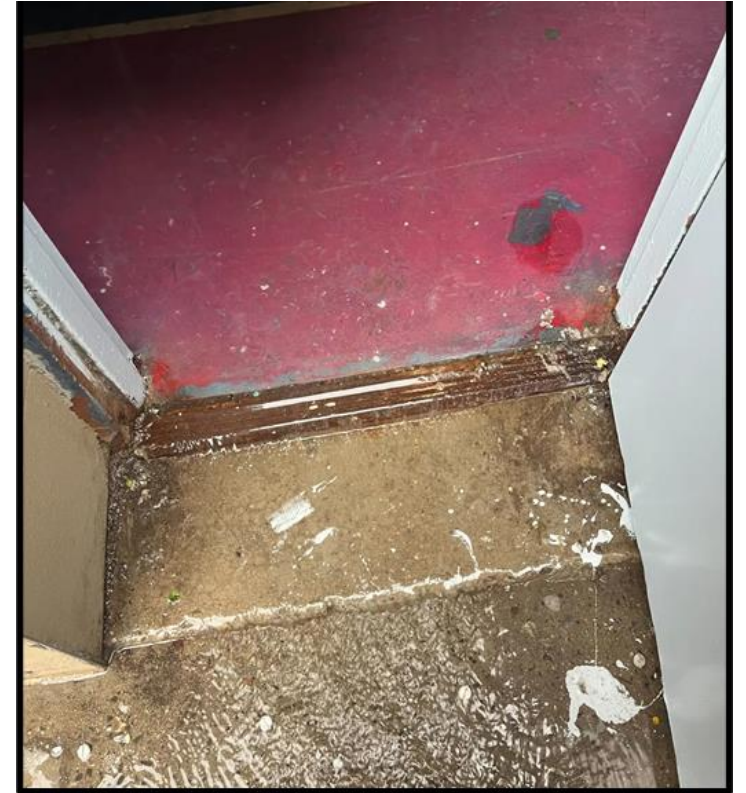
Source of the leak located outside impacted apartment?

- Inspect unit(s) above or adjacent to find the root cause (***multi-apartment inspection***):
 - Request assistance of another Maintenance Worker or APMS/ PMS, if needed.
 - Post *48 Hour Notice of Health or Safety Repairs* or consider *Right of Entry*, if needed.
- If still not able to find a source, consider conducting full line inspection (***vertical line inspection***).



Maintenance Workers

- Immediately notify APMS or PMS when:
 - There is a **standing water** as a result of a flood or leak (require Caretaker or Technical Services).
 - There is a **suspected structural integrity risks**.
 - **Immediate follow-up repairs by another trade** are required:
 - *Eg: You are not able to stop an active leak due to the severely corroded pipes and need an immediate follow up by plumbers.*



If the standing water **contains sewage**, appropriate staff and/or a vendor should be assigned.

Maintenance Workers

- Keep the residents informed on inspection findings, repairs made, and next steps in repair process:
 - **If skilled trade work is required**, issue *NYCHA Form 042.800 Repairs to Schedule (RTS)* slip to each impacted apartment and inform resident(s) to contact Neighborhood Planner to schedule repairs.
 - **If other craft work is required** (e.g., property maintenance staff, vendor, heating, etc.), inform the resident that property management office will schedule repairs.



Supervisors of Housing Caretakers (SOHC)

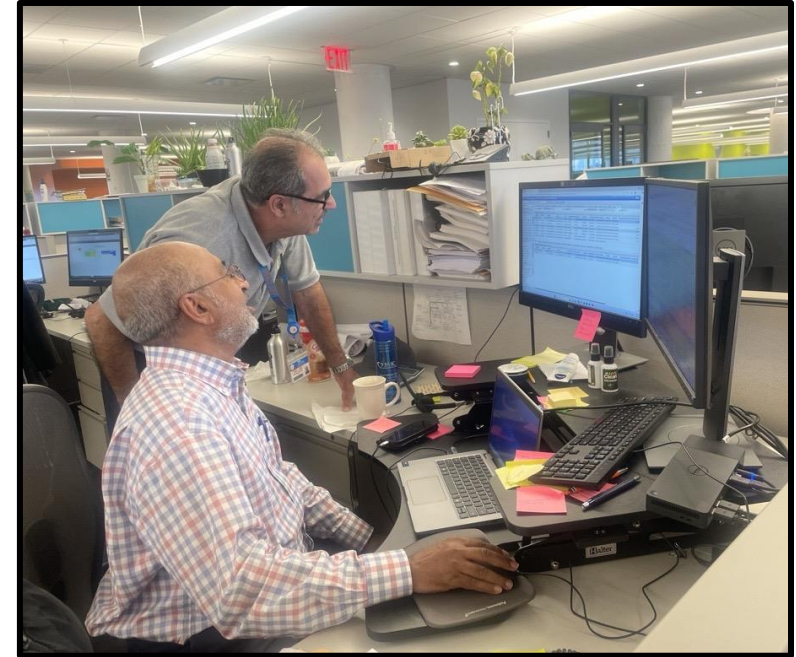
- **Review Maximo daily** for any Standing Water Removal Work Orders:
 - **Assign caretakers** to address standing water removal work orders.
 - **Monitor that the work is completed** in accordance with repair protocols.
 - **Close the Standing Water Removal Work Order** in Maximo, once work is completed.



Failure Class (FC): LEAKFOLLOWUP
Problem Code (PC):
NEEDSWATERREMOVAL

Property Maintenance Supervisors & Assistant Property Maintenance Supervisors

- Review work orders in Maximo **multiple times a day.**
- **Assign maintenance workers** to address the work orders based on:
 - Severity of condition
 - Work orders priority
 - Scheduled date
- Assist maintenance workers with **Multi-Apartment** and **Vertical Line Inspections:**
 - Review work order history in Maximo
 - Coordinate scheduling with residents
 - Assist with conducting inspections



Property Maintenance Supervisors & Assistant Property Maintenance Supervisors

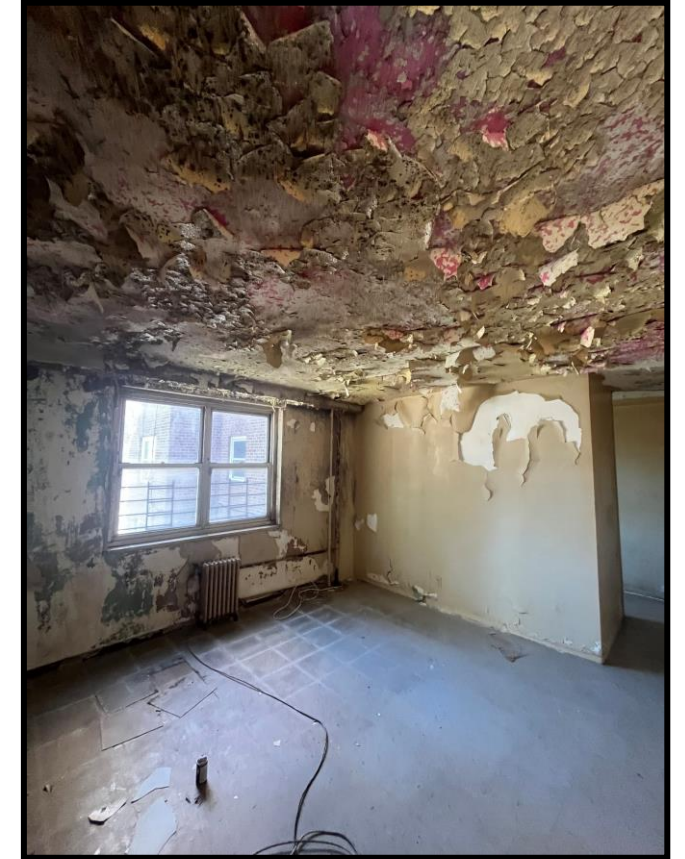
- Monitor Maximo for **any missed Leak WOs**:
 - Reschedule maintenance work orders.
 - Coordinate the rescheduled date with residents, when needed.
- Ensure that residents are notified if maintenance workers **might be late** or **miss a scheduled appointment**.



*Property maintenance staff (PMS, APMS, HA, etc.) **must contact resident** if maintenance workers might be late or miss scheduled appointment.*

Property Maintenance Supervisors & Assistant Property Maintenance Supervisors

- **Escalate any conditions that require immediate response by follow up crafts** to neighborhood administrator, skilled trades administrator or operations administrator
 - *Eg: structural integrity risks, floods or severe leaks.*
- Notify neighborhood administrator and above titles **if shutting of the supply riser is needed** to stop an active floods.
- Manage **vendor work**.



Property Maintenance Supervisors & Assistant Property Maintenance Supervisors

- Conduct **regular quality assurance (QA) inspections** of closed maintenance work orders.
 - Randomly select **up to 3 closed WOs** per worker each week for QA inspections.
 - Pay close attention to **closed Leak From Above (LFA) WOs** to ensure their root causes are identified and follow up repairs are created.



See NYCHA Standard Procedure 040:22:2, *Apartment Turnover, Monthly Building and Other Maintenance Inspections* for reference.

Property Maintenance Supervisors & Assistant Property Maintenance Supervisors

- Ensure that skilled trades and vendors are at the assigned locations.
 - Notify the skilled trades supervisor if **a skilled trades worker does not check in by 9.00 a.m.** at the development.
 - Notify the skilled trades supervisor and the neighborhood planner of **any skilled trade repairs that require rescheduling or additional work.**
- Ensure that the development is **equipped with appropriate tools and materials.**



Emergency Management and Services Department (EMSD)

- **EMSD Maintenance Team:**
 - Respond **emergency Leak Work Orders** outside Normal Business hours and performs work in accordance with the Leak SP:
 - *E.g., answer inspection questions, document Root Cause(s), create follow up repairs, close WOs, etc.*



Normal business hours are **Monday – Friday from 8:30am – 4.30pm**, excluding holidays.

Emergency Management and Services Department (EMSD)

- **EMSD Supervisors:**
 - Oversee staff response to emergency leaks **outside of Normal Business Hours.**
 - **Assign EMSD maintenance teams** in accordance with the work order priority code, severity, and protocols outlined in the Leak SP.
 - Ensure that EMSD work orders **are closed** or **are reassigned back to the development** at the start of the regular business hours.



Property Managers

- Review work orders at least three times a week to ensure compliance with Leak SP.
 - Address non-compliance or deviations from Leak SP with PMS or APMS.
- Ensure that staff in property management office:
 - Assists property maintenance staff **with contacting residents** to get access.
 - **Timely responds** to the reasonable accommodation requests.



*If NYCHA is unable to comply with this timeframe, **use best efforts** to prioritize scheduling of leak repairs.*

Neighborhood Planners

- Schedule skilled trade repairs to be completed in **no later than 15 calendar days**:
 - Email PMS and APMS the next day's schedule for skilled trades **by the close of business** of the previous day.
 - Inform PMS or APMS of any non-skilled trades work (e.g., heating, lead, asbestos, vendors) that needs to be coordinated to complete repairs.
- Neighborhood skilled trades include **Bricklayer, Electrician, Exterminator, Plumber, Carpenter, Plasterer, and Painter.**



*If NYCHA is unable to comply with this timeframe, **use best efforts** to prioritize the scheduling of these work orders.*

Neighborhood Planners

- Answer resident calls to schedule leak repairs:
 - Determine appropriate sequencing of repairs.
 - *E.g., If root cause originates outside of the impacted apt., **schedule repairs in the root cause apt.** (e.g., plumbing) prior to scheduling cosmetic repairs in the impacted apt.*
 - Coordinate with **the borough planner** the scheduling of borough skilled trades.
 - Coordinate with the **property management** staff scheduling of non-skilled trade repairs.



Neighborhood Planners

- **Schedule WOs when the resident has not called.**
- Make **two attempts** to contact the resident. If the resident cannot be reached, proceed with scheduling:
 - **Repair scheduled 21+ days away:** NYCHA will mail/email *NYCHA Form 042.861, Notice of Skilled Trade Appointment*
 - **Repair scheduled less than 21 days away or rescheduled:** Planning Unit must generate *NYCHA Form 042.861* in Maximo and email to development to place under resident's door.



*If the phone number for resident is out of service or incorrect, **contact property management to request best contact number** for resident.*

Neighborhood Planners

- When notified by the skilled trade supervisor that **the scheduled appointment can't be kept**:
 - **Notify the resident** as soon as made aware.
 - **Coordinate rescheduling of a skilled trade appointment** with resident(s), skilled trade supervisors, and PMS or APMS.
 - Review all other repairs scheduled for the apartment(s) **to ensure that the missed appointment won't impact other work.**
- Escalate any issues to the Neighborhood Administrator.



Borough Planners

- Schedule skilled trade repairs to be completed in **no later than 15 calendar days**, and coordinate scheduling with neighborhood planner and skilled trades supervisors.
- When notified that scheduled appointments for **glaziers** and **roofers cannot be kept**:
 - **Coordinate rescheduling** of appointments with the neighborhood planner and skilled trades supervisors, and residents, if needed.
 - **Ensure that rescheduled appointments** do not impact other scheduled appointments.



*Borough skilled trades include
Glazier and Roofer.*

Skilled Trade Workers

- Ensure that all repairs to **correct the root cause(s) of leaks and cosmetic repairs** are completed to NYCHA standards and documented in the iWM App.
- Adhere to **specific instructions outlined in the Leak SP**, e.g.:
 - Making wall breaks.
 - Insulating domestic water pipes.
 - Applying mold-resistant materials.

See Standard Procedure 040:09:7, *Managing Maintenance Work Orders* for instructions on addressing WOs.

See Standard Procedure 040:18:1, *Repair Standards & NSPIRE REAC Inspections* for more information on NYCHA repair standards.



Skilled Trades Supervisors

- **Oversee** the daily work of all skilled trades staff and ensure repairs are completed in accordance with NYCHA procedures.
- **Conduct a weekly review of skilled trade leak repair appointments scheduled for the next two weeks** and notify the neighborhood planner if a skilled trade worker cannot keep a scheduled appointment.
 - When possible, notify the neighborhood planner **at least 24 hours** prior to the scheduled appointment.



*If NYCHA is unable to comply with this timeframe, **use best efforts** to prioritize the scheduling of leak repairs.*

Neighborhood Administrators

- **Set priorities & provide guidance for prioritizing repairs on the neighborhood level.**
 - **Review weekly schedule** of skilled trade appointments for **under booking or overbooking**.
 - **Review high priority WOs** with neighborhood planner and property management supervisors.
 - Ensure that leak repairs **get scheduled and rescheduled**, and that work is completed in compliance with Leak SP.
- **Review work order backlog** and determine what work could be performed by vendors.



Other Staff Responsibilities

VPs for Property Management & Operations Administrators

- Monitor leak performance metrics at the borough, neighborhood, and consolidation levels, provide guidance and prioritize repairs.

Skilled Trades Deputy Directors

- Provide recommendations on a leak investigations and repair performed by NYCHA staff or vendors.
- Work closely with skilled trades administrators and supervisors to ensure that skilled trade workers meet scheduled appointments and perform work in accordance with NYCHA standards.



Other Staff Responsibilities

Skilled Trades Administrators

- Provide guidance on leak repairs to neighborhood administrators, borough planners and neighborhood planners.
- Monitor scheduling of skilled trades staff to ensure that complex repairs that do not require capital improvements are scheduled and **completed within 15 calendar days**, when possible.



Office of Mold Assessment and Remediation (OMAR)

- Serves as a **NYCHA's liaison** to the Special Master, *Baez* Plaintiffs, HUD Monitor, IMA and IDA.
- Sets strategies to **improve leak & mold compliance** and monitors NYCHA performance:
 - *E.g., average time to respond, average time to complete simple and complex repairs, root cause(s) of leaks and mold, recurrence, etc.*
- **Provides technical expertise** to NYCHA staff:
 - Manages **complex jobs** (i.e., Building Line Initiative).
 - Takes **on escalated cases** for assessment.



Office of Mold Assessment and Remediation (OMAR)

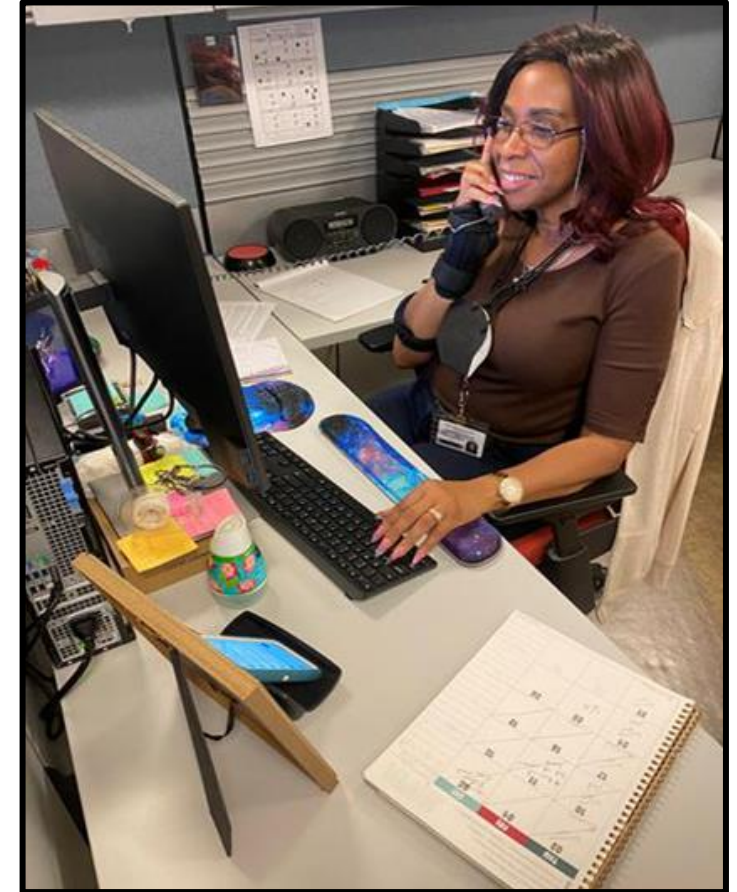
- Administers **Enhanced Oversight Program (EOP)**.
- Assists NYCHA Operations upon request with:
 - Performing leak & mold inspections for complex cases.
 - Providing field training.
 - Assisting with work order verification.
 - Assisting with addressing high priority work orders (*e.g., vent cleaning, mold removal, and mold resistant paint WOs*).



Mold Response Unit (MRU)

Office of Mold Assessment and Remediation

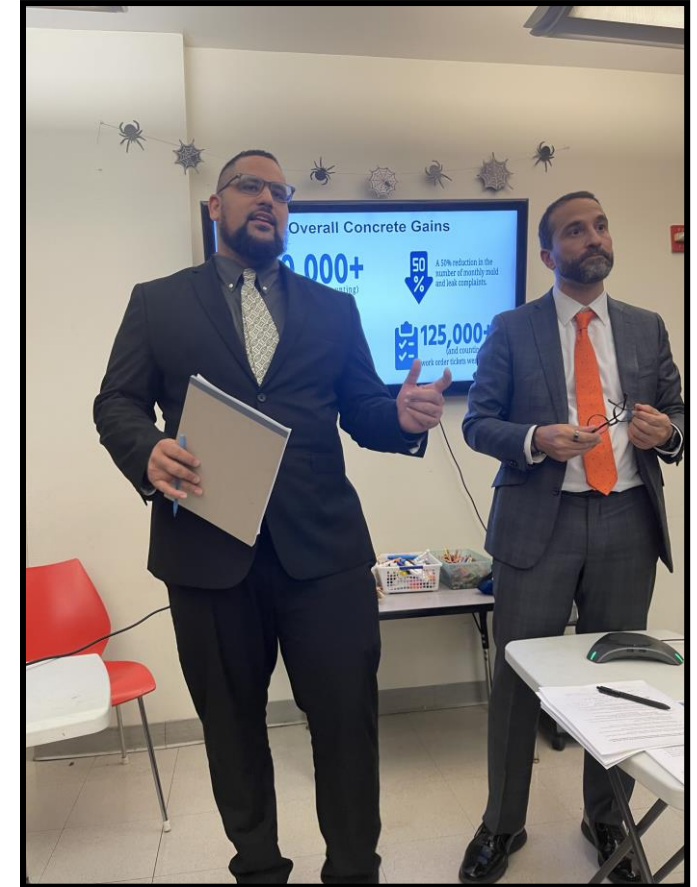
- **Monitors and case manages OCC cases, referrals, escalated cases, and court cases:**
 - Tracks resident complaints until resolution and resident satisfaction.
 - Hosts check-ins with residents.
 - Ensures all necessary work orders are created, properly sequenced and completed as scheduled.
 - Escalates severe conditions for prioritization of scheduling or resident relocation.



Ombudsperson Call Center (OCC)

OCC is independent, court-appointed entity that **holds NYCHA accountable** repairs in a timely manner.

- **Conducts initial intake** of complaints from residents and refers cases to Mold Response Unit (MRU).
- **Tracks scheduled repair dates** based on resident complaints.
- **Refers cases** to OMAR, the Compliance Department, and the IMA to ensure root causes are addressed.
- **May issue orders to NYCHA** if resident complaints are not promptly resolved.



Ombudsperson Call Center (OCC)



Ombudsperson

NYCHA is under a court order to effectively remediate mold and excessive moisture in a timely fashion. The Court has appointed **César de Castro** as the Ombudsperson to consider complaints from Residents if NYCHA fails to comply with that order. Mr. de Castro will address residents' complaints about leak, mold and excess moisture repair orders. Mr. de Castro and the OCC, which works under Mr. de Castro's direction, are completely independent of NYCHA.

Mr. de Castro is an experienced litigator whose practice focuses on criminal defense, corporate investigations, commercial litigation, and appellate litigation. Mr. de Castro is a former judicial law clerk and prosecutor who has been practicing law for nearly twenty years. He has also served as an adjunct law professor of legal writing and is currently an adjunct professor of criminal law.

The Ombudsperson has **the authority to issue NYCHA to take a specific action**, including – **completing repairs with specified days**, require a **transfer**, require an **independent contractor** to complete repairs at NYCHA expense, and others.

Office of Quality Assurance

- Performs **random QA inspections** of closed Leak WOs to ensure that all repairs:
 - Were completed satisfactory.
 - Were completed in accordance with NYCHA repair standards.



Compliance Department

- Ensures that all NYCHA employees **follow laws** and uphold ethical standards.
- Reviews leak and mold complaints **through the [Complaint Forum](#) on the NYCHA website.**
- Investigates or flags potential **deceptive practices.**
- **Refers cases** to EH&S, Property Management Operations, the Office of Quality Assurance, and Ombudsperson Call Center (OCC).



Environmental Health & Safety Department (EH&S)

- **Conducts oversight inspections** for Mold WOs.
- **Investigates resident or employee complaints** received regarding health and safety hazards (*e.g., floods, severe leaks, and air quality*).
- **Issues corrective actions to address deficiencies:**
 - Relocate tenants or employees until hazards are abated.
 - Conduct investigations to identify the root cause(s).
 - Use mold-resistant materials.
 - Provide additional training to staff who is out of compliance.



Environmental Health & Safety Department (EH&S)

- Provides **recommendations to Property Management** and other departments based on investigations and routine oversight inspections.
- Administers **NYCHA's Respiratory Protection Program**.
- Oversees **NYCHA's Hazard Communication Program**.
- Provides **initial safety trainings** and **refreshers** to ensure NYCHA's compliance.



See *NYCHA Standard Procedure 001:17:2, NYCHA Respiratory Protection Safety Program.*

Take a Break!

- We appreciate your participation.
- Our job is to provide training that will give you the capability to conduct proper leak inspection.
- Please let the instructor or any EEA staff if there's anything we can do to improve your learning experience.



NYCHA LEAK TRAINING

LEAK DETECTION EQUIPMENT

EEA

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Informer Work Management



Samsung Handheld provides access to the Informer Work Management (iWM) App

- iWM App is used to Search, Document Work, Create and Close Work Orders.
 - Document if the resident is not home.
- Camera is used to document the condition and completed (or necessary) repairs

Log into the Device

1

Press Power/Lock Button
Swipe across screen
Enter the default
password for the **Device**:

nycha90
(Old devices)

nycha123
(New devices)



1

Tools: All Leak Work Orders

- Moisture Meter
- Step Ladder (4 ft)
- Set of Pipe Wrenches (10' & 14")
- Tongue & Groove Pliers (various sizes)
- Hammer & 3 lb. Lump Hammer (Sledge)
- Utility Knife
- Aviator Snips
- Epoxy
- Headlamp, flashlight, etc.
- Nitrile Gloves
- Safety Glasses
- Rags
- Duct Tape
- Respiratory Protection (N95 respirator), as needed.



Moisture Meter (Protimeter)

- Includes **Search** and **Measure (Pin)** measurement capabilities for recording moisture levels in buildings.
- The two-in-one measurement capability allows for faster and less destructive moisture measurements.



Search Mode
(Non-Invasive)



Measure Mode
(Pin Mode)

Moisture Meter (Protimeter)

- **Search Mode:** By pressing the device against the material's surface, moisture meter **reads the average moisture of a substrate to a depth of $\frac{3}{4}$ inches:**
 - *This feature allows to distinguish between **surface moisture** (e.g., shower condensation) and **substrate saturation** (e.g., ongoing leak from above).*
- **Measure Mode:** Moisture meter can be used to monitor the progress of drying materials by inserting a specialized pin probe into the material.



When to use Moisture Meter?

- Use moisture meter and document the highest measurement on the Leak WO when:
 - Investigating leak from above or leak within call cavity.
 - Tracing a leak from above to the source:
 - *Eg: Root Cause apartment will likely be the first apartment where wet conditions do not extend to the upper section of the chase wall.*
 - Identifying a location for initial wall break.
- NYCHA building component is considered “**wet**” when moisture meter reads **599 or greater**.



Example: moisture meter reads ‘wet’ (999).

How to use Moisture Meter?

- By using moisture meter, **identify hidden wet conditions:**
 - Wet readings that are localized and are present on **lower portion** of the wall are typically caused by a leak **within the local chase wall**.
 - Wet readings that extend to the **top of the wall and/or ceiling** often indicate that the root cause(s) of the leak **is located above the impacted apartment**.
- Leak to be **concealed behind a tub enclosure or beneath a toilet** (no visible damaged materials or visible leak).



Example: moisture meter reads 'dry' (155).

When to use Moisture Meter?

Following types of complaints require moisture meter measurements to be taken!

<u>FAILURE CLASS (FC)</u>	<u>PROBLEM CODE (PC)</u>
LEAKFROMABOVE	CONSTANTDRIPPING
LEAKFROMABOVE	CONSTANTLEAKING
LEAKFROMABOVE	FLOODING
LEAKFROMABOVE	LEADBENDLEAKING
LEAKFROMABOVE	WATERPENETRATION
EXCESSIVEMOISTURE	EXCESSIVEMOISTURE
PIPES	PIPENEEDSREPAIR
PIPES	PIPESLEAK
WALLS	WALLLEAK
WALLS	WATERDAMAGE

*See visible moisture or water?
You can **manually enter 999** on
the work order since active leak will
measure wet!*

How to use Moisture Meter?

- Check all surfaces in the room you are inspecting:
 - **Visible water damage or mold?** Take moisture readings **every 6"** (horizontal & vertical) and continue until readings are below 599 for at least 2' beyond the affected area.
 - **No visible water damage or mold?** Take moisture readings **every 1'** (horizontal & vertical).
- Special attention must be paid to **plumbing chase walls** and surfaces **above toilets and showers**.



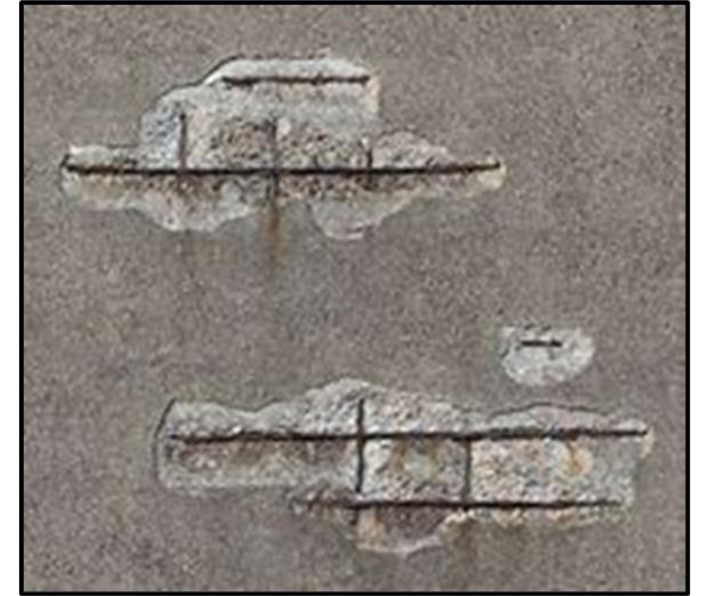
How to use Moisture Meter?

- Hold moisture meter **firmly flat** against the wall.
- **Avoid** any contact with 3.5 mm input jack on the right side of the moisture meter - highly conductive and could cause a false reading!
 - Do not place your finger on it.
 - Could cover with a piece of blue tape.
- **Do not slide** the moisture meter!



How to use Moisture Meter?

- The moisture meter is calibrated to detect **average moisture** of a substrate to a depth of $\frac{3}{4}$ inches.
 - Could be used on **Sheetrock, Plaster, Wood, Brick, Concrete** and **Tiles**.
- **Caution – False Reading!**
 - If you **suspect a false reading** (e.g., if the moisture meter makes contact with rebar in a reinforced concrete cement structure), **take additional readings in six-inch (6”) intervals** in each direction.



Tools: Leak from Above WOs

Tools to Make Initial Wall Break:

- Drill and drill bits
- Borescope
- Allway handy saw
- Masonite or equivalent (e.g., Plas-tec Polywall)



Additional Tools to Enlarge a Wall Break:

- Scraper
- Straight Edge (Level) + Marker
- Sheetrock saw (for sheetrock locations only)
- HEPA vacuum cleaner
- 6 mil poly-sheeting roll



Borescope

A borescope is a hand-held tool that allows users to see leaks and potential mold problems inside walls, ceiling plenums, crawl spaces, and other tight areas.

- Consists of a video camera on the end of a flexible "snake."
- No major drilling or cutting of drywall is required.
- Can be **used to observe conditions in other hard to reach places**, such as inside an exhaust vent.



Borescope Operations

1. Turn Power on
2. Lamp to brighten image
3. Zoom in & out
4. Flip Image
5. Take Picture
6. Save Picture



Tools: In Unit Stoppage

- Hand drum
- Toilet auger with swivel head



Knowledge Check

Name this tool and describe what it is used for?



Knowledge Check

Name this tool and describe what it is used for?

- Moisture Meter
- It could be used to identify hidden moisture conditions and to pinpoint to the location of the root cause.



Knowledge Check

Explain when you should be using a moisture meter?



Knowledge Check

Explain when you should be using a moisture meter?

- **When investigating leak from above or leak within call cavity.**
- **When tracing a leak from above to the source:**
 - *E.g., Root Cause apartment will likely be the first apartment where wet conditions do not extend to the upper section of the chase wall.*
- **When identifying a location for initial wall break.**



Knowledge Check

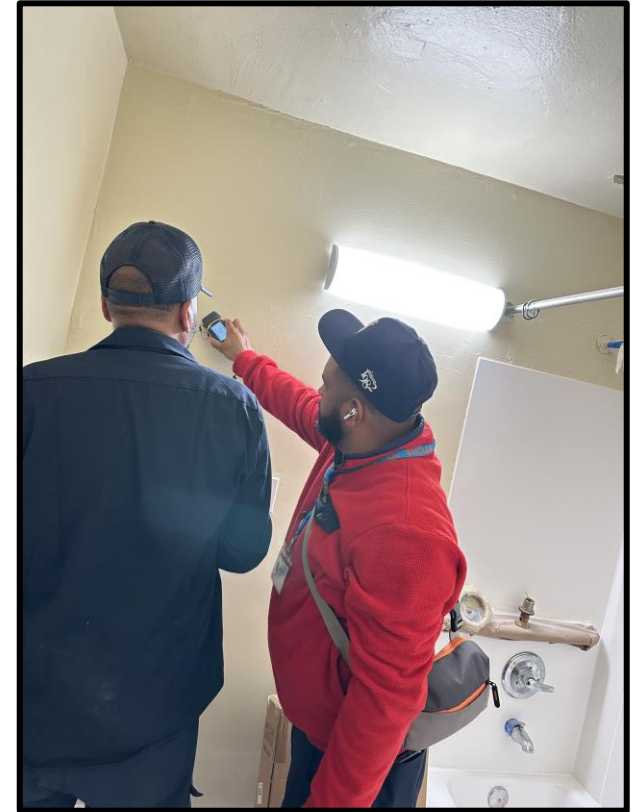
Explain and demonstrate how to use moisture meter (including how to take multiple measurements in each direction)?



Knowledge Check

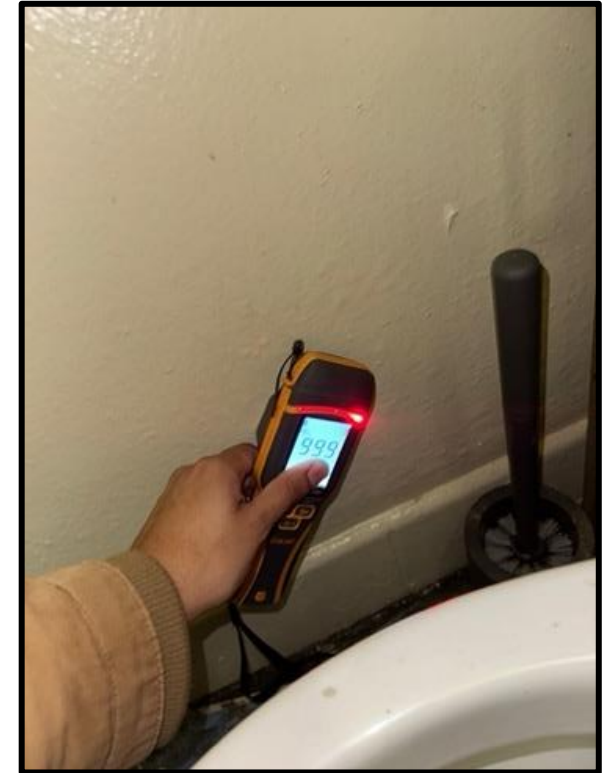
Explain and demonstrate how to use moisture meter (including how to take multiple measurements in each direction)?

- **Visible water damage or mold?** Take moisture readings every 6" (horizontal & vertical) and continue until readings are below 599 for at least 2' beyond the affected area.
- **No visible water damage or mold?** Take moisture readings every 1' (horizontal & vertical).



Knowledge Check

What moisture measurement reading is considered “wet”?



Knowledge Check

What moisture measurement reading is considered “wet”?

- The reading of 599 or higher is considered “wet”.



Knowledge Check

Name this instrument & explain its purpose for leak detection.



Knowledge Check

Name this instrument & explain its purpose for leak detection.

A borescope is a hand-held tool that allows users to see potential leaks and mold problems inside walls, ceiling plenums, crawl spaces, and other tight areas.

- Consists of a video camera on the end of a flexible “snake”.
- No major drilling or cutting of drywall is required.
- Can be used to observe conditions in other hard to reach places, such as inside an exhaust vent.



NYCHA Smart Device Policy

The smart device provided to you by NYCHA is the property of NYCHA and is solely for use authorized by NYCHA:

- There is no reasonable expectation of privacy when using your NYCHA smart device.
- Any information saved on any smart device owned by NYCHA, is the property of NYCHA and may be subject to monitoring.
- Unauthorized altering of or tampering with your NYCHA smart device is prohibited.



This information can be found in section 17 of the [NYCHA Human Resources Manual](#).

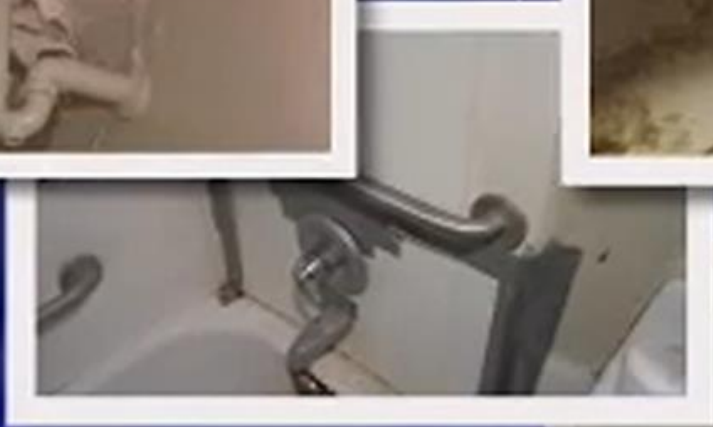
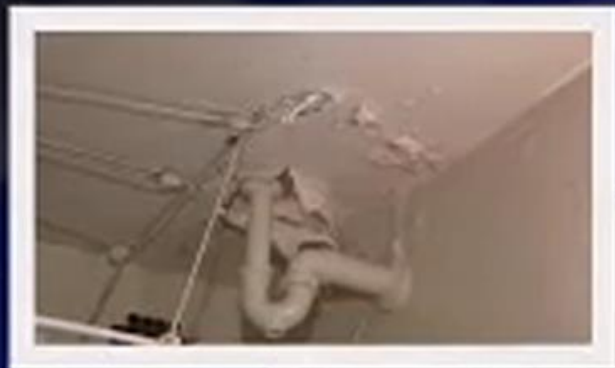


NYCHA LEAK TRAINING



LEAK DETECTION PROCEDURES

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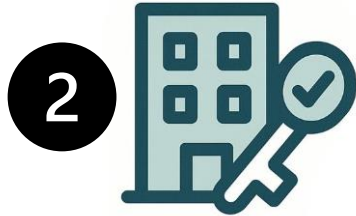


Leak Inspection – Workflow



1 Review Work Orders

- ❖ Prioritize emergencies.
- ❖ Address non-emergencies in accordance with the scheduled date.



2 Access Apartment

- ❖ Use *Right of Entry*, if needed.
- ❖ Confirm complaint.



3 Talk to Resident

- ❖ Ask about leak history.
- ❖ Inform about work needed.



4 Inspect for Root Cause

- ❖ Use moisture meter.
- ❖ Check pipes, fixtures, walls, ceilings etc.
- ❖ If needed, inspect above/adjacent apartments.



5 Document in iWM App

- ❖ Respond to inspection prompts.
- ❖ Document moisture readings.
- ❖ Upload photos.
- ❖ Create follow up repairs, if needed.



VI. Communicate Next Steps

- ❖ Tell resident what was found.
- ❖ Explain what will happen next.
- ❖ Leave RTS slip, if needed.

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Working to make our communities healthy

I. Reviewing Work Orders

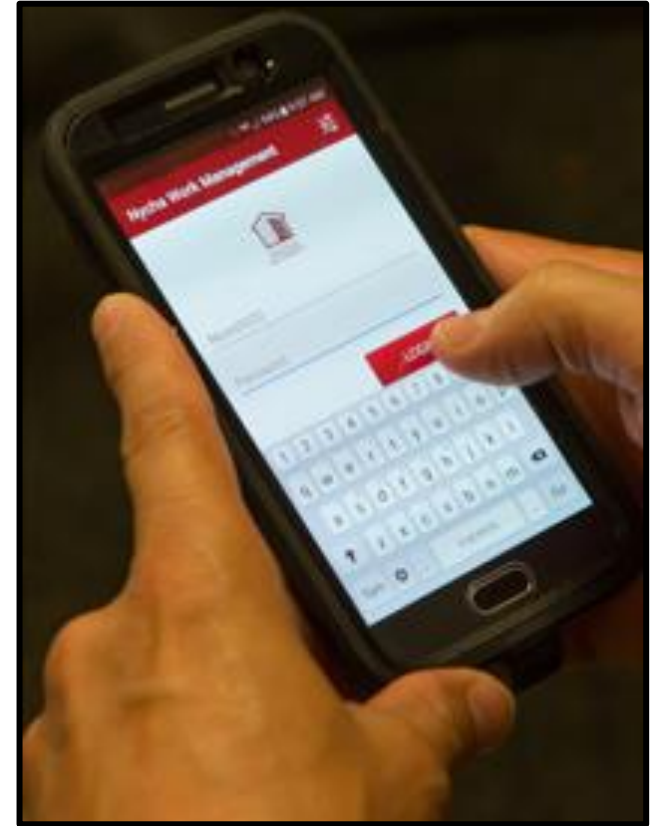
- Prioritize assigned or open work orders according to:
 - **Severity** (e.g., Flooding or Dripping)
 - **Priority** (e.g., Priority 7 or 3)
 - **Scheduled date for non-emergency repairs:**
 - *Morning appointment: 8am - 12pm*
 - *Afternoon appointment: 1pm – 4pm*
- **Check the tool kit** to ensure all necessary tools are in working order.



See Standard Procedure 040:09:7, *Managing Maintenance Work Orders* for instructions on accessing apartments and starting time.

I. Reviewing Work Orders

- Use iWM App to respond to the Leak Work Orders:
 - Start the time in the when **at the apartment door**.
 - Document all findings in the iWM App **prior to leaving the apartment** (e.g., *respond to inspection questions, log repairs, upload photographs, create child WOs*).
- If not able to use iWM App, use the **Maximo Leak Work Order Form** and submit to PMS or APMS:
 - PMS or APMS must enter the results in Maximo.



I. Reviewing Work Orders

- When feasible, PMS or APMS should assign **two (2) maintenance workers** to address **Leak From Above WOs**.
 - If another maintenance worker is not available, PMS or APMS could assign one maintenance worker.
- If assistance is needed during leak tracing, **maintenance worker should request APMS or PMS to dispatch additional staff** (*e.g., to operate fixtures in units above or assist with wall breaks*).



II. Accessing the Apartment

Scenario #1: Emergency Leak is Severe, but Tenant is Not Home

- If a resident or other adult is not home, the maintenance worker **may use *NYCHA's Right of Entry* to address floods or other emergency conditions.**
 - Maintenance worker must notify PMS or APMS before executing right of entry.
 - See Right of Entry provisions of *NYCHA Resident Lease* (NYCHA Form 040.507).



Standard Procedure 040:17:3, *Accessing Public Housing Apartments When Tenant Not Home to Address Deficiencies Related to Leaks, Mold, and Lead-Based Paint.*

II. Accessing the Apartment

Scenario #2: Emergency Leak is Severe, but Tenant Refuses Access

- If the resident **refuses access**, notify PMS or APMS:
 - PMS or APMS must contact property management, who should try to convince them to allow access.
- If the tenant **still does not allow access**, the property management office could:
 - Call the tenant's emergency contact for assistance.
 - Call the neighborhood administrator for further guidance, if unsuccessful.



Do not leave severe leaks and floods unaddressed!

II. Accessing the Apartment

How to obtain access in case of emergency?

- Request the assistance from the **NYPD**, or
- Request **NYCHA's Family Partnerships** to intervene with tenant or emergency contact, or
- Coordinate with **NYCHA's Relocation Services** regarding any relocation needs (e.g., if the resident is concerned about repairs being done while residing in the apartment).




Property management **may begin the termination of tenancy process** for breach of rules and regulations described in *Management Manual Chapter IV*.

II. Accessing the Apartment

Scenario #3: Emergency Leak is not Severe, or Work Order is Not for Emergency Leak

- Issue *NYCHA form 042.727, 48 Hour Notice of Health and Safety Repairs* to the apartment and **return in 48 hours** to reattempt to gain access.



Sorry, we missed you.
Lo siento, no los encontramos en su residencia.
Вас не было дома.
我們曾經到訪，但您不在家。



DATE / FECHA / DATA / 日期	We will return on Regresamos el / Мы придем еще раз / 我們將會再次上門，日期：	
Work Order # Orden de trabajo# / № заказа на ремонт / 維修工作單編號		
Description of work Descripción del trabajo / Описание необходимых работ / 報修項目說明：	Based on the terms of your lease, we are providing you with advanced notice that NYCHA will be exercising our right to enter your apartment on the date listed above to perform repairs. That means we may need to gain access if you or another adult is not home.	
NOTICE GIVEN BY NOTIFICACION DADA POR / УВЕДОМЛЕНИЕ ПОДПИСАЛ / 特此通知：	If we do not hear from you, we will attempt to gain access to your apartment on the date listed.	
(NYCHA Employee Name Printed / NYCHA Nombre de empleado en imprenta / (Имя и фамилия сотрудника NYCHA печатными буквами) / 房屋局職員姓名(正楷書寫))		
Spanish	Russian	Chinese
Basado en los terminos de su contrato, nosotros le estamos notificando por adelantado, que NYCHA ejercera sus derechos de entrar a su apartamento en la fecha indicada arriba para hacer reparaciones. Esto significa que...	В соответствии с условиями вашего Договора об аренде жилья, мы предоставляем вам предварительное уведомление о том, что NYCHA осуществит свое право на посещение вашей квартиры в указанную выше дату для выполнения ремонтных работ. Это...	根據您所簽署的租約規定，如果我們已預先提供了通知，紐約市房屋局有權於上述日期進入您的住房單位進行所需的維修工作。也就是說，如果您或其他成年人...

See NYCHA Standard Procedure 040:09:7, *Managing Maintenance Work Orders* for reference.

III. Speaking with Resident

- Upon entering the apartment, immediately address any emergency condition.
 - **Make a best effort to ask** about the history of prior complaints and repairs that might be relevant to the current work order (if applicable).
 - Inform residents of **what kind of work will be done and how long it's expected to take** (if applicable).
- **Can not identify resident's language?** Call the **Language Hotline** for assistance **212-306-4444**.



For guidance on how to request and provide language assistance services, see Standard Procedure 007:09:1, *Language Assistance Services*.

III. Speaking with Resident

Here are some examples of questions you can ask a resident:

- *Did this happen before? How long did it/ does it last? When did it occur for the first time?*
- *Does the leak impact other rooms or adjacent areas (e.g., through a shared wall)?*
- *Is the leak associated with any activity (e.g., rainfall, bathroom use, neighbor taking shower, neighbor running washing machine, humidity in apartment)?*
- *Any distinctive characteristics (e.g., color of water or odor of the water).*



Add any relevant information to the 'Work Log' that could **assist other staff** with leak tracing or inform follow up work.

III. Speaking with Resident

- If you identify a situation in the apartment that could be **hazardous to your safety and health** (e.g., *an unsecured animal or suspected illegal activity*):
 - Stop work.
 - Immediately leave the apartment.
 - Immediately alert APMS or PMS.
- See *Standard Procedure 001:15:3, Make it Safe*



Knowledge Check

If a resident or adult is not home to allow access to apartment that reported flooding condition, the maintenance worker:

- a. Waits for resident to request a visit
- b. Disregards the leak issue
- c. Might use NYCHA's Right of Entry



Knowledge Check

If a resident or adult is not home to allow access to apartment that reported flooding condition, the maintenance worker:

- a. Waits for resident to request a visit
- b. Disregards the leak issue
- c. Might use NYCHA's Right of Entry

Knowledge Check

If resident refuses to provide access to apartment with emergency leak, the property maintenance supervisor or assistant maintenance supervisor contacts:

- a. Property manager
- b. Environmental Health & Safety (EH&S)
- c. All of the above



Knowledge Check

If resident refuses to provide access to apartment with emergency leak, the property maintenance supervisor or assistant maintenance supervisor contacts:

- a. Property manager
- b. Environmental Health & Safety (EH&S)
- c. All of the above.

Identify Root Cause(s)



- Does leak originate **Within Impacted Apartment?**
- Does leak originate in an **Above or Adjacent Apartment? Or roof?**

IV. Root Cause(s)

- **Timely identifying and correcting the root cause(s) is essential** to avoiding damage to building components and to ensuring the leak does not recur.
 - There are **17 Root Cause(s)** for Leaks.
 - **Select at least 1 Root Cause per Work Order** (up to 4 Root Causes).
 - Make sure you **select accurate root cause(s)** before closing work order!



IV. Root Cause(s)

1. Appliance Issues**
2. Bathtub Shower Issues
3. Caulking Damaged, Missing, Loose (Caulking DML)
4. Grouting Damaged, Missing, Loose (Grouting DML)
5. Leak Around Window
6. Leak From Above/Adjacent – *Investigate***
7. Leak From Above/Adjacent - *Previously Identified***
8. Leak Through Façade
9. Pipe Condensation
10. Pipe Condensation - *Previously Addressed***
11. Plumbing Leak - In Unit
12. Radiator Unit Leak
13. Resident Caused**
14. Roof Leak
15. Sink Issues - In Unit
16. Toilet Issues - In Unit
17. Other**

*Root Causes marked with (**) might require Notes to be entered.*

Root Cause #1

Appliance Issues:

Select this root cause when the source of leak, water damage, or excessive moisture is attributed to **improper installation or failure of appliances** (e.g., washing machine, air conditioner, dishwasher).



Root Cause #1 (cont.)

Appliance Issues:

- **Improperly Installed Dishwasher (or Tubing)** -
Instruct the resident to contact a repair service for the dishwasher and to not use the dishwasher until it is properly repaired and/or connected.
- **Improperly Installed Washing Machine (or Tubing)**
- Instruct the resident to contact a repair service for the washing machine and to not use the washing machine until it is properly repaired and/or connected.



*If dishwasher or washing machine is leaking, **shut off the water valves.***

Root Cause #1 (cont.)

Appliance Issues:

- **Improperly Installed Air Conditioner** - Instruct the resident to contact a repair service for the air conditioner and to not use the air conditioner until it is properly repaired and/or connected.
- **Improperly Installed Freezer** - Instruct the resident to contact a repair service for the freezer and to not use the freezer until it is properly repaired.



*If an air conditioner is **improperly installed and presents a danger**, immediately remove the unit and install a window guard in its place.*

Root Cause #1 (cont.)

What to do when observed leaking appliance?

- **Disconnect the appliance** and **instruct the resident** to get it repaired, installed correctly, or removed.
- **Inform the PMS or APMS**, who should notify the property management office.
 - ***Property management must take prompt follow up action to confirm the appliance is authorized and to ensure the appliance is properly installed or repaired.***
 - ***If the resident fails to comply, NYCHA may commence a termination of tenancy action for breach of rules and regulations.***

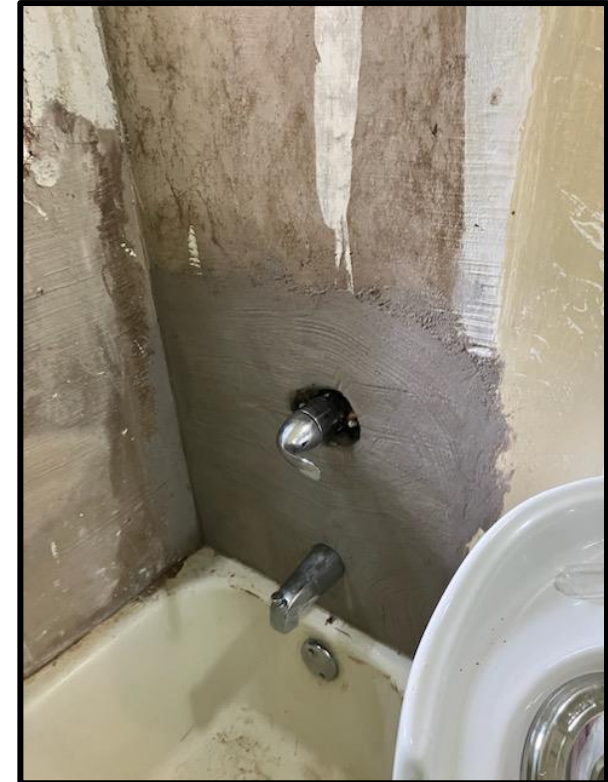


See the *Management Manual Chapter I, Occupancy, Section X, Appliances*, for NYCHA policies related to resident installed appliances.

Root Cause #2

Bathtub Shower Issues:

Select this root cause when the source of the leak, water damage, or excessive moisture is attributed to **any damage to the bathtub or shower** (e.g., damaged or cracked bathtub, damaged or cracked tub enclosure, faucet leaks).



Root Cause #3

Caulking Damaged, Missing, Loose (Caulking DML):

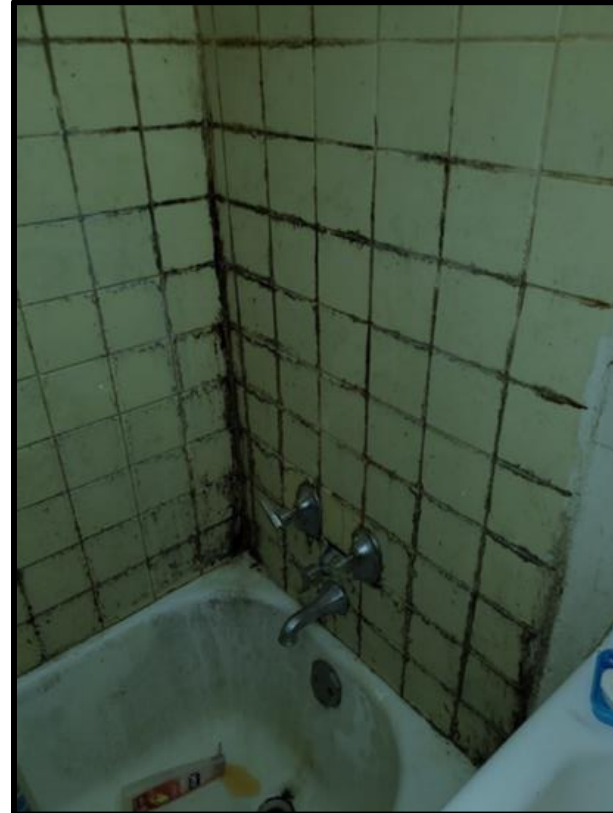
Select this root cause when the source of the leak, water damage, or excessive moisture is attributed to **water penetration through a missing or damaged area of bathtub/shower caulking.**



Root Cause #4

Grouting Damaged, Missing, Loose (Grouting DML):

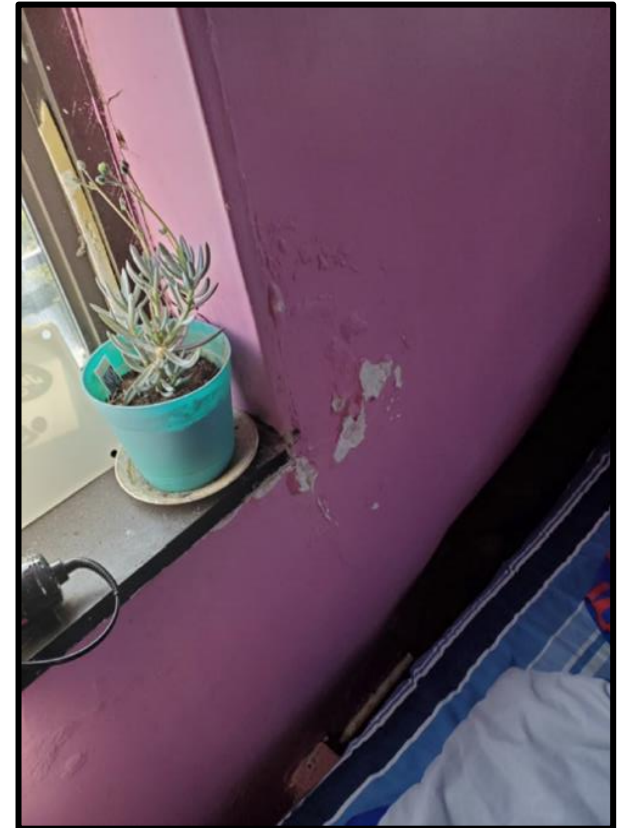
Select this root cause when the source of the leak, water damage, or excessive moisture is attributed to water penetration **through missing or damaged areas of bathtub or shower grout** (e.g., missing or damaged tiles, missing or chipping grout, missing mortar).



Root Cause #5

Leak Around Window:

Select this root cause when the source of the leak, water damage, or excessive moisture is attributed to **missing, damaged, or inadequate sealant** around a window, or a **poorly installed window**, which allows water to penetrate the building.

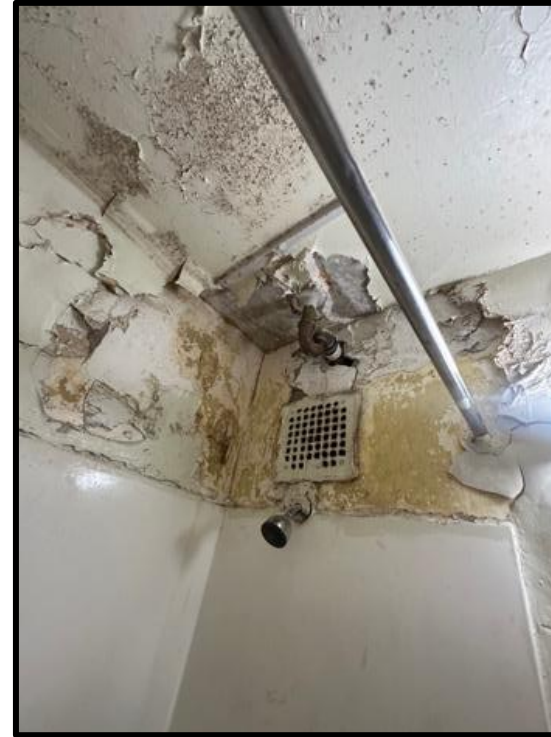


Root Cause #6

Leak From Above/Adjacent – *Investigate:*

Select this root cause when the source of the leak, water damage, or excessive moisture is attributed to **an active leak from the apartment above or adjacent to the impacted apartment.**

- Select **once the root cause is verified.**
- Enter **the exact location** of the root cause (e.g., 131.04.010.F08.08F.BTH01)



Use moisture meter when tracing leaks from above!

Root Cause #7

Leak From Above/Adjacent – *Previously Identified:*

Select this root cause when the source of the leak, water damage, or excessive moisture **has been already identified and abated**, or there is an **existing open work order to abate** that you confirmed.

- Select **once the root cause is verified**.
- Enter **the exact location** of the root cause (e.g., 131.04.010.F08.08F.BTH01)



Use moisture meter when tracing leaks from above!

Root Cause #6 and #7 - What is the Difference?

Leak From Above/ Adjacent - Investigate

- ❑ Leak is new (not previously reported):
 - Repairs to address leak need to be created.

Leak From Above/ Adjacent – Previously Identified

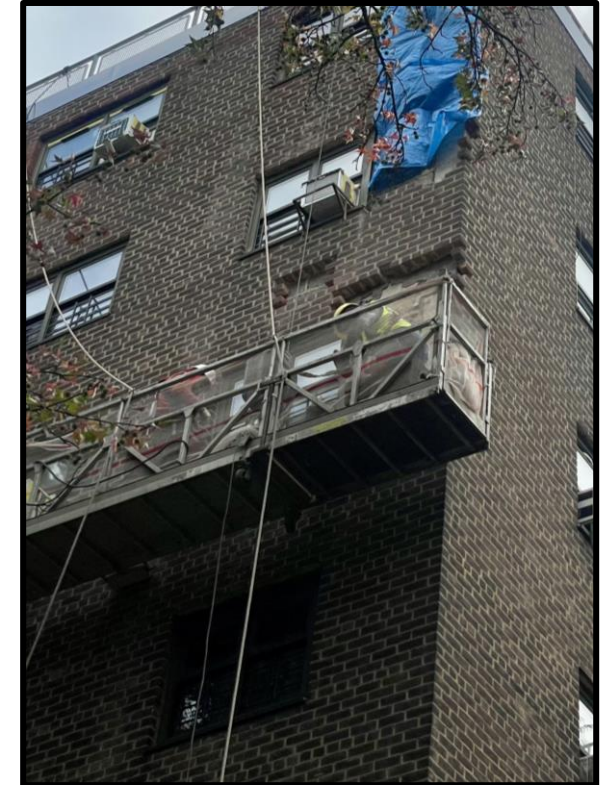
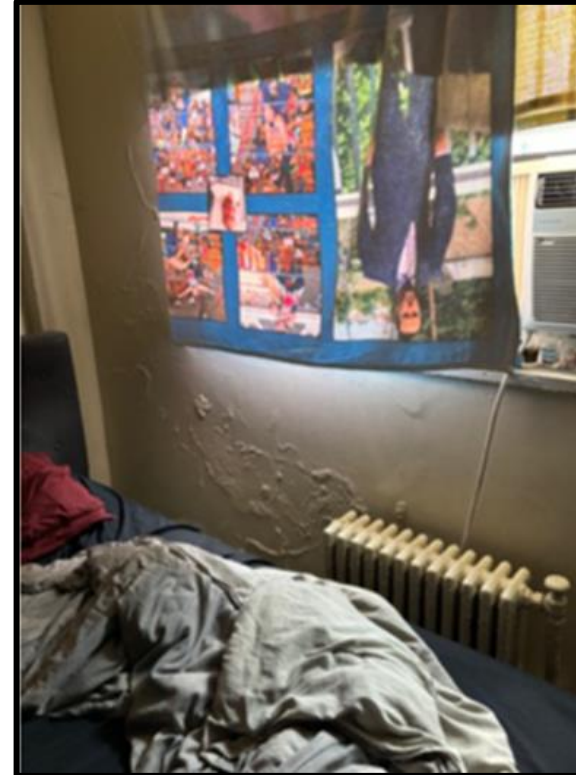
- ❑ Leak has been previously identified:
 - Repairs to address leak have been **already completed**, or
 - There is an **existing (open) work order** to address leak.
- ❑ **Verify that there is an existing work order before selecting this Root Cause!**

! Selecting **specific location** helps NYCHA to differentiate if there is a *new occurrence* vs
● *recurrence*.

Root Cause #8

Leak Through Façade:

Select this root cause when the source of the leak, water damage, or excessive moisture is attributed to **damaged, cracked, or missing mortar** on the exterior wall.



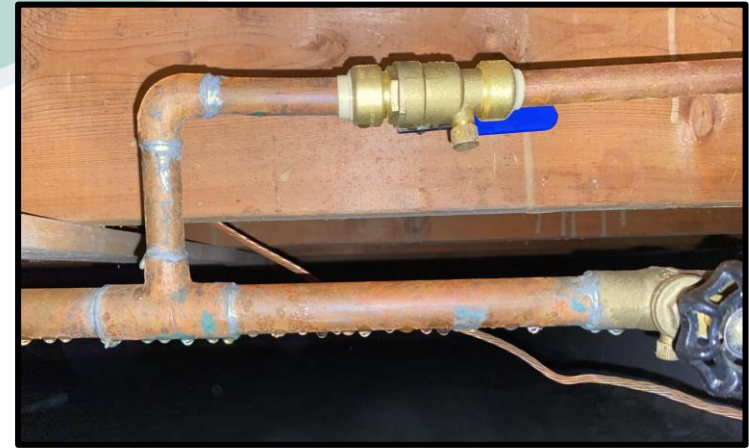
Root Cause #9

Pipe Condensation:

Select this root cause when the source of the **excessive moisture or water damage** is attributed to condensation on the cold-water risers and/or branch lines.

Example:

- There is **mold and/or water damage** on the lower 3 feet of the chase wall, and
- There is **ongoing condensation** (due to missing or damaged pipe insulation).



Make a small wall break to verify!

Root Cause #10

Pipe Condensation – Previously Addressed:

Select this root cause when the source of the excessive moisture is attributed to **condensation on the cold-water risers or branch lines**, but NYCHA already applied ‘Interim Controls’ to prevent future mold growth.

Example:

- *There is **water damage and/or excessive moisture** on the lower 3 feet of the chase wall, and*
- *There is **ongoing condensation** (due to missing or damaged pipe insulation) **but no mold**, and*
- ***Mold-resistant materials** (e.g., mold-resistant sheetrock and/or mold-resistant paint) **were previously applied.***



Make a small wall break to verify!

Root Cause #9 and #10 - What is the Difference?

Pipe Condensation

- ❑ Pipe condensation problem is new (not previously addressed):
 - Repairs to address pipe condensation **need to be created**.

Pipe Condensation – Previously Addressed

- ❑ Pipe condensation problems have been previously addressed:
 - Pipes have been previously insulated, or
 - Mold-resistant materials have been previously applied – e.g., **mold-resistant sheetrock and/or mold-resistant paint** ('Interim Controls').
- ❑ **Verify with PMS or APMS that mold-resistant materials were previously applied!**



*If the 'Interim Controls' were applied there should be **no visible mold!***

Root Cause #11

Plumbing Leak – In Unit:

Select this root cause when the source of the leak, water damage, or excessive moisture is attributed to a **plumbing leak within impacted apartment** (e.g., clogged lines, corrosion, broken seals, damaged joints, loose connectors).

- *Wet readings will not extend to the upper section of the chase wall, when the leak originates within impacted apartment.*



Make a small wall break to diagnose!

Root Cause #12

Radiator Unit Leak:

Select this root cause when the source of the leak, water damage, or excessive moisture is attributed to **excessive steam** or a **leak from a radiator unit**.



Root Cause #13

Resident Caused:

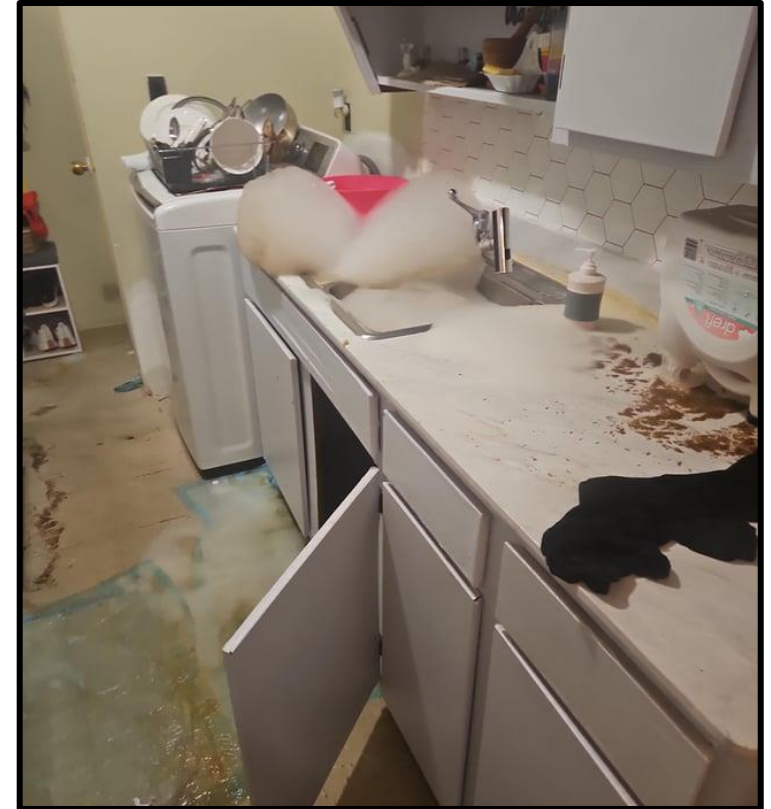
Select this root cause when the source of the leak, water damage, or excessive moisture is attributed **to specific resident actions or inactions** (e.g., allowing fixtures to overflow, improper disposal of waste, leaving the windows open during rain or a storm).



Root Cause #13 (cont.)

Resident Caused:

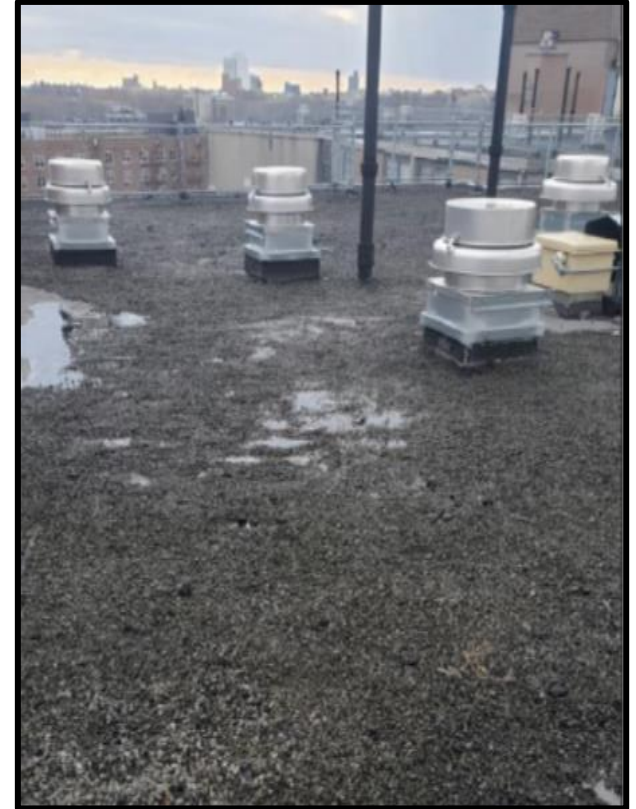
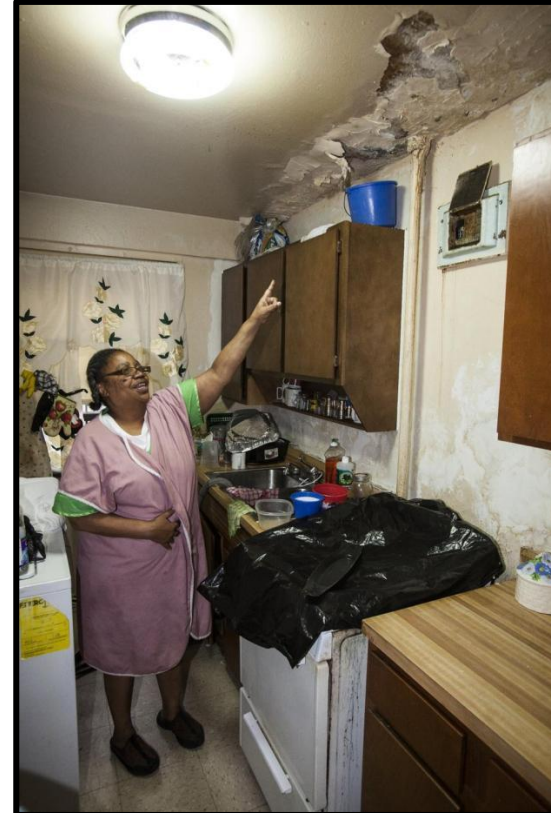
- **Improper Disposal of Waste Down Drains:** Instruct the resident not to dispose waste objects other than toilet paper in toilets down the drains (e.g., kitchen grease, paper towels, disposable diapers, cotton balls).
- **Overflowing Fixtures:** Instruct the resident not to overfill or overflow sinks and tubs.
- **Other:** Provide other instructions to the resident, as needed.



Root Cause #14

Roof Leak:

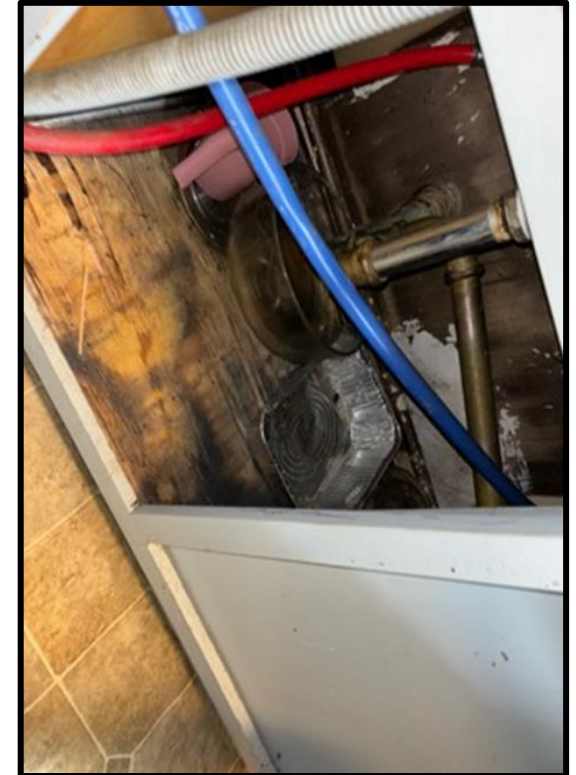
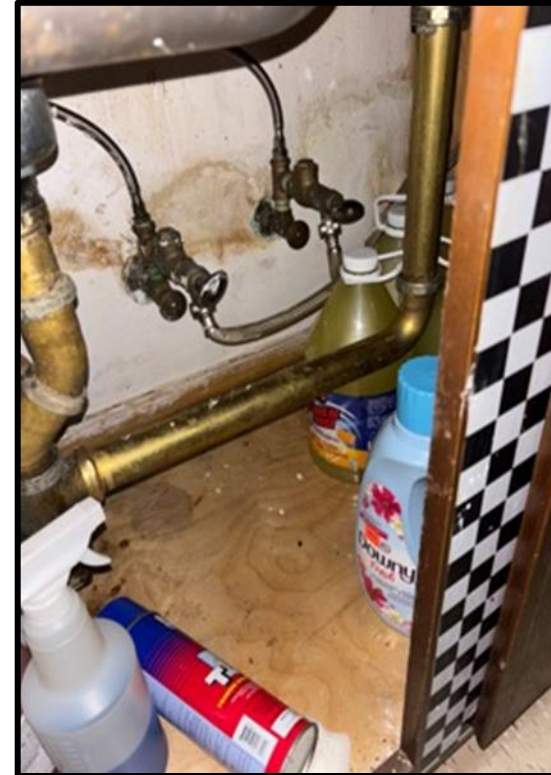
Select this root cause when the source of the leak, water damage, or excessive moisture is attributed to **damage to the roof** (e.g., punctured seals, cracked flashing, loose or broken shingles, worn down roofing materials, etc.).



Root Cause #15

Sink Issues – In Unit:

Select this root cause when the source of the leak, water damage, or excessive moisture is attributed to the **improper installation of the sink or a sink leak** (e.g., leaking faucets, damage to the shut off valve, stoppages, loose or damaged connections or joints, etc.).



Root Cause #16

Toilet Issues – In Unit

Select this root cause when the source of the leak, water damage, or excessive moisture is attributed to **improper installation of the toilet or a toilet leak** (e.g., leaking bowl, running water, loose wax ring, loose flange bolts, deteriorated flappers, faulty ballcocks, etc.).



Root Cause #17

Other:

Select this root cause when the source of the leak, water damage, or excessive **moisture** is not available for selection in the dropdown menu.



Describe suspected root cause or conditions observed in the 'Work Log' in the iWM App.

IV. Root Cause(s)

Root cause originates within impacted apartment? Check the following:

- ❑ Drain lines and lead bends above showers and toilets.
- ❑ Sink (*e.g., backsplash, faucets, waste lines*).
- ❑ Shower body (*e.g., escutcheon plates, stems, cartridges*):
 - Check whether shower body, tub/diverter spout and shower head are operating properly.
- ❑ Toilet (*e.g., internal toilet parts, or flapper*):
 - Check whether the bowl is loose/affixed to the floor, whether the toilet is constantly running and/or displays visible condensation.



IV. Root Cause(s) (cont.)

Root cause originates within impacted apartment? Check the following:

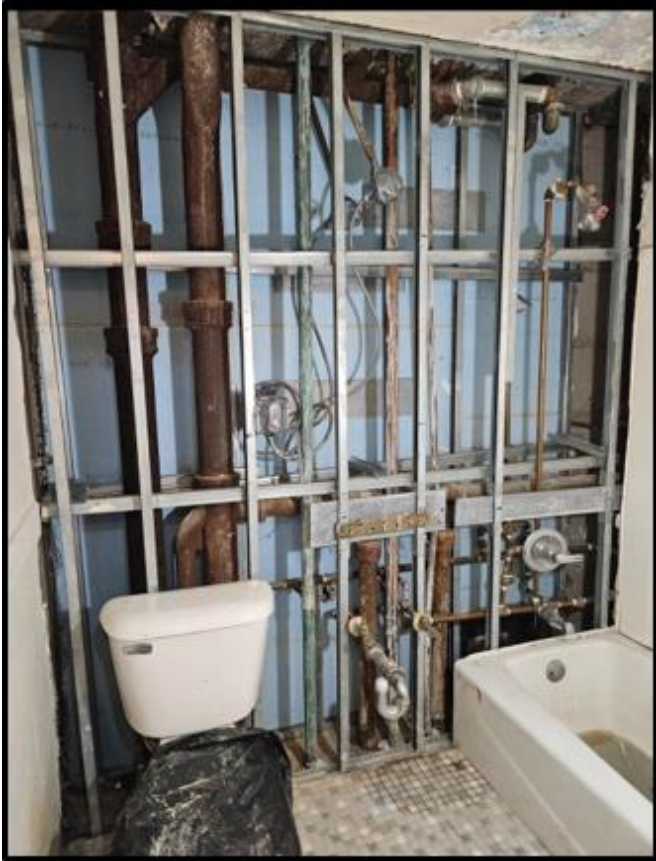
- ☐ Exterior wall condition.
- ☐ Window frame and area around window lintels.
- ☐ Whether the washing machine, if any, is properly installed.
- ☐ Whether the air conditioner(s), if any, is properly installed.
- ☐ Whether the freezer, if any, is properly installed.
- ☐ Whether the dishwasher, if any, is properly installed.

Do it Yourself!

- Name That Plumbing?
- Moisture Meter Scavenger Hunt
- Measuring Moisture
- Boroscoping

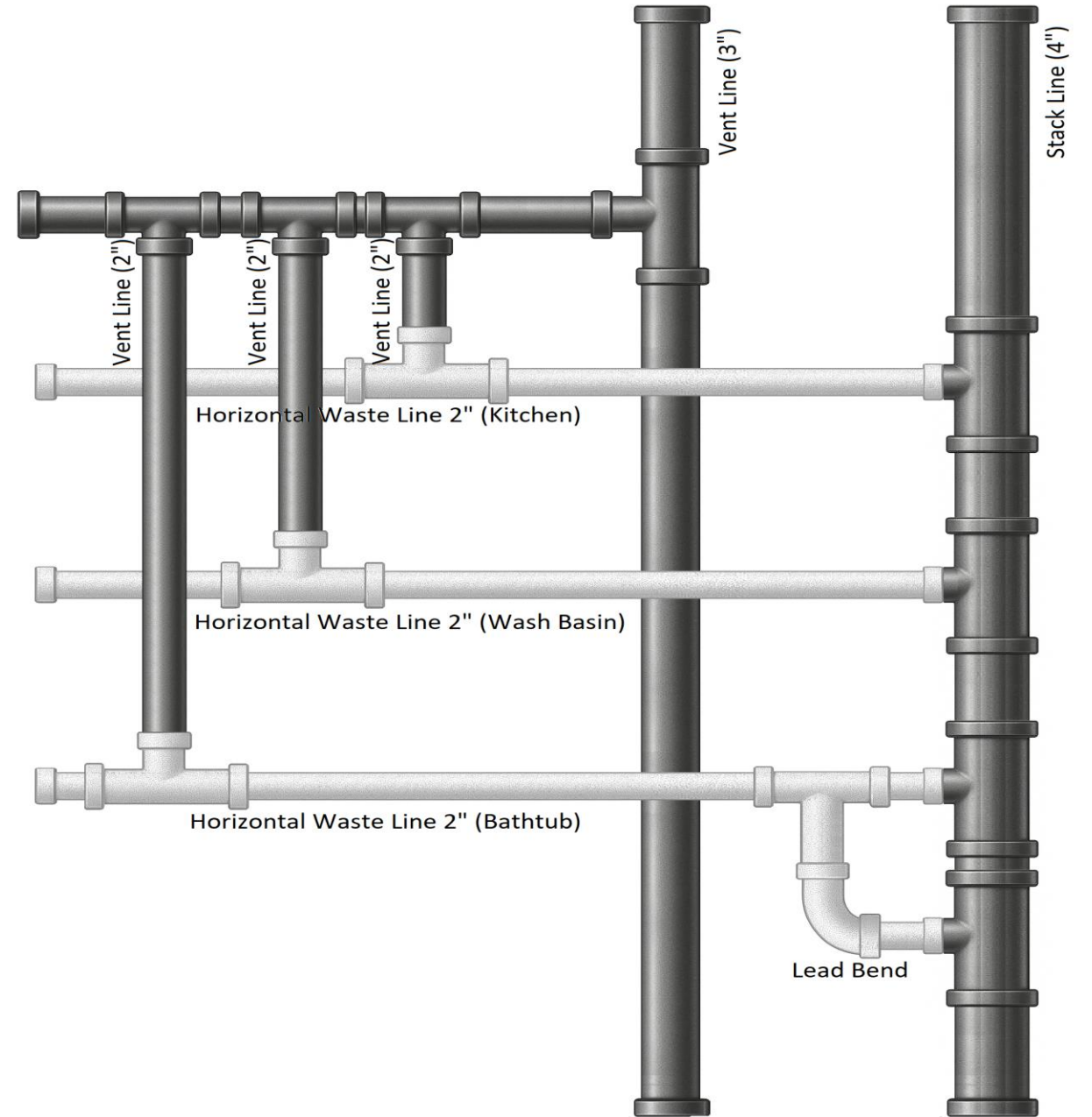
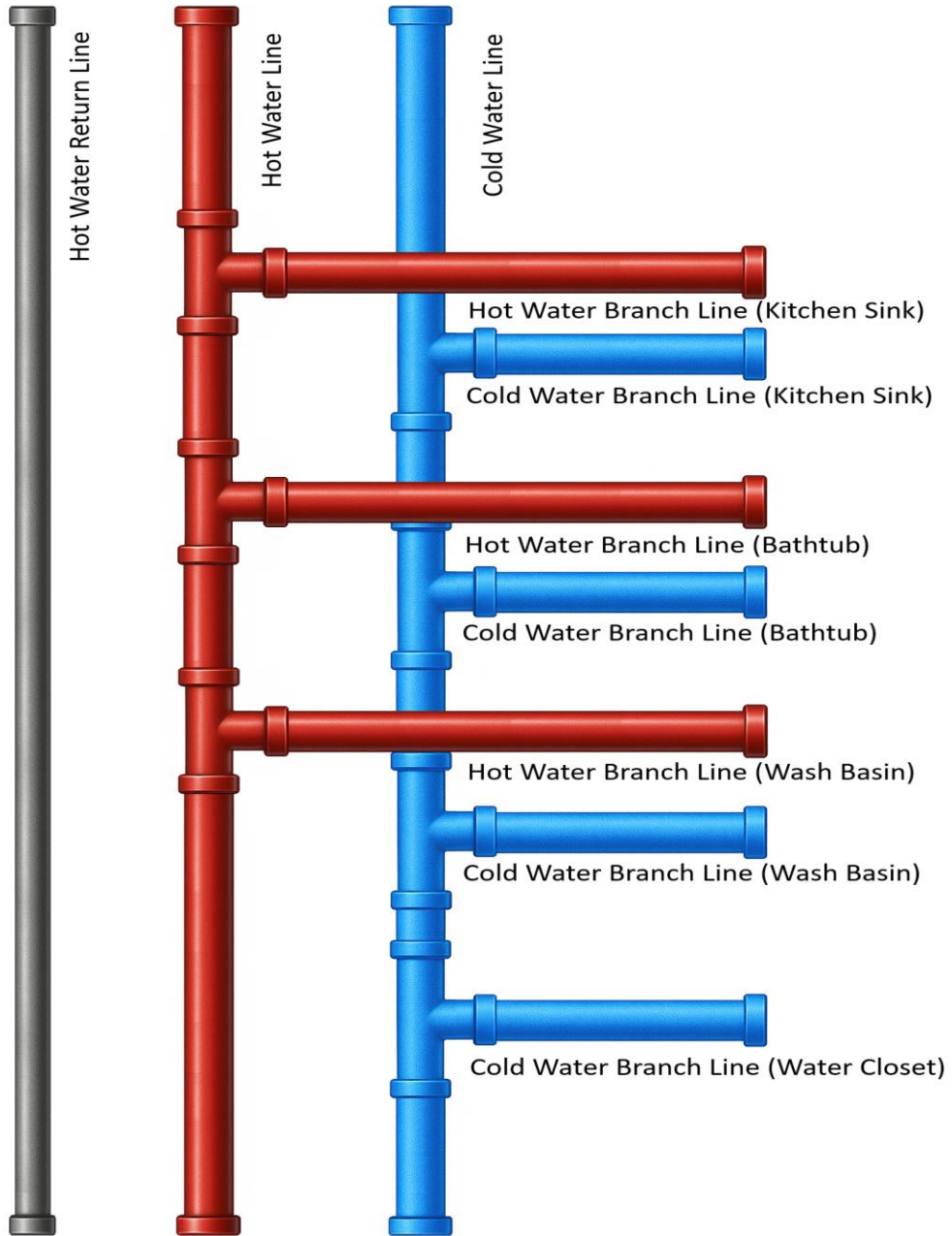


Plumbing Systems

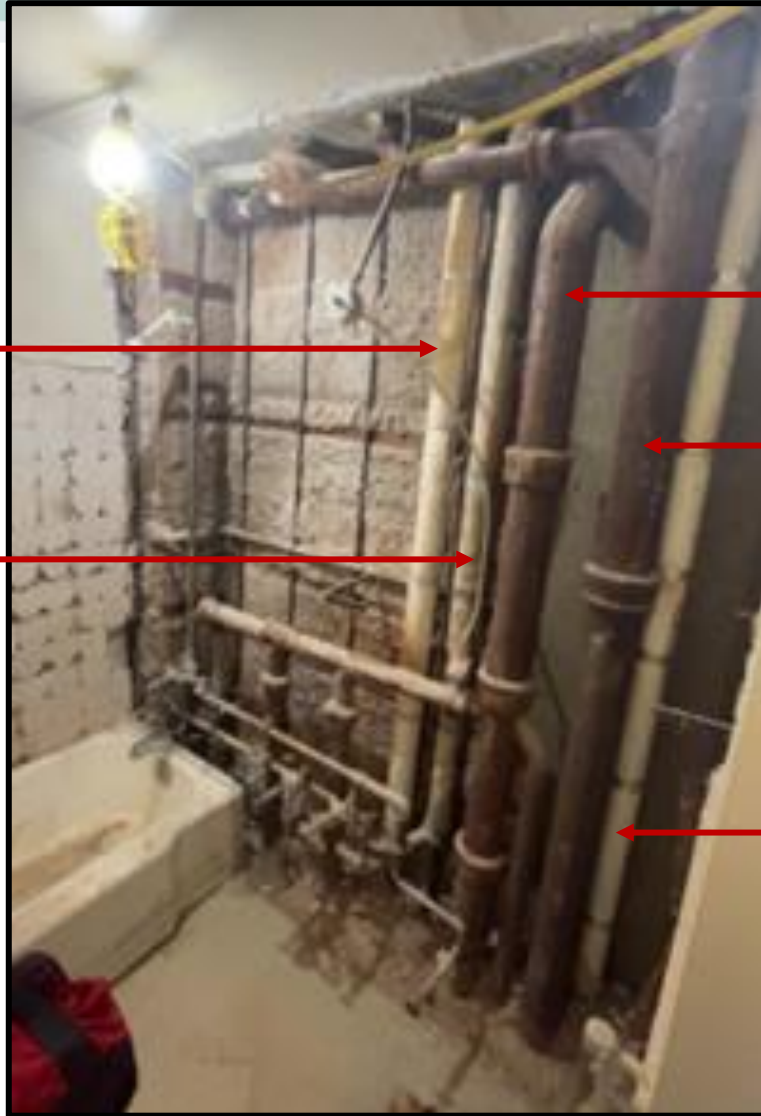


Most NYCHA plumbing follows the same basic plumbing pattern:

- Hot & Cold Delivery Lines (aka Risers)
- Hot Water Return Lines
- Waste Disposal Vent & Lines



Name that Plumbing



Hot Water
Riser

Hot Water
Return

Vent Line

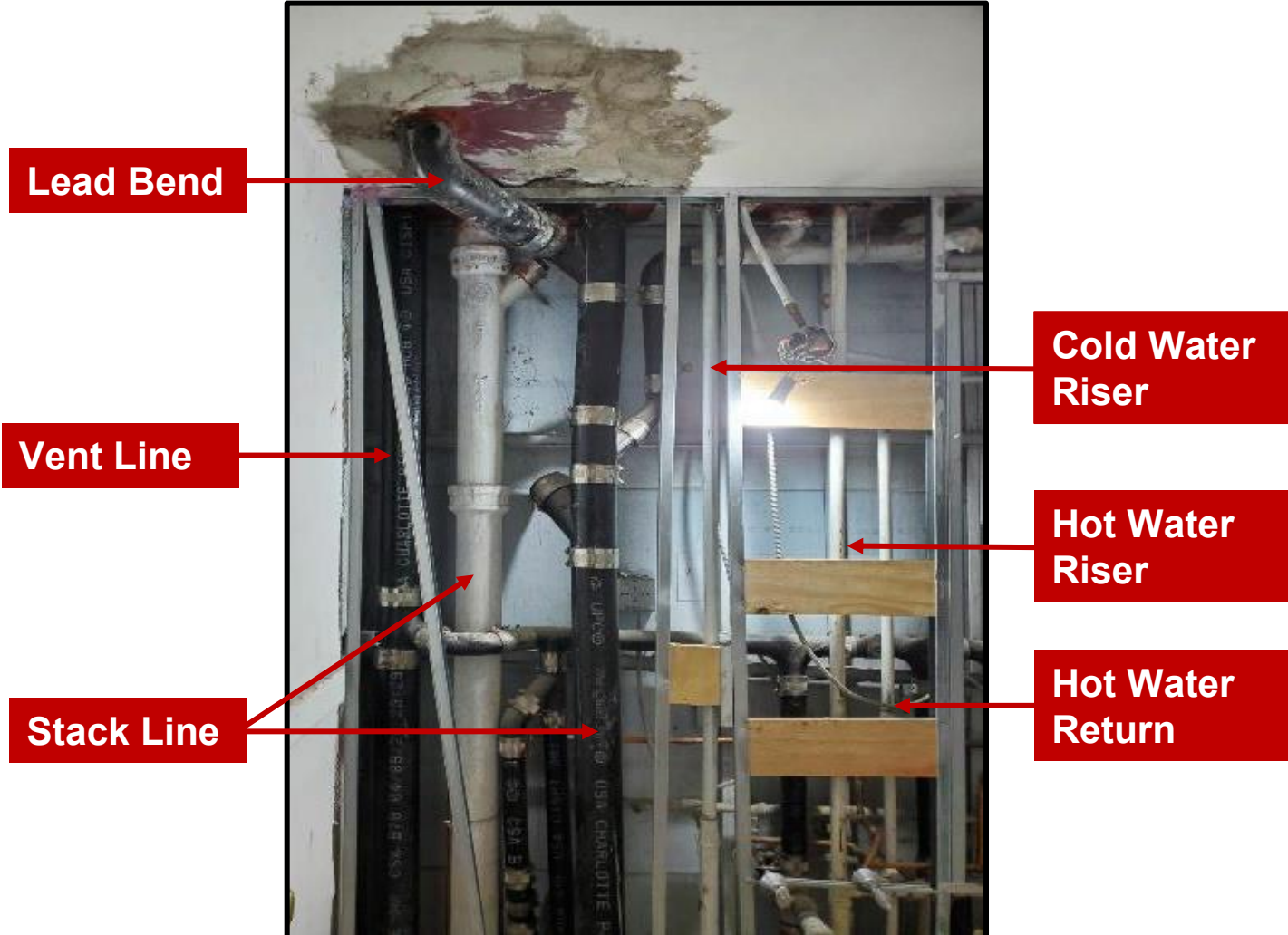
Stack Line

Cold Water
Riser

Identify the following:

- Stack Line
- Vent Line
- Hot Water Riser
- Hot Water Return
- Cold Water Riser

Name that Plumbing



Identify the following:

- Stack Line
- Vent Line
- Hot Water Riser
- Hot Water Return
- Cold Water Riser
- Lead Bend

Name that Plumbing



Identify the following:

- Stack Line
- Vent Line
- Hot Water Riser
- Hot Water Return
- Cold Water Riser
- Lead Bend

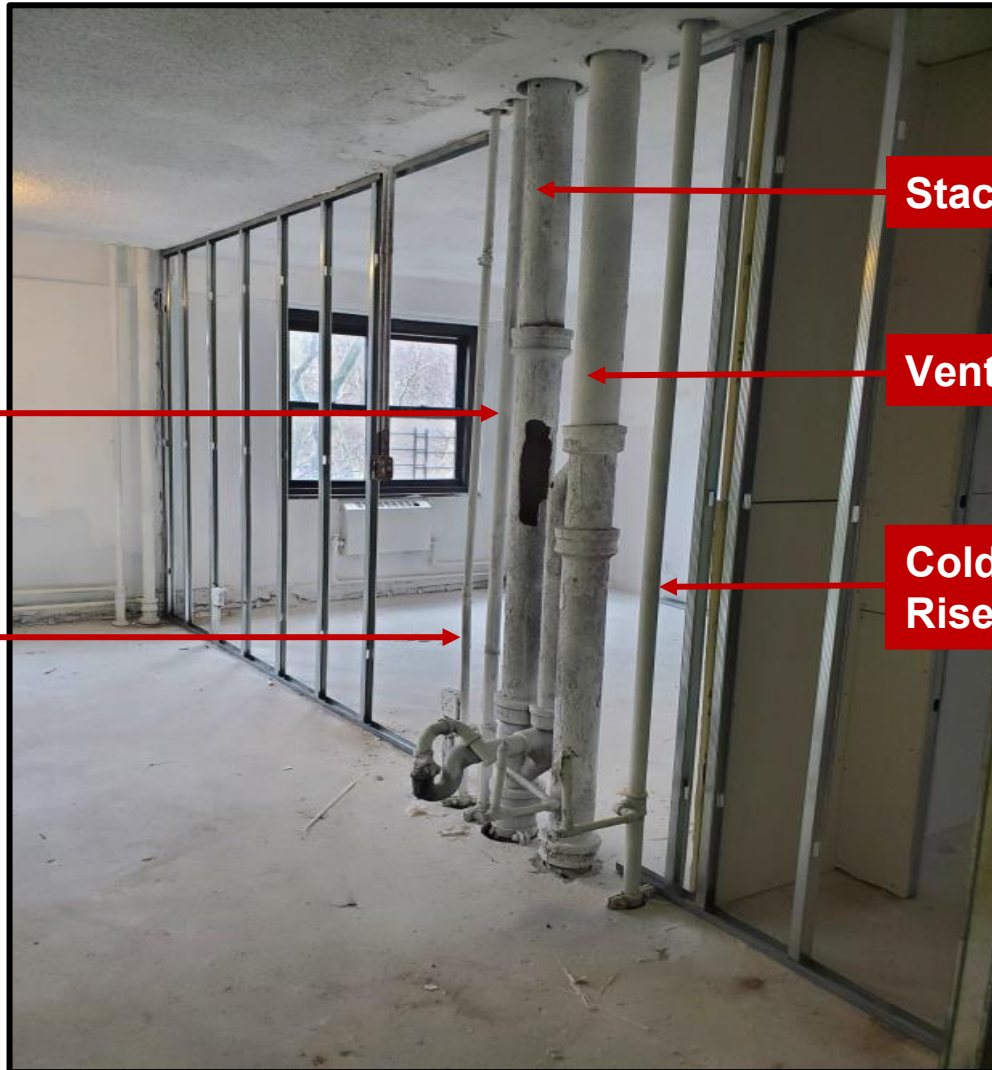
Name that Plumbing



Identify the following:

- Stack Line
- Vent Line
- Hot Water Riser
- Hot Water Return
- Cold Water Riser

Name that Plumbing



Identify the following:

- Stack Line
- Vent Line
- Hot Water Riser
- Hot Water Return
- Cold Water Riser

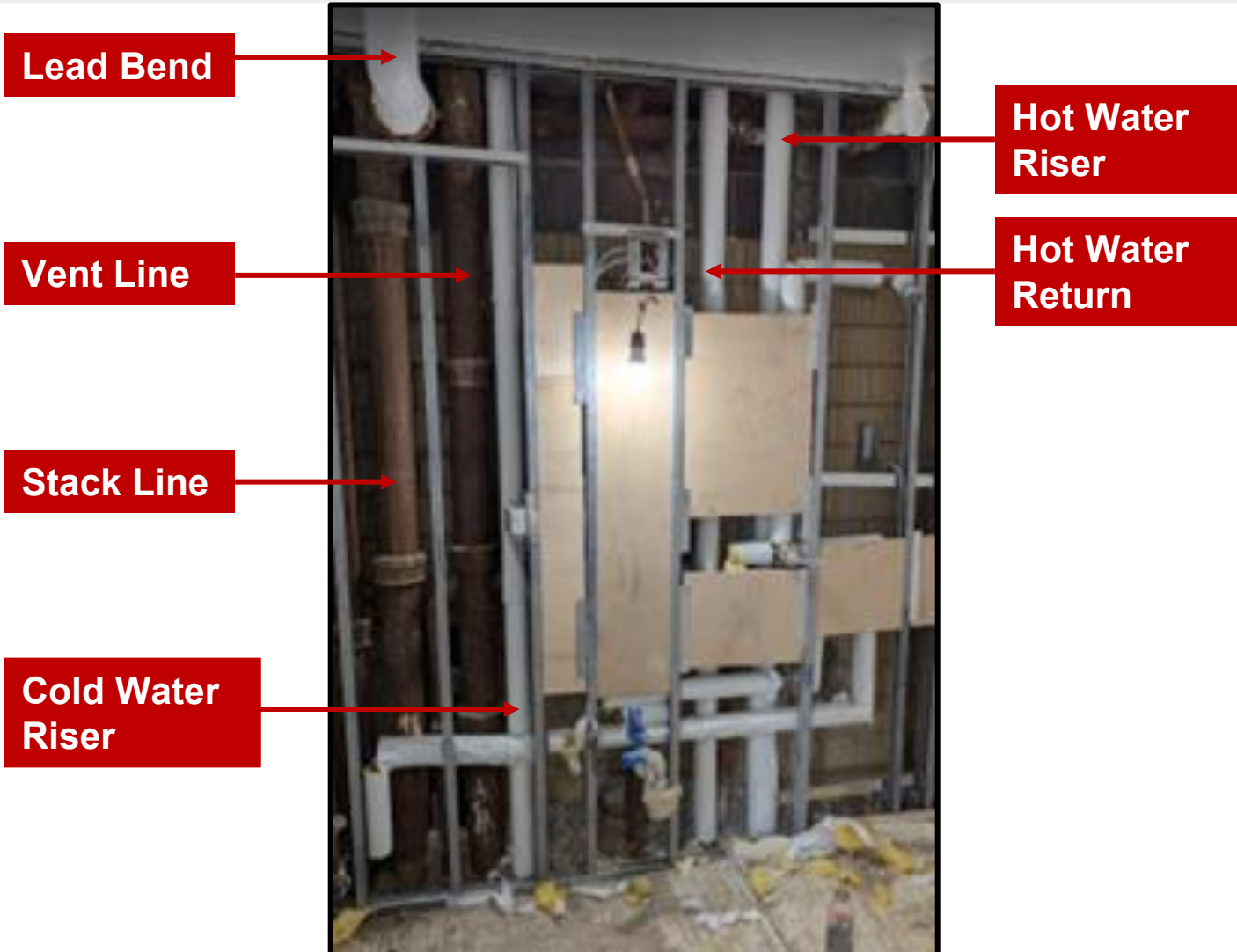
Name that Plumbing



Identify the following:

- Stack Line
- Vent Line
- Hot Water Riser
- Hot Water Return
- Cold Water Riser
- Lead Bend

Name that Plumbing



Identify the following:

- Stack Line
- Vent Line
- Hot Water Riser
- Hot Water Return
- Cold Water Riser
- Lead Bend

Name that Plumbing



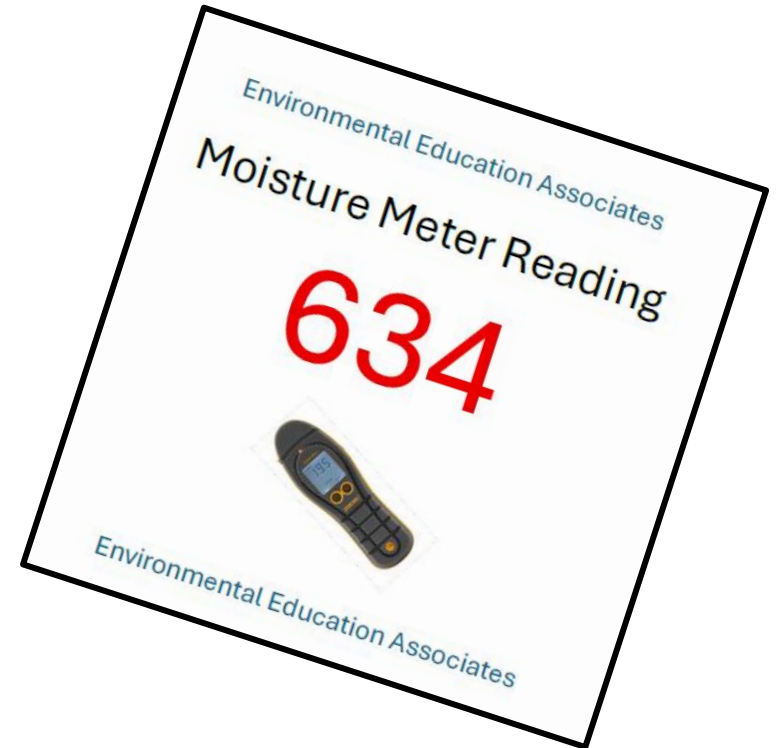
Identify the following:

- Stack Line
- Vent Line
- Hot Water Riser
- Hot Water Return
- Cold Water Riser

Do it yourself

Moisture Meter Scavenger Hunt

Use the moisture meter readings placed around the pest management space to determine where wet readings are present and then choose the correct probable root causes of leaks for each wet reading.



Do it yourself

Measure some moisture

Use the moisture meter to demonstrate proper use of meter.

NOTE: Place moisture meter on wall and press firmly to get accurate reading, and do not drag of surfaces which may harm the sensor.



Do it yourself

Using the Borescope

Use Borescope to inspect plumbing inside wall cavity for leaks.

- *Create an initial wall-break 1 sq inch at the high moisture meter reading spot.*
- *Identify at three (3) moisture sources or leaks.*



Take a Lunch Break!

- We appreciate your participation!
- Our job is to provide training that will give you the capability to conduct leak inspection.
- Please let the instructor or any EEA staff if there's anything we can do to improve your learning experience.



NYCHA LEAK TRAINING

LEAK DETECTION: SOURCE WITHIN APARTMENT

EEA

ENVIRONMENTAL
EDUCATION ASSOCIATES

Working to make our communities healthy

V. Leak Inspection (iWM App)



Begin Inspection

- ❖ INSLEAK Job plan



Task 10: Evaluation of Conditions

- ❖ Is there flooding condition?
- ❖ Is there standing water?
- ❖ Is there active leak?



Task 20: Probable Cause

- ❖ Is moisture measurement \geq to 599?
- ❖ Is wall break required?
 - Is there suspect ACM?
 - Is there mold on back of sheetrock?



Task 30: General Evaluation

- ❖ Is there mold growth?
- ❖ Cockroaches?
- ❖ Rodent droppings?



Child work orders as needed

- ❖ Create follow up repairs if needed.



Submit report

- ❖ Close work order

EEA

ENVIRONMENTAL
EDUCATION ASSOCIATES

Working to make our communities healthy

V. Leak Inspection Steps

Step One: Evaluation of Conditions

- Inspect the apartment for leaks, excessive moisture, and water damage.

Step Two: Probable (Root) Cause

- Identify root cause(s) of the leak.
- Use inspection tools, as needed.

Step Three: General Evaluation (If Applicable)

- Visually inspect the impacted area for environmental issues (i.e., mold or pest infestation).



V. Leak Inspection Steps

Step One: Evaluation of Conditions

- Inspect the apartment for leaks, excessive moisture, and water damage.
- Take steps to abate active flooding or remove standing water, if applicable.

Follow the iWM App prompts to log your findings!



Step One: Evaluation of Conditions

Q1: Is there a flooding condition*?

- No
- **Corrective Action Taken (CAT)**

Select this option if you observed flooding and **you were able** to take a corrective action to abate the condition during the visit.

Maximo automatically creates a closed child work order with failure class '**FLOODING**' and problem code '**ABATED**'.



*Floods and Emergency Leaks are to be abated **within 24 hours** after the condition is reported to NYCHA.*

Continued...

Step One: Evaluation of Conditions

Q1: Is there a flooding condition*?

- **Needs Abatement**

Select this option if you observed flooding and **you were not able** to abate the condition or stop the flow of water during the visit.

Maximo automatically creates a child work order with failure class '**FLOODING**' and problem code '**NEEDSABATEMENT**' for a follow up response.



*Notify PMS or APMS **immediately** for a follow up response!*

Active Flood Emergency

If shutting off the riser is needed to stop an active flood (i.e., there is gushing water):

- **During Normal Business Hours:** PMS or APMS must contact the Neighborhood Administrator or above titles, to request prior authorization.
- **Outside Normal Business Hours:** EMSD maintenance workers are authorized to shut off a supply riser, if needed to stop flood or severe leak.



Step One: Evaluation of Conditions

Q2. Is there Standing Water?

- No
- **Corrective Action Taken (CAT)**
Select this option if you observed standing water and **you were able to** remove it during the visit.

Maximo automatically creates a closed child work order with failure class '**LEAKFOLLOWUP**' and problem code '**NEEDSWATERREMOVAL**'.



*Standing water is to be removed **within 48 hours** after the condition is reported to NYCHA.*

Step One: Evaluation of Conditions

Q2. Is there Standing Water*?

- **Standing Water within One Room**

Select this option if you observed standing water in one room, and **you were not able to remove it** during the visit.

Maximo automatically creates an open child work order with failure class '**LEAKFOLLOWUP**', problem code '**NEEDSWATERREMOVAL**' (job plan STDWATER1ROOM').

- **Standing Water Extends into Other Rooms**

Select this option if you observed standing water in multiple rooms, and **you were not able to remove it** during the visit.

Maximo automatically creates an open child work order with failure class '**LEAKFOLLOWUP**', problem code '**NEEDSWATERREMOVAL**' (job plan 'STDWATEROTRROOMS').

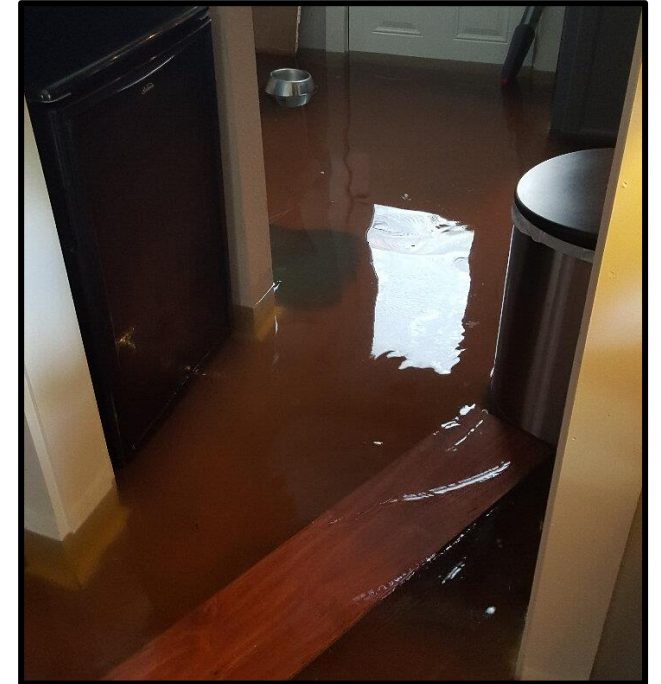
Step One: Evaluation of Conditions

Q2. Is there Standing Water*?

- **Standing Water Apartment Wide or Greater than One Inch Deep**

Select this option if you observed standing water apartment wide or 1" deep (or more), and **you were not able to remove** it during the visit.

Maximo automatically creates a child work order with failure class '**LEAKFOLLOWUP**', problem code '**NEEDSWATERREMOVAL**' (job plan '**STDWATERAPTWIDE**').



Standing Water Removal



Request **Caretaker** to assist while you have access to unit.



Not able to remove standing water right away?



Create child WO
'Leak Follow Up/Needs Water Removal'



Immediately **notify APMS/ PMS**



APMS/ PMS will notify **SOHC**



SOHC will dispatch **Caretaker**



SOHC will verify work is completed and **close WO** in Maximo.



Step One: Evaluation of Conditions

Q3. Is there an active leak*?

- No
- Yes

Select this option if the leak is ongoing at the time of the visit. This will help to escalate a repair request, if needed!



Perform Inspection

The first task in a series of tasks is **Task 10: Evaluation of Conditions**

1

The **WO Inspection State** is **NONE**.

2

Tap 'Inspect'

3:13 5Guc 56

← Complete Work Order
WO #132204889

re — 4 Related — 5 Perform Inspection — 6

Inspecting Location:
171.01.001.F04.04F.LIV01
360 MOTHER GASTON BOULEVARD

1 → WO Inspection State: NONE → 2

Evaluation of Conditions Inspect

State: NONE

Probable Cause Inspect

State: NONE

General Evaluation Inspect

State: NONE

← PREVIOUS STOP TIME NEXT →

Evaluation of Conditions

1

Evaluate the overall severity of leak and take steps to abate a flooding condition or remove standing water, if observed.

Note: All questions that have an asterisk (*) are mandatory.

1

10:53 5G UC 67%

← Evaluation of Conditions → DONE

Bathroom 01

* Is there a flooding condition? (None)

* Is there standing water? (None)

* is there active leak? (None)

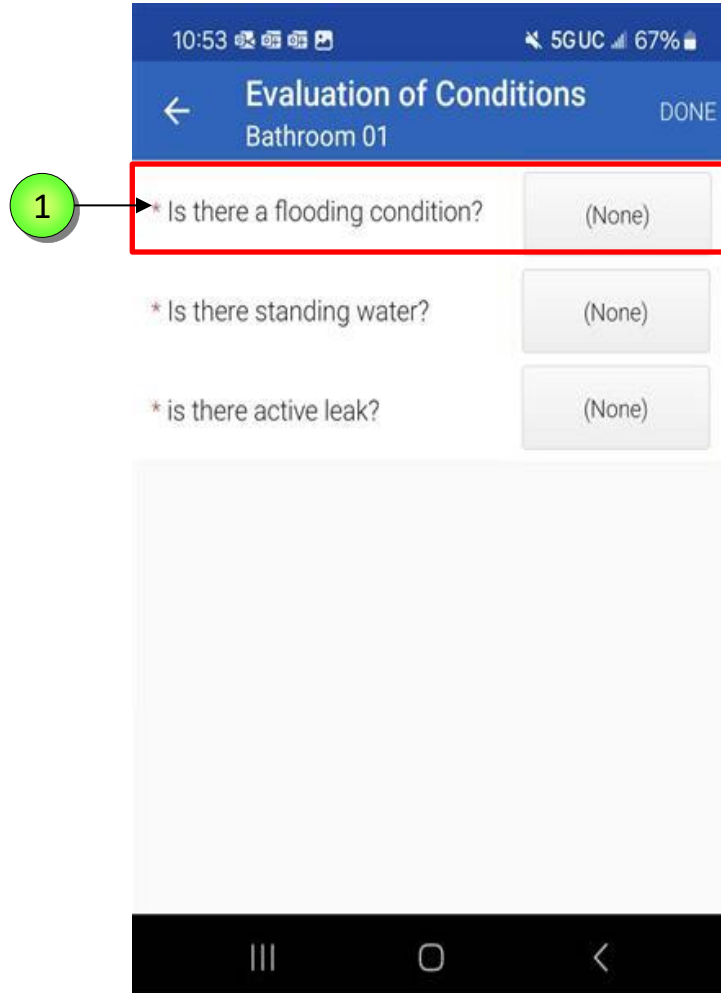
Evaluation of Conditions –

Q1: Flooding

1 Response options for '**Is there a Flooding Condition?**' are:

- No
- Corrective Action Taken (CAT)
- Needs Abatement

2 In the **Notes** field, the user can input free-text information.



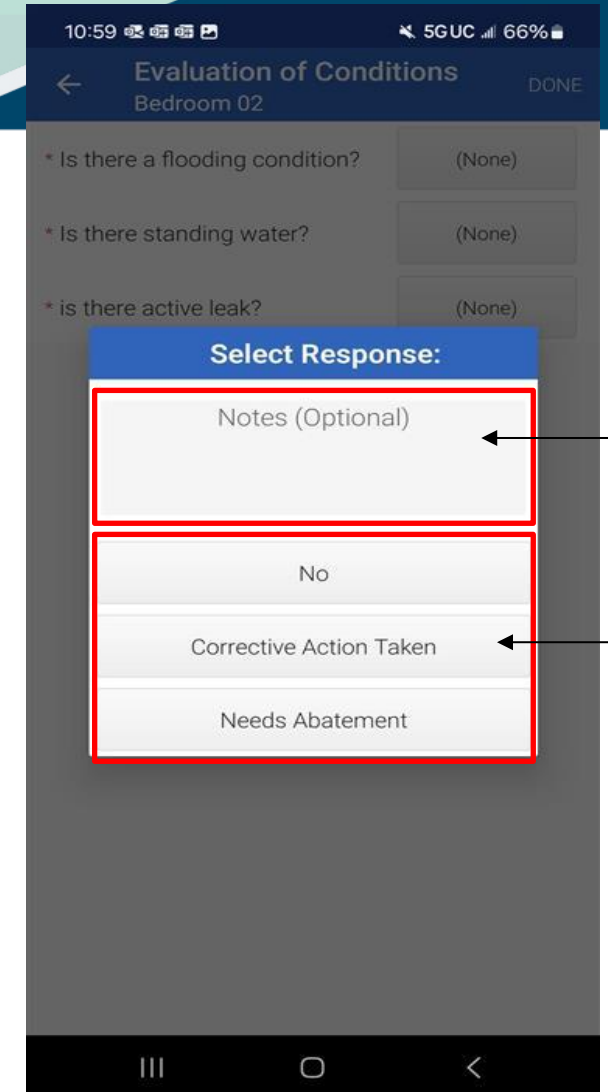
10:53 5GUC 67%

← Evaluation of Conditions Bathroom 01 DONE

1 * Is there a flooding condition? (None)

* Is there standing water? (None)

* is there active leak? (None)



10:59 5GUC 66%

← Evaluation of Conditions Bedroom 02 DONE

* Is there a flooding condition? (None)

* Is there standing water? (None)

* is there active leak? (None)

Select Response:

Notes (Optional)

No

Corrective Action Taken

Needs Abatement

Evaluation of Conditions – Q1: Flooding

1 If maintenance worker is able to abate flooding, select 'Corrective Action Taken' (CAT).

2 iWM App will prompt 'Followup Info' screen showing:

- Failure Class
- Problem Code
- Location
- Craft (defaulted to MAINT)

Note: Selecting this option will create a **closed** child work order to document that flooding was abated.

10:59 5G UC 66%

← Evaluation of Conditions Bedroom 02 DONE

* Is there a flooding condition? (None)

* Is there standing water? (None)

* Is there active leak? (None)

Select Response:

Notes (Optional)

No

Corrective Action Taken

Needs Abatement

3:38 5G 53

← Followup Info DONE

Failure Class FLOODING

Problem Code ABATED

Location 171.01.001.F04.04F.LIV01

Craft MAINT

Notes

Evaluation of Conditions – Q1: Flooding

1 If maintenance worker is not able to abate flooding, select 'Needs Abatement' to create a work order for the follow up response.

2 iWM App will prompt 'Followup Info' screen showing:

- Failure Class
- Problem Code
- Location
- Craft (select **MAINT** or **PLUMBER**)

Note: Selecting this option will create an open child work order to abate active flood.

10:59 5G UC 66%

← Evaluation of Conditions Bedroom 02 DONE

* Is there a flooding condition? (None)

* Is there standing water? (None)

* Is there active leak? (None)

Select Response:

Notes (Optional)

No

Corrective Action Taken

Needs Abatement

3:39 5G UC 53

← Followup Info DONE

Failure Class FLOODING

Problem Code NEEDSABATEMENT

Location 171.01.001.F04.04F.LIV01

Craft Please select...

Notes

← Select Craft

MAINT Maintenance

PLUMBER Plumber

Evaluation of Conditions – Q2: Standing Water

1

Response options for '**Is there Standing Water?**' are:

- No
- Corrective Action Taken (CAT)
- Standing water within one room
- Standing water extends into other rooms
- Standing water apartment wide or >1" deep

2

In the **Notes** field, the user can input free-text information.

10:53 5GUC 67%

← Evaluation of Conditions Bathroom 01 DONE

* Is there a flooding condition? (None)

* Is there standing water? (None)

* Is there active leak? (None)

10:59 5GUC 66%

← Evaluation of Conditions Bedroom 02 DONE

* Is there a flooding condition? (None)

* Is there standing water? (None)

Select Response:

Notes (Optional)

No

Corrective Action Taken

Standing water within one room

Standing water extends into other rooms

Standing water apartment wide or >1" deep

Evaluation of Conditions – Q2: Standing Water

1

If maintenance worker is **able to remove standing water** during the visit, select '**Corrective Action Taken**' (CAT).

2

iWM App will prompt '**Followup Info**' screen showing:

- Failure Class
- Problem Code
- Location
- Craft (defaulted to **SOHC**).

Note: Selecting this option will create a **closed** child work order to document that standing water was removed.

1

10:59 5G UC 66%

← Evaluation of Conditions DONE
Bedroom 02

* Is there a flooding condition? (None)

* Is there standing water? (None)

* is t

Select Response:

Notes (Optional)

No

Corrective Action Taken

Standing water within one room

Standing water extends into other rooms

Standing water apartment wide or >1" deep

2

12:04 5G UC 58%

← Followup Info DONE

Failure Class
LEAKFOLLOWUP

Problem Code
NEEDSWATERREMOVAL

Location
135.01.001.F02.02B.BTH01

Craft
SOHC

Evaluation of Conditions – Q2: Standing Water

1 If maintenance worker is **not able** to remove standing water, select the appropriate option to create a follow up work order.

2 iWM App will prompt 'Followup Info' screen showing:

- Failure Class
- Problem Code
- Location
- Craft (defaulted to **SOHC**).

*Note: Selecting this option will create an **open** child work order to remove standing water*

10:59 5G UC 66%

← Evaluation of Conditions Bedroom 02 DONE

* Is there a flooding condition? (None)

* Is there standing water? (None)

* is

Select Response:

Notes (Optional)

No

Corrective Action Taken

Standing water within one room

Standing water extends into other rooms

Standing water apartment wide or >1" deep

12:04 5G UC 58%

← Followup Info DONE

Failure Class LEAKFOLLOWUP

Problem Code NEEDSWATERREMOVAL

Location 135.01.001.F02.02B.BTH01

Craft SOHC

Evaluation of Conditions – Q3: Active Leak

1

Response options for '**Is there Active Leak?**' are:

- No
- Yes

Note: Select '**Yes**' if there is an active leak at the time of inspection.

10:53 5GUC 67%

← Evaluation of Conditions Bathroom 01 DONE

* Is there a flooding condition? (None)

* Is there standing water? (None)

* is there active leak? (None)

10:59 5GUC 66%

← Evaluation of Conditions Bedroom 02 DONE

* Is there a flooding condition? (None)

* Is there standing water? (None)

* is there active leak? (None)

Select Response:

Notes (Optional)

No

Yes

Evaluation of Conditions –

Q3: Active Leak

1

Task 10: Evaluation of Conditions is now completed.

2

The 'WO Inspection State' is '**PARTIAL**' because the Task 20: Probable Cause task needs to be completed as well.

The screenshot shows a mobile application interface for a 'Complete Work Order' (WO #132204889). The top navigation bar is blue with a back arrow, the title 'Complete Work Order', and icons for attachments and camera. Below the header, a progress bar shows steps 4, 5, and 6, with step 5 'Perform Inspection' highlighted. The 'Inspecting Location' is listed as '171.01.001.F04.04F.LIV01' and '360 MOTHER GASTON BOULEVARD'. The 'WO Inspection State' is 'PARTIAL', highlighted by a red box and a green circle with the number 2. Below this, the 'Evaluation of Conditions' section is highlighted by a red box and a green circle with the number 1. It shows 'State: COMPLETE' and an 'Inspect' button. Further down, 'Probable Cause' shows 'State: NONE' and 'General Evaluation' shows 'State: NONE', both with 'Inspect' buttons. At the bottom, there are navigation buttons: '< PREVIOUS', 'STOP TIME', and 'NEXT >'. The status bar at the very bottom shows the time 9:42, 5G signal, and battery level 59%.

9:42 5Guc 59

Complete Work Order
WO #132204889

4 Related 5 Perform Inspection 6

Inspecting Location:
171.01.001.F04.04F.LIV01
360 MOTHER GASTON BOULEVARD

WO Inspection State: PARTIAL

1 Evaluation of Conditions State: COMPLETE Inspect

Probable Cause State: NONE Inspect

General Evaluation State: NONE Inspect

< PREVIOUS STOP TIME NEXT >

Knowledge Check

When responding to a work order, the maintenance worker uses the handheld device and starts the time of the work order:

- a. When at the apartment door
- b. Before getting to the apartment
- c. After leaving the apartment



Knowledge Check

When responding to a work order, the maintenance worker uses the handheld device and starts the time of the work order:

- a. When at the apartment door
- b. Before getting to the apartment
- c. After leaving the apartment

Knowledge Check

Maintenance worker reviews list of work orders daily and prioritizes work in accordance with:

- a. Severity
- b. Priority
- c. Scheduled Window (*e.g.*, 8am – 12pm)
- d. All of the above



Knowledge Check

Maintenance worker reviews list of work orders daily and prioritizes work in accordance with:

- a. Severity
- b. Priority
- c. Scheduled Window (*e.g.*, 8am – 12pm)
- d. All of the above

Knowledge Check

To shut off a riser to stop an active flood, the property maintenance supervisor or assistant property maintenance supervisor must get permission from the:

- a. Borough Vice-President
- b. Compliance Department
- c. Tenant



Knowledge Check

To shut off a riser to stop an active flood, the property maintenance supervisor or assistant property maintenance supervisor must get permission from the:

- a. Borough Vice-President
- b. Compliance Department
- c. Tenant

Knowledge Check

If maintenance worker abated an active flooding condition when responding to leak, how does maintenance worker document this in the iWM App under '*Task 10: Evaluations of Conditions*'? Maintenance worker selects:

- a. No
- b. Corrective Action Taken
- c. Needs Abatement

The screenshot shows the 'Evaluation of Conditions' screen for 'Bedroom 02' in the iWM App. The status bar at the top shows the time as 10:59, 5G signal, and 66% battery. The screen has a dark blue header with a back arrow, the title 'Evaluation of Conditions', and a 'DONE' button. Below the header, there are three questions with dropdown menus: '* Is there a flooding condition?' (None), '* Is there standing water?' (None), and '* is there active leak?' (None). A 'Select Response:' dialog box is overlaid on the screen, showing four options: 'Notes (Optional)', 'No', 'Corrective Action Taken', and 'Needs Abatement'. The bottom of the screen shows the Android navigation bar with three icons: a square, a circle, and a triangle.

Knowledge Check

If maintenance worker abated an active flooding condition when responding to leak, how does maintenance worker document this in the iWM App under '*Task 10: Evaluations of Conditions*'? Maintenance worker selects:

- a. No
- b. Corrective Action Taken
- c. Needs Abatement

The screenshot shows the 'Evaluation of Conditions' screen for 'Bedroom 02'. The status bar at the top indicates 10:59, 5GUC, and 66% battery. The screen lists three conditions, each with a '(None)' response button:

- * Is there a flooding condition? (None)
- * Is there standing water? (None)
- * Is there active leak? (None)

A 'Select Response:' modal is displayed in the foreground with the following options:

- Notes (Optional)
- No
- Corrective Action Taken (highlighted with a red box)
- Needs Abatement

Knowledge Check

What are the procedures if the resident is not home to allow access to the unit to abate an emergency leak?



Knowledge Check

What are the procedures if the resident is not home to allow access to the unit to abate an emergency leak?

- The maintenance worker may use NYCHA's Right of Entry to access the apartment.
- The maintenance worker must inform APMS and PMS.
- See NYCHA SP 040:17:3, *Accessing Public Housing Apartments When Tenant Not Home to Address Deficiencies Related to Leaks, Mold, and Lead-Based Paint.*

Inspection Steps

Step Two: Probable (Root) Cause

- Use moisture meter to inspect apartment for leaks, water damage or hidden moisture, when applicable.
- Document any wall breaks made, when applicable.
- Identify and document the root cause(s).

Follow the iWM App prompts to log your findings!



Step Two: Root Cause

Q1. Is the moisture meter equal or higher than 599?

- **No**

Document the highest moisture meter measurement.

- **Yes**

Document the highest moisture meter measurement **against each impacted surface** (e.g., Wall 1, Wall 2, Wall 3, Wall 4, Ceiling, Floor).

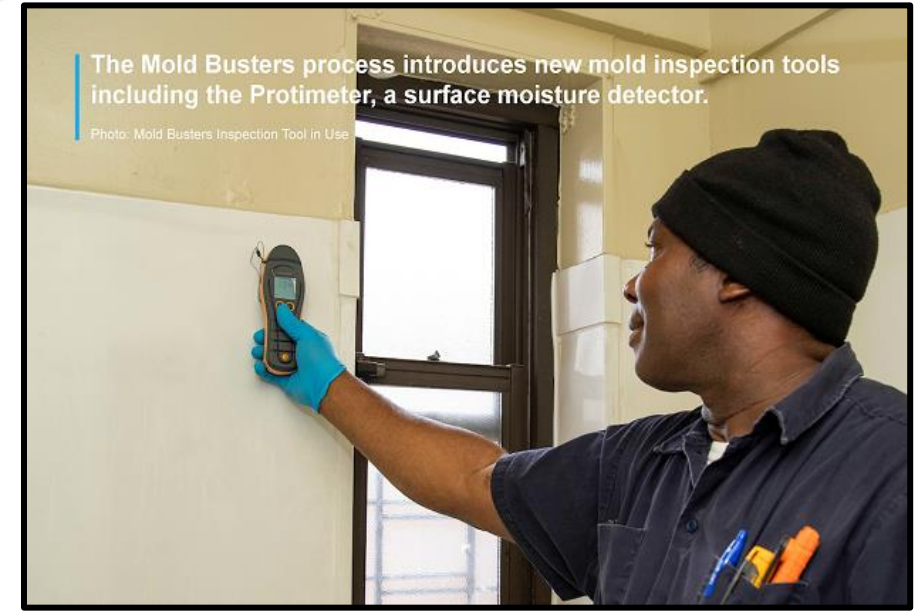


*If you see **visible moisture**, you can **manually enter 999** in the iWM App since the active leak or wet surface will measure wet.*

Step Two: Root Cause

Inspect surfaces in the room (e.g., cabinets, ceilings, floors, or walls) for any signs of the leak, excessive moisture, or water damage **by using a moisture meter**:

- Check each wall and ceiling in the room.
- Inspect kitchen sink cabinets and bathroom vanities.
- Inspect around P-traps and lead bends.

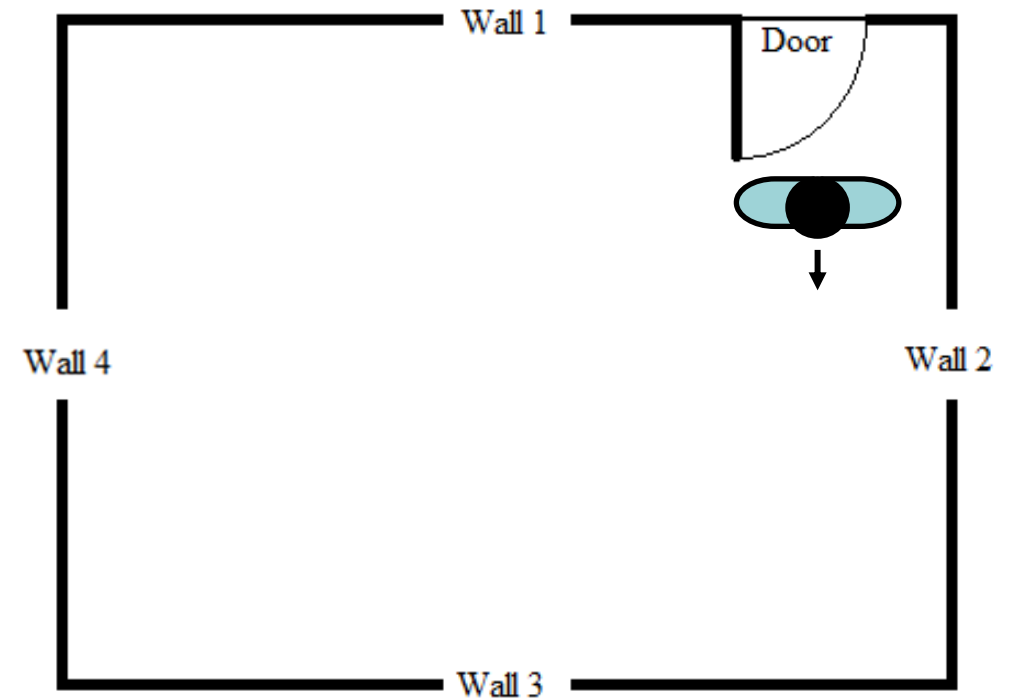


*A moisture meter quickly and accurately detects **hidden leaks** without damaging surfaces and helps to pinpoint to where a root cause might be coming from.*

Step Two: Root Cause

How to number NYCHA walls?

- **Wall 1:** The wall with the door.
- **Wall 2:** The wall to your left upon entering.
- **Wall 3:** The wall you are facing upon entering.
- **Wall 4:** The wall to your right upon entering.



Step Two: Root Cause

Q2. Is Wall Break Required*?

- No
- Yes

Select this options if you need to make a wall break to identify the location of the root cause and/or provide access to further repairs.

Document completed wall break by selecting repair code '**WALLBROKEN**' or '**WALLBREAKCOMPLETED**', or entering details in the 'Work Log' in the iWM App.

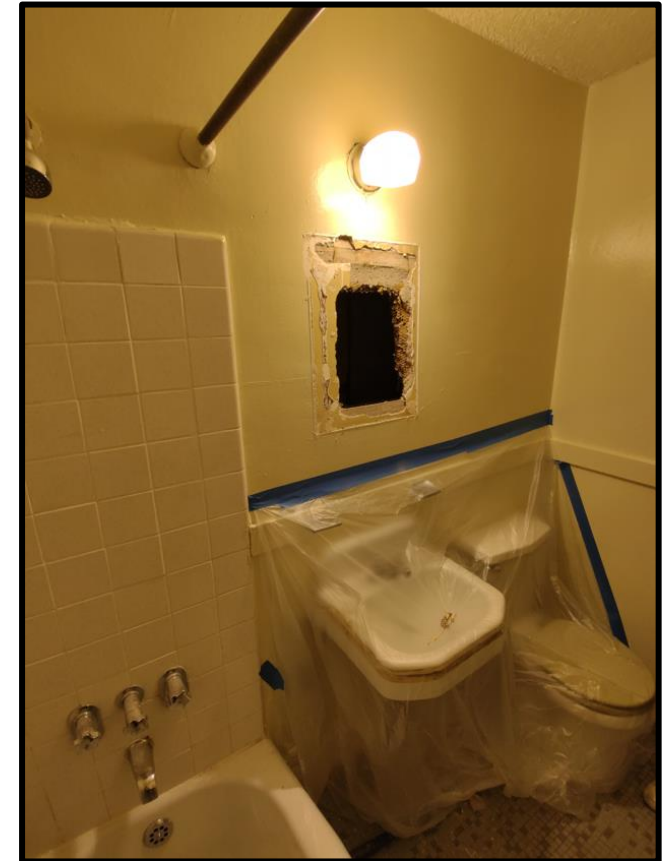


Step Two: Root Cause

When moisture meter measures equal to or greater than 599, wet readings do not extend to the upper section of the wall, and the root cause is not readily visible:

- Make a small wall break in the room.
- Inspect the conditions within the wall cavity.

The root cause could be attributed to an active leak within the wall cavity or to uninsulated cold water supply pipes that are causing moisture to penetrate the ceiling or walls.



Step Two: Root Cause

Q3. Is there (suspected) asbestos on pipe insulation that will be disturbed?

- No
- Yes

Select this option if you observe suspected ACM on pipe insulation that **could be disturbed during the wall break or repairs.**

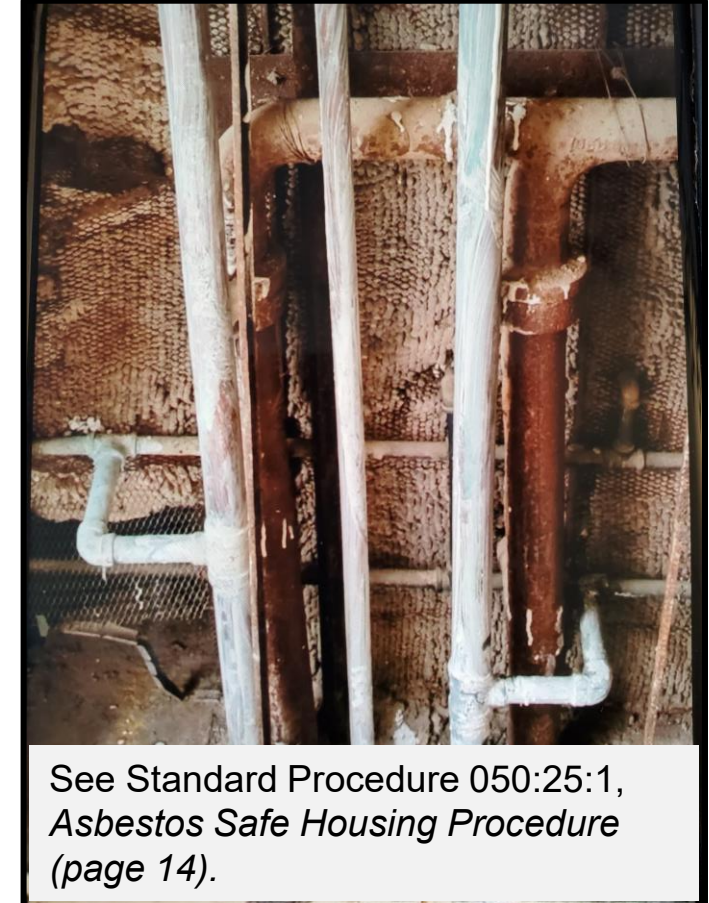
Create a child work order with failure class '**ASBESTOS**' and problem code '**ASBPIPEABATE**' (owner group '**TSDEFO**') to request emergency abatement.



See Standard Procedure 050:25:1, *Asbestos Safe Housing Procedure.*

Caution - Asbestos

- If you observe suspected ACM that could be disturbed during wall break or follow up repairs, **IMMEDIATELY STOP WORK.**
- Create an **asbestos testing** or **abatement work order**, and notify PMS or APMS:
 - PMS or APMS will notify NYCHA Asbestos Department and coordinate scheduling.
- **NEED EMERGENCY ABATEMENT?** Abatement may be performed **without** a prior survey to address emergency leak:
 - Email asbestos.abatement@nycha.nyc.gov or call Asbestos Department supervisor.



Caution - Asbestos

Which is of this may not be asbestos?



Photo 1: ???

Photo 2: ???

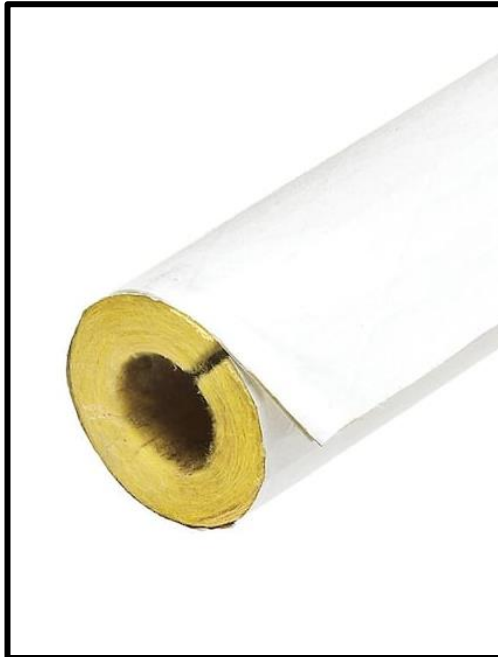


Photo 3: ???



Photo 4: ???

Caution - Asbestos

Insulation with a **fabric wrapping** or **corrugated appearance** is typical of **asbestos containing material (ACM)**!



Photo 1: ACM

Photo 2: Not ACM

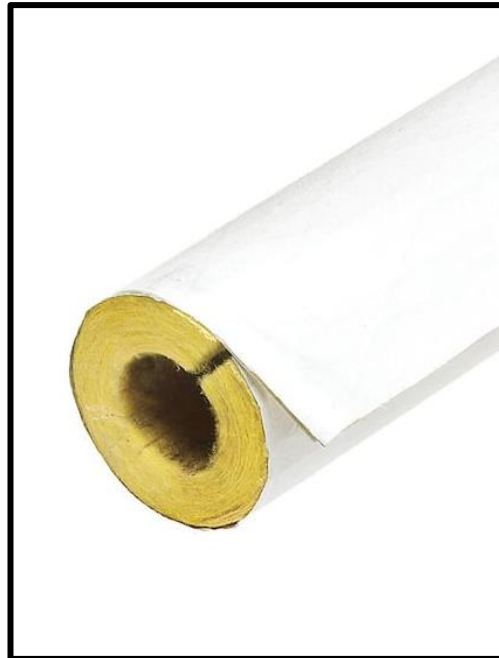


Photo 3: ACM



Photo 4: ACM

Caution - Asbestos

- No NYCHA employee or vendor shall disturb any ACM as part of their duties unless they have had the appropriate training to perform the task.
- Failing to test ACM/suspect ACM prior to disturbing it violates NYCHA's policy for the handling of ACM. Failure to follow the established protocol for the assessment and removal of asbestos can pose a health risk to both NYCHA residents and staff.
- NYCHA staff must follow the criteria and instructions in Standard Procedure 050:25:1, *Asbestos Safe Housing Procedure* to identify, investigate, test, and abate ACM and presumed ACM.

Step Two: Root Cause

Q4. Is there mold on the backside of sheetrock?
(sheetrock locations only)

- **No**
- **Yes**

Select this option if you observe mold on the backside of sheetrock (e.g., you made initial wall break and were inspecting conditions behind the wall cavity).

Create a child work order with failure class '**WALL**' and problem code '**SHEETROCKDML**' to replace sheetrock.



Enter in '**Work Log**' that the mold is **on the back of sheetrock** to assist skilled trades to identify repair needs

Step Two: Root Cause

- The water damaged or moldy sheetrock must be **replaced with fiberglass-faced gypsum board** in sheetrock constructions.
- If mold is found **on the back side of a sheetrock wall of an adjacent room or an adjacent apartment**, create a parent Mold Inspection WO.



Step Two: Root Cause

Q5: Select at least one Root Cause:

1. Appliance Issues
2. Bathtub Shower Issues
3. Caulking Damaged, Missing, Loose (Caulking DML)
4. Grouting Damaged, Missing, Loose (Grouting DML)
5. Leak Around Window
6. Leak From Above/Adjacent - *Investigate*
7. Leak From Above/Adjacent - *Previously Identified*
8. Leak Through Façade
9. Pipe Condensation
10. Pipe Condensation - *Previously Addressed*
11. Plumbing Leak - In Unit
12. Radiator Unit Leak
13. Resident Caused
14. Roof Leak
15. Sink Issues - In Unit
16. Toilet Issues - In Unit
17. Other

Step Two: Root Cause

- Do **NOT CLOSE** parent Leak WO, if you **cannot identify a root cause of the leak** during the visit.
- Parent Leak WO should **REMAIN OPEN** ('Inspection State' = 'Partial'), until root cause is identified:
 - Complete 'Step One: Evaluation of Conditions'.
 - Enter details in the 'Work Log' in the iWM App:
 - *E.g.: Need to get access to apt above.*
 - *E.g.: Wall break needed in the kitchen. Resident needs to remove personal property first.*
 - Coordinate with resident time for the follow up visit, when possible.

3:13 5Guc 56

← Complete Work Order WO #132204889

re rt — 4 Related — 5 Perform Inspection — 6

Inspecting Location: 171.01.001.F04.04F.LIV01
360 MOTHER GASTON BOULEVARD

WO Inspection State: PARTIAL

Evaluation of Conditions Inspect
State: COMPLETE

Probable Cause Inspect
State: PARTIAL

General Evaluation Inspect
State: NONE

< PREVIOUS STOP TIME NEXT >

Step Two: Root Cause

During this step, the maintenance worker inspects surfaces for water damage and documents root cause(s) in Maximo.

1

All questions that have an asterisk (*) are **mandatory**.

2

At least **one Probable Cause** should be selected.

11:45 5G UC 63%

← Probable Cause Bathroom 01 DONE

* Is moisture meter equal or higher than 599? (None)

* Is Wall-break required? (None)

Appliance Issues (None)

Bathtub Shower Issues (None)

Caulking DML (None)

Grouting DML (None)

Leak Around Window (None)

Leak From Above/ Adjacent - Investigate (None)

Leak From Above - Previously Identified (None)

Leak Through Facade (None)

Other (None)

Pipe Condensation (None)

1

2

Select at least 1 (one) Root Cause

Root Cause -

Q1: Moisture Measurement

1 Response options for '**Is Moisture Meter Equal or Higher than 599**' are:

- No
- Yes

2 If '**No**', document the highest moisture meter measurement (below 599).

If '**Yes**', document the highest moisture meter measurement per each surface (equal or above 599).

3 To input value, **select the location** you found moisture in and then tap on the grey box next to it.

11:54 5GUC 62%

← Probable Cause Bathroom 01 DONE

* Is moisture meter equal or higher than 599? (None)

* Is Wall-break required? (None)

Is there (suspected) asbestos on pipe insulation that will be disturbed?

Select Response:

Notes (Optional)

No

Yes

Leak Around Window (None)

Leak From Above/Adjacent - Investigate (None)

Leak From Above - Previously Identified (None)

Leak Through Facade (None)

11:54 5GUC 62%

← Select Areas Affected DONE

C Ceiling

F Floor

W1 Wall 1 (Near)

W2 Wall 2 (Left)

W3 Wall 3 (Far)

W4 Wall 4 (Right)

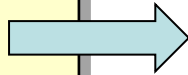
Root Cause -

Q1: Moisture Measurement

1

Taking moisture meter measurements **is required for select FC/PCs:**

Note: Taking moisture meter readings will be **optional** for other FC/PCs.



Failure Class (FC)	Problem Code (PC)
LEAKFROMABOVE	CONSTANTDRIPPING
LEAKFROMABOVE	CONSTANTLEAKING
LEAKFROMABOVE	FLOODING
LEAKFROMABOVE	WATERPENETRATION
EXCESSIVEMOISTURE	EXCESSIVEMOISTURE
PIPES	PIPENEEDSREPAIR
PIPES	PIPESLEAK
WALLS	WALLLEAK
WALLS	WATERDAMAGE

Root Cause -

Q2: Wall Break

1

Response options for '**Is wall break required?**' are:

- No
- Yes

Note: Select '**Yes**' if wall break needs to be made to identify root cause and/or complete repairs.

If not able to do the wall break during the visit (e.g., tenant needs to move personal property) **complete Task 10** and enter in Work Log that need to return to conduct a wall break.

1

11:45 5GUC 63%

← Probable Cause Bathroom 01 DONE

* Is moisture meter equal or higher than 599? (None)

* Is Wall-break required? (None)

Appliance Issues (None)

Bathtub Shower Issues (None)

Caulking DML (None)

Grouting DML (None)

Leak Around Window (None)

Leak From Above/Adjacent - Investigate (None)

Leak From Above - Previously Identified (None)

Leak Through Facade (None)

Other (None)

Pipe Condensation (None)

11:54 5GUC 62%

← Probable Cause Bathroom 01 DONE

* Is moisture meter equal or higher than 599? (None)

* Is Wall-break required? (None)

Is there (suspected) asbestos on pipe insulation that will be disturbed?

Select Response:

Notes (Optional)

No

Yes

Leak Around Window (None)

Leak From Above/Adjacent - Investigate (None)

Leak From Above - Previously Identified (None)

Leak Through Facade (None)

Root Cause - Q3: Asbestos*

1

If you identify that **wall break is required**, iWM App will prompt **two additional questions**.

2

Response options for '**Is there Suspected Asbestos on Pipe Insulation that will be disturbed?**' are:

- No
- Yes

3

If you identify suspected asbestos containing material (ACM) that might be disturbed during repairs, **you must create a child work order** with failure code '**ASBESTOS**' and problem code '**ASBPIPEABATE**'.

1

2

11:37 5GUC 76%

← Probable Cause Kitchen 01 DONE

* Is moisture meter equal or higher than 599? Yes

* Is Wall-break required? Yes

Is there (suspected) asbestos on pipe insulation that will be disturbed? Yes

* Is there mold on the backside of sheetrock? Yes

Appliance Issues (None)

Bathtub Shower Issues (None)

Caulking DML (None)

Grouting DML (None)

Leak Around Window (None)

Leak From Above/ Adjacent - Investigate (None)

Leak From Above - Previously Identified (None)

3

9:14 5GUC 92

← Create Child Work Order DONE

Description Suspected asbestos on pipe insulation

Location 171.01.001.F04.04F.LIV01

Asset Please select...

Work Type CM

Sub Work Type LEAK Leak

Failure Class ASBESTOS Asbestos

Problem Code ASBPIPEABATE Asbestos Pipe Abatement

Root Cause -

Q4: Mold on Sheetrock*

1 Response options for '**Is there Mold on the Back Side of Sheetrock?**' are:

- No
- Yes

Note: For locations that use sheetrock, you must check behind the sheetrock for mold.

2 If you identify mold on the back side of sheetrock, you must create a child work order with a failure class '**WALL**' and a problem code '**SHEETROCKDML**'. Indicate in the Work Order Description that '**mold on the backside of sheetrock**'.

11:37 5GUC 76%

← Probable Cause Kitchen 01 DONE

* Is moisture meter equal or higher than 599? Yes

* Is Wall-break required? Yes

Is there (suspected) asbestos on pipe insulation that will be disturbed?

* Yes

1 * Is there mold on the backside of sheetrock? Yes

Appliance Issues (None)

Bathtub Shower Issues (None)

Caulking DML (None)

Grouting DML (None)

Leak Around Window (None)

Leak From Above/Adjacent - Investigate (None)

Leak From Above - Previously Identified (None)

9:10 5GUC 92

← Create Child Work Order DONE

Description Mold on the backside of sheetrock

Location 171.01.001.F04.04F.LIV01

Asset Please select...

Work Type CM

Sub Work Type LEAK Leak


Failure Class WALLS Walls

Problem Code SHEETROCKDML Sheetrock DML

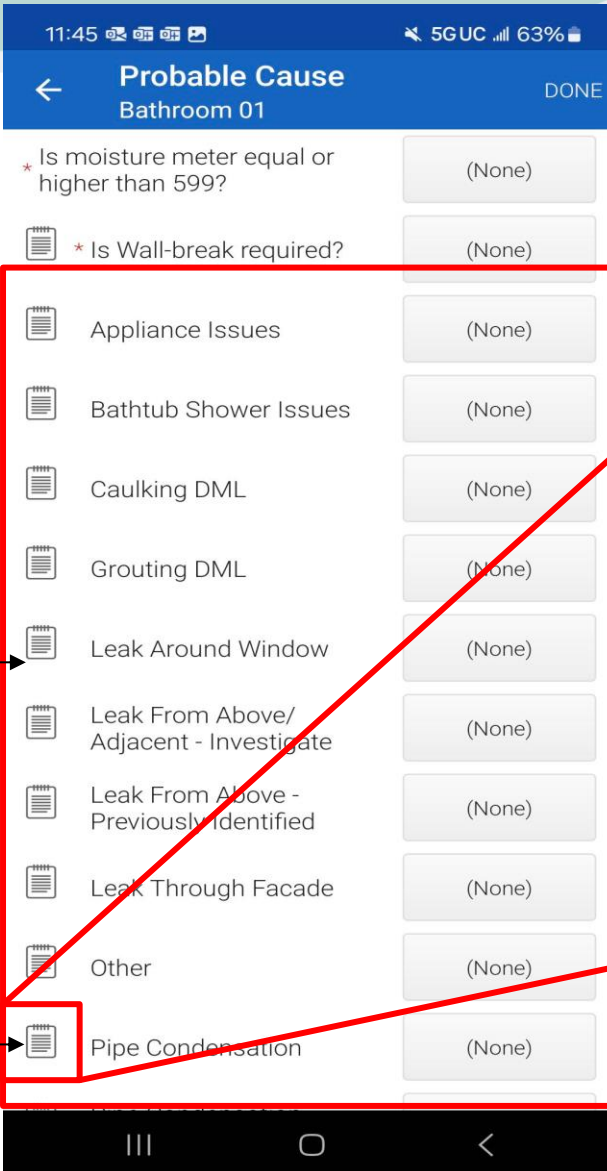
Q5: Root Cause

1 Select a **Probable Cause (Root Cause)**.

- **At least one** Probable Cause should be selected.
- **Up to four** Probable Causes can be selected.

2 Tap on **Long Description**  to learn more information about each Probable Cause.

Some probable causes will require '**Notes**' and/or '**Location**' to be entered to complete.



11:45 5G UC 63%

← Probable Cause Bathroom 01 DONE

* Is moisture meter equal or higher than 599? (None)

* Is Wall-break required? (None)

Appliance Issues (None)

Bathtub Shower Issues (None)

Caulking DML (None)

Grouting DML (None)

Leak Around Window (None)

Leak From Above/ Adjacent - Investigate (None)

Leak From Above - Previously Identified (None)

Leak Through Facade (None)

Other (None)

Pipe Condensation (None)

Long Description

Pipe Condensation should be selected when the cause of the excessive moisture or water damage is attributed to the condensation on the cold-water risers and/ or branch lines. Condensation is most likely to be contributing root cause, when staff observes missing or damaged pipe insulation and water damage and/or mold on the lower 3 feet of the chase wall. This root cause will require a wall-break to diagnose.

OK

Root Cause – Plumbing (Example #1)

1

Select the root cause(s) that contributed to the leak or water damage complaint (e.g., 'Plumbing Leak – In Unit').

2

Add 'Notes' as needed.

9:20 5Guc 91

← Probable Cause Living Room 01 DONE

Bathtub Shower Issues	(None)
Caulking DML	(None)
Grouting DML	(None)
Leak Around Window	(None)
Leak From Above/ Adjacent - Investigate	(None)
Leak From Above - Previously Identified	(None)
Leak Through Facade	(None)
Other	(None)
Pipe Condensation	(None)
Pipe Condensation - Previously Addressed	(None)
Plumbing Leak - In Unit	Yes
Radiator Unit Leak	(None)

View Details >

2

9:21 5Guc 91

← Probable Cause Living Room 01 DONE

Leak From Above/ Adjacent - Investigate (None)

Leak From Above - Previously Identified (None)

Leak Through Facade (None)

Resident - Caused (None)

Roof Leak (None)

Sink Issues - In Unit (None)

Toilet Issues - In Unit (None)

Select Response:

Notes (Optional)

No

Yes

Root Cause – Appliance Issues (Example #2)

1

If root cause is 'Appliance Issues', select one of the following options and provide instructions to the resident(s):

- Improperly Installed Dishwasher (or Tubing)
- Improperly Installed Washing Machine (or Tubing)
- Improperly Installed Air Conditioner
- Improperly Installed Freezer

2

Add 'Notes' as needed.

2

1

11:06 5GUC 78%

← Probable Cause Bathroom 01 DONE

Select Response:

Notes (Optional)

Resident was instructed to contact a repair service for the dishwasher and to not use the dishwasher until it can be properly repaired/connected.

Resident was instructed to contact a repair service for the washing machine and to not use the washing machine until it can be properly repaired/connected.

Resident was instructed to contact a repair service for the air conditioner and to not use the air conditioner until it can be properly repaired/installed.

Resident was instructed to contact a repair service for the freezer and to not use the freezer until it can be properly repaired.

No

Pipe Condensation (None)

Root Cause – Resident Caused (Example #3)

1 If root cause is '**Resident Caused**', select one of the following options and provide instructions to the resident(s):

- Improper Disposal of Waste Materials Down the Drains
- Overflowing Fixtures
- Other

2 Add '**Notes**' as needed.

The screenshot shows a mobile app interface for reporting a problem. The screen displays a list of 'Probable Cause' options for 'Bathroom 01'. A 'Select Response:' dialog box is open, showing options for resident instructions. A red box highlights the 'Resident - Caused' option in the list below.

12:07 5G 86%

← Probable Cause Bathroom 01 DONE

Caiking DML (None)

Grouting DML (None)

Leak Around Window (None)

Select Response:

Notes (Optional)

Resident was instructed not to improperly dispose of waste down the drain.

Resident instructed not to overfill or overflow fixtures.

Other

No

Radiator Unit Leak (None)

Resident - Caused (None)

Roof Leak (None)

Root Cause – Other (Example #4)

1

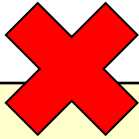
If root cause is 'Other', you must enter the identified root cause in the 'Notes' and attach a **photograph** to support their determination.

1

The screenshot shows a mobile application interface for 'Probable Cause Bathroom 01'. At the top, there is a status bar with the time 12:04, signal strength, and battery level at 86%. Below the title bar, there is a 'Yes' button. The main list includes 'Appliance Issues (None)', 'Bathtub Shower Issues (None)', 'Leak Through Facade (None)', and 'Other' with a 'Yes' button. A 'Select Response:' dialog box is open, showing a text input field for 'Notes (Optional)', a 'No' button, and a 'Yes' button. A red box highlights the 'Other' option in the list, and another red box highlights the 'Select Response' dialog. A green circle with the number '1' and an arrow points to the 'Other' option.

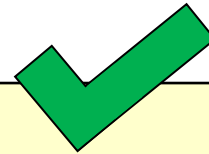
Root Cause - Note Examples

Make sure your 'Note' is helpful to other staff responding to follow up repair (child WOs) or reviewing findings in Maximo.



Note 1:

Leak was fixed before.



Note 1:

Shower body repair was done in Apt 2A bathroom in April. Walls and ceiling in 1A bathroom measure dry.

Note 2:

Leak from above PFU.



Note 2:

Unable to access to 2A. Accessed 2B and 3A (no leak). Need to follow up with 2A.

Step Two: Root Cause (Completed)

1

Once you have selected all applicable Probable Causes, tap on 'Done'.

2

Task 20: Probable Cause is now completed.

3

The WO Inspection State is 'COMPLETED'

9:48 5Guc 64

← Probable Cause 1 → DONE

Living Room 01

* Is moisture meter equal or higher than 599? Yes

* Is Wall-break required? Yes

Is there (suspected) asbestos on pipe insulation that will be disturbed?

* Yes

* Is there mold on the backside of sheetrock? No

Appliance Issues (None)

Bathtub Shower Issues (None)

Caulking DML (None)

Grouting DML (None)

Leak Around Window (None)

Leak From Above/ Adjacent - Investigate Yes

View Details >

Leak From Above - Previously Identified (None)

9:42 5Guc 59

← Complete Work Order WO #132204889

4 Related 5 Perform Inspection 6

Inspecting Location:

171.01.001.F04.04F.LIV01

360 MOTHER GASTON BOULEVARD

WO Inspection State: COMP / UNSUBMITTED 3

Evaluation of Conditions Inspect

State: COMPLETE

Probable Cause 2

State: COMPLETE

General Evaluation Inspect

State: NONE

< PREVIOUS STOP TIME NEXT >

III O <

Knowledge Check

You responded to the Leak From Above complaint submitted by the tenant of apartment #5C. You determine that the source of the leak originates 2 stories above in #7C bathroom (crack on branch line). You create a follow up plumbing work order. What root cause will you select in the iWM App?

- a. Sink Issues – In Unit
- b. Leak From Above/ Adjacent - Investigate
- c. Plumbing Leak – In Unit
- d. Other



Knowledge Check

You responded to the Leak From Above complaint submitted by the tenant of apartment #5C. You determine that the source of the leak originates 2 stores above in #7C bathroom (crack on branch line). You create a follow up plumbing work order. What root cause will you select in the iWM App?

- a. Sink Issues – In Unit
- b. Leak From Above/ Adjacent - Investigate
- c. Plumbing Leak – In Unit
- d. Other

Knowledge Check

Bathtub shower Issues should be selected when the cause of the leak, water damage, or excessive moisture is attributed to which of the following:

- a. Damaged or cracked tub enclosure
- b. Missing grouting
- c. Clogged pipes



Knowledge Check

Bathtub shower Issues should be selected when the cause of the leak, water damage, or excessive moisture is attributed to which of the following:

- a. **Damaged or cracked tub enclosure**
- b. Missing grouting
- c. Clogged pipes

Knowledge Check

Plumbing Leak – In Unit should be selected when the cause of the leak, water damage, or excessive moisture is attributed to:

- a. Corrosion on pipes (within impacted apartment)
- b. Leak from the apartment above
- c. Improperly installed appliances (within impacted apartment)



Knowledge Check

Plumbing Leak – In Unit should be selected when the cause of the leak, water damage, or excessive moisture is attributed to:

- a. Corrosion on pipes (within impacted apartment)
- b. Leak from the apartment above
- c. Improperly installed appliances (within impacted apartment)

Knowledge Check

Grouting DML stand for:

- a. Grouting damaged, moldy, and loose
- b. Grouting density, moisture, and loose
- c. Grouting damaged missing, and loose



Knowledge Check

Grouting DML stand for:

- a. Grouting damaged, moldy, and loose
- b. Grouting density, moisture, and loose
- c. Grouting damaged, missing, and loose

Knowledge Check

What probable cause could be selected when the cause of leak, water damage or excessive moisture is due to improper installation or failure of appliances?

- a. Pipe Condensation
- b. Resident-Caused
- c. Appliance Issues



Knowledge Check

What probable cause could be selected when the cause of leak, water damage or excessive moisture is due to improper installation or failure of appliances?

- a. Pipe Condensation
- b. Resident-Caused
- c. **Appliance Issues**

Inspection Steps

Step Three: General Evaluation (If Applicable):

- Visually inspect the impacted area for environmental issues (e.g., mold or pest infestation).
- **This step is required, if mold or pest infestation are observed.**
 - If no mold or pests (e.g., roaches or mice) are observed, completing this step is optional.

Follow the iWM App prompts to log your findings!



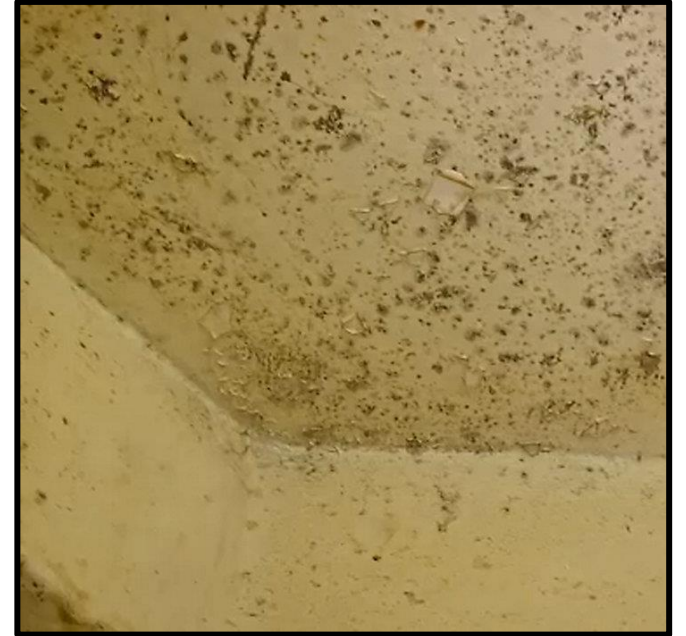
Step Three: General Evaluation

Q1. Is there mold growth?

- No
- Yes

Select this option if you observe mold during the visit.
Record the total estimated square footage of mold on room walls (1-4), floor, ceiling, or any components (e.g., cabinets).

Maximo automatically creates a parent Mold Inspection work order with failure class '**MILDEWCONDITION**' and problem code '**NEEDSCLEANING**'.

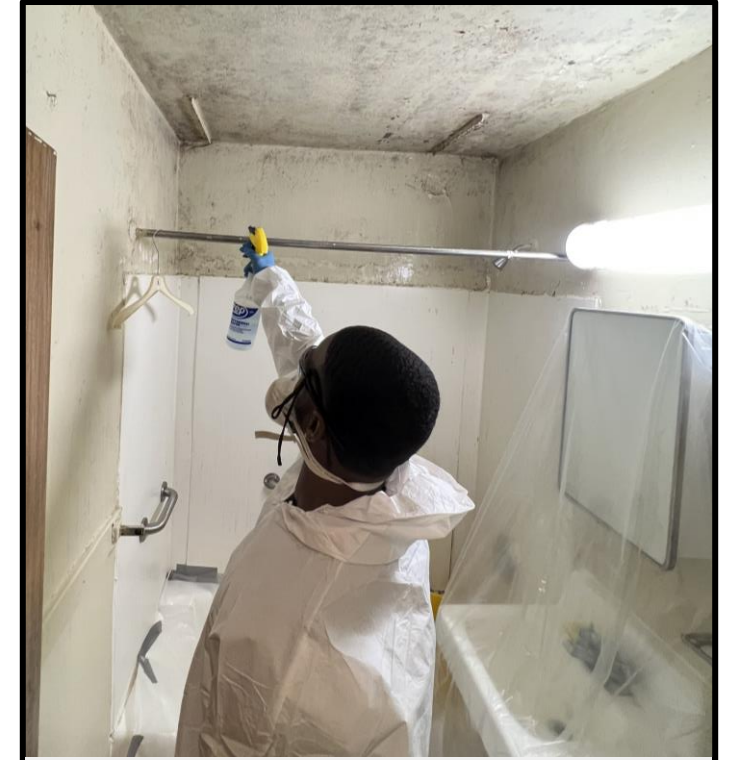


Step Three: General Evaluation

Do you see any Mold?

- **Follow iWM App inspection prompts** to create a Mold Inspection WO.
- **Notify APMS or PMS** while you still have access to the unit.
- If you completed *Mold Busters* training, APMS or PMS **might assign you to** complete Mold Inspection while you still have access to the unit.

NYCHA staff must complete **mandatory Mold Busters training** to perform mold inspections and/or repairs.



See Standard Procedure
040:14:1, *Mold/Mildew Control in
NYCHA Residential Buildings.*

Step Three: General Evaluation

Q2. Are there cockroaches?

- No
- Yes

Select this option if you observe any signs of roach infestation.

Maximo automatically creates a parent Extermination work order with failure class '**EXTERMINATION**' and problem code '**ROACHES**'.



Step Three: General Evaluation

Q3. Are there rodent droppings?

- No
- Yes

Select this option if you observe signs of rodent infestation.

Maximo automatically creates a parent Extermination work order with failure class '**EXTERMINATION**' and problem code '**MICE**'.



General Evaluation

1 Completing 'Task 30: General Evaluation' is optional for Leak Work Orders.

2 Task 30 has three questions:
1 - Is there Mold Growth?
2 - Cockroaches
3 - Rodent Droppings

Note: Complete Task 30 if the conditions are observed, otherwise all responses will be defaulted to 'No'.

9:42 5GUC 59

← Complete Work Order
WO #132204889

4 Related 5 Perform Inspection 6

Inspecting Location:
171.01.001.F04.04F.LIV01
360 MOTHER GASTON BOULEVARD

WO Inspection State: COMP / UNSUBMITTED

Evaluation of Conditions
State: COMPLETE Inspect

Probable Cause
State: COMPLETE Inspect

General Evaluation
State: NONE Inspect

12:48 5GUC 58%

← General Evaluation Bathroom 01 DONE

Is there mold growth? No

Cockroaches No

Rodent Droppings No

< PREVIOUS STOP TIME NEXT >

General Evaluation -

Q1: Mold

1

Response options for '**Is there Mold Growth?**' are:

- No
- Yes

2

If the response is '**Yes**', iWM App will prompt '**Followup Info**' screen:

- Failure Class
- Problem Code
- Location
- Craft

3

Note: Selecting this option will create an open parent Mold Inspection Work Order.

1

3:22 5G 34%

General Evaluation
Bathroom 01

Is there mold growth? No

Cockroaches No

Rodent Droppings No

Select Response:

Notes (Optional)

No

Yes

2

9:51 5G 67%

Followup Info DONE

Failure Class
MILDEWCONDITION

Problem Code
MILDEW

Location
171.01.001.F04.04F.LIV01

Craft
SUPT

General Evaluation – Q2: Cockroaches

1 Response options for '**Cockroaches?**' are:

- No
- Yes

2 If the response is '**Yes**', iWM App will prompt '**Followup Info**' screen:

- Failure Class
- Problem Code
- Location
- Craft

3 **Note:** Selecting this option will create an open parent Extermination Work Order.

3:22 5G 34%

General Evaluation
Bathroom 01

Is there mold growth? No

Cockroaches No

Rodent Droppings No

Select Response:

Notes (Optional)

No

Yes

9:43 5G 90

Followup Info

Failure Class
EXTERMINATION

Problem Code
ROACHES

Location
171.01.001.F04.04F.LIV01

Craft
EXTERMIN

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General Evaluation – Q3: Mice

- 1 Response options for '**Rodent Droppings?**' are:
 - No
 - Yes
- 2 If the response is '**Yes**', iWM App will prompt '**Followup Info**' screen:
 - Failure Class
 - Problem Code
 - Location
 - Craft

Note: Selecting this option will create an open parent Extermination Work Order.

3:22 5G 34%

General Evaluation Bathroom 01 DONE

Is there mold growth? No

Cockroaches No

Rodent Droppings No

Select Response:

Notes (Optional)

No

Yes

9:43 5G 90

Followup Info DONE

Failure Class EXTERMINATION

Problem Code MICE

Location 171.01.001.F04.04F.LIV01

Craft EXTERMIN

Ad Hoc Inspection

1 Completing Ad Hoc Inspection is required for all corrective maintenance work orders .

2 Some FC/PCs require the 'Pipe Insulation' to be inspected as well.

Note: All items on the list must be answered up to 'Heat related Ad Hoc Inspection Data' excluding 'Apt has Cat' and 'Apt has Dog'.

2:47 5GUC 53%

← Complete Work Order WO #131653917

Perform Inspection 5 Materials Optional 6 Ad hoc Insp

* Please check install dates on the CO/Smoke Detectors or if applicable on Combo Detector. If a date is not entered OR older than 7 years a NEW Combo Detector must be installed

Apartment Ad Hoc Inspection Data

* Pipe Insulation No Value

* According to NYCHA procedures, you must physically check these items

* Fire Safety Notice No Value

* CO Detector Install date: No Value

1 * Smoke Detector Install date: No Value

* Combo Detector Install date: 07/27/20 No Value

* Window Guard No Value

< PREVIOUS START TIME NEXT >

2:48 5GUC 53%

← Complete Work Order WO #131653917

Perform Inspection 5 Materials Optional 6 Ad hoc Insp

* Window Guard No Value

* GFCI Outlets No Value

* Apartment Door No Value

Apt has Cat Yes No

Apt has Dog Yes No

Apartment Temp

Water Temp

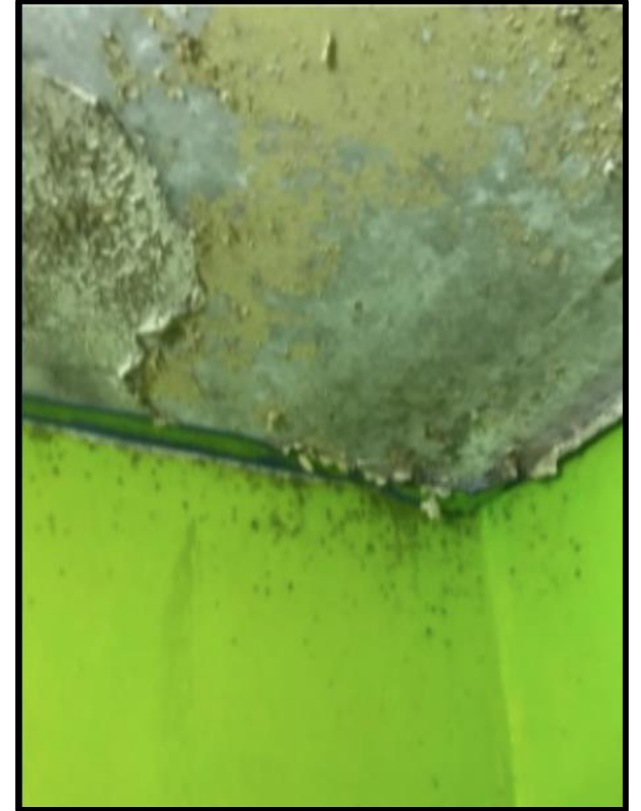
Heat Related Ad hoc Inspection Data

Stove Used for Heat Yes No

< PREVIOUS START TIME NEXT >

Knowledge Check

How does moisture serve as a catalyst for mold, rodents and roaches?



Knowledge Check

How does moisture serve as a catalyst for mold, rodents and roaches?

It provides essential condition for their growth and survival



Knowledge Check

You are assigned a leak work order to repair a faucet in 3A Bathroom. Once you get access you notice visible mold on the bathroom ceiling. You completed NYCHA *Mold Busters training* and are occasionally assigned to address mold complaints. What would be your steps to go about mold in this unit?



Knowledge Check

You are assigned a leak work order to repair a faucet in 3A Bathroom. Once you get access you notice visible mold on the bathroom ceiling. You completed NYCHA *Mold Busters training* and are occasionally assigned to address mold complaints. What would be your steps to go about mold in this unit?

- Document presence of mold on the Leak WO (“Is there mold growth? = Yes”). Maximo will generate a parent Mold WO.
- Notify APMS or PMS, and consult if you should proceed with mold inspection while you have access to unit.
- If yes, APMS or PMS should assign you Mold Inspection WO in Maximo. Wait a few minutes and refresh your phone.

NYCHA LEAK TRAINING

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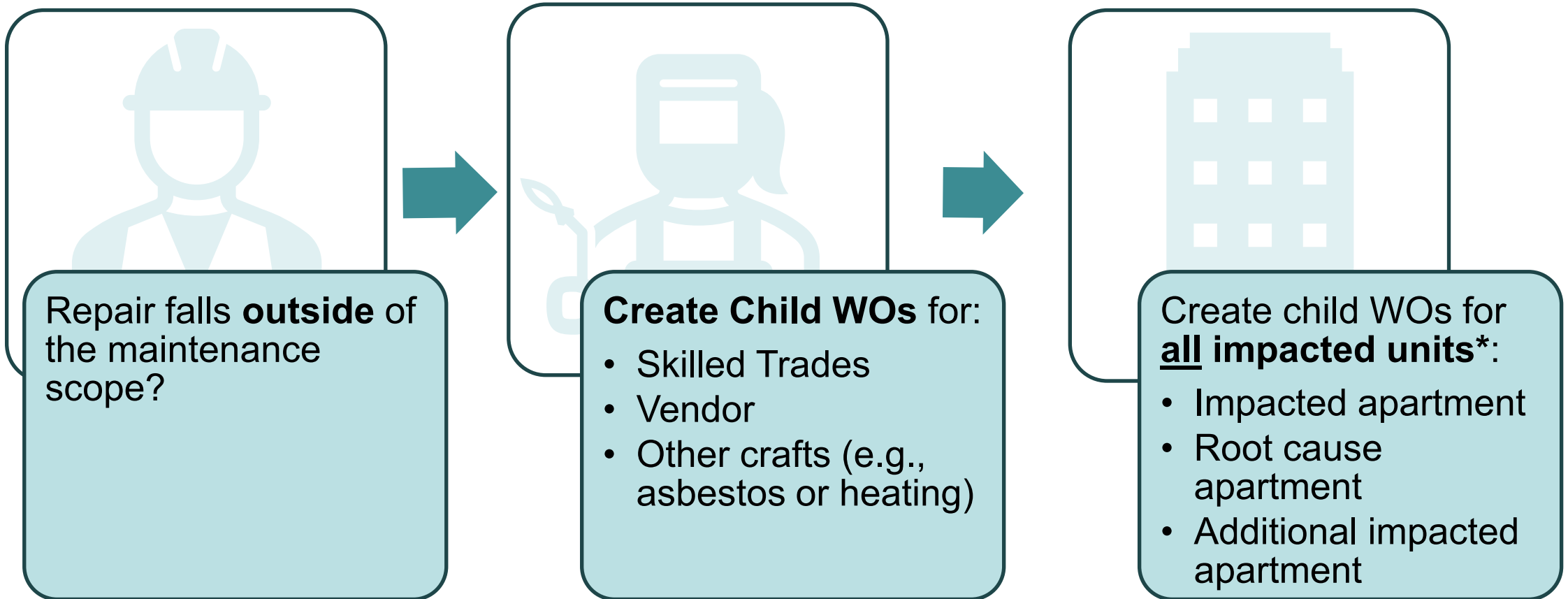
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CREATING CHILD LEAK REPAIR WORK ORDERS IN iWM APP



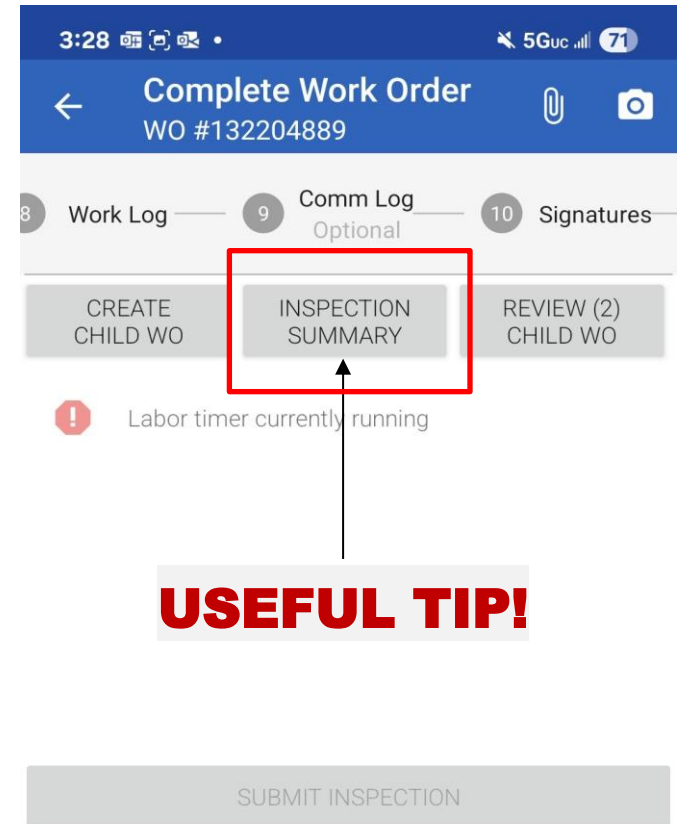
V. Creating Child Work Orders



Creating Child Work Orders

You can use the '**Inspection Summary**' Tab for guidance in creating repairs.

- The 'Inspection Summary' **will list** findings from 'Step Two: Root Cause' in the iWM App.
 - **Create Child WOs** to address these conditions.
- The 'Inspection Summary tab' **will NOT list** findings from 'Step One: Evaluation of Conditions' and 'Step Three: General Evaluation'.
 - Maximo **will automatically create work order(s)** based on the inspection (e.g., standing water or mold).



Creating Child Work Orders

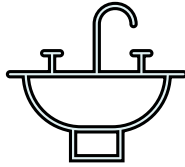


WOs are created **automatically**
(based on inspection)

Task 10: Evaluation of Conditions

- Flooding Abatement WO
- Standing Water Removal WO

(!) Location **is defaulted** to parent Leak WO.

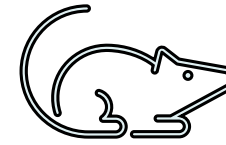


NYCHA staff must **manually** create WOs

Task 20: Probable Cause

- Root Cause Repair WOs (e.g., *Plumbing*)
- Cosmetic Repair WOs (e.g., *Plastering, Painting*)
- Asbestos testing or abatement WOs
- Sheetrock Replacement WOs (e.g., *mold on the back of sheetrock*)

(!) Location could be **manually adjusted**, if needed.



WOs are created **automatically**
(based on inspection)

Task 30: General Evaluation

- Extermination WO
- Mold Inspection WO

(!) Location **is defaulted** to parent Leak WO.

Creating Child Work Orders

1

In this example, NYCHA staff identified root cause as **‘Plumbing Leak – In Unit’** and **suspected asbestos on the pipe insulation.**

2

To create a child work order, tap on **‘Create Child WO’**.

3

iWM App will prompt a new window to **‘create Child Work Order’**.

2

1

3

2:18 4G 80%

← Inspection Summary

CREATE CHILD WO Created 0 WOs

You observed the following conditions during inspection

Is there (suspected) asbestos on pipe insulation that will be disturbed? -	Yes
Plumbing Leak - In Unit -	Yes

12:34 5GUC 93%

← Create Child Work Order DONE

Parent Work Order
131576597

Description
Enter description

Location
135.01.001.F09.09H.BTH01

Asset
Please select...

Work Type
Please select...

Sub Work Type
Please select...

Failure Class
Please select...

Problem Code

Creating Child Work Orders

To create a Child WO(s), enter in the iWM App:

- **Description:** Type of repair or the specific area requiring repair (e.g., *crack on cold water riser*).
- **Location:** Specific room or area that requires work:
 - Location is defaulted to the same location as the parent Leak WO (e.g., *a leak in the bathroom*).
 - If the repair is needed for another room or a room in a different apartment, **you must change the location in the iWM App** (e.g., *repair needed in the bathroom above*).



All child work orders **must specify the exact location** where the work is required. Child work orders created **without adjusting the location will delay repairs.**

Creating Child Work Orders (cont.)

To create a Child WO(s) enter in the iWM App:

- **Work Type:** “Corrective Maintenance” (CM)
- **Sub-Work Type:** “Leak”
- **Failure Class and Problem Code:**
 - The Failure Class identifies the work order category (*e.g., Pipes*).
 - The Problem Code identifies the specific issue within the category (*e.g., Riser Leaking*).
- **Craft:** Select based on FC/PC.

Creating Child Work Orders

1

When creating child work orders, **carefully select FC/PC** that most accurately identify the repair need.

NYCHA has recently introduced **new FC/PCs for Plumbing Repairs:**

Failure Code	Problem Code
PIPES	WATER BRANCH LEAKING
PIPES	RISER LEAKING
PIPES	WASTE BRANCH LEAKING
PIPES	STACK LEAKING
PIPES	TRAP LEAKING
TOILET	FLANGEDML
TOILET	TANKNEEDSBARRIER

3:16 5Guc 72

← Create Child Work Order DONE

Description
pipe corroded water branch leaking

Location
171.01.001.F04.04F.LIV01

Asset
Please select...

Work Type
CM

Sub Work Type
LEAK
Leak

Failure Class
PIPES
Pipes

Problem Code
WATER BRANCH LEAKING
Water Branch Leaking

Craft

1

3:19 5Guc 71

← Create Child Work Order DONE

Description
Toilet flange broken off

Location
171.01.001.F04.04A.BTH01
Bathroom 01

Asset
Please select...

Work Type
CM

Sub Work Type
LEAK
Leak

Failure Class
TOILET
Toilet

Problem Code
FLANGEDML
FlangeDML

1

Creating Child Work Orders

Need to create multiple child repair WOs?

Repeat steps above for each child WO!

The image displays three overlapping screenshots of a mobile application interface for creating child work orders. Each screenshot shows a form with the following fields:

- Parent Work Order (132204889)
- Description (Stack pipe leaking)
- Location (171.01.001.F04.04F.LIV01)
- Asset (Please select...)
- Work Type (CM)
- Sub Work Type (LEAK)
- Failure Class (PIPES)
- Problem Code (STACK LEAKING)

Red boxes highlight the 'Failure Class' and 'Problem Code' fields in each screenshot, indicating the steps to be repeated for multiple child work orders.

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Creating Child Work Orders

If **skilled trades repair(s)** are needed to complete the leak repairs, issue to resident **NYCHA Form 042.800, Repairs to Schedule Slip (RTS slip)** and instruct resident to contact **Neighborhood Planner** to schedule repairs.

- Issue RTS Slip to resident while **you still have access** to the apartment.
- Create **child WO(s)** in **iWM App** before RTS is issued.



*Skilled trades are limited to
**Bricklayer, Carpenter, Electrician,
Exterminator, Glazier, Painter,
Plasterer, Plumber, and Roofer.***

Issuing RTS Slip (Skilled Trades)

Add the following information on the RTS Slip:

- **Parent Leak WO #** (top of the RTS Slip).
- **Check all skilled trades** to complete the job:
 - If there are pre-existing WOs that are part of the leak scope, **RELATE** the WOs(s) in the iWM App and **check the skilled trade(s)** on the RTS Slip.
 - If a pre-existing WOs **fall outside of leak repair**, **DO NOT RELATE** it to the parent Leak WO.

1

2

NEW YORK CITY HOUSING AUTHORITY Repairs to Schedule Slip		
Date:	Work Order #:	
NYCHA maintenance staff has determined that the following Skilled Trades are needed to complete your repairs:		
<input type="checkbox"/> Bricklayer	<input type="checkbox"/> Exterminator	<input type="checkbox"/> Roofer
<input type="checkbox"/> Electrician	<input type="checkbox"/> Carpenter	<input type="checkbox"/> Plumber
<input type="checkbox"/> Painter	<input type="checkbox"/> Glazier	<input type="checkbox"/> Plasterer
To schedule these repairs, please call your Neighborhood Selection Planning Team : Mon-Fri between the hours of 8:30am – 4:30pm		
Neighborhood Planner Contact: [Redacted]	Planning Secretary Contact: [Redacted]	
New repairs can be requested through the contact lines below: Phone: 718-707-7771, Customer Contact Center (CCC) Smartphone/Tablet: MyNYCHA App Web: www.nyc.gov/MyNYCHA		
A translation of this form is available in your Property Management Office.		
La traducción de este formulario está disponible en su Oficina de Administración de Propiedades.		
Перевод этого документа находится в Офисе управления вашего жилищного комплекса.		
客戶服務中心提供本文件的譯本。		
客戶服務中心提供本文件的譯本。		

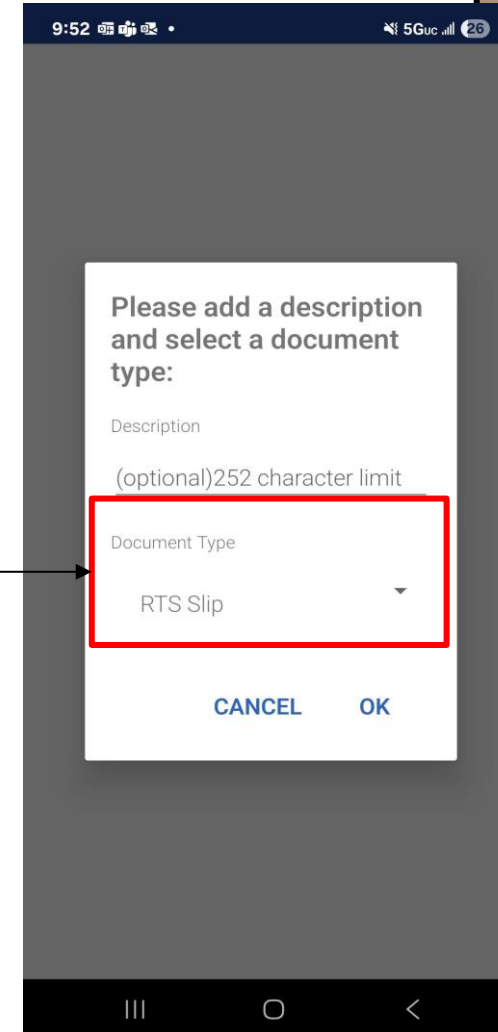
NYCHA 042.800 (Rev. 12/29/23) V3

Issuing RTS Slip (Skilled Trades)

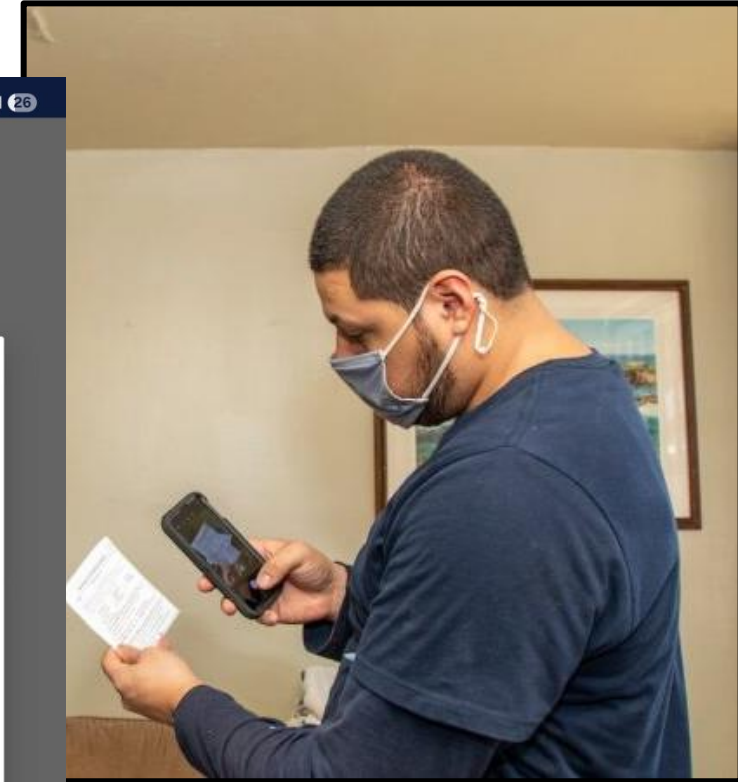
Take photograph of the completed RTS Slip before leaving apartment:

- Upload the photograph of the RTS Slip under document type '**RTS Slip**' in the iWM App.
- Advise the resident to **contact the Neighborhood Planning Unit** to schedule skilled trade repair(s) using the phone numbers on the RTS Slip.

1




The screenshot shows a mobile app interface with a status bar at the top displaying '9:52', signal strength, and battery level. The main screen has a dark background with a white modal box in the center. The modal box contains the text 'Please add a description and select a document type:'. Below this, there is a 'Description' field with a placeholder '(optional)252 character limit'. The 'Document Type' section is highlighted with a red rectangle and contains a dropdown menu with 'RTS Slip' selected. At the bottom of the modal are 'CANCEL' and 'OK' buttons. A green circle with the number '1' and an arrow points to the 'RTS Slip' option in the dropdown.



Issuing RTS Slip (Skilled Trades)

- Advise residents that NYCHA **will mail and/or email** the resident NYCHA Form 042.861. *Notice of Appointment for Skilled Trade Repairs* when skilled trades are scheduled. Notice will include:
 - Work order number.
 - Date and time for a skilled trade repair.
 - Description of work and craft.
 - Contact information for neighborhood planner.
- The resident will receive a **robocall reminder 48 hours in advance** of scheduled appointment.

**NOTICE OF APPOINTMENT
FOR SKILLED TRADES REPAIR**

Date: 02/11/2025 [REDACTED]
Development: RED HOOK [REDACTED]
Address: 116 MILL STREET [REDACTED]

Dear Resident,

An appointment for a **Painter** has been scheduled for your apartment.

Appointment Date: **February 11th, 2025**
Appointment Time: **8:00 a.m. to 3:30 p.m.**

During the appointment, the **Painter** will address the ticket(s) listed below.

Work Ticket Number	Location	Description
131410032	Living Room	Paint

Please prepare for your appointment by:

- Clearing a path from your apartment door to the repair area
- Moving items and furniture away from the repair area and surrounding area
- Ensuring that conditions are fit for the repair

On the appointment date, please make sure that you or an adult 18 years of age or older is home from 8:00 a.m. to 3:30 p.m. If the **Painter** does not arrive by 10 a.m., please contact your Neighborhood Planning Unit (their contact information is below).

Creating Child Work Orders

If **non-skilled trades repair(s)** are needed, create the work orders and advise resident that:

- NYCHA **will schedule work order(s)** and inform the resident once repairs are scheduled.
- Resident **can contact Property Management Office** for any questions about scheduling.

Non-skilled trades repairs include asbestos testing and abatement, heating, lead testing and abatement, vendor, maintenance and caretaker and others.

The image displays three overlapping screenshots of a mobile application interface for creating child work orders. The form is titled 'Create Child Work Order' and includes the following fields:

- Location: 171.01.001.F04.04E.BTH01
- Asset: Please select...
- Work Type: CM
- Sub Work Type: LEAK
- Failure Class: SINK, WALLS, ASBESTOS
- Problem Code: NEEDSCLEANING, NEEDSABATEMENT
- Craft: MAINT, CARETAKER, ASBABATE

Red boxes highlight the Failure Class, Problem Code, and Craft sections across the three screenshots.

Taking Photographs

Use the iWM to take photograph(s) of the **conditions, repair(s) made, and/or any follow-up repair(s)**:

- Upload at least one photograph of each condition **prior to making repair(s)** under the document type **‘Photos – Pre Repair’**.
- Upload at least one photograph of the condition **after making repair(s)** under the document type **‘Photos – Post Repair’**

USEFUL TIP!



Avoid uploading blurry or unclear pictures.

Taking Photographs



Photos: 'Pre-Repair'



Photos: 'Post-Repair'

Taking Photographs

Photos can be **taken anytime during the inspection or repair process** and automatically attached to the Work Order.

- 1 Tap on the **Camera icon** in the upper right corner to open the camera.
- 2 Tap the image on the preview screen to **focus** the camera.
- 3 Then, tap the **Circle icon** at the bottom of the screen to take the photo.

9:42 5GUC 59

← Complete Work Order WO #132204889

4 Related 5 Perform Inspection 6

Inspecting Location:

171.01.001.F04.04F.LIV01
360 MOTHER GASTON BOULEVARD

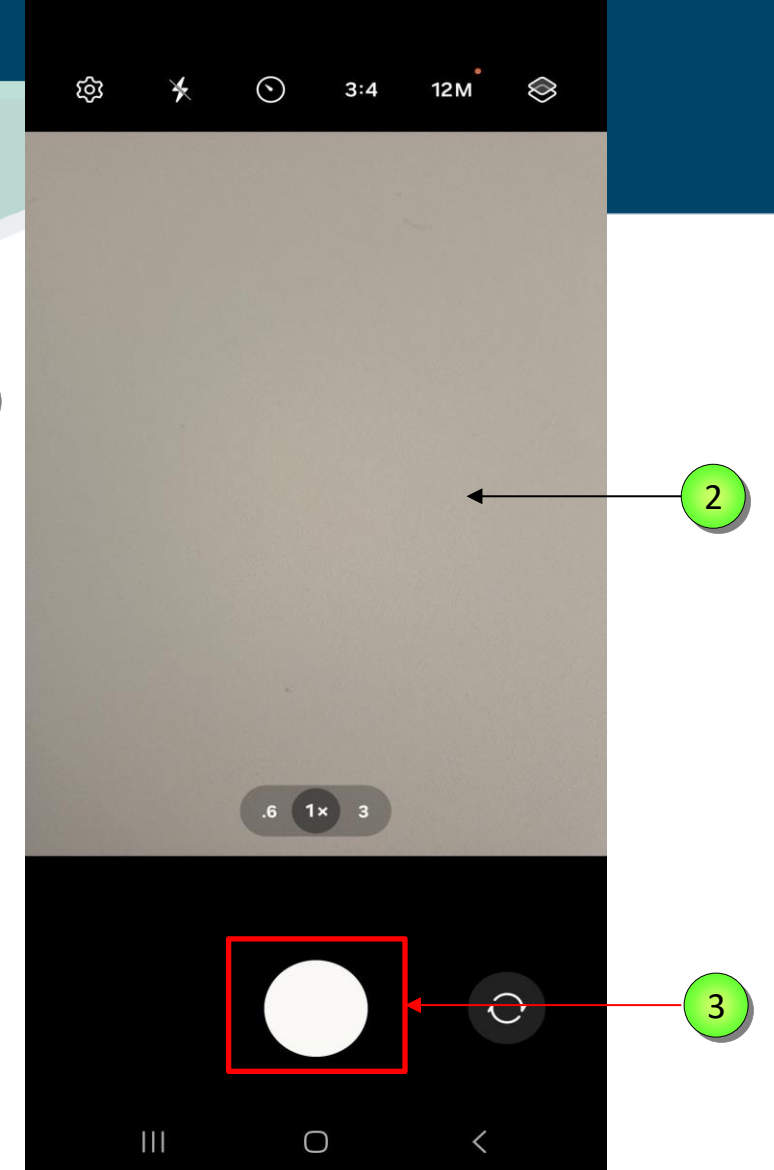
WO Inspection State: COMP / UNSUBMITTED

Evaluation of Conditions State: **COMPLETE** Inspect

Probable Cause State: **COMPLETE** Inspect

General Evaluation State: **NONE** Inspect

< PREVIOUS STOP TIME NEXT >



Taking Photographs

1 Use the following folders in the iWM App, as applicable:

- 'Photo – Pre-Repair'
- 'Photo – Post-Repair'

2 You can type a **Description** for the photo taken, if needed.

3 Document Type will be defaulted to 'Informer'. Use a drop down to change to 'Photo – Pre-Repair' and/or 'Photo – Post-Repair' and tap 'OK'.

3:29 5GUC 66%

← Complete Work Order
WO #131865346

1 Select Labor Type 2 RRP work 3 Failure Report

Please select type of labor:

☒ Work Done No Sequence Required (WORK)
☐ Work Done with Sequence (WORKWITHSEQ)
☐ No Work Done with Sequence (NOWORKDOWNSWITHSEQ)

Attach Photo
Attachment of Photos – Pre Repair required Attachment of Photos – Post Repair required
OK

☐ Unsafe Condition (UNSAFECOND)
☐ Resident Refused (RESREFUSED)
☐ No Floor Access (NOFLRACCESS)
☐ No Room Access (NORMACCESS)
☐ Waiting for materials (WMATL)

PREVIOUS STOP TIME NEXT >

2

9:55 5GUC 89

Please add a description and select a document type:

Description
(optional)252 character limit

Document Type
Informer

CANCEL OK

Piping
Post Repair Photos
Pre Repair Photos
QA Inspection Failed
QA Inspection Passed
RTS Slip
Receipt

3

Taking Photographs

- If follow up repairs are needed, upload at least one photograph **for each type repair** (e.g., *skilled trades, vendors, other crafts*).
- For **leaks from above, wall leaks, and other complex repairs**, it is recommended to capture:
 - At least **one close-up** photograph of the condition (e.g., *area of damage*), and
 - At least one photograph of the **larger area for scale** (e.g., *entire wall or ceiling*).



Reviewing Child Work Orders

Before closing parent Leak Work Order, review all created child work orders to make sure **all necessary repairs are created to address the leak complaint.**

Do not close the Leak WO until:

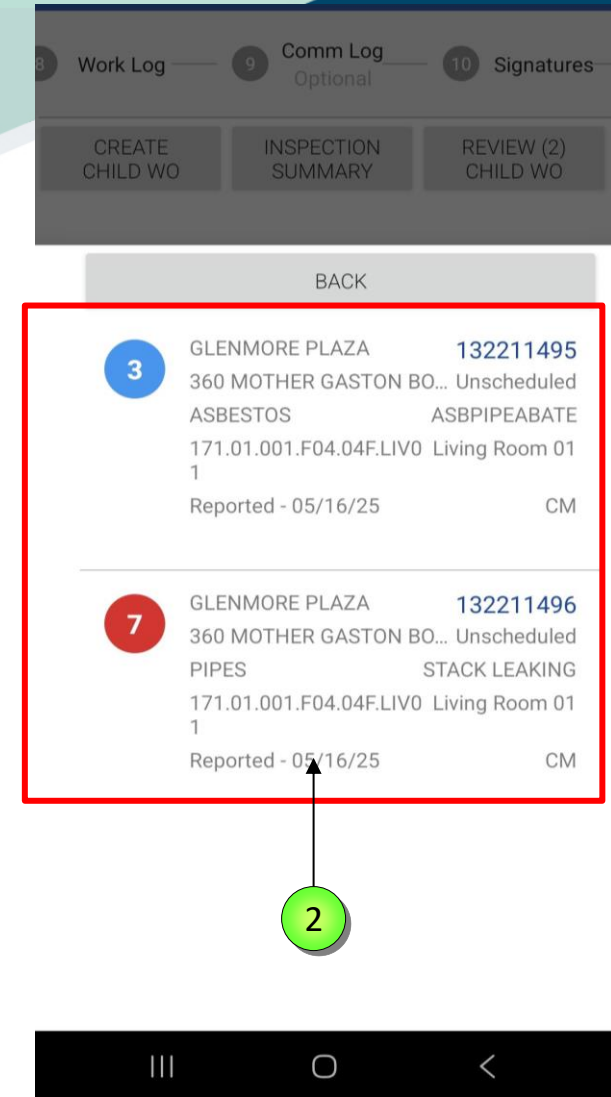
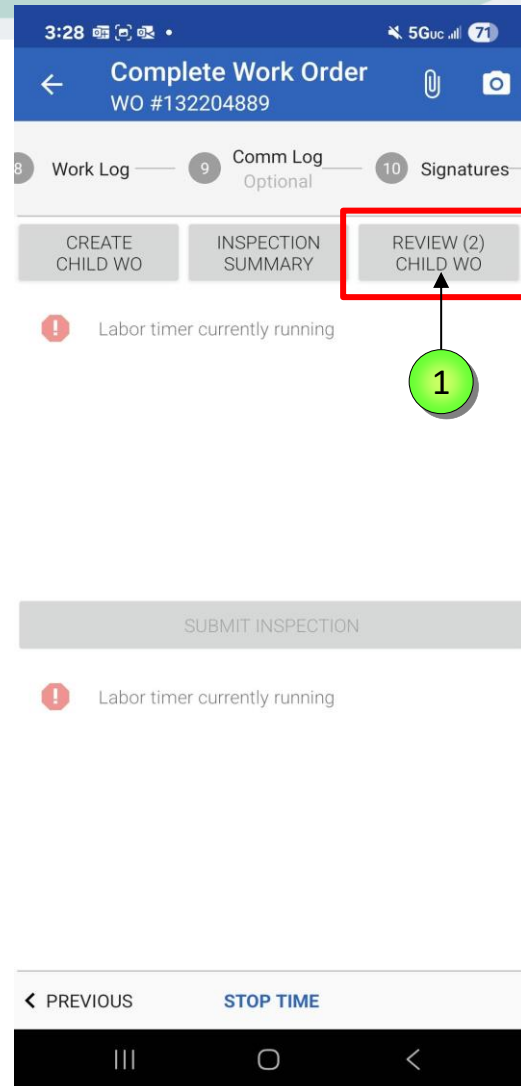
- The **source of the leak has been identified** and fully repaired, or
- All necessary **repair WOs were created** to address leak.



*Maintenance workers **are responsible** for creating all repairs needed to address the job!*

Reviewing Child Work Orders

- 1 Once you finish creating the child work orders, you could view them by tapping on **'REVIEW (X) CHILD WO'** view .
- 2 iWM App will display all created work orders.



Reviewing Child Work Orders

1

Before closing parent Leak WO, iWM App will prompt **‘Did you finish creating ALL children WOs to resolve the repairs?’**:

- Yes (select if you created all necessary WOs).
- No (select if you need to create additional WOs).

1

12:31 5GUC 72%

← Complete Work Order
WO #131865302

8 Work Log 9 Comm Log Optional 10 Signatures

CREATE CHILD WO INSPECTION SUMMARY REVIEW (1) CHILD WO

? Close WO

Did you finish creating ALL children WOs needed to resolve the repair YES/ NO ?

NO YES

< PREVIOUS START TIME NEXT

Knowledge Check

What skilled trades could be checked off RTS Slip?

- a. Plumber
- b. Heating Plant Technician
- c. Lead Abatement Worker



Knowledge Check

What skilled trades could be checked off RTS Slip?

- a. Plumber
- b. Heating Plant Technician
- c. Lead Abatement Worker

Knowledge Check

Name some other crafts for child work orders (not skilled trades)?



Knowledge Check

Name some other crafts for child work orders (not skilled trades)?

- Asbestos testing and abatement
- Caretaker
- Heating Plant Technical
- Lead Testing and Abatement Worker
- Maintenance
- Vendor, etc.

Knowledge Check

What are some different advantages of taking photographs upfront and from a distance?



Knowledge Check

What are some different advantages of taking photographs upfront and from a distance?

- An **upfront photo** provides visual evidence of the condition at the time of the inspection, capturing details that are less easy to describe in words.
- A **photo from a distance** documents the overall context of the area and provides a broader understanding of the situation.

Take a Break!

- We appreciate your participation.
- Our job is to provide training that will give you the capability to conduct leak inspection.
- Please let the instructor or any EEA staff if there's anything we can do to improve your learning experience.



NYCHA LEAK TRAINING

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RESIDENT COMMUNICATION



Resident Communication

Residents are an essential partner in:

- Immediately identifying and reporting leaks.
- Providing access to their apartments even though they might have no visible water damage (e.g., to *trace leaks from above*).

NYCHA staff should keep residents informed in all stages of repair process:

- Informing the resident *what type* of work is needed, *who is responsible* to complete this work, *how the work will be scheduled* and how the *resident can follow up*.



See Leak Standard Procedure (Appendix I), Communications with Residents Related to Leak Work Orders for details.

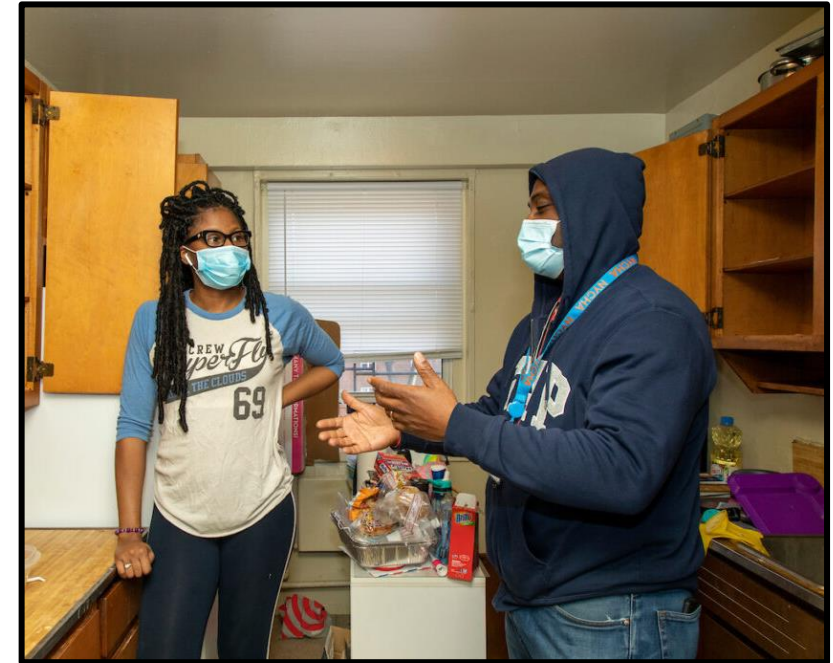
Resident Communication

Before you begin work (unless it is an emergency):

- Ask resident about any **history** of leaks & repairs.
- Check if there are **any open (pending) repairs**.
- Inform resident what work needs to be done and how long it might take.

During the inspection or repair, let the resident know:

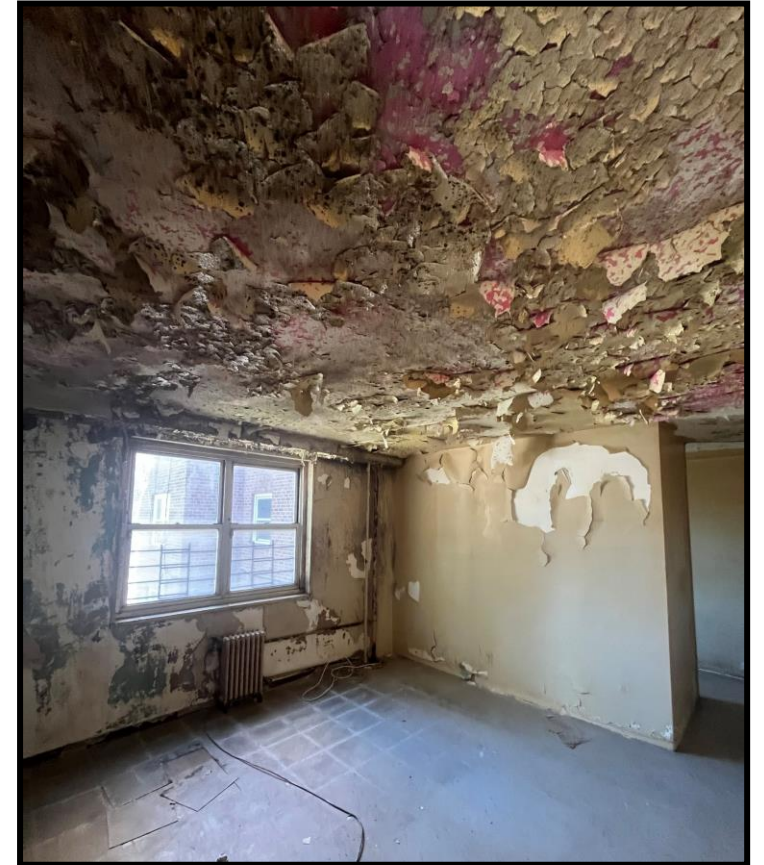
- If you need to **temporarily step out** from apartment.
- If you anticipate appointment to take **longer than expected**.
- If work is expected to generate a **significant level of noise or dust**.



Resident Communication

Observed severe condition that require an immediate action?

- Immediately escalate the repair request with photos and brief description to **NYCHA Maintenance Cares** at Maintenance.Cares@nycha.nyc.gov.
- Examples include **hazardous or severe conditions** – e.g., floods, severely damaged ceilings or walls, excessive hoarding.



Resident Communication



Leak is **Found?**



Leak is **Unfounded?**

Keep resident informed!

Reviewing Inspection Findings - **Leak is Found** ✓

- Explain to the resident what caused the issue
- Describe any **repair(s) made** during the visit:
 - *Let resident check completed repair(s).*
 - *Answer any questions about repair(s).*
 - ***If not able to make any repair(s), explain why.***
- Explain what resident could do to **prevent issue from reoccurring.**



Reviewing Inspection Findings - **Leak is Found** ✓

- Inform resident of **any additional work**, if needed.
 - If **skilled trade work** is needed, issue RTS Slip and inform resident to contact Neighborhood Planning Unit.
 - If **other craft work** is needed inform the resident that Property Management will schedule repairs.
- Tell resident that they could **check status of open repairs** by contacting CCC or using MyNYCHA.



Reviewing Inspection Findings - Leak is Found

- **Ask resident to sign Leak WO in the iWM App:**
 - **Capture resident satisfaction** ('Yes' or 'No').
 - If the resident refuses to sign, **indicate the refusal.**
 - **If resident refuses work**, capture resident information when possible (*e.g., resident name and comment*).



Reviewing Inspection Findings - Leak is **Unfounded** ❌

- Explain the resident your findings (e.g., *moisture meter reads below 599*).
- Invite the resident to inspect impacted area and ask additional questions.
 - Request **resident to sign the unfounded work order** in the iWM App.
 - If a resident **refuses to sign**, indicate the refusal.
 - Capture the **Resident Satisfaction** ('Yes' or 'No').



Unfounded means no water damage, no wet condition, no flooding, no standing water, etc.

Reviewing Inspection Findings

1

'Worker' and 'Resident' signatures are required.

2

To capture the resident's signature, tap on **'Latest Resident Signature'**.

1

9:57 5Guc 73

← Complete Work Order
WO #132204889

9 Comm Log Optional 10 Signatures 11 Labor

LATEST RESIDENT SIGNATURE

Tap Here to Sign

LATEST WORKER SIGNATURE

Tap Here to Sign

LATEST SUPERINTENDENT/SUPERVISOR SIGNATURE

Tap Here to Sign

← PREVIOUS STOP TIME NEXT >

2

9:57 5Guc 73

← Complete Work Order
WO #132204889

9 Comm Log Optional 10 Signatures 11 Labor

LATEST RESIDENT SIGNATURE

Tap Here to Sign

LATEST WORKER SIGNATURE

Tap Here to Sign

LATEST SUPERINTENDENT/SUPERVISOR SIGNATURE

Tap Here to Sign

← PREVIOUS STOP TIME NEXT >

Reviewing Inspection Findings

1

Upon completion of inspection and/or repairs, ask Resident to **sign WO on the iWM App**. Tap 'NEXT'.

Note: If the Resident Refused Work, check the box.

2

Ask if the resident was satisfied or not with completed inspection and/or repairs. Tap 'NEXT'.

3

Capture **Resident Name** and **Comments**, when possible. Tap 'NEXT'.

4

Review the information and tap 'FINISH'.

2:27 5G 83%

Capture Signature

1 Resident: Signature

☐ Resident Refused to Sign

NEXT

2:27 5G 83%

Capture Signature

2 Resident: Satisfied

Yes ☒

No ☐

PREVIOUS NEXT

2:28 5G 82%

Capture Signature

3 Resident: Info

NAME
e.g. Larry

COMMENTS
Optional

PREVIOUS NEXT

2:29 5G 82%

Capture Signature

4 Review

NAME (None)

COMMENTS (None)

SIGNATURE

PREVIOUS FINISH

Reviewing Inspection Findings

After tapping on **LATEST WORKER SIGNATURE**:


- 1 Sign and tap 'NEXT'.
- 2 Answer 'Yes' or 'No' if the work was skilled trades work.
- 3 Enter your information.
- 4 Answer the 'Acknowledgement Statement'.
- 5 Review the information and tap 'FINISH'.

1

10:21 5Guc 87

Capture Signature

Worker: Signature



NEXT

2

10:21 5Guc 87

Capture Signature

Worker: Was This Skilled Trades Work

Yes ☐

No ☒

PREVIOUS NEXT

3

10:21 5Guc 87

Capture Signature

Worker: Info

NAME

e.g. Larry

COMMENTS

Optional

PREVIOUS NEXT

4

10:21 5Guc 87

Capture Signature

Worker: Acknowledgement

☒ For the purposes of this work order, I certify that all information on this form is correct, true and accurate and that all work has been performed in full accordance with any applicable laws and regulations, and New York City Housing Authority policies and procedures; and that the following is a full, true and correct statement of the work performed on the date indicated herein.

PREVIOUS NEXT


5

10:22 5Guc 87

Capture Signature

Review

SIGNATURE



WORKER: WAS THIS SKILLED TRADES WORK No

PREVIOUS FINISH

Resident Communication

Tenant is Not Satisfied with Repairs?

- Residents can contact the **NYCHA Compliance Department** at on.nyc.gov/Submit-Concern or call the CCC at 718-707-7771 (select menu option 7 when prompted).
- Residents can also contact the **independent, court-appointed Ombudsperson Call Center** at 1-888-341-7152 or at www.ombnyc.com.



*If needed, instruct resident to **contact Property Maintenance Office** for details.*

Resident Communication

Reasonable Accommodation

Residents with a disability may request a short-term or permanent relocation due to a leak or mold condition.

How to submit Reasonable Accommodation request?

- Resident can submit *NYCHA Form 040.050, NYCHA Transfer Request* and *NYCHA Form 040.426, Reasonable Accommodation – Medical Verification* available at each **Property Management Office**, or
- Resident can submit a request via [NYCHA's Self-Service Portal](#).



See Standard Procedure 040:12:1, *Reasonable Accommodations in Housing for Applicants, Public Housing Residents, and Section 8 Voucher Holders*.

Ombudsperson Call Center

When can a resident contact OCC?

- Tenant submitted a leak or mold repair request, but NYCHA staff **didn't show up** for the scheduled appointment.
- Tenant is waiting for a leak or mold repair that is **taking longer than 15 calendar days** to complete and is causing a problem to tenant.
- NYCHA staff began leak or mold repair but **didn't complete work** or **didn't provide resident** with the follow up appointment date or instructions.
- NYCHA completed leak or mold repair, but tenant **is not satisfied** with repair.
- NYCHA determined that the leak is unfounded, but tenant doesn't agree with inspection results.

For details: [Ombudsperson Call Center](#)









*The OCC receives complaints from residents, who **already submitted** a leak or mold complaint to NYCHA but **still have concerns about their repairs.***

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Ombudsperson Call Center

WHAT HAPPENS AFTER YOU CALL THE OCC?

-  The OCC will review the information and propose next steps to you.
-  The OCC will monitor the repair activity.
-  If the OCC cannot resolve your complaint with the information available, a NYCHA Resident Coordinator will be assigned to your ticket.
-  The OCC will seek updates on progress on your behalf, and ensure things are progressing.
-  The Resident Coordinator works at NYCHA but is independent from the development.
-  You can always contact the OCC throughout the process.

[Ombudsperson Video](#)

Relocations Due to Floods, Leaks, and Mold

Residents can be relocated for emergency or health and safety reasons:

- **Immediate Relocation:** Determined by Property Management or EMSD when an emergency poses immediate danger (*e.g., fire, flood, ceiling collapse, water or steam pipe burst*).
- **Planned Relocation:** Initiated by Property Management or another department (*e.g., Asbestos, Lead Hazard Control, OMAR*) when an apartment must be vacated due to ongoing health/safety risks or legal requirements.



See Standard Procedure 040:24:1, *Resident Relocation* for guidance on resident relocation.

Relocations Due to Floods, Leaks, and Mold

Property management *should consider* relocation when:

- Extensive mold growth that **impacts most of the apartment** ($\geq 50\%$ of walls and ceilings).
- **Significant mold growth (100+ sq ft) in a “high-use” areas** (sole bathroom or sole kitchen) in apartments occupied by individuals with **severe medical conditions**.
- **Significant mold growth in a “high-use” areas (10+ sq feet) occupied by individuals with severe medical conditions** where the root cause **cannot be identified** within 4 calendar days, or the **remediation cannot be completed** within 15 calendar days.



Relocations Due to Floods, Leaks, and Mold

Property management *should consider* relocation when:

- Leaks that **compromise structural integrity** that may lead to harm or fatalities (e.g. ceiling collapse).
- **Severe leaks from waste/sanitary lines** that require significant cleanup, remediation, and repairs.
- **Severe flooding conditions** that require gut renovations.
- Leaks that render a “**high-use**” **area unable to be occupied** (e.g., cascading water leak from water line that renders bathroom or kitchen unusable).



Knowledge Check

What are some reasons why it is important to relocate residents with disabilities?



Knowledge Check

What are some reasons why it is important to relocate residents with disabilities?

- For their safety, well-being, and compliance with legal obligations.

Knowledge Check

Give a few examples when property management staff should consider relocation due to leak.



Knowledge Check

Give a few examples when property management staff should consider relocation due to leak.

- Leaks that **compromise structural integrity** that may lead to harm or fatalities (*e.g. ceiling collapse*).
- Severe leaks from waste/sanitary lines.
- **Severe floods** that require gut renovations.
- Leaks that render a “**high-use**” area **unable to be occupied** (*e.g., cascading water leak from water line that renders bathroom or kitchen unusable*).

NYCHA LEAK TRAINING

CLOSING LEAK WORK ORDERS

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Closing Leak Work Orders

If the resident is not home, refuses access, or if no adult is present - document the visit by selecting appropriate **'Labor Type'**.

- Issue *'NYCHA Form 040.534A, Notice of Visit by NYCHA Staff'* against the door.
- Upload the photograph of the Notice under the document type **'Photo Front Door'**.

NYCHA staff must make **two attempts with at least one attempt a scheduled appointment** to be able to close a Leak WO with 'no access'.



NYCHA staff **can not close** Leaks From Above or Flooding Work Orders without access.

Closing Leak Work Orders

NYCHA 040.534A (Rev. 8/10) NOTICE OF VISIT BY NYCHA STAFF		NEW YORK CITY HOUSING AUTHORITY	
<p>NYCHA Staff was at your apartment today in response to your call to the Customer Contact Center at (718) 707-7771.</p> <p>At the time of the visit to your apartment you were not at home for the work you requested.</p> <p>If the repair(s) in your apartment is (are) still required, it will be necessary for you to call the Customer Contact Center to arrange a new appointment date.</p>			
WORK ORDER #		DESCRIPTION OF WORK REQUESTED	
DATE OF VISIT		TIME OF VISIT	
STAFF NAME (Print & Sign)			
STAFF TITLE			

DISTRIBUTION: Original left for Tenant • Copy attached to Work Order

8:54 5GUC 28

Please add a description and select a document type:

Description
(optional)252 character limit

Document Type
Photo Front Door

CANCEL OK

9:19 5GUC 86%

Complete Work Order
WO #131856578

Log 6 Signatures 7 Labor 8

CREATE CHILD WO REVIEW NONE

CLOSE WO

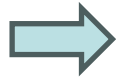
To close this work order, it must have multiple "no access" attempts with at least one on a day work order was scheduled.

PREVIOUS START TIME NEXT

Closing Leak Work Order

Exception!

Based on the current business rules, NYCHA **can not close Flooding and Leak From Above WOs** until condition is verified.



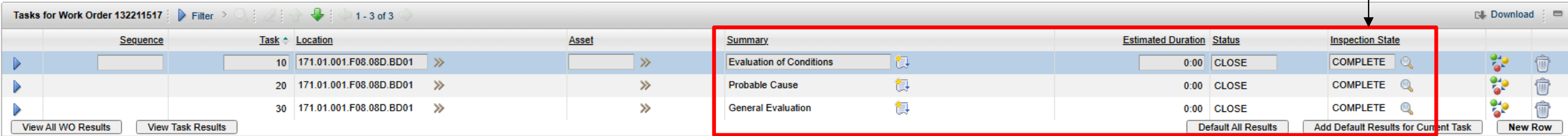
Failure Code	Problem Code
Pipes	Pipes Leak
Leak From Above	Constant Dripping
Leak From Above	Constant Leaking
Leak From Above	Lead Bend Leaking
Leak From Above	Water Penetration
Leak From Above	Flooding
Drains	Flooding
Rooftop	Flooding
Terrace	Flooding
Sink	Stoppage with Flooding
Toilet	Overflowing

Maximo View for Supervisors

Example 1: Simple Leak WO

Supervisors can view status of Leak Inspection WOs in Maximo to make sure work order is properly addressed.

- Inspection State = ‘Complete’



Tasks for Work Order 132211517					Filter		1 - 3 of 3		Download	
Sequence	Task	Location	Asset	Summary	Estimated Duration	Status	Inspection State			
10	171.01.001.F08.08D.BD01	>>	>>	Evaluation of Conditions	0:00	CLOSE	COMPLETE			
20	171.01.001.F08.08D.BD01	>>	>>	Probable Cause	0:00	CLOSE	COMPLETE			
30	171.01.001.F08.08D.BD01	>>	>>	General Evaluation	0:00	CLOSE	COMPLETE			

- Work Order Status = ‘Closed’

Work Orders for Job Filter 1 - 1 of 1

Work Order	Parent WO	Description	Location	Craft	Owner Group	Priority	Failure Class	Problem Code	Actual Reported Date	Status	Status Date	Actual Start	Actual Finish
132211517		iWM training	171.01.001.F08.08D.BD01	MAINT DEV169		3	CEILING	CONDENSATION	5/16/25 11:56 AM	CLOSE	5/16/25 12:05 PM	5/16/25 12:03 PM	5/16/25 12:05 PM

Maximo View for Supervisors

Example 2: Complex Leak WO

- Inspection State = **'Complete'**

Tasks for Work Order 132211533

Sequence	Task	Location	Asset	Summary	Estimated Duration	Status	Inspection State
10	171.01.001.F10.10F.KIT01			Evaluation of Conditions	0:00	CLOSE	COMPLETE
20	171.01.001.F10.10F.KIT01			Probable Cause	0:00	CLOSE	COMPLETE
30	171.01.001.F10.10F.KIT01			General Evaluation	0:00	CLOSE	COMPLETE

View All WO Results View Task Results

Default All Results Add Default Results for Current Task New Row

- Work Order Status = **'Closed'** + Child WOs created.

Work Orders for Job

Work Order	Parent WO	Description	Location	Craft	Owner Group	Priority	Failure Class	Problem Code	Actual Reported Date	Status	Status Date	Actual Start	Actual Finish
132211533		IWM training	171.01.001.F10.10F.KIT01	MAINT	DEV169	3	SINK	LEAKUNDER	5/16/25 12:10 PM	CLOSE	5/16/25 12:21 PM	5/16/25 12:17 PM	5/16/25 12:19 PM
132211537	132211533	Pipe leaking	171.01.001.F10.10F.KIT01	MAINT	DEV169	7	PIPES	PIPESLEAK	5/16/25 12:20 PM	APPR	5/16/25 12:20 PM		
132211538	132211533	Is there standing water?	171.01.001.F10.10F.KIT01	SOHC	DEV169	7	LEAKFOLLOWUP	NEEDSWATERREMOVAL	5/16/25 12:21 PM	APPR	5/16/25 12:21 PM		
132211539	132211533	Is there a flooding condition?	171.01.001.F10.10F.KIT01	MAINT	DEV169	7	FLOODING	ABATED	5/16/25 12:17 PM	CLOSE	5/16/25 12:21 PM	5/16/25 12:17 PM	5/16/25 12:19 PM
132211544	132211533	WINDOW GUARDS - MAINT	171.01.001.F10.10F	MAINT	DEV169	3	WINDOWGUARDS	MISSING	5/16/25 12:22 PM	WTSCH	5/16/25 12:22 PM		
132211545	132211533	ELECTRICAL OUTLET - MAINT	171.01.001.F10.10F	MAINT	DEV169	3	ELECTRICALOUTLET	GFIOOO	5/16/25 12:22 PM	WTSCH	5/16/25 12:22 PM		

Knowledge Check

What do maintenance workers issue to residents of impacted apartment if follow up skilled trade repairs are needed?



Knowledge Check

What do maintenance workers issue to residents of impacted apartment, if follow up skilled trade repairs are needed?

- The maintenance worker issues a Repairs to Schedule Slip (RTS)
- Parent Leak WO# must be written at the top of the RTS.
- Skilled trades need to be checked off.

Knowledge Check

What do maintenance workers or other staff do if the resident refuses to sign the parent leak order?



Knowledge Check

What do maintenance workers or other staff do if the resident refuses to sign the parent leak order?

- Indicate the refusal in the iWM App
- Capture resident information and comments, if possible.
- Capture resident satisfaction (Resident Satisfied – ‘Yes’ or ‘No’, if possible.
- Can inform resident that they can contact the Ombudsperson Call Center if they are dissatisfied with NYCHA’s response to the leak complaint.

Knowledge Check

What do maintenance workers do and tell the resident if they are unable to locate the root cause?



Knowledge Check

What do maintenance workers do and tell the resident if they are unable to locate the root cause?

- Explain **why** were not able to locate the root cause (e.g., *need to make a wall break or need access to another apartment*).
- Inform of the **next steps** (e.g., *obtain access or seek additional guidance*).
- Explain if any **interim steps** were taken to prevent the issue from reoccurring.
- Keep parent Leak WO **open** until the root cause is verified.



Knowledge Check

Can maintenance staff close leak work orders with no access? If yes, what requirements need to be met?



Knowledge Check

Can maintenance staff close leak work orders with no access? If yes, what requirements need to be met?

- Yes (except select emergency leaks – e.g., leaks from above).
- Maintenance workers must make two attempts to attempt work with at least one attempt on the scheduled dates as per Maximo.

iWM Simulations

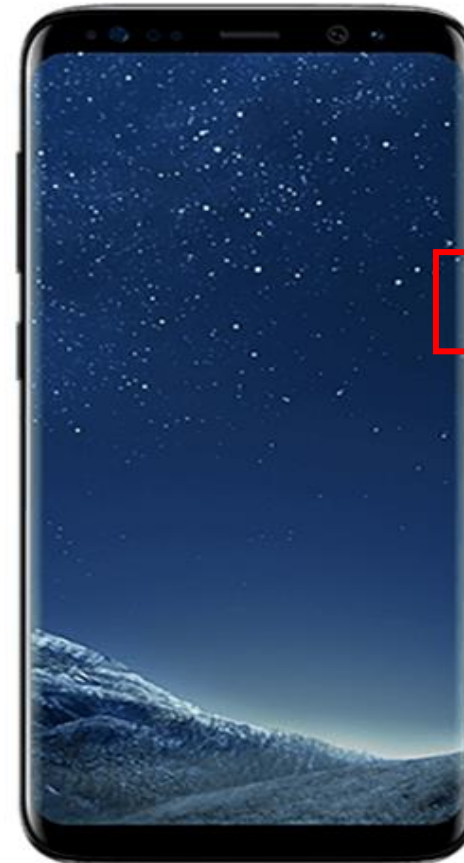
Leak Inspection Scenarios #1 - #2: Source of the Leak Within Impacted Apartment

1

Log into the iWM
Training Phone

nycha90
(Old devices)

nycha123
(New devices)

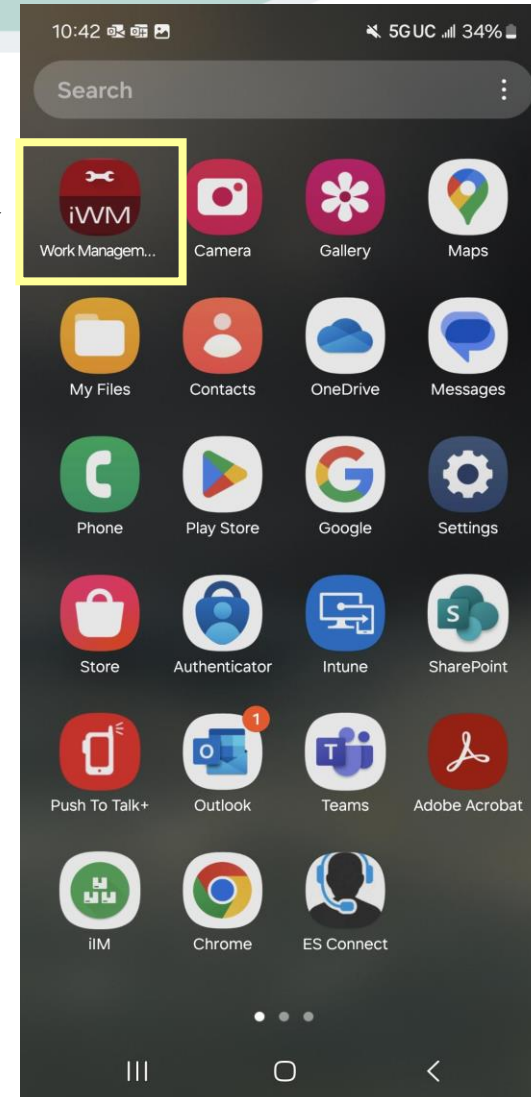


1

Launch the iWM App

- 1 Tap on the **Work Management** Application to access the Log In screen.

1



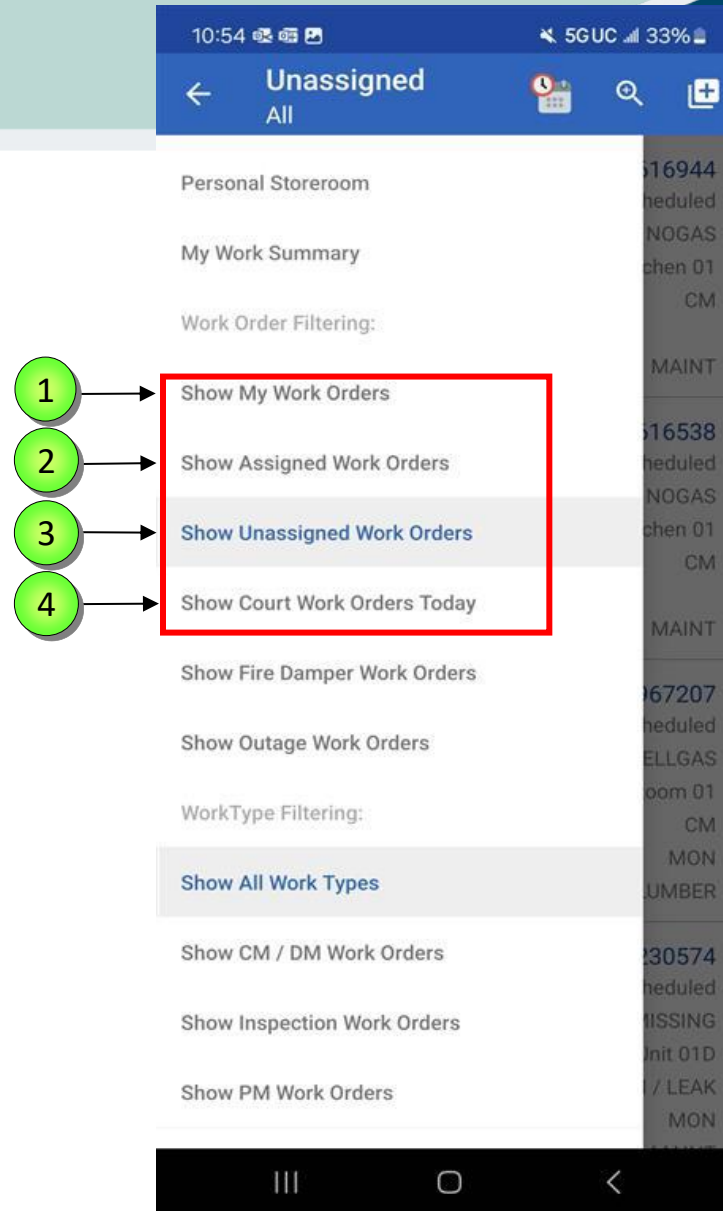
Log into iWM App

- 1 Enter **Username** and **Password**
 - 2 Tap **Login**
- Use log in and password provided by the EEA.*

The screenshot shows the Nycha Work Management app interface. At the top, the status bar displays '4G', '81%', and '3:36 PM'. The app title 'Nycha Work Management...' is visible. Below the title is the New York City Housing Authority logo. The login form consists of a username field with 'SmithJ' entered, a password field, and a blue 'LOGIN' button. A red box highlights the 'LOGIN' button. Arrows from numbered circles 1 and 2 point to the input fields and the button respectively.

View Work Orders

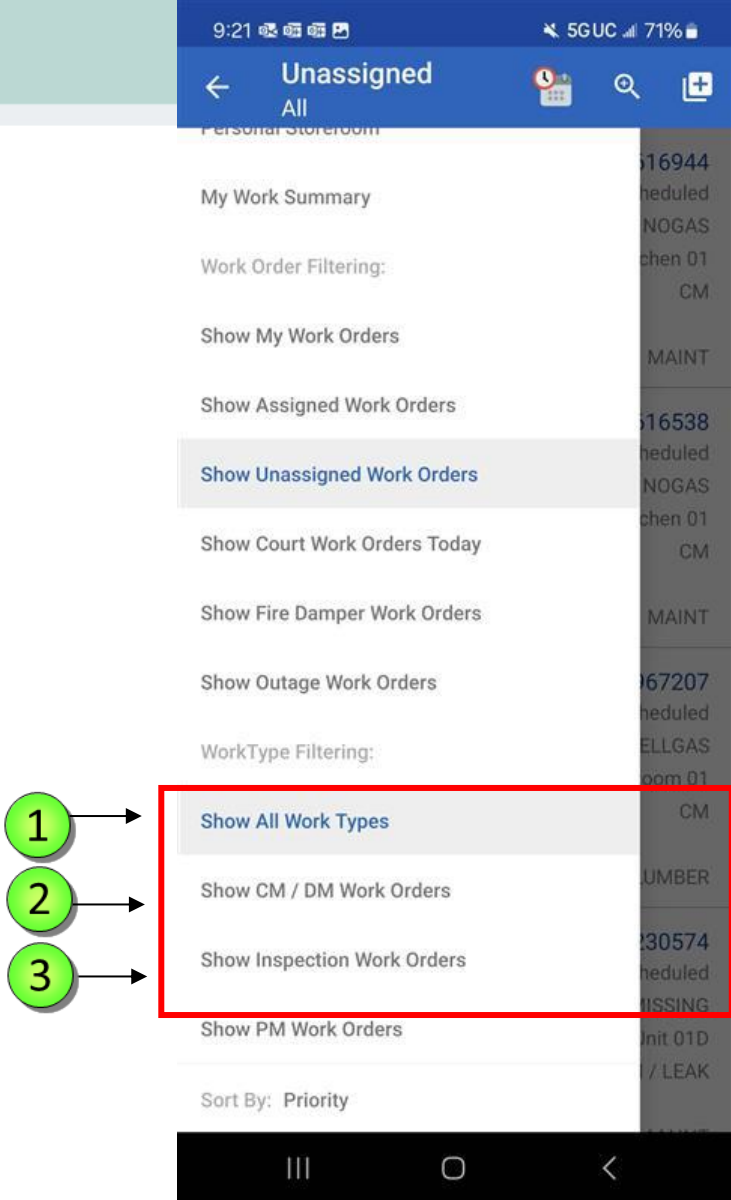
- 1 **Show My Work Orders:** Shows open WOs assigned to the user who is logged-in.
- 2 **Show Assigned Work Orders:** Shows Open WOs that are assigned to other users in the user's area (Development or Borough)
- 3 **Show Unassigned Work Orders:** Shows Open WOs that are not assigned to any person.
- 4 **Show Court Work Orders Today:** Shows Open WOs where resident has an appointment for today.



View Work Orders


Work Orders can be filtered and sorted by Work Order type.

- 1 **Show All Work Types** displays all open WOs for the Development.
- 2 **Show CM / DM Work Orders** displays all open Corrective Maintenance and Deferred Maintenance WOs.
- 3 **Show Inspection Work Orders** displays all open Inspection WOs.



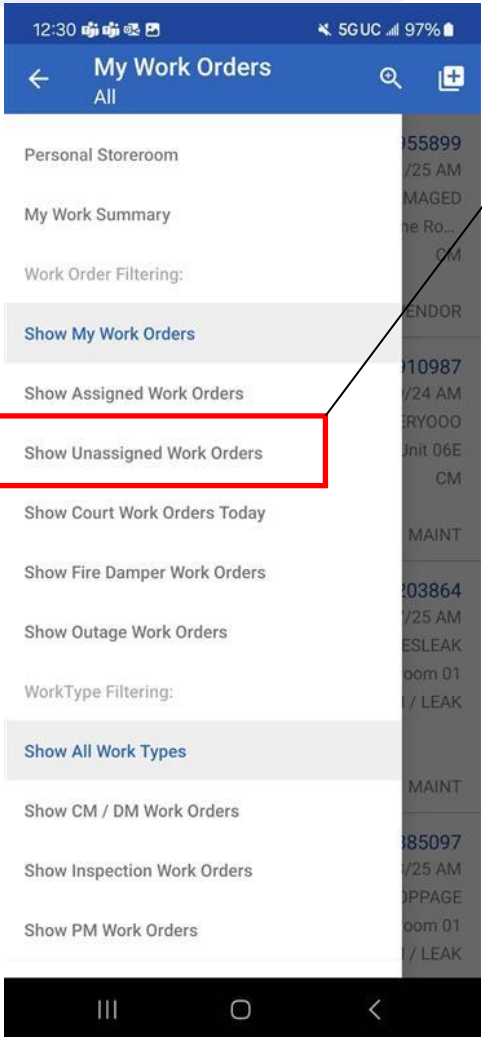
View Work Orders

1


To view the unassigned work orders, tap this Icon  to go to the **Menu**. Then Tap on **Show Unassigned Work Orders**.

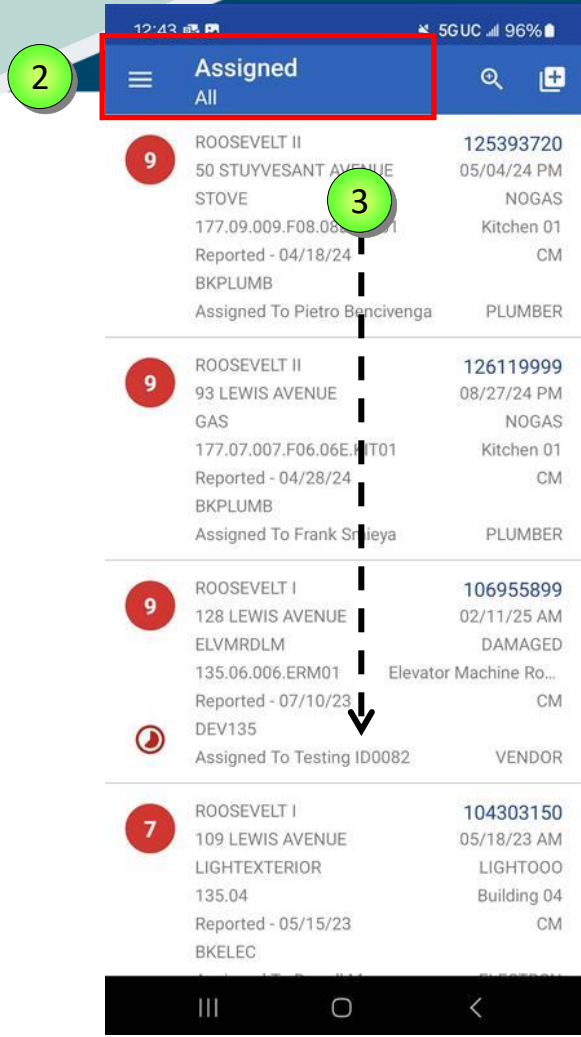
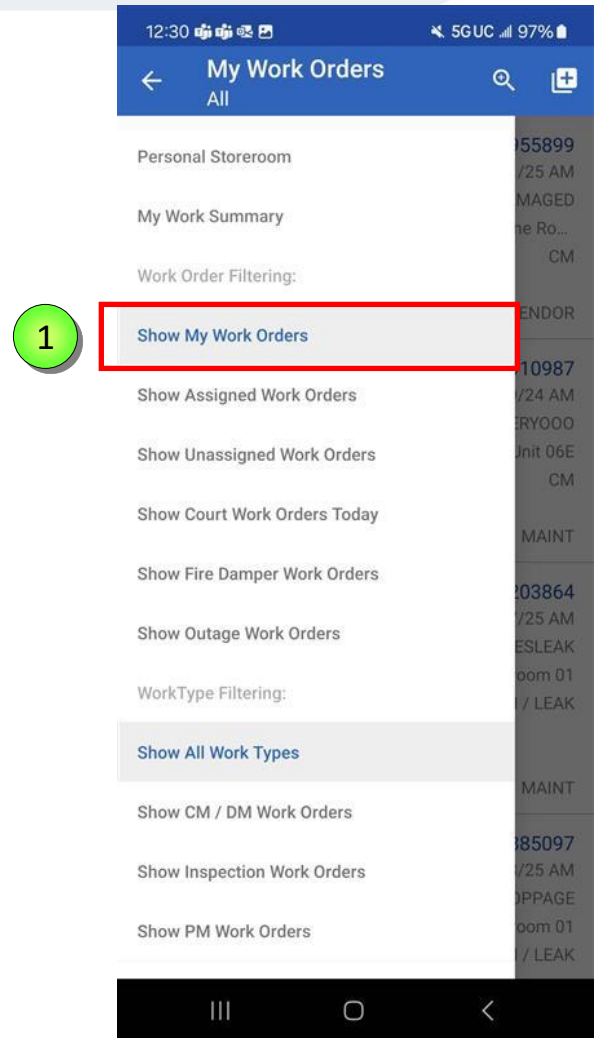
Note: The work orders you see are tied to the user's assigned area or location.

1



View Work Orders

- 1 To see the list of assigned Work orders tap this Icon  again to open the **Menu**.
- 2 Tap **Show Assigned Work Orders** option to open the list.
- 3 To manually **Refresh** the app, you can slide your finger **down** on the screen.



Search for Work Orders

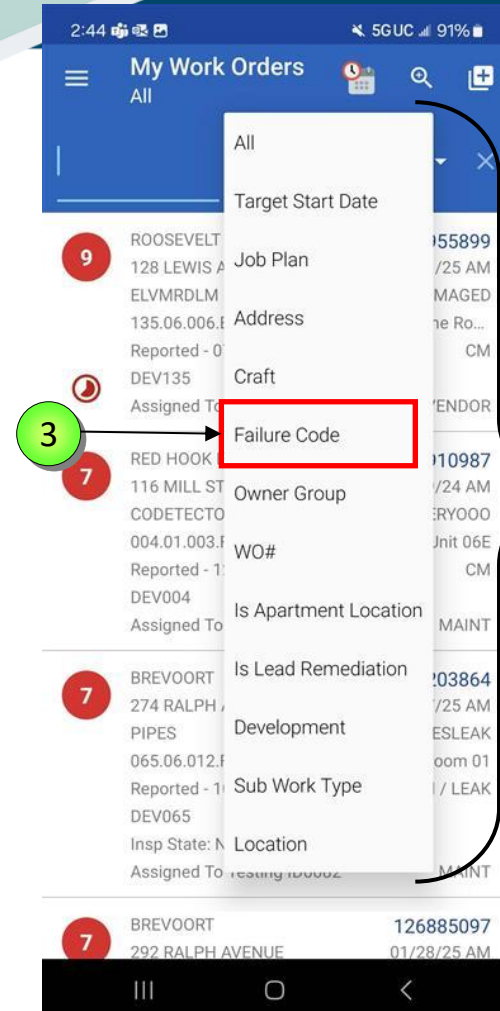
1

To search under a specific criteria, tap on the **down arrow** and a list displays with all available search options.

2

You can search by **All, Work Order Number, Failure Code, Craft, Sub- Work Type, Location, Owner Group, Development, etc.**

Note: Work Orders are shown in order of highest to lowest priority.



Search for Work Orders

- 1

For example, to search by **Failure Code**, type the desired code in the search bar (e.g., Leak From Above).
- 2

iWM App will display all the WOs with this criteria.

You can tap anywhere on the screen to close the search list.
- 3

Tap on **X** to cancel your search.

8:26 5GUC 56%

Unassigned All

Leakfromabove

All

X

7

ROOSEVELT I 131411221

153 MARCUS GARVEY BOULEV... 02/14/25 PM

LEAKFROMABOVE FLOODING

135.01.001.F01.01A.BD02 Bedroom 02

Reported - 02/14/25 CM / LEAK

DEV135

Insp State: PARTIAL

MAINT

7

ROOSEVELT I 131411237

153 MARCUS GARVEY BOULEV... 02/18/25 AM

LEAKFROMABOVE WATERPENETRATION

135.01.001.F04.04C.BTH01 Bathroom 01

Reported - 02/14/25 CM / LEAK

DEV135

Insp State: NONE

MAINT

7

ROOSEVELT I 105812233

109 LEWIS AVENUE Unscheduled

LEAKFROMABOVE CONSTANTLEAKING

135.04.004.F02.02E.LIV01 Living Room 01

Reported - 06/21/23 CM / LEAK

DEV135

VENDOR

ROOSEVELT I 125394390

8:26 5GUC 56%

Unassigned All

All

Target Start Date

Job Plan

Address

Craft

Failure Code

Owner Group

WO#

Is Apartment Location

Is Lead Remediation

Development

Sub Work Type

Location

9

ROOSEVELT I 16944

50 STUYVESANT STOVE Scheduled

177.09.009.F01.01A.BD02 NOGAS

Reported - 02/14/25 CM

DEV135

MAINT

9

ROOSEVELT I 16538

50 STUYVESANT STOVE Scheduled

177.09.009.F01.01A.BD02 NOGAS

Reported - 02/14/25 CM

DEV135

MAINT

9

ROOSEVELT I 67207

128 LEWIS AVENUE Scheduled

135.06.B01.F01.01A.BD02 ELLGAS

Reported - 06/21/23 CM

BKPLUMB

LUMBER

9

ROOSEVELT I 131230574

128 LEWIS AVENUE Unscheduled

WINDOWGUARDS MISSING

EEA

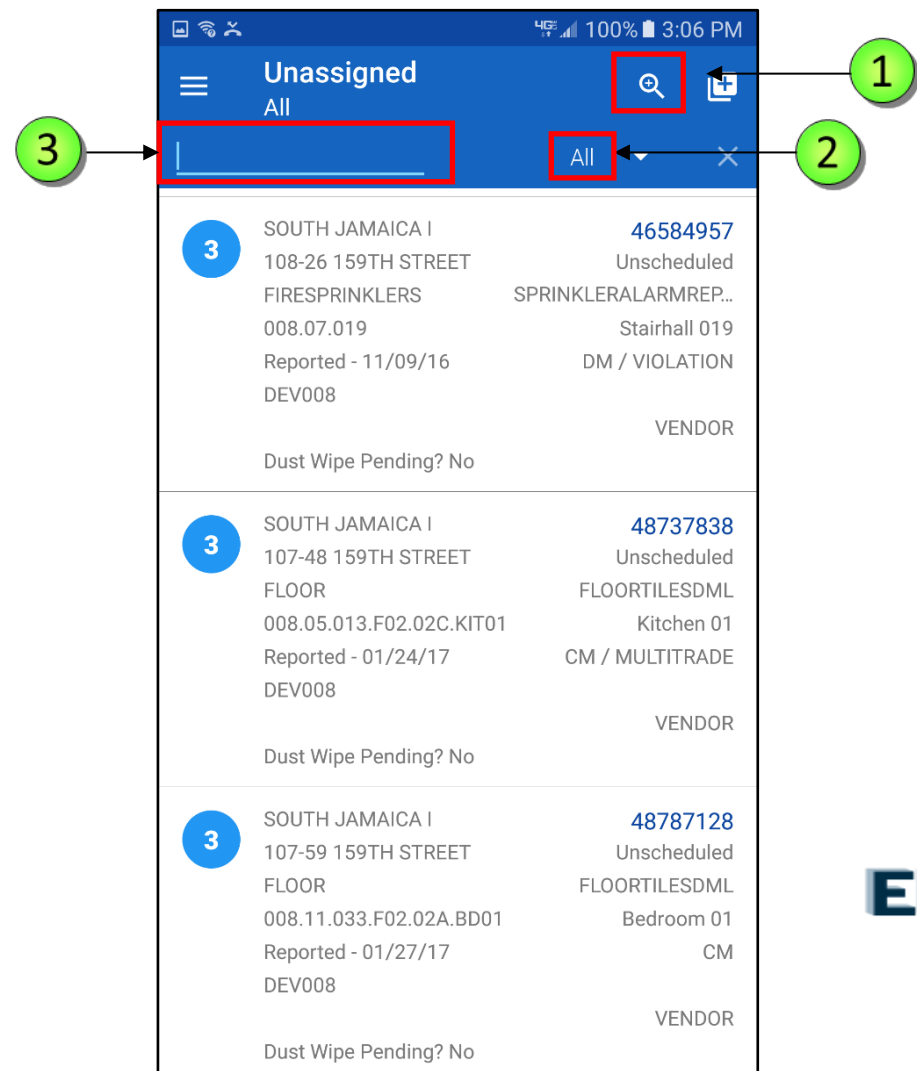
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Search for Work Orders

- 1 You can search for Work Orders by tapping on the **small magnifying glass** icon.
- 2 The default search criteria is set to **All**, where you can use the keyboard and **type a Work Order number** to search for.
- 3 Use the keyboard and start typing the **first few numbers** and the system displays all the Work Orders that start with or contain these numbers.

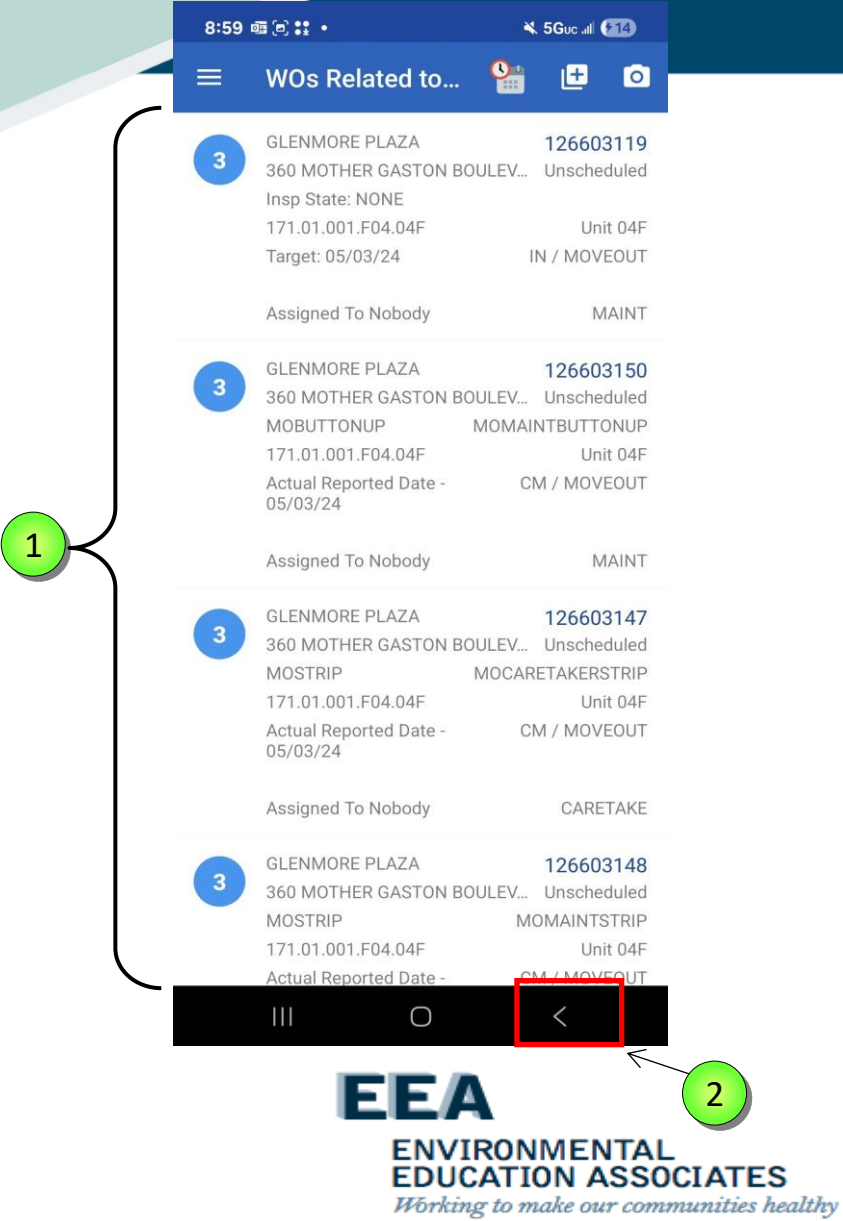
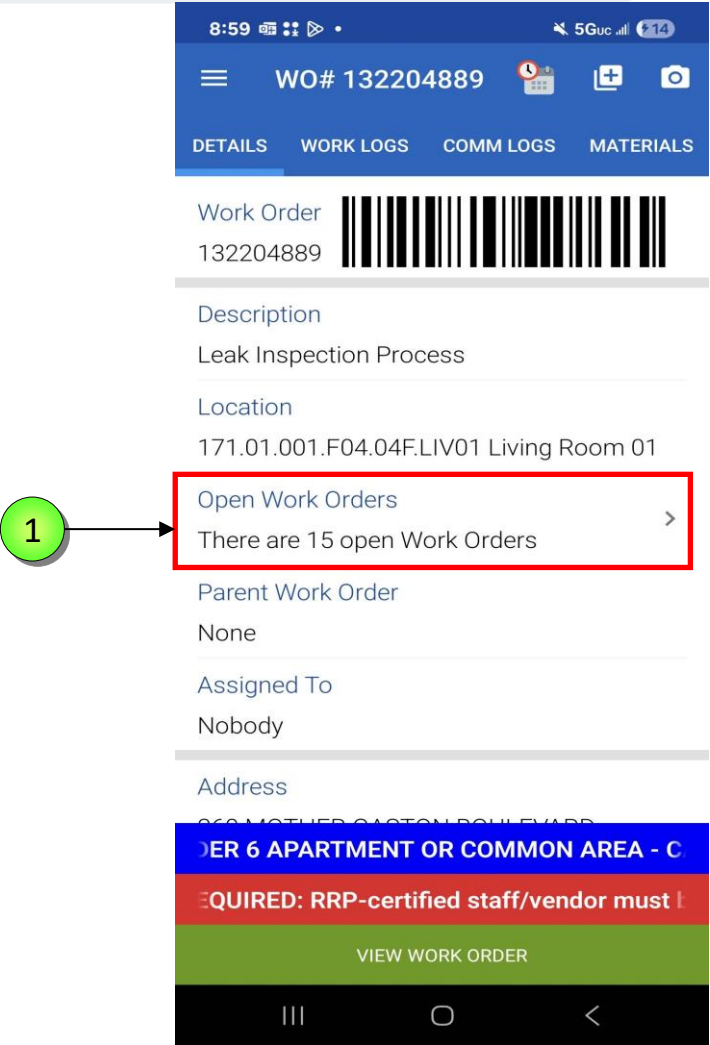


View all Open Work Orders

- 1

Tap on **Open Work Orders** to see all open work orders in the apartment.
- 2

To return to the original **Work Order Details** screen after viewing the **Related Work Orders**, tap the device's **back arrow**.



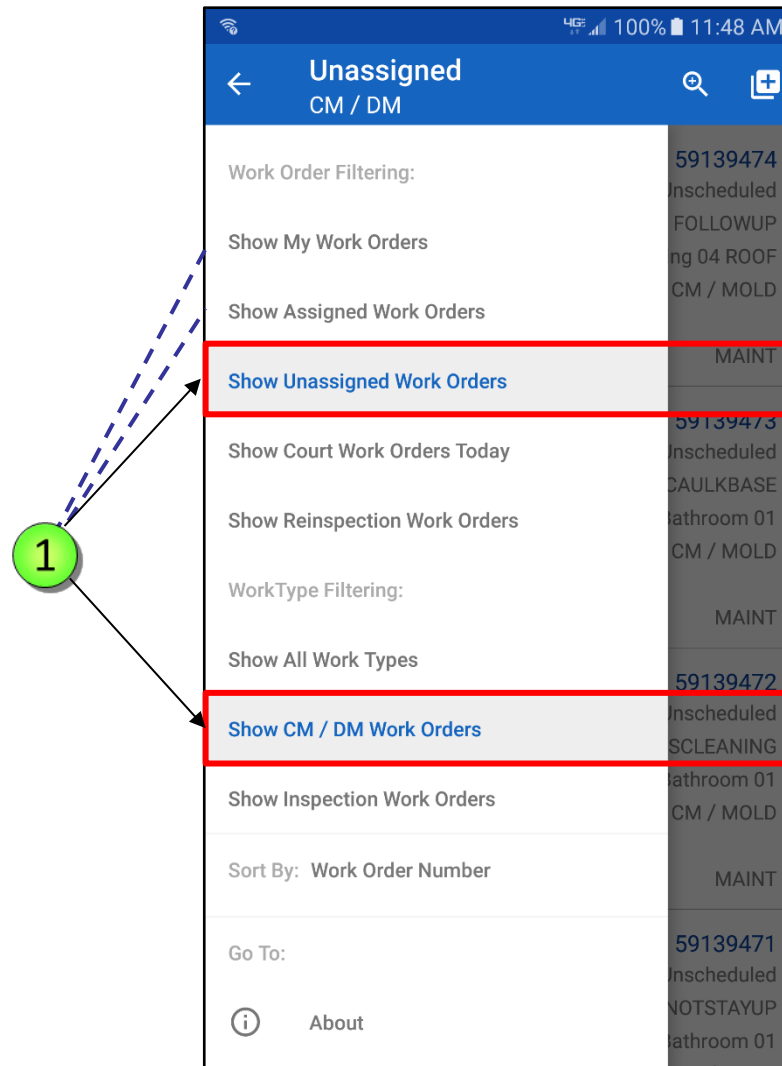
Leak Work Orders

1

The Parent Leak Work Order appears in:

- Show Unassigned Work Orders
- Show CM /DM Work Orders

Note: If the Work Order is assigned to a worker it will appear in **Show Assigned Work Orders** or **Show My Work Orders**.



Emergency Leaks

This is an **Emergency Leak WOs** with **no start date**.

1

The user can review the **Work Order Details** by scrolling up and down on the **Details** tab.

2

The fields below are unique for the **Leak** Work Order:

- **Work Type = CM**
- **Job Plan# = INSLEAK**
- **Sub-work Type = LEAK**
- **Failure Class = PIPES**
- **Problem Code = PIPESLEAK**
- **Priority = 7**

9:30 5GUC 71%

WO# 131653917

DETAILS WORK LOGS COMM LOGS MATERIALS

NOBODY

Address

153 MARCUS GARVEY BOULEVARD

Work Type	Job Plan#	Sub-Work Type
CM	INSLEAK	LEAK
Failure Class	Problem Code	
PIPES	PIPESLEAK	
Craft	Responsible Scheduler	
MAINT	MAXIMO	
Priority	Status	
7	APPR	

Scheduled Start

Owner Group

DEV135

Target Start

Actual Reported Date Age Message Code

Apr 1 2025 9:00 AM 0

START WORK TIME

Non-Emergency Leaks

1

This is a **Non-Emergency Leak WOs** with **a scheduled start date.**

Maintenance workers should make their best effort to **respond on the scheduled date.**

- **Work Type = CM**
- **Job Plan# = INSLEAK**
- **Sub-work Type = LEAK**
- **Failure Class = BATHTUBSHOWER**
- **Problem Code = LEAKUNDER**
- **Priority = 3**

Note: See Scheduled Start Date.

2

Additional important information about the resident's apartment.

1

2

WO# 131797340

DETAILS

WORK LOGS

COMM LOGS

MATERIALS

Address

604 CLINTON STREET

Work Type

Job Plan#

Sub-Work Type

CM

INSLEAK

LEAK

Failure Class

Problem Code

BATHTUBSHOWER

LEAKUNDER

Craft

Responsible Scheduler

MAINT

MAXIMO

Priority

Status

3

SCHED

Scheduled Start

Owner Group

Apr 11, 2025 8:30 AM

DEV004

CHILD UNDER 6 APARTMENT OR COMMO..

ACTION REQUIRED: RRP-certified staff/ve..

VIEW WORK ORDER

iWM Practice – Scenario #1

Sink Stoppage

You enter a resident's apartment in response to a complaint that the kitchen sink is backing up. The resident mentions that water isn't draining properly and that they've noticed the sink is slow to empty after being used. The resident is concerned that the issue may be a plumbing issue, though there is no visible damage or active leakage around the sink. You're tasked with assessing the situation to determine the cause and resolve the issue if possible.

Failure Class: SINK
Problem Code: STOPPAGE
Location: KITCHEN



iWM Practice – Scenario #1 (Response)

8:47 5G 34

Complete Work Order
WO #132396702

1 Select Labor Type 2 Failure Report 3 Related

Please select type of labor:

☒ Work Done No Sequence Required (WORK)

☐ Work Done with Sequence (WORKWITHSEQ)

☐ No Work Done with Sequence (NOWORKDNEWITHSEQ)

☐ Resident Not Home (RESNOTHOME)

☐ Condition not Founded (UNFOUNDED)

☐ Previously Corrected (PREV CORRECTED)

☐ No Building Access (NOBLDGACCESS)

☐ Completed on Arrival (COMPLETEONARRIVAL)

☐ No Adult (NOADULT)

☐ Unsafe Condition (UNSAFECOND)

☐ Resident Refused (RESREFUSED)

☐ No Floor Access (NOFLRACCESS)

☐ Waiting for materials (WMATL)

PREVIOUS STOP TIME NEXT

11:16 5G 28

Complete Work Order
WO #132396702

2 Failure Report 3 Related 4 P Ins

SPEEDYCONNECTORREPLACED

☐ Stems Repaired
STEMSREPAIRED

☐ Stems Replaced
STEMSREPLACED

☒ Stoppage Cleared
STOPPAGECLEARED

☐ Stoppage Replaced
STOPPERREPLACED

☐ Temp Sink Installed
TEMPSINKINSTALL

☐ Wall Mount Support Bracket Installed
WALLMNTSUPPBACKETINSTALLED

☐ Wall Mount Support Bracket Secured
WALLMNTSUPPBACKETSECURED

☐ Wire Mesh On Vent Installed
WIREMESHVENTINSTALLED

☐ Wire Mesh On Window Well Installed
WIREMESHWINWELLINSTALLED

PREVIOUS STOP TIME NEXT

11:17 5G 28

Evaluation of Conditions
Kitchen 01

DONE

* Is there a flooding condition? No

* Is there standing water? No

* is there active leak? No

11:17 5G 28

Probable Cause
Kitchen 01

DONE

Leak From Above/ Adjacent - Investigate (None)

Leak From Above - Previously Identified (None)

Leak Through Facade (None)

Other (None)

Pipe Condensation (None)

Pipe Condensation - Previously Addressed (None)

Plumbing Leak - In Unit (None)

Radiator Unit Leak (None)

Resident - Caused (None)

Roof Leak (None)

Sink Issues - In Unit Yes

Toilet Issues - In Unit (None)

View Details >

iWM Practice – Scenario #2

Pipes Leak

You respond to a service request for a plumbing issue in a resident's unit. The resident has reported significant flooding in the bathroom and water accumulating on the floor. Upon entering the unit, you notice signs of an ongoing flooding condition that requires immediate abatement. You request APMS to get approval to shut down the riser to stop active flooding. You also radio a SOHC who dispatches a caretaker to remove standing water while you have access to the unit. The plumbing problem seems to be originating from pipes behind the bathroom sink.

Failure Class: PIPES

Problem Code: PIPESLEAK

Location: BATHROOM



iWM Practice – Scenario #2

(Response)

8:50 5G

← Complete Work Order
WO #132396706

1 Select Labor Type 2 Failure Report 3 Related

Please select type of labor:

☐ Work Done No Sequence Required (WORK)

☒ Work Done with Sequence (WORKWITHSEQ)

☐ No Work Done with Sequence (NOWORKDONEWITHSEQ)

☐ Resident Not Home (RESNOTHOME)

☐ Condition not Founded (UNFOUNDED)

☐ Previously Corrected (PREV CORRECTED)

☐ No Building Access (NOBLDGACCESS)

☐ Completed on Arrival (COMPLETEONARRIVAL)

☐ No Adult (NOADULT)

☐ Unsafe Condition (UNSAFECOND)

☐ Resident Refused (RESREFUSED)

☐ No Floor Access (NOFLRACCESS)

☐ No Room Access (NORMACCESS)

☐ Waiting for materials (WMATL)

PREVIOUS STOP TIME NEXT >

12:58 5G

← Complete Work Order
WO #132396706

pe 2 Failure Report 3 Related 4 P Ins

☐ Graffiti Cleaned
GRAFFITICLEANED

☐ Leak Tracing
LEAKTRACING

☐ Pipes Asbestos Tested
PIPESASBESTOSTESTED

☒ Pipes Clamped
PIPESCLAMPED

☐ Pipes Installed
PIPESINSTALLED

☐ Pipes Insulated
PIPESINSULATED

☐ Pipes Lead Tested
PIPESLEADTESTED

☐ Pipes Painted
PIPESPAINTED

☐ Wire Mesh On Vent Installed
WIREMESHVENTINSTALLED

SUBMIT

< PREVIOUS STOP TIME NEXT >

8:51 5G

← Evaluation of Conditions
Bathroom 01

DONE

* Is there a flooding condition?

Corrective Action Taken

* Is there standing water?

Corrective Action Taken

* is there active leak?

Yes

III O <

iWM Practice – Scenario #2

(Response)

1:13 5G 20

← Probable Cause Bathroom 01 DONE

* Is moisture meter equal or higher than 599?

Yes

Is Wall-break required?

Yes

Is there (suspected) asbestos on pipe insulation that will be disturbed?

Yes

* Is there mold on the backside of sheetrock?

No

Appliance Issues

(None)

Bathtub Shower Issues

(None)

Caulking DML

(None)

Grouting DML

(None)

Leak Around Window

(None)

Leak From Above/ Adjacent - Investigate

(None)

Leak From Above - Previously Identified

(None)

12:56 5G 23

← Select Areas Affected DONE

C Ceiling

F Floor

W1 Wall 1 (Near)

999 W2 Wall 2 (Left)

W3 Wall 3 (Far)

W4 Wall 4 (Right)

12:58 5G 23

← Probable Cause Bathroom 01 DONE

Leak From Above/ Adjacent - Investigate

(None)

Leak From Above - Previously Identified

(None)

Leak Through Facade

(None)

Other

(None)

Pipe Condensation

(None)

Pipe Condensation - Previously Addressed

(None)

Plumbing Leak - In Unit

Yes

View Details >

Radiator Unit Leak

(None)

Resident - Caused

(None)

Roof Leak

(None)

Sink Issues - In Unit

(None)

Toilet Issues - In Unit

(None)

12:58 5Guc 23

← General Evaluation Bathroom 01 DONE

Is there mold growth?

No

Cockroaches

No

Rodent Droppings

Yes

iWM Practice – Scenario #2 (Response)

<div>1:15 5G 20</div> <div>Create Child Work Order DONE</div> <div>Location 171.01.001.F02.02C.BTH01</div> <div>Asset Please select...</div> <div>Work Type CM</div> <div>Sub Work Type LEAK</div> <div>Failure Class ASBESTOS Asbestos</div> <div>Problem Code NEEDSTESTING Needs Testing</div> <div>Craft ASBINV Asbestos Hazard Investigator</div>	<div>1:01 5G 22</div> <div>Create Child Work Order DONE</div> <div>Location 171.01.001.F02.02C.BTH01</div> <div>Asset Please select...</div> <div>Work Type CM</div> <div>Sub Work Type LEAK Leak</div> <div>Failure Class PIPES Pipes</div> <div>Problem Code PIPENEEDSREPAIR Pipe Needs Repair</div> <div>Craft PLUMBER Plumber</div>	<div>8:56 5G 33</div> <div>Create Child Work Order DONE</div> <div>Location 171.01.001.F02.02C.BTH01</div> <div>Asset Please select...</div> <div>Work Type CM</div> <div>Sub Work Type LEAK Leak</div> <div>Failure Class WALLS Walls</div> <div>Problem Code SHEETROCKDML Sheetrock DML</div> <div>Craft CARPENTR Carpenter</div>	<div>1:03 5G 22</div> <div>Create Child Work Order DONE</div> <div>Location 171.01.001.F02.02C.BTH01</div> <div>Asset Please select...</div> <div>Work Type CM</div> <div>Sub Work Type LEAK Leak</div> <div>Failure Class PAINT Paint</div> <div>Problem Code NEEDSPAINTING Needs Painting</div> <div>Craft PAINTER Painter</div>
---	---	---	--

Have a Great Night!

- We appreciate your participation.
- Leave your training handheld & workbook here
- Please let the instructor or any EEA staff if there's anything we can do to improve your learning experience.
- See you tomorrow.
- Get home safe!



NYCHA LEAK TRAINING

DAY 2: LEAK DETECTION & REPAIR TRAINING

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Day 1 Review

- Overview & Policy
- Roles & Responsibilities
- *Leak Detection: Equipment & Procedures*
- Root Cause(s)

Leak Inspections: Source of the Leak Within Impacted Apartment

- Inspection Requirements & Steps
- Creating Repair Work Orders
- Resident Communication
- *iWMM Work Order Simulations #1 & 2*

Link to
Training
Resources



NYCHA LEAK TRAINING

LEAK DETECTION: SOURCE OUTSIDE IMPACTED APARTMENT

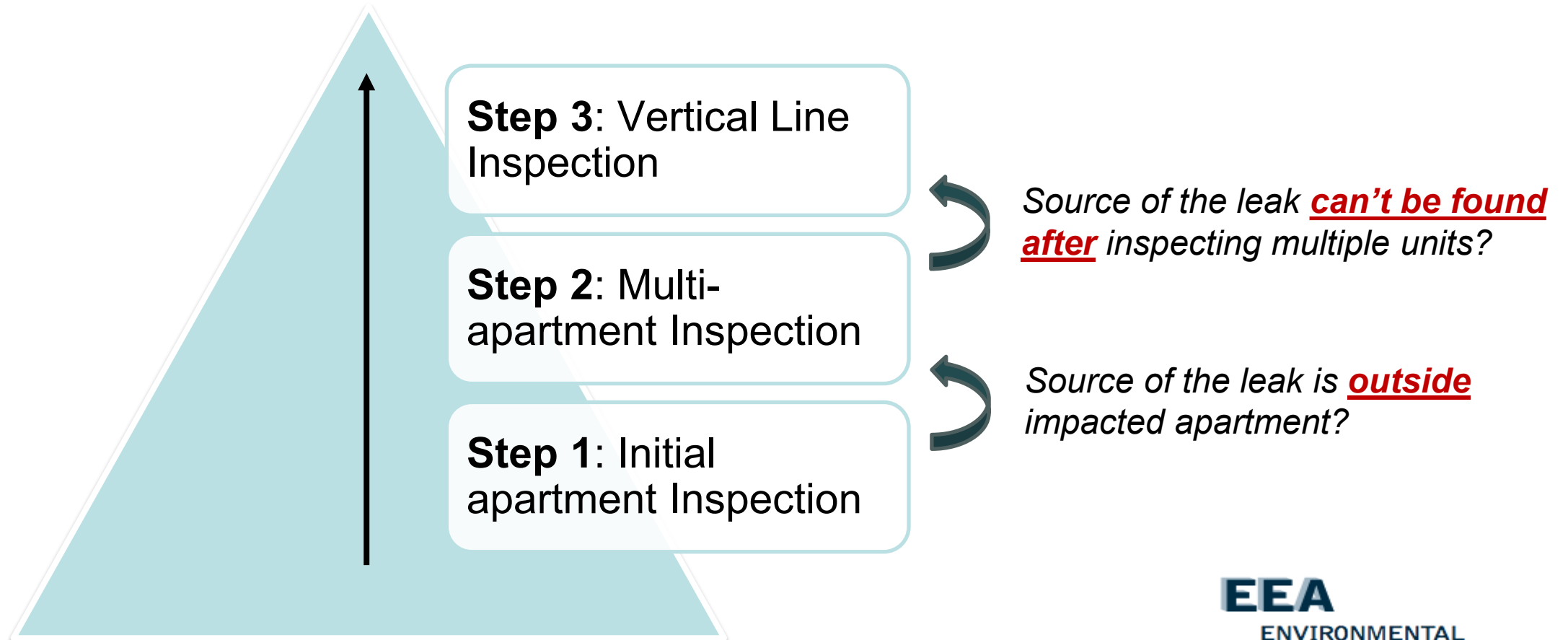
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Identifying Root Causes – Outside the Impacted Apt



Identifying Root Causes – Outside the Impacted Apt

- When feasible, APMS or PMS should assign **two maintenance workers** to Leak From Above WOs.
- If not feasible, assign **one maintenance worker**, who must attempt to trace the leak up the line on their own.
 - If additional help is needed to operate fixtures in unit(s) above or find the root cause, maintenance staff must **contact APMS or PMS for guidance** or **request another staff assistance**.



Identifying Root Causes – Outside the Impacted Apt

- Begin leak tracing by attempting to access the **apartment directly above** and **continue up the line until the Root Cause Unit** and **specific leak source is identified**.
 - The source of a leak from above may originate **from an apartment in an adjacent building line**.
- Attempt **to access as many apartments** as needed.



Inspecting Additional Apartments

For leaks from above originating within plumbing chase walls of an above apartment:

- Wet readings that are present only **on the lower sections of the wall** suggest the leak is likely within that or an adjacent apartment.

➡ ***A wall-break is needed to inspect pipes.***

- Wet readings that extend to **the upper sections of a chase wall** suggest that the Root Cause Unit is further up the line:

➡ ***Additional leak tracing is necessary.***



*After making a wall-break in the Root Cause Unit, **operate the fixtures in that unit and make observations** inside the wall cavity to determine the specific leak source.*

Accessing Additional Apartment(s)

- To gain access to additional units when tracing leak:
 - **Knock** on the door and state purpose of the visit, or
 - **Contact the property management office to for assistance** with getting in touch the resident(s).
 - Property management office **will inform NYCHA staff** if apartment is vacant.

Make sure to **announce your presence** to residents when attempting to access NYCHA apartments!



See Standard Procedure 040:09:7, *Managing Maintenance Work Orders* for reference.

Accessing Additional Apartment(s)

- If not able to gain access to the apartment with the suspected root cause due to Tenant Not Home:
 - If the leak is **severe**, consider using *Right of Entry* (e.g., floods or water leak through electrical outlets).
 - If the leak is **not severe** (e.g., signs of past water damage but no active leak):
 - Issue NYCHA Form 042.727, *48 Hour Notice of Health and Safety Repairs*.
 - Return in 48 hours to reattempt the access.



See Standard Procedure 040:17:3, *Accessing Public Housing Apartments When Tenant Not Home to Address Deficiencies Related to Leaks, Mold, and Lead-Based Paint* for instructions.

Accessing Additional Apartment(s)

- If not able to gain access to the apartment with the suspected root cause due to Tenant Refused:
 - Notify APMS or PMS for assistance (e.g., *contact property management office for assistance or contact tenant emergency contact*).
 - Request NYPD for assistance with getting access.



See Right of Entry provisions of *NYCHA Resident Lease* (NYCHA Form 040.507).

Accessing Additional Apartment(s)

- **Apartment sealed and locked by the NYPD?**
 - Follow the *Section XXII, Move Outs* of the *Management Manual Chapter, Occupancy*.
 - **Not sure?** Contact property management office for guidance.
- **Apartment is vacant or abandoned?**
 - **Not sure?** Contact NYCHA Law Department for guidance.



Inspecting Additional Apartment(s)

One maintenance worker **remains in the impacted apartment**, and the other worker **proceeds to the apartment directly above or adjacent**.

The worker in the apartment above should:

- ❑ **Visually inspect** wall, ceiling, and floor.
- ❑ **Take moisture measurements** focusing on areas adjacent to fixtures and appliances (including floors) and plumbing chase walls.
- ❑ **Operate fixtures** to determine possible source of the leak.



Wet readings on the ceiling around the P-traps or lead bends commonly indicate leaks from around the toilet wax gasket or bathtub waste/overflow pipes in the apartment above.

Inspecting Additional Apartment(s)

Scenario #1: Able to Access Apt. Above

Maintenance worker in the **suspected root case apartment checks the following** while maintenance worker in the impacted apartment checks for leaks:

- ❑ **Bathtub:**
 - With the tub stopper in, **fill the tub past the overflow** & let the water drain through overflow.
 - **Pull the tub drain plug and lets the water drain.**
- ❑ **Sink:** Fill the sink with stopper in & pull the drain plug.
- ❑ **Toilet:** Flush the toilet.



*One of the most common places for a waste line leak is from the **horizontal branch piping** that connects the tub drain to the stack.*

Inspecting Additional Apartment(s) (cont.)

- ❑ **Caulking:** Check for gaps or damaged caulking around the bathtub and tub enclosure.
- ❑ **Washing Machine:** Check whether the washing machine, if any, is properly installed.
- ❑ **Air Conditioner:** Check whether the air conditioner(s), if any, is properly installed.
- ❑ **Freezer:** Check whether the freezer, if any, is properly installed.
- ❑ **Dishwasher:** Check whether the dishwasher, if any, is properly installed.



The maintenance worker may consider conducting a **toilet pull** to inspect the wax gasket and flange for damage.

Inspecting Roof

If impacted apartment located **on the top floor**, inspect the roof of the building:

- ❑ **Roof Deck:** Check for torn or damaged areas of the roof membrane, and/or ponding.
- ❑ **Roof Perimeter:** Check the perimeter of the roof (e.g., parapets, bulkheads) for damaged & missing flashing.
- ❑ **Roof Flashing & Curbing:** Check penetrations (e.g., drains, roof fans, vents) for damaged or missing flashing or curbing materials.
- ❑ **Water Tanks:** check for defects with constant water leakage (e.g., check feed & supply lines for proper waterproofing).



A **Maximo flag** indicates if the roof is under warranty. **Do not make any repairs if the roof is under warranty.** See Standard Procedure 025:52:1, *Administration of Guarantees and Warranties*.

Inspecting Additional Apartment(s)

(!) A water leak can **sometimes "skip" multiple floors**, meaning it can appear on a lower level even if the root cause of the leak is significantly higher up, as water can travel along structural elements (*e.g., floor joists or wall studs*) before dripping down to a visible location.



Inspecting Additional Apartments

Scenario #2: If Not Able to Access Apt. Above

If not able to gain access to the apartment above (or root cause is not there), **continue up the line!**

- **If no wet readings** are present in the next accessible unit, **this will narrow down the search.**
- It may be possible to **identify the source from an adjacent apartment**, if there is a shared chase wall.

If needed, **ask PMS or APMS to check history in Maximo** for history of leak complaints in line or any pending repairs.



Knowledge Check

What units must staff attempt to access when trying to locate a root cause during a leak inspection?



Knowledge Check

What units must staff attempt to access when trying to locate a root cause during a leak inspection?

- An **apartment immediately** above the impacted apartment and continue up the line until the Root Cause is identified, or
- An **apartment adjacent** to the impacted apartment or an apartment immediately above the adjacent apartment.



Knowledge Check

When inspecting additional units while tracing a leak to its source, what signs should you look for to determine if that unit has been affected?



Knowledge Check

When inspecting additional units while tracing a leak to its source, what signs should you look for to determine if that unit has been affected?

- Visible leak
- Visible water damage
- Moisture readings 599 or higher

Knowledge Check

If a wet reading extends to the uppermost section of a chase wall, what does it indicate?



Get a Grip!

Is this the correct way to hold the moisture meter?



Knowledge Check

If a wet reading extends to the uppermost section of a chase wall, what does it indicate?

- The source of the leak is likely located **above** that point (*e.g., in adjacent apartment or roof*).
- Leak investigation should be **continued up the line**.

No!

Thumb is over jack.



NYCHA LEAK TRAINING

PERFORMING VERTICAL LINE INSPECTION

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Vertical Line Inspection

Scenario #3: You Accessed Multiple Units but Couldn't Identify Source of the Leak

If not able to identify suspected root cause after inspecting multiple units, **consult PMS or APMS to develop Vertical Line Inspection plan:**

- Identify which units will need to be accessed (e.g., *based on plumbing configuration or complaint history*).
- **Previously inspected apartments will narrow down the search** (e.g., *apts. with similar wet conditions vs. no wet conditions*)



Vertical Line Inspection

PMS or APMS must assist maintenance workers in preparing for Vertical Line Inspection:

- Review **findings** from multi-apartment inspections.
- Check **work order history** (*Maximo or Tableau*).

(!) Depending on the individual layout of the apartments, the vertical line inspection may consist of only **one apartment per floor** (*i.e., if the chase wall is entirely contained within the apartment*) or **multiple apartments** (*i.e., if the chase wall is shared with adjacent apartments*).



Vertical Line Inspection

What apartments to include in a Vertical Line Inspection?

Scenario #1: Some of the previously accessed units above had no water damage.

- Initially impacted apt. (e.g., #1A).
- Additionally impacted apt(s) (e.g., #2A, #4A).
- Other apt(s) not previously accessed (e.g., #3A).
- Up to the first apt. without water damage (e.g., #5A)

- Initially impacted apt. (e.g., #1A).
- Additionally impacted apt(s) (e.g., #2A, #4A).
- All other apt(s) in line up to the roof (e.g., #3A, #5A and #6A).

Scenario #2: All previously accessed units above had water damage.

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Vertical Line Inspection

When to schedule a Vertical Line Inspection?

- **Schedule within 48 hours** of initial inspection, if possible **(PMS or APMS)**.
- Coordinate access date with all tenants **(Property Management)**.
 - **Advise of the specific date** NYCHA would need access.
 - **Ask if resident has any water damage or leak** and provide the responses to the PMS or APMS.
 - Issue ***48-Hour Notice of Health and Safety Repairs*** to all apartments identified for the Vertical Line Inspection.



Vertical Line Inspection

What to inspect during Vertical Line Inspection?

- One maintenance worker **remains in the impacted apartment**, and the other worker **proceeds to inspect apartments up the line**:
 - Look for **visible water damage**, take **thorough moisture measurements**, and **check fixtures and appliances** for visible leaks.
- **Inform the residents** of all inspected apartments about inspection findings and create follow up repairs, as needed.



Vertical Line Inspection

What to do if Tenant is not Home or Refuses Access for Scheduled Vertical Line Inspection?

- **Immediately consult PMS or APMS** for further guidance.
- **Consider using NYCHA's Right of Entry.**

See Standard Procedure 040:17:3, *Accessing Public Housing Apartments When Tenant Not Home to Address Deficiencies Related to Leaks, Mold, and Lead-Based Paint.*



Sorry, we missed you.
Lo siento, no los encontramos en su residencia.
Вас не было дома.
我們曾經到訪，但您不在家。



DATE / FECHA / DATA / 日期

Work Order #
Orden de trabajo# / № заказа на ремонт / 維修工作單編號

Description of work
Descripción del trabajo / Описание необходимых работ / 維修項目說明

NOTICE GIVEN BY
NOTIFICACION DADA POR /
УВЕДОМЛЕНИЕ ПОДПИСАЛ / 特此通知:

(NYCHA Employee Name Printed / NYCHA Nombre de empleado en imprenta /
(Имя и фамилия сотрудника NYCHA печатными буквами) / 房屋局職員姓名(正楷書寫))

We will return on
Regresamos el / Мы придём еще раз /
我們將會再次上門，日期:

Based on the terms of your lease, we are providing you with advanced notice that NYCHA will be exercising our right to enter your apartment on the date listed above to perform repairs. That means we may need to gain access if you or another adult is not home.

If we do not hear from you, we will attempt to gain access to your apartment on the date listed.

Spanish	Russian	Chinese
Basado en los términos de su contrato, nosotros le estamos notificando por adelantado, que NYCHA ejercerá sus derechos de entrar a su apartamento en la fecha indicada arriba para hacer reparaciones. Esto significa que nosotros necesitamos acceso si usted u otro adulto no está en casa.	В соответствии с условиями вашего Договора об аренде жилья, мы предоставляем вам предварительное уведомление о том, что NYCHA осуществит свое право на посещение вашей квартиры в указанную выше дату для выполнения ремонтных работ. Это означает, что нам может понадобиться доступ в вашу квартиру даже при вашем (или другого взрослого члена семьи) отсутствии в ней.	根據您所簽署的租約規定，如果我們已預先提供了通知，紐約市房屋局有權於上述日期進入您的住房單位進行所需的維修工作。也就是說，如果您或其他成年人未留守家中，我們或將進入您的住房單位。
Si nosotros no escuchamos de usted, nosotros trataremos de entrar a su apartamento en la fecha indicada.	Если от вас не поступит никаких известий, NYCHA будет пытаться получить доступ в вашу квартиру в указанную выше дату.	如您沒有回覆，我們將於上述日期嘗試進入您的住房單位。


NYCHA 042.727 (Rev. 7/18/17) V3 48 NOTICE FOR HEALTH & SAFETY REPAIRS

Vertical Line Inspection

Scenario #4: Still not able to identify root cause after Vertical Line Inspection?

- Property management staff or Neighborhood Administrator can **contact Office of Mold Assessment and Remediation (OMAR)** for assistance with tracing of complex leak cases via:

MOLD.BUSTERS@NYCHA.NYC.GOV



NYCHA LEAK TRAINING

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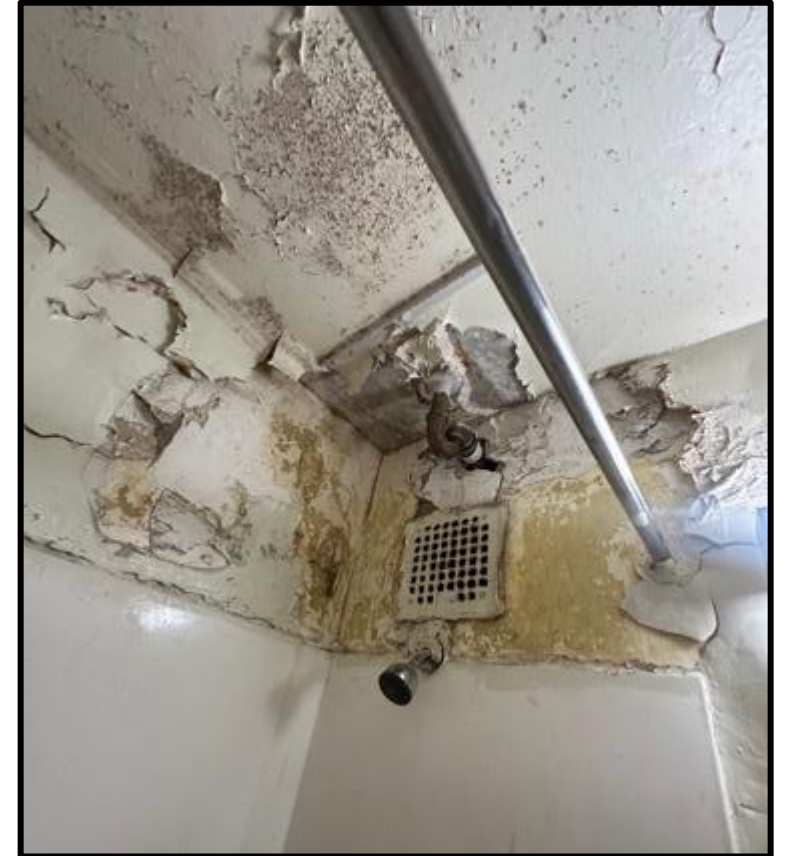
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**SELECTING ROOT CAUSE(S) IN iWM APP:
SOURCE OUTSIDE OF IMPACTED
APARTMENT**

Documenting Root Causes(s) of LFA

- When a source of the leak originates in the apartment other than the initial impacted apartment, select one of the following Root Causes in the iWM App:
 - Leak From Above/ Adjacent – *Investigate*
 - Leak From Above/ Adjacent – *Previously Identified*
- Maintenance staff can select **Repair Code** 'LEAK TRACING' when tracing leak between multiple floors.



Documenting Root Causes(s) of LFA

- Select '**Leak From Above/Adjacent – Investigate**' when:
 - Leak **is new** (not previously reported)
 - Repair(s) to address leak **need to be made**.
- Enter on the parent Leak WO:
 - **Exact location** of the root cause (*e.g., specific room*)
 - **Notes describing root cause** (*e.g., leak from a broken stack in the apartment above*).
- (!) **Do not select this root cause until you are able to physically verify the location of the root cause.**



'Leak From Above – Investigate' (Example #1)

1

Select 'Leak From Above/ Adjacent – Investigate' in the iWM App.

2

Enter 'Notes' to describe the root cause.

3

Select the 'Location' of the Root Cause (**Tip:** Tap on the magnifying glass for easier search).

4

Tip: Type the apartment number and select specific location (e.g., 05F)

2

1

2:03 5GUC 57%

← Probable Cause Bathroom 01 DONE

Is there (suspected) asbestos on pipe insulation that will be disturbed?

Yes

Appliance Issues (None)

Select Response:

Constant dripping

No

Yes

Leak From Above/ Adjacent - Investigate Yes

Leak From Above - Previously Identified (None)

Leak Through Facade (None)

Other (None)

3

4

11:03 5GUC 70%

← Select Location

171.01.001 Stairhall 001

171.01.001.CAN01 Stairhall 001 CANOPY

171.01.001.CC01 Community Center 01

171.01.001.CC01.BTH01 Bathroom 01

171.01.001.CC01.GND01 COMMUNITY CENTER GROUNDS

171.01.001.CC01.KIT01 Kitchen 01

171.01.001.CC01.OFF01 Office 01

171.01.001.CC01.RM01 Room 01

171.01.001.CC01.SLOP01 Slop Sink 01

171.01.001.ERM01 Elevator Machine Room 01

171.01.001.ERM01.BK01 Elevator Bank 01

171.01.001.ERM01.BK01.SHT6397

171.01.001.F05.05F Unit 05F

171.01.001.F05.05F.BD01 Bedroom 01

171.01.001.F05.05F.BTH01 Bathroom 01

171.01.001.F05.05F.FH01 Foyer/Hallway 01

171.01.001.F05.05F.KIT01 Kitchen 01

171.01.001.F05.05F.LIV01 Living Room 01

Documenting Root Causes(s) of LFA

- Select '**Leak From Above – *Previously Identified***' when:
 - Leak has **been previously identified**,
 - Repairs to address leak have been **already completed**, or there is **existing open WO** to address.
- Enter on the parent Leak WO:
 - **Exact location** of the root cause (*e.g., specific room*)
 - **Notes describing root cause** (*e.g., horizontal waste pipe was replaced last week in #5F*).
- **Consult PMS or APMS to obtain the details, as needed.**



Leak From Above – Prev. Identified (Example #2)

1

Select 'Leak From Above/
Adjacent – Previously
Identified' in the iWM App.

2

Enter 'Notes' to describe
the root cause.

3

Select the 'Location' of the
Root Cause (**Tip:** Tap on the
magnifying glass for easier
search).

Tip: Type the apartment
number (e.g., 05F)

9:35 5Guc 90

← Probable Cause DONE

Living Room 01

higher than 599? Yes

* Is Wall-break required? Yes

Is there (suspected) asbestos on pipe insulation that will be disturbed?

Select Response:

Pipes already repaired, plasterer scheduled to fix ceiling

No

Yes

Leak From Above - Previously Identified Yes

View Details >

9:36 5Guc 90

← Select Location 171.01.001.F05.05F.BTH01

Bedroom 01

171.01.001.F05.05F.BTH01 Bathroom 01

171.01.001.F05.05F.FH01 Foyer/Hallway 01

171.01.001.F05.05F.KIT01 Kitchen 01

171.01.001.F05.05F.LIV01 Living Room 01

171.01.001.F05.STW01 Stairwell A

171.01.001.F06 Floor 06

171.01.001.F06.06A Unit 06A

171.01.001.F06.06A.BD01 Bedroom 01

171.01.001.F06.06A.BD02 Bedroom 02

171.01.001.F06.06A.BD03 Bedroom 03

171.01.001.F06.06A.BTH01 Bathroom 01

Documenting Root Causes(s) of LFA

- Do **NOT CLOSE** parent Leak WO, if you **cannot** identify a root cause of the Leak From Above.
- Parent Leak WO should **REMAIN OPEN**, until you **physically verify** the location of the root cause:
 - Complete ‘Step One: Evaluation of Conditions’.
 - Enter details in the ‘Work Log’ in the iWM App:
 - Apt(s) you were able to access (e.g. #2B BTH wall – wet, #2A BTH wall – dry).
 - Apt(s) you were not able to access (e.g., #3B, #4B – no access).



Parent Leak WO should remain open (*‘Inspection State’ = ‘**PARTIAL**’*) until you are able to verify the exact location of the root cause.

Documenting Root Causes(s) of LFA

Repair Code: 'Leak Tracing'.

12:51 5G 99

Complete Work Order
WO #131797332

RRP work — 3 Failure Report — 4 Related —

- ☐ Cabinets Caulked
CABINETSCAULKED
- ☐ Escutcheon Plates Caulked
ESCUTCHEONPLATESCAULKED
- ☐ Excluder Installed
EXCLUDERINSTALLED
- ☐ Graffiti Cleaned
GRAFFITICLEANED
- ☒ Leak Tracing
LEAKTRACING
- ☐ Pipes Asbestos Tested
PIPESASBESTOSTESTED
- ☐ Pipes Clamped
PIPESCLAMPED
- ☐ Pipes Installed
PIPESINSTALLED
- ☐ Pipes Insulated
PIPESINSULATED

< PREVIOUS STOP TIME NEXT >

Inspection State: 'Partial'.

12:51 5G 99

Complete Work Order
WO #131797332

Report — 4 Related — 5 Perform Inspection — 6

Inspecting Location:
135.01.001.F01.01A.LIV01
153 MARCUS GARVEY BOULEVARD

WO Inspection State: PARTIAL

Evaluation of Conditions
State: COMPLETE

Probable Cause
State: NONE

General Evaluation
State: NONE

12:54 5G 98

Complete Work Order
WO #131797332

Form — 6 Materials Optional — 7 Ad hoc Insp — 8

Unit Accessed 11/17/25 User Work Log
Work Log Type: WORK
Created By: Testing ID0082
Create Date: Nov 17, 2025 12:51 PM

Details:
Unit Accessed 11/17/25
2B bathroom - wet 999
2A bathroom - dry
Need access to 3B and 4B

Failure = PIPES, Problem = TRAP LEAKING, Location = 135.01.001.F01.01A.LIV01 User Work Log
Work Log Type: WORKSTILLNEEDED
Created By: Danan Pooladi
Create Date: Apr 14, 2025 3:25 PM

Details:
Failure = PIPES, Problem = TRAP LEAKING,
Location = 135.01.001.F01.01A.LIV01

WORKMAN: Business Hours User Work Log

< PREVIOUS STOP TIME NEXT >

Work Log: Record what units you were able to access.

NYCHA LEAK TRAINING

**CREATING REPAIR WO(S):
SOURCE OUTSIDE OF IMPACTED
APARTMENT**

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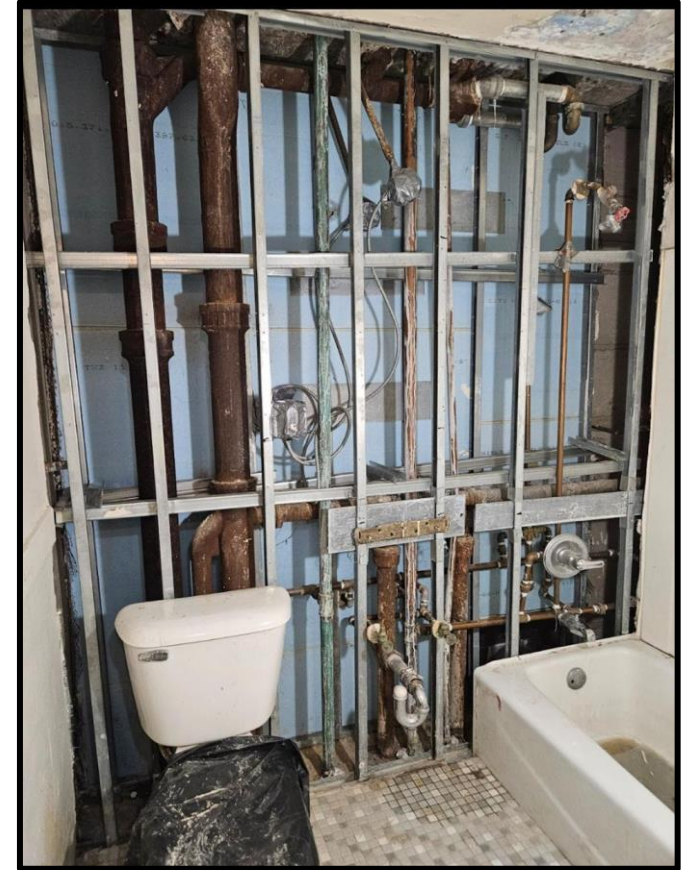
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Creating Child Work Orders

Important (!)

- It is crucial that follow up **child work orders are created for the root cause apartment and impacted apartment(s)** *(including cosmetic repairs)*.
- Use iWM App to **adjust the location** when creating child work orders, if needed.
- Child work orders created **without the correct location** will delay the repairs!



Creating Child Work Orders

For example, if you identify that the leak in apartment #4F originates from apartment #5F, you must **create work orders for both units** if you find water damage.

Use iWM App to **adjust the location**, when needed.

- Tap on the 'magnifying glass' to adjust the location, when needed (e.g., apt. #5F)

3:59 5G 69

← Create Child Work Order DONE

Description
Ceiling needs paint due to water damage

1 Location
171.01.001.F04.04F.LIV01

Asset
Please select...

Work Type
CM

Sub Work Type
LEAK
Leak

Failure Class
CEILING
Ceiling

Problem Code
MRPAINT
MR Paint

8:02 5G 56

← Create Child Work Order DONE

Description
broken pipe leaking into apt below

2 Location
171.01.001.F05.05F.KIT01
Kitchen 01

Asset
Please select...

Work Type
CM

Sub Work Type
LEAK
Leak

Failure Class
PIPES
Pipes

Problem Code
PIPESLEAK
Pipes Leaking

Creating Child Work Orders

- If you identified **additional apartment(s)** in line impacted **by the same leak**:
 - **Create a child work order(s)** for additionally impacted apartment(s) while you have access (*best practice*), or
 - Instruct the resident(s) to call CCC or use MyNYCHA **to submit a new repair request** for that apartment (*e.g., if not able to create repairs for additionally impacted unit(s) due to the severity of conditions or expediency*)



Made wall break while tracing the leak (but source is not there)?
Make sure to create work orders to repair the wall!

Creating Child Work Orders

- If you identified **unrelated water damage** or **mold** in additional impacted apartments (*i.e., not related to the leak you are tracing*):
 - **Create parent work order(s)** to address unrelated leak or mold while you have access (*best practice*), or
 - Instruct the resident(s) to **call CCC or use MyNYCHA to submit a new repair request** (*e.g., if not able to create repairs due to the severity of conditions or expediency*).



Creating Child Work Orders

1

Before submitting the inspection, you can check '**Inspection Summary**' View in the iWM App to see what actions need to be taken.

2

'**Inspection Summary**' view will document findings from '**Task 20: Probable Cause**' to guide you what repairs needs to be created.

9:55 5GUC 71%

← Complete Work Order
WO #132204889

8 Work Log — 9 Comm Log Optional — 10 Signatures

CREATE CHILD WO INSPECTION SUMMARY REVIEW NONE

Labor timer currently running

SUBMIT INSPECTION

Labor timer currently running

← PREVIOUS STOP TIME NEXT

12:37 5GUC 94%

← Inspection Summary

CREATE CHILD WO Create Child WOs

You observed the following conditions during inspection

Is there (suspected) asbestos on pipe insulation that will be disturbed? -	Yes
Leak From Above/ Adjacent - Investigate -	Yes

PREVIOUS STOP TIME NEXT

Creating Child Work Orders

*Step 1: you need to create a child WO to address **suspected asbestos** in apt. #4F.*

1

Fill out all the required steps:

- Description
- Location*
- Work Type
- Sub-Work Type
- Failure Class
- Problem Code
- Craft

2

Adjust the '**Location**' as needed.
iWM App defaults the location to the initial parent WO.

3

Tap '**Done**'.

The screenshot shows the 'Create Child Work Order' screen in the iWM app. It features a list of fields to be filled out, with numbered callouts indicating the steps:

- 1** points to the **Description** field, which contains 'Suspected asbestos on pipe insulation'.
- 2** points to the **Location** field, which contains '171.01.001.F04.04F.LIV01'.
- 3** points to the **DONE** button in the top right corner.

A red box highlights the **Location** field and a modal window that appears when the location is selected. The modal shows a list of locations for '04F':

- 171.01.001.F04.04F.LIV01 (Living Room 01)
- 171.01.001.F04.04F (Unit 04F)
- 171.01.001.F04.04F.BD01 (Bedroom 01)
- 171.01.001.F04.04F.BTH01 (Bathroom 01)
- 171.01.001.F04.04F.FH01 (Foyer/Hallway 01)
- 171.01.001.F04.04F.KIT01 (Kitchen 01)

The other fields in the form are:

- Asset**: Please select...
- Work Type**: CM
- Sub Work Type**: LEAK (Leak)
- Failure Class**: ASBESTOS (Asbestos)
- Problem Code**: ASBPIPEABATE (Asbestos Pipe Abatement)
- Craft**: (empty)

Creating Child Work Orders

Step 2: You need to create a child WO to address the root cause (**'PIPES/ STACK LEAKING'**) after asbestos is abated.

- 1 Fill out the requires information
- 2 Adjust the **'Location'** as needed. iWM App defaults the location to the initial parent WO.
- 3 Tap **'Done'**.

The screenshot shows the 'Create Child Work Order' screen in the iWM app. The screen is annotated with three numbered circles: 1 points to the top status bar, 2 points to the 'Location' field, and 3 points to the 'DONE' button. A red box highlights the 'Location' field and its dropdown menu. A red line connects the 'Location' field to the dropdown menu, which is shown on the right. The dropdown menu lists several location options, including '171.01.001.F04.04F.LIV01', 'Living Room 01', '171.01.001.F04.04F', 'Unit 04F', '171.01.001.F04.04F.BD01', 'Bedroom 01', '171.01.001.F04.04F.BTH01', 'Bathroom 01', '171.01.001.F04.04F.FH01', 'Foyer/Hallway 01', '171.01.001.F04.04F.KIT01', and 'Kitchen 01'.

12:22 5Guc 81

← Create Child Work Order DONE

Parent Work Order
132204889

Description
Stack pipe leaking

Location
171.01.001.F04.04F.LIV01

Asset
Please select...

Work Type
CM

Sub Work Type
LEAK
Leak

Failure Class
PIPES
Pipes

Problem Code
STACK LEAKING

04F

171.01.001.F04.04F.LIV01
Living Room 01
171.01.001.F04.04F
Unit 04F
171.01.001.F04.04F.BD01
Bedroom 01
171.01.001.F04.04F.BTH01
Bathroom 01
171.01.001.F04.04F.FH01
Foyer/Hallway 01
171.01.001.F04.04F.KIT01
Kitchen 01

Leak From Above in the iWM APP (Scenario #1)

You are assigned to a work order for a resident who is complaining of water dripping from her bathroom room ceiling (apt #3B). Upon entering her apartment, you notice **a small puddle** where the leak happened which you radio a caretaker to help with. There are **no signs of mold or pests** in the apartment. Moisture meter **reads 844** on the ceiling. There is no flooding or active leak. Upon inspection of the apartment above, you conclude that the leak is **due to a cracked toilet bowl in the apartment above (apt #4B)**.

Leak From Above (Scenario #1)

- 1 Click 'Start Work Time' at the apt. door.
- 2 Select 'Work Done No Sequence Required' (WORK).
- 3 Take a picture of the condition (pre-repair).
- 4 Select all applicable 'Repair Codes' to document work done.
- 5 Speak with the resident to gather information about the history of the leak.

10:18 5Guc 90

WO # 132393238

DETAILS WORK LOGS COMM LOGS MATERIALS

Work Order
132393238

Description
Leak Inspection Process

Location
171.01.001.F03.03B.LIV01 Living Room 01

Open Work Orders
There are 6 open Work Orders

Parent Work Order
None

Assigned To
Nobody

Address
360 MOTHER GASTON BOULEVARD

Work Type Job Plan# Sub-Work Type
CM INSLEAK LEAK

START WORK TIME

3:26 5Guc 77

Complete Work Order
WO #132393238

1 Select Labor Type 2 Failure Report 3 Related

Please select type of labor:

- ☐ Work Done No Sequence Required (WORK)
- ☒ Work Done with Sequence (WORKWITHSEQ)
- ☐ No Work Done with Sequence (NOWORKDONEWITHSEQ)
- ☐ Resident Not Home (RESNOTHOME)
- ☐ Condition not Founded (UNFOUNDED)
- ☐ Previously Corrected (PREV CORRECTED)
- ☐ Resident Corrected (RESCORRECTED)
- ☐ No Building Access (NOBLDGACCESS)
- ☐ Completed on Arrival (COMPLETEONARRIVAL)
- ☐ No Adult (NOADULT)
- ☐ Unsafe Condition (UNSAFECOND)
- ☐ Resident Refused (RESREFUSED)
- ☐ No Floor Access (NOFLRACCESS)
- ☐ No Room Access (NORMACCESS)
- ☐ Waiting for materials (WMATL)
- ☐ Work in Progress (WORKINPROGRESS)

PREVIOUS STOP TIME NEXT >

4:09 5Guc 75

Please add a description and select a document type:

Description
(optional)252 character limit

Document Type
Pre Repair Photos

CANCEL OK

2:26 5Guc 73

Complete Work Order
WO #132393238

1 pe 2 Failure Report 3 Related 4 P Ins

FLUSHMETERREPAIRED

- ☐ Ballcock Replaced
BALLCOCKREPLACED
- ☒ Bowl Replaced
BOWLREPLACED
- ☐ Caulking Replaced
CAULKINGREPLACED
- ☐ Grab Bar Replaced
GRABBARREPLACED
- ☐ Grout Replaced
GROUTREPLACED
- ☐ Lead Band Replaced
LEADBANDREPLACED
- ☒ Leak Tracing
LEAKTRACING
- ☐ Overflow Cover Repaired
OVERFLOWCOVERREPAIRED
- ☐ Overflow Cover Replaced
OVERFLOWCOVERREPLACED

SUBMIT

< PREVIOUS STOP TIME NEXT >

Leak From Above (Scenario #1)

Complete 'Task 10: Evaluation of Conditions'.

- 1 • Is there a flooding condition? ('No')
- 2 • Is there standing water? ('CAT').
- 3 • Is there an active leak? ('No').

3:09 5Guc 79

← Evaluation of Conditions Living Room 01 DONE

* Is there a flooding condition? No

* Is there standing water? Corrective Action Taken

* is t

Select Response:

Notes (Optional)

1 No

Corrective Action Taken

Needs Abatement

3:07 5Guc 79

← Evaluation of Conditions Living Room 01 DONE

* Is there a flooding condition? No

* Is there standing water? Corrective

* is t

Select Response:

Notes (Optional)

2 Corrective Action Taken

Standing water within one room

Standing water extends into other rooms

Standing water apartment wide or >1" deep

3:09 5Guc 79

← Evaluation of Conditions Living Room 01 DONE

* Is there a flooding condition? No

* Is there standing water? Corrective Action Taken

* is there active leak? No

Select Response:

Notes (Optional)

3 No

Yes

Leak From Above (Scenario #1)

Complete 'Task 20:
Probable Cause'.

1

Enter moisture meter measurements ('844').

2

Indicate that 'Wall break is required? ('No').

1

3:56 5Guc 76

← Probable Cause Living Room 01 DONE

* Is moisture meter equal or higher than 599? Yes

2

* Is Wall-break required? No

Appliance Issues (None)

Bathtub Shower Issues (None)

Caulking DML (None)

Grouting DML (None)

Leak Around Window (None)

Leak From Above/ Adjacent - Investigate (None)

Leak From Above - Previously Identified (None)

Leak Through Facade (None)

Other (None)

Pipe Condensation (None)

3:57 5Guc 76

← Select Areas Affected DONE

844 C Ceiling

F Floor

W1 Wall 1 (Near)

W2 Wall 2 (Left)

W3 Wall 3 (Far)

W4 Wall 4 (Right)

Leak From Above (Scenario #1)

- 3 Select the Probable Cause(s) ('**Leak From Above/ Adjacent – Investigate**').
- 4 Enter 'Notes'.
- 5 Input the **exact location** where the root cause is coming from (**apt 4B**).
 - Tip: use the **magnifying glass** to search for specific unit.

2:38 5Guc 72

← Probable Cause Living Room 01 DONE

* Is moisture meter equal or higher than 599? Yes

* Is Wall-break required? No

Appliance Issues (None)

Bathtub Shower Issues (None)

Caulking DML (None)

Grouting DML (None)

Leak Around Window (None)

1 Leak From Above/ Adjacent - Investigate Yes View Details >

Leak From Above - Previously Identified (None)

Leak Through Facade (None)

Other (None)

Pipe Condensation (None)

3:03 5Guc 92

← Probable Cause Living Room 01 DONE

* Is moisture meter equal or higher than 599? Yes

* Is Wall-break required? No

Appliance Issues (None)

2 Select Response:
Toilet bowl in apt 4B is cracked and leaking
No
Yes View Details >

Leak From Above - Previously Identified (None)

Leak Through Facade (None)

Other (None)

Pipe Condensation (None)

11:49 5Guc 84

← Select Location 3

171.01.001 Stairhall 001

171.01.001.CAN01 Stairhall 001 CANOPY

11:52 5Guc 84

← 4b X

171.01.001.F04.04B Unit 04B

171.01.001.F04.04B.BD01 Bedroom 01

171.01.001.F04.04B.BTH01 Bathroom 01

171.01.001.F04.04B.FH01 Foyer/Hallway 01

171.01.001.F04.04B.KIT01 Kitchen 01

171.01.001.F04.04B.LIV01 Living Room 01

171.01.001.ERM01.BK01 Elevator Bank 01

171.01.001.ERM01.BK01.SHT6397

Leak From Above (Scenario #1)

1 Complete Ad Hoc questions.

2 Get signatures.

3:15 5G 78

← Complete Work Order
WO #132393238

Perform Inspection — 5 Materials Optional — 6 Ad hoc Insp

* Please check install dates on the CO/Smoke Detectors or if applicable on Combo Detector. If a date is not entered OR older than 7 years a NEW Combo Detector must be installed

1

Apartment Ad Hoc Inspection Data

* According to NYCHA procedures, you must physically check these items

* Fire Safety Notice

Satisfactory

* CO Detector
Install date:

N/A

* Smoke Detector
Install date:

N/A

* Combo Detector
Install date: 03/16/21

Satisfactory

* Window Guard

Satisfactory

* GFCI Outlets

Satisfactory

← PREVIOUS STOP TIME NEXT →

3:16 5G 78

← Complete Work Order
WO #132393238

Ad hoc Insp — 7 Work Log — 8 Comm Log Optional

2

LATEST RESIDENT SIGNATURE



LATEST WORKER SIGNATURE



LATEST SUPERINTENDENT/SUPERVISOR SIGNATURE

Tap Here to Sign

Signature Saved

← PREVIOUS STOP TIME NEXT →

Leak From Above (Scenario)

- 1 Create Child Work Orders needed.
- 2 Submit Post-repair photos.

1

2:52 5Guc 71

← Create Child Work Order DONE

Description
Ceiling needs to be painted

Location
171.01.001.F03.03B.LIV01

Asset
Please select...

Work Type
CM

Sub Work Type
LEAK
Leak

Failure Class
PAINT
Paint

Problem Code
NEEDSPAINTING
Needs Painting

Craft

5:13 5Guc 72

2

Please add a description and select a document type:

Description
(optional)252 character limit

Document Type
Post Repair Photos

CANCEL OK

Leak From Above (Scenario)

1

Review 'Inspection Summary' view:

- Verify you created all necessary WOs.

2

Submit the work order.

2:51 5Guc 71

← Inspection Summary

CREATE CHILD WO Created 1 WOs

You observed the following conditions during inspection

Leak From Above/ Adjacent - Investigate -	Yes
---	-----

5:12 5Guc 72

← Complete Work Order WO #132393238

rk Log 8 Comm L Options 1 Signatures 10

1

CREATE CHILD WO INSPECTION SUMMARY REVIEW (1) CHILD WO

BACK

3

GLENMORE PLAZA	132393374
360 MOTHER GASTON BO...	Unscheduled
PAINT	NEEDSPAINTING
171.01.001.F03.03B.LIVO Living Room 01	
1	
Reported - 06/13/25	CM

2

SUBMIT INSPECTION

< PREVIOUS START TIME NEXT

Knowledge Check

If the source of the leak originates in the apartment outside of the initially impacted unit, which root cause options could be selected in the iWM App?



Knowledge Check

If the source of the leak originates in the apartment outside of the initially impacted unit, which root cause options could be selected in the iWM App?

- Leak From Above/ Adjacent – Investigate
- Leak From Above/ Adjacent – Previously Identified

Knowledge Check

What is the main difference between 'Leak From Above/ Adjacent – Investigate' and 'Leak From Above/ Adjacent – Previously Identified' root causes?



Knowledge Check

What is the main difference between ‘Leak From Above/ Adjacent – Investigate’ and ‘Leak From Above/ Adjacent – Previously Identified? Root Causes?

- **‘Leak From Above/ Adjacent – Investigate’:** Leak is newly reported and NYCHA staff must take steps to address leak (e.g., make repairs or create child WOs for repairs).
- **‘Leak From Above/ Adjacent – Previously Identified’:** Leak has been previously reported or known off. NYCHA staff already made a repair to address leak or there is an existing open WO in Maximo to address leak.

Knowledge Check

What steps should be taken if you are unable to access the suspected root-cause apartment while tracing a leak from above? Select the right option.

- a. Close the initial “leak from above” complaint and ask the resident of the impacted unit to submit a new ticket.
- b. Close the initial “leak from above” complaint and request that APMS or PMS create a new parent leak work order for the suspected root-cause unit.
- c. Leave the initial “leak from above” complaint open until access is gained and the root cause is confirmed.



Knowledge Check

What steps should be taken if you are unable to access the suspected root-cause apartment while tracing a leak from above? Select the right option.

- a. Close the initial “leak from above” complaint and ask the resident of the impacted unit to submit a new ticket.
- b. Close the initial “leak from above” complaint and request that APMS or PMS create a new parent leak work order for the suspected root-cause unit.
- c. Leave the initial “leak from above” complaint open until access is gained and the root cause is confirmed.

Knowledge Check

What Repair Code *can be used* to document work when tracing a leak between multiple apartments?



Knowledge Check

What repair code *can be used* to document work when tracing a leak between multiple apartments?

- “LEAK TRACING”



Knowledge Check

When responding to leak from above complaint, maintenance worker identifies one additional unit in line impacted by the same leak. The unit needs to be replastered and repainted after the root cause is addressed. What is the best course of action to create repairs for this unit?



Knowledge Check

When tracing leak from above, maintenance worker identifies one additional unit in line impacted by the same leak. The unit needs to be replastered and repainted after the root cause is address. What is the best course of action to create repairs for this unit?

- Best practice would be to **create child work orders** for additional impacted unit(s) on the spot (while you have access).
- If not ale to create child repairs on the spot, **instruct resident to call CCC or use MyNYCHA App** to submit a repair request.



NYCHA LEAK TRAINING

RESIDENT COMMUNICATION & RTS SLIP

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Reviewing Findings with Resident(s)

Need to trace leak up the line?

- Keep all impacted tenants informed, as applicable:
 - Resident(s) of the initially impacted apt.
 - Resident(s) of additionally impacted apt(s).
 - Resident(s) of the root cause apt.



Reviewing Findings with Resident(s)

Scenario #1: Root Cause is in the Apartment Above (Access Gained Same Day)

- Inform the resident of the Root Cause apartment:
 - The leak in their unit **impacts** residents below.
 - Describe any **repairs that needs to be made** and let the resident **to inspect the repairs** once work is completed, or
 - Create follow **up child WOs** and inform residents of **next steps** to schedule work.



*Share with resident(s)
recommendations to prevent the
issue from recurring (**while pending
permanent repair**) if applicable.*

Reviewing Findings with Resident(s) (cont.)

- Return to the resident in the Impacted apartment:
 - Explain **what** is the root cause of the issue and **where** it was found.
 - Describe **any repairs made** to address the root cause (including temporary repairs), or
 - Describe **any additional repairs** that needs to be scheduled to address the root cause.
 - Create **follow up child WOs** and inform residents of next steps to schedule work.



Reviewing Findings with Resident(s) (cont.)

Scenario #2: Root Cause is Not Found (e.g., Not Able to Access Apt. Above Same Day)

- Return to the resident of the Impacted apartment:
 - Inform resident that you could not get access and will follow up within 48 hours.
 - Create child work orders(s) for repairs in the impacted apt. and discuss next steps with the resident.
 - Resident can contact property management office for updates on the root cause tracing, or
 - Resident could contact neighborhood planner for update on the status of root cause repairs.

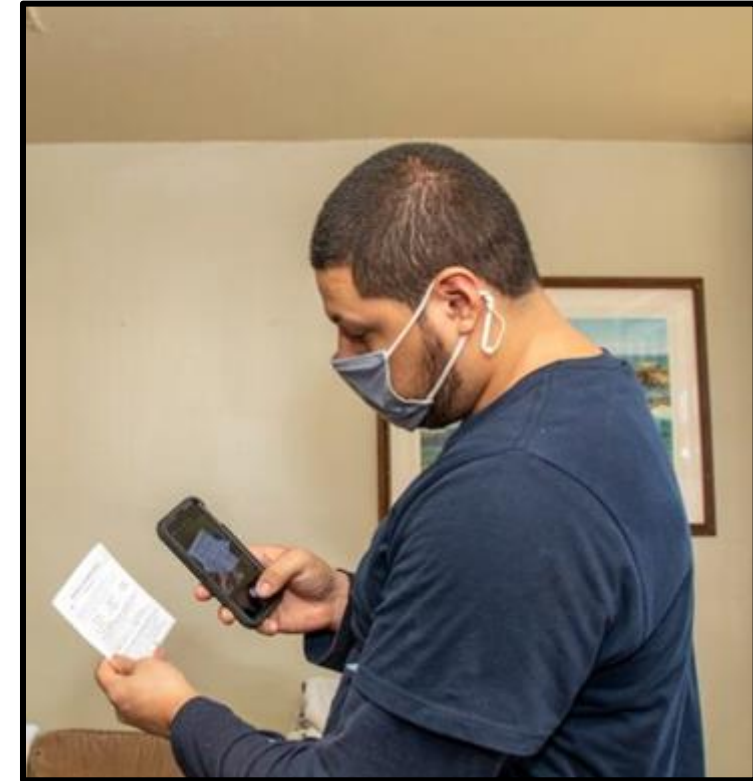


The parent Leak **WO should remain open** until the root cause is identified (Inspection State = 'PARTIAL').

Issuing RTS Slip

Follow up Skilled Trade repairs are needed for impacted apartments?

- **Issue RTS Slip(s) for all** impacted apartments, including:
 - Initially impacted apartment.
 - Additionally impacted apartment(s).
 - Root cause apartment.
- **Upload photo(s) of completed RTS Slip(s)** in the iWM App before leaving the unit.



Issuing RTS Slip (Impacted Apartment)

- To issue RTS Slip for **Impacted Apartment**:
 - Put the **parent Leak WO** at the top of the RTS Slip (e.g., *Maintenance WO#*).
 - Check off all necessary skilled trade(s) needed to complete full scope of (leak) repair in that unit.

2

NEW YORK CITY HOUSING AUTHORITY Repairs to Schedule Slip		
Date:	1	Work Order #: MAINT WO#
NYCHA maintenance staff has determined that the following Skilled Trades are needed to complete your repairs:		
<input type="checkbox"/> Bricklayer	<input type="checkbox"/> Exterminator	<input type="checkbox"/> Roofer
<input type="checkbox"/> Electrician	<input type="checkbox"/> Carpenter	<input type="checkbox"/> Plumber
<input type="checkbox"/> Painter	<input type="checkbox"/> Glazier	<input type="checkbox"/> Plasterer
To schedule these repairs, please call your Neighborhood Select Planning Team: Mon-Fri between the hours of 8:30am – 4:30pm		
Neighborhood Planner Contact: <input type="text"/>		Planning Secretary Contact: <input type="text"/>
New repairs can be requested through the contact lines below: Phone: 718-707-7771, Customer Contact Center (CCC) Smartphone/Tablet: MyNYCHA App Web: www.nyc.gov/MyNYCHA		
A translation of this form is available in your Property Management Office.		
La traducción de este formulario está disponible en su Oficina de Administración de Propiedades.		
Перевод этого документа находится в Офисе управления вашего жилищного комплекса.		
客戶服務中心提供本文件的譯本。		
客戶服務中心提供本文件的译本。		



Issuing RTS Slip (Root Cause Apartment)

- To issue RTS Slip for **the Root Cause Apartment**:
 - Put the **child Skilled Trade WO** to address the root cause at the top of the RTS Slip (e.g., *Plumbing WO#*).
 - Check off all necessary skilled trade(s) needed to complete full scope of (leak) repair in that unit.

2

NEW YORK CITY HOUSING AUTHORITY Repairs to Schedule Slip		
Date:	1	Work Order #: PLUMBING WO#
NYCHA maintenance staff has determined that the following Skilled Trades are needed to complete your repairs:		
<input type="checkbox"/> Bricklayer	<input type="checkbox"/> Exterminator	<input type="checkbox"/> Roofer
<input type="checkbox"/> Electrician	<input type="checkbox"/> Carpenter	<input type="checkbox"/> Plumber
<input type="checkbox"/> Painter	<input type="checkbox"/> Glazier	<input type="checkbox"/> Plasterer
To schedule these repairs, please call your Neighborhood Select Planning Team: Mon-Fri between the hours of 8:30am – 4:30pm		
Neighborhood Planner Contact: <input type="text"/>		Planning Secretary Contact: <input type="text"/>
New repairs can be requested through the contact lines below: Phone: 718-707-7771, Customer Contact Center (CCC) Smartphone/Tablet: MyNYCHA App Web: www.nyc.gov/MyNYCHA		
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客戶服務中心提供本文件的譯本。		
客戶服務中心提供本文件的译本。		

Issuing RTS Slip (Additional Impacted Apt.)

- To issue RTS Slip for **the Additional Impacted Apartment(s)**:
 - Put the **child Skilled Trade Cosmetic Repair WO** at the top of the RTS Slip (e.g., *Plastering WO#*).
 - Check off all necessary skilled trade(s) needed to complete full scope of (leak) repair in that unit.

NEW YORK CITY HOUSING AUTHORITY Repairs to Schedule Slip		
Date:	1	Work Order #: PLASTERING WO#
NYCHA maintenance staff has determined that the following Skilled Trades are needed to complete your repairs:		
<input type="checkbox"/> Bricklayer	<input type="checkbox"/> Exterminator	<input type="checkbox"/> Roofer
<input type="checkbox"/> Electrician	<input type="checkbox"/> Carpenter	<input type="checkbox"/> Plumber
<input type="checkbox"/> Painter	<input type="checkbox"/> Glazier	<input type="checkbox"/> Plasterer
To schedule these repairs, please call your Neighborhood Selection Planning Team : Mon-Fri between the hours of 8:30am – 4:30pm		
Neighborhood Planner Contact: [Redacted]		Planning Secretary Contact: [Redacted]
New repairs can be requested through the contact lines below: Phone: 718-707-7771, Customer Contact Center (CCC) Smartphone/Tablet: MyNYCHA App Web: www.nyc.gov/MyNYCHA		
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Перевод этого документа находится в Офисе управления вашего жилищного комплекса.		
客戶服務中心提供本文件的譯本。		
客戶服務中心提供本文件的译本。		

Knowledge Check

If after inspecting multiple units you are still not able to find a source of the leak, whom can you (maintenance worker) reach out for guidance?



Knowledge Check

If after inspecting multiple units you are still not able to find a source of the leak, whom can you (maintenance worker) reach out for guidance?

- Assistance Property Maintenance Supervisor
- Property Maintenance Supervisor



Knowledge Check

What steps could take PMS or APMS to assist maintenance worker, when maintenance worker already accessed and inspected multiple units but still not able to find a root cause of a leak?



Knowledge Check

What steps could take PMS or APMS to assist maintenance worker, when maintenance worker already accessed and inspected multiple units but still not able to find a root cause of a leak?

- Assign another maintenance worker to assist with leak tracing or assist themselves.
- Review Maximo work order history for any repeated leak complaints in the line or any pending repairs to identify the source.
- Develop a plan do conduct Vertical Line Inspection.

Knowledge Check

What is a Vertical Line Inspection plan?



Knowledge Check

What is a Vertical Line Inspection plan?

- Follow-up inspection of multiple apartments in the line (including adjacent apartment or above it, as needed) to identify the source of the leak that couldn't be identified during the initial multi-apartment leak inspection.
- Includes initially impacted apartment all other apartments in line up to the roof, or up to the first apartment in line they didn't display signs of leak, water damage or excessive moisture.



Knowledge Check

Within how many hours should NYCHA staff attempt to schedule Vertical Line Inspection?



Knowledge Check

Within how many hours should NYCHA staff attempt to schedule Vertical Line Inspection?

Within 48 hours following the initial leak inspection or multi-apartment inspection, when feasible.

Knowledge Check

Why should NYCHA issue Form 042.727, *48 Hour Notice of Health and Safety Repairs* to conduct a Vertical Line Inspection?



 Sorry, we missed you. Lo siento, no los encontramos en su residencia. Вас не было дома. 我們曾經到訪，但您不在家。  OUR VISION FOR NEXT GENERATION NYCHA <small>100 Years of Housing Opportunity</small>		
DATE / FECHA / DATA / 日期		
Work Order # Orden de trabajo // № заказа на ремонт / 維修工作單編號		
Description of work Descripción del trabajo / Описание необходимых работ / 報修項目說明:		
NOTICE GIVEN BY NOTIFICACION DADA POR / УВЕДОМЛЕНИЕ ПОДПИСАЛ / 特此通知:		
<small>(NYCHA Employee Name Printed / NYCHA Nombre de empleado en imprenta / Имя и фамилия сотрудника NYCHA печатными буквами) / 房屋局職員姓名(正楷書寫)</small>		
Spanish	Russian	Chinese
Basado en los términos de su contrato, nosotros le estamos notificando por adelantado, que NYCHA ejercerá sus derechos de entrar a su apartamento en la fecha indicada arriba para hacer reparaciones. Esto significa que nosotros necesitamos acceso si usted u otro adulto no está en casa. Si nosotros no escuchamos de usted, nosotros trataremos de entrar a su apartamento en la fecha indicada.	В соответствии с условиями вашего Договора об аренде жилья, мы предоставляем вам предварительное уведомление о том, что NYCHA осуществит свое право на посещение вашей квартиры в указанную выше дату для выполнения ремонтных работ. Это означает, что нам может понадобиться доступ в вашу квартиру даже при вашем (или другого взрослого члена семьи) отсутствии в ней. Если от вас не поступит никаких известий, NYCHA будет пытаться получить доступ в вашу квартиру в указанную выше дату.	根據您所簽署的租約規定，如果我們已預先提供了通知，紐約市房屋局有權於上述日期進入您的住房單位進行所需的維修工作。也就是說，如果您或其他成年人未留守家中，我們或強行進入您的住房單位。 如您沒有回覆，我們將於上述日期嘗試進入您的住房單位。
 NYCHA 042.727 (Rev. 7/18/17) V3		
48 NOTICE FOR HEALTH & SAFETY REPAIRS		

Knowledge Check

Why should NYCHA issue Form 042.727, *48 Hour Notice of Health and Safety Repairs* to conduct a Vertical Line Inspection?

- To inform the tenants of the identified units **in writing** that NYCHA staff will attempt to access these units **on the specified day**, and
- To inform the tenants that **NYCHA might utilize its *Right of Entry*** to gain access, if needed.



Sorry, we missed you.
Lo siento, no los encontramos en su residencia.
Вас не было дома.
我們曾經到訪，但您不在家。



DATE / FECHA / DATA / 日期

Work Order #
Orden de trabajo# / № заказа на ремонт / 維修工作單編號

Description of work
Descripción del trabajo / Описание необходимых работ / 報修項目說明

NOTICE GIVEN BY
NOTIFICACION DADA POR /
УВЕДОМЛЕНИЕ ПОДПИСАЛ / 特此通知

(NYCHA Employee Name Printed / NYCHA Nombre de empleado en Imprinta /
(Имя и фамилия сотрудника NYCHA печатными буквами) / 房屋局職員姓名(正楷書寫))

We will return on
Regresamos el / Мы придём еще раз /
我們將會再次上門，日期：

Based on the terms of your lease, we are providing you with advanced notice that NYCHA will be exercising our right to enter your apartment on the date listed above to perform repairs. That means we may need to gain access if you or another adult is not home.

If we do not hear from you, we will attempt to gain access to your apartment on the date listed.

Spanish

Russian

Chinese

Basado en los terminos de su contrato, nosotros le estamos notificando por adelantado, que NYCHA ejercera sus derechos de entrar a su apartamento en la fecha indicada arriba para hacer reparaciones. Esto significa que nosotros necesitamos acceso si usted u otro adulto no esta en casa.

Si nosotros no escuchamos de usted, nosotros trataremos de entrar a su apartamento en la fecha indicada.

В соответствии с условиями вашего Договора об аренде жилья, мы предоставляем вам предварительное уведомление о том, что NYCHA осуществит свое право на посещение вашей квартиры в указанную выше дату для выполнения ремонтных работ. Это означает, что нам может понадобиться доступ в вашу квартиру даже при вашем (или другого взрослого члена семьи) отсутствии в ней.

Если от вас не поступит никаких известий, NYCHA будет пытаться получить доступ в вашу квартиру в указанную выше дату.

根據您所簽署的租約規定，如果我們已預先提供了通知，紐約市房屋局有權於上述日期進入您的住房單位進行所需的維修工作。也就是說，如果您或其他成年人未留守家中，我們或強行進入您的住房單位。

如您沒有回覆，我們將於上述日期嘗試進入您的住房單位。


NYCHA 042.727 (Rev. 7/19/17) V3

48 NOTICE FOR HEALTH & SAFETY REPAIRS

iWM App Simulation

Leak Inspection Scenario **Source of the Leak Outside Impacted Apartment**

1

Press Power/Lock Button
Swipe across screen
Enter the default password
for the **Device**:

nycha90
(Old devices)

nycha123
(New devices)



1

iWM Practice – Scenario #3

Leak From Above - Constant Dripping

You enter the apartment of a resident who is complaining of a water leak above the toilet leading to occasional water pooling on the bathroom floor. The tenant also notices water damage around the lead bend. The resident mentions that the leak gets more severe when the neighbor above flushes their toilet.

Failure Class: LEAKFROMABOVE
Problem Code: CONSTANT
DRIPPING

Location: BATHROOM



iWM Practice – Scenario #3

(Response)

8:50 5G 33

← Complete Work Order
WO #132396706

1 Select Labor Type 2 Failure Report 3 Related

Please select type of labor:

- ☐ Work Done No Sequence Required (WORK)
- ☒ Work Done with Sequence (WORKWITHSEQ)
- ☐ No Work Done with Sequence (NOWORKDONEWITHSEQ)
- ☐ Resident Not Home (RESNOTHOME)
- ☐ Condition not Founded (UNFOUNDED)
- ☐ Previously Corrected (PREV CORRECTED)
- ☐ No Building Access (NOBLDGACCESS)
- ☐ Completed on Arrival (COMPLETEONARRIVAL)
- ☐ No Adult (NOADULT)
- ☐ Unsafe Condition (UNSAFECOND)
- ☐ Resident Refused (RESREFUSED)
- ☐ No Floor Access (NOFLRACCESS)
- ☐ No Room Access (NORMACCESS)
- ☐ Waiting for materials (WMATL)

PREVIOUS STOP TIME NEXT >

1:48 5G 18

← Complete Work Order
WO #132396750

pe 2 Failure Report 3 Related 4 P Ins pe

GRABBARREPLACED

- ☐ Grout Replaced
GROUTREPLACED
- ☐ Lead Band Replaced
LEADBANDREPLACED
- ☒ Leak Tracing
LEAKTRACING
- ☐ Overflow Cover Repaired
OVERFLOWCOVERREPAIRED
- ☐ Overflow Cover Replaced
OVERFLOWCOVERREPLACED
- ☐ Overflow Tube Replaced
OVERFLOWTUBEREPLACED
- ☐ Pipes Repaired
PIPESREPAIRED
- ☐ Pipes Replaced
PIPESREPLACED
- ☐ Shower Floor Replaced
SHOWERFLOORREPLACED

SUBMIT

< PREVIOUS STOP TIME NEXT >

1:44 5G 18

← Complete Work Order
WO #132396750

pe 2 Failure Report 3 Related 4 P Ins pe

TANKDOGSREPLACED

- ☐ Tank Replaced
TANKREPLACED
- ☐ Toilet Handle Repaired
TOILETHANDLEREPAIRED
- ☐ Toilet Handle Replaced
TOILETHANDLEREPLACED
- ☒ Toilet Reset
TOILETRESET
- ☐ Tub Surround Removed
TUBSURROUNDREMOVED
- ☐ Tub Surround Repaired
TUBSURROUNDREPAIRED
- ☐ Tub Surround Replaced
TUBSURROUNDREPLACED
- ☐ Wall Broken
WALLBROKEN
- ☐ Wax Gasket Replaced
WAXGASKETREPLACED

SUBMIT

< PREVIOUS STOP TIME NEXT >

iWM Practice – Scenario #3

(Response)

1:45 5Guc 18

Evaluation of Conditions
Bathroom 01

DONE

* Is there a flooding condition?

No

* Is there standing water?

Corrective Action Taken

* is there active leak?

Yes

1:52 5G 17

Probable Cause
Bathroom 01

DONE

* Is moisture meter equal or higher than 599?

Yes

* Is Wall-break required?

No

Appliance Issues

(None)

Bathtub Shower Issues

(None)

Caulking DML

(None)

Grouting DML

(None)

Leak Around Window

(None)

Leak From Above/
Adjacent - Investigate

Yes

View Details >

Leak From Above -
Previously Identified

(None)

Leak Through Facade

(None)

Other

(None)

Pipe Condensation

(None)

1:45 5Guc 18

Select Areas Affected

DONE

822 C Ceiling

F Floor

W1 Wall 1 (Near)

W2 Wall 2 (Left)

W3 Wall 3 (Far)

W4 Wall 4 (Right)

1:47 5Guc 18

General Evaluation
Bathroom 01

DONE

Is there mold growth?

Yes

Cockroaches

No

Rodent Droppings

No

1:03 5Guc 22

Create Child Work Order

DONE

Location

171.01.001.F02.02C.BTH01

Asset

Please select...

Work Type

CM

Sub Work Type

LEAK
Leak

Failure Class

PAINT
Paint

Problem Code

NEEDSPAINTING
Needs Painting

Craft

PAINTER
Painter

iWM Practice – Scenario #4

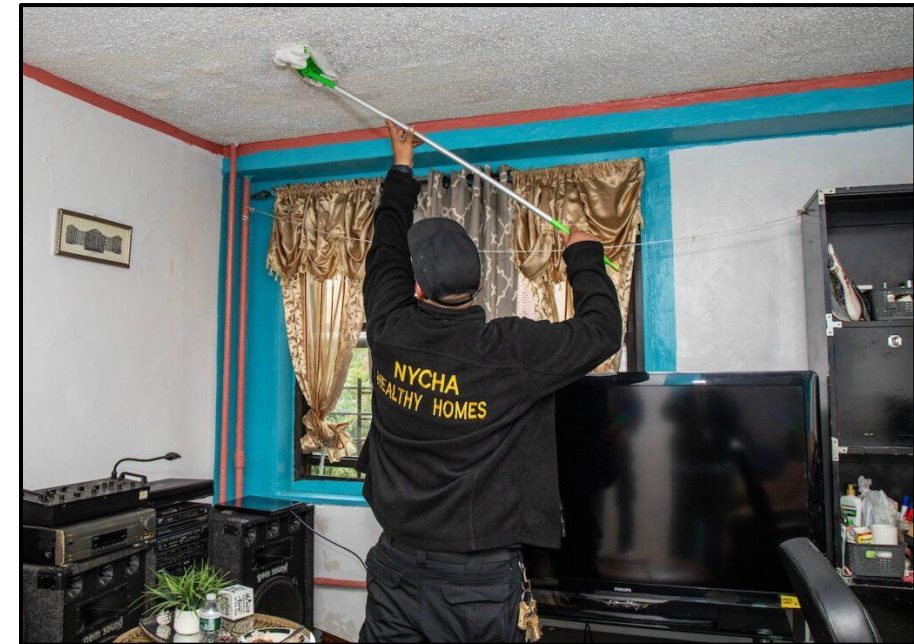
Walls - Wall Leak

You enter a resident's apartment who called about water stains on their kitchen wall. The resident says that the water stain started appearing after a severe storm that happened the night before. Upon entry, you see water stains on the wall coming from the ceiling, stopping halfway on the wall. The moisture meter measures 800 on the ceiling, 784 on the top of the wall, and 120 on the bottom half of the wall. You don't see flooding or standing water. You begin tracing the leak in the apartments above.

Failure Class: WALLS

Problem Code: WALLLEAK

Location: KITCHEN



iWM Practice – Scenario #4

(Response)

9:57 5G 29

Complete Work Order
WO #132396754

1 Select Labor Type 2 Failure Report 3 Related

Please select type of labor:

☐ Work Done No Sequence Required (WORK)

☒ Work Done with Sequence (WORKWITHSEQ)

☐ No Work Done with Sequence (NOWORKDONWITHSEQ)

☐ Resident Not Home (RESNOTHOME)

☐ Condition not Founded (UNFOUNDED)

☐ Previously Corrected (PREV CORRECTED)

☐ No Building Access (NOBLDGACCESS)

☐ Completed on Arrival (COMPLETEONARRIVAL)

☐ No Adult (NOADULT)

☐ Unsafe Condition (UNSAFECOND)

☐ Resident Refused (RESREFUSED)

☐ No Floor Access (NOFLRACCESS)

☐ No Room Access (NORMACCESS)

☐ Waiting for materials (WMATL)

PREVIOUS STOP TIME NEXT

2:51 5G 14

Complete Work Order
WO #132396754

2 Failure Report 3 Related 4 Ins

EXPOSEDREBARREPAIRED

☐ Exposed Rebar Replaced
EXPOSEDREBARREPAIRED

☐ Glass Block Replaced
GLASSBLOCKREPLACED

☐ Graffiti Cleaned
GRAFFITICLEANED

☐ Lead Abated
LEADABATED

☐ Lead Tested
LEADTESTED

☒ Leak Tracing
LEAKTRACING

☐ PG Tiles Repaired
PGTILESREPAIRED

☐ PG Tiles Replaced
PGTILESREPLACED

☐ Rebar Repaired
REBAR REPAIRED

PREVIOUS STOP TIME NEXT

2:36 5G 15

Probable Cause
Bedroom 01

DONE

☒ Is moisture meter equal or higher than 599? Yes

☒ Is Wall-break required? Yes

☐ Is there (suspected) asbestos on pipe insulation that will be disturbed? No

☒ Is there mold on the backside of sheetrock? No

☐ Appliance Issues (None)

☐ Bathtub Shower Issues (None)

☐ Caulking DML (None)

☐ Grouting DML (None)

☐ Leak Around Window (None)

☒ Leak From Above/ Adjacent - Investigate Yes

☐ Leak From Above - Previously Identified (None)

View Details >

9:59 5G 29

Select Areas Affected

DONE

800 C Ceiling

F Floor

784 W1 Wall 1 (Near)

W2 Wall 2 (Left)

W3 Wall 3 (Far)

W4 Wall 4 (Right)

3:53 5G 21

Complete Work Order
WO #132396754

5 Materials Optional 6 Ad hoc Insp 7 Work Log

Tenant not home at 4A to check for water damage, left 48 hour notice User Work Log

Work Log Type: WORK

Created By: Testing ID0082

Create Date: Jun 20, 2025 3:52 PM

Wall break completed in 5A User Work Log

Work Log Type: WORK

Created By: Testing ID0082

Create Date: Jun 20, 2025 2:49 PM

Details: Wall break completed in 5A

No water damage in apt 3a User Work Log

Work Log Type: WORK

Created By: Testing ID0082

Create Date: Jun 20, 2025 2:41 PM

Details: No water damage in apt 3a

PREVIOUS START TIME NEXT

iWM Practice – Scenario #3

(Response)

<div>2:53 5Guc 14</div> <div>← Create Child Work Order DONE</div> <div>Location 171.01.001.F05.05A.BD01 Bedroom 01</div> <div>Asset Please select...</div> <div>Work Type CM</div> <div>Sub Work Type LEAK Leak</div> <div>Failure Class PIPES Pipes</div> <div>Problem Code RISER LEAKING Riser Leaking</div> <div>Craft PLUMBER Plumber</div>	<div>8:53 5Guc 89</div> <div>← Create Child Work Order DONE</div> <div>Location 171.01.001.F05.05A.BD01 Bedroom 01</div> <div>Asset Please select...</div> <div>Work Type CM</div> <div>Sub Work Type LEAK Leak</div> <div>Failure Class WALLS Walls</div> <div>Problem Code NEEDSPASTERING Needs Plastering</div> <div>Craft PLASTER Plaster</div>	<div>2:54 5Guc 13</div> <div>← Create Child Work Order DONE</div> <div>Location 171.01.001.F05.05A.BD01 Bedroom 01</div> <div>Asset Please select...</div> <div>Work Type CM</div> <div>Sub Work Type LEAK Leak</div> <div>Failure Class PAINT Paint</div> <div>Problem Code NEEDSPAINTING Needs Painting</div> <div>Craft PAINTER Painter</div>	<div>2:52 5Guc 14</div> <div>← Create Child Work Order DONE</div> <div>Location 171.01.001.F02.02A.BD01</div> <div>Asset Please select...</div> <div>Work Type CM</div> <div>Sub Work Type LEAK Leak</div> <div>Failure Class PAINT Paint</div> <div>Problem Code NEEDSPAINTING Needs Painting</div> <div>Craft PAINTER Painter</div>
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Break Time!

- We appreciate your participation!
- Our job is to provide training that will give you the capability to conduct leak inspection.
- Please let the instructor or any EEA staff if there's anything we can do to improve your learning experience.
- **Stretch!**



NYCHA LEAK TRAINING

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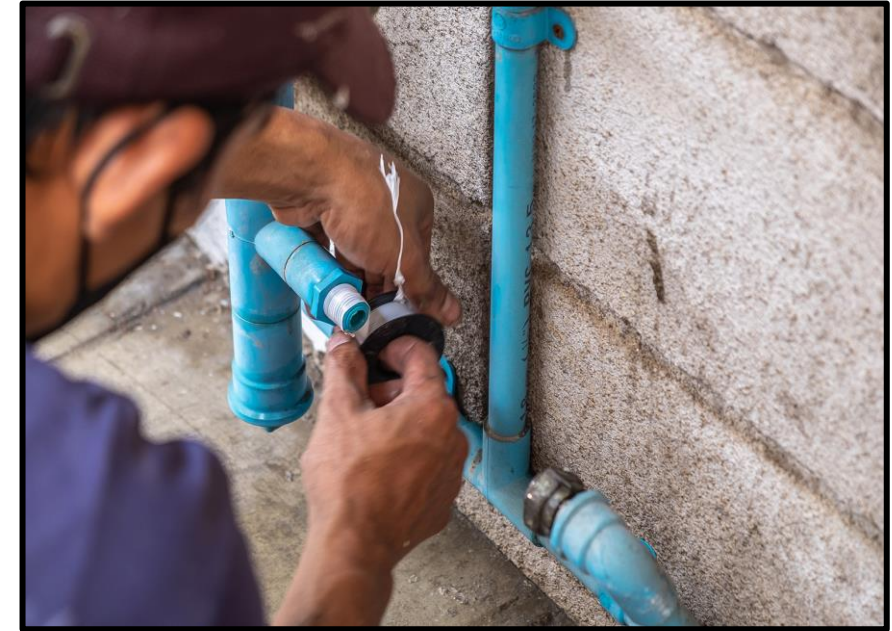
Working to make our communities healthy

**CORRECTING ROOT CAUSE(S)
AND MAKING COSMETIC REPAIRS**

Leak Repairs

NYCHA employees must ensure that **both root cause(s) repairs and cosmetic repairs** are:

- Completed to NYCHA standards in accordance with Standard Procedure 040:18:1, *Repair Standards and NSPIRE REAC Inspections*.
- Documented and closed in Maximo in accordance with Standard Procedure 040:09:7, *Managing Maintenance Work Orders*.



Leak Repairs

- NYCHA employees **must wear appropriate Personal Protective Equipment (PPE)** when performing specific tasks outlined in the Leak SP:
 - Standing Water Removal
 - Wall Breaks
 - Pipe Insulation
- For more information about HA numbers and item descriptions, refer to the [Personal Protective Equipment \(PPE\) and Other Safety Equipment Catalogue](#).



New York City Housing Authority
Office of Safety and Security

**Personal Protective Equipment (PPE)
and
Other Safety Equipment Catalogue**



Have questions about PPT?
Discuss with your Supervisor, or
contact ehs@nycha.nyc.gov

Temporary Plumbing Repairs

- When possible, maintenance must make a **temporary plumbing repair** to address leak:
 - Patch a crack of a pipe joint using **epoxy putty stick**.
 - **Create child WO for Plumber.**
- (!) Duct tape should not be considered a temp repair.
- The plumber must **replace the pipe joint** during repairs (*i.e., epoxy must not be left as a permanent plumbing solution*).



Epoxy that is used to shall be certified for use on drinking water systems (NSF/ANSI/CAN61) and be certified by ANSI-accredited organizations.

Temporary Plumbing Repairs

Not able to make any temporary repair and there is active leak? Consider the following steps:

- Shut down water valve.
- Shut down the riser.
- Immediately notify PMS or APMS to escalate emergency repair request to Skilled Trades.



Permanent Plumbing Repairs

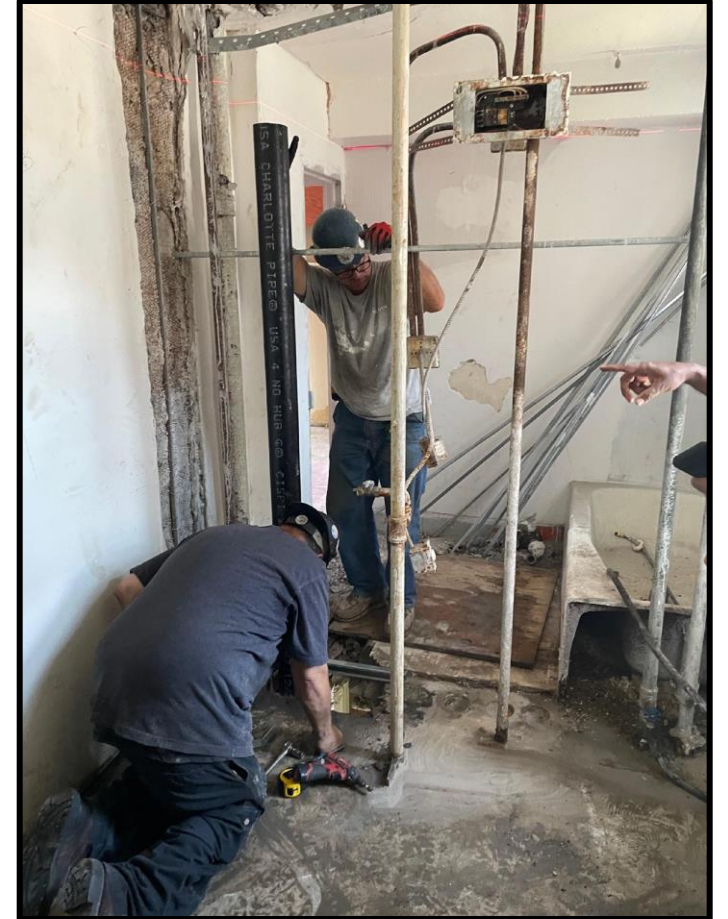
- Plumbers are responsible for making **permanent plumbing repairs** (e.g., replacing cast iron or galvanized pipes).
- Plumbers **must use caution** (in particular, when replacing vent pipes and horizontal branch waste pipes).
 - Aging cast iron pipes are brittle – it is important to **minimize stress** while making repairs.
 - Replacement pipe must only **be connected to pipe in satisfactory condition**.



*It's possible that work on brittle pipes **may cause breaches**. These breaches must be immediately reported and treated as emergency leaks.*

Permanent Plumbing Repairs (cont.)

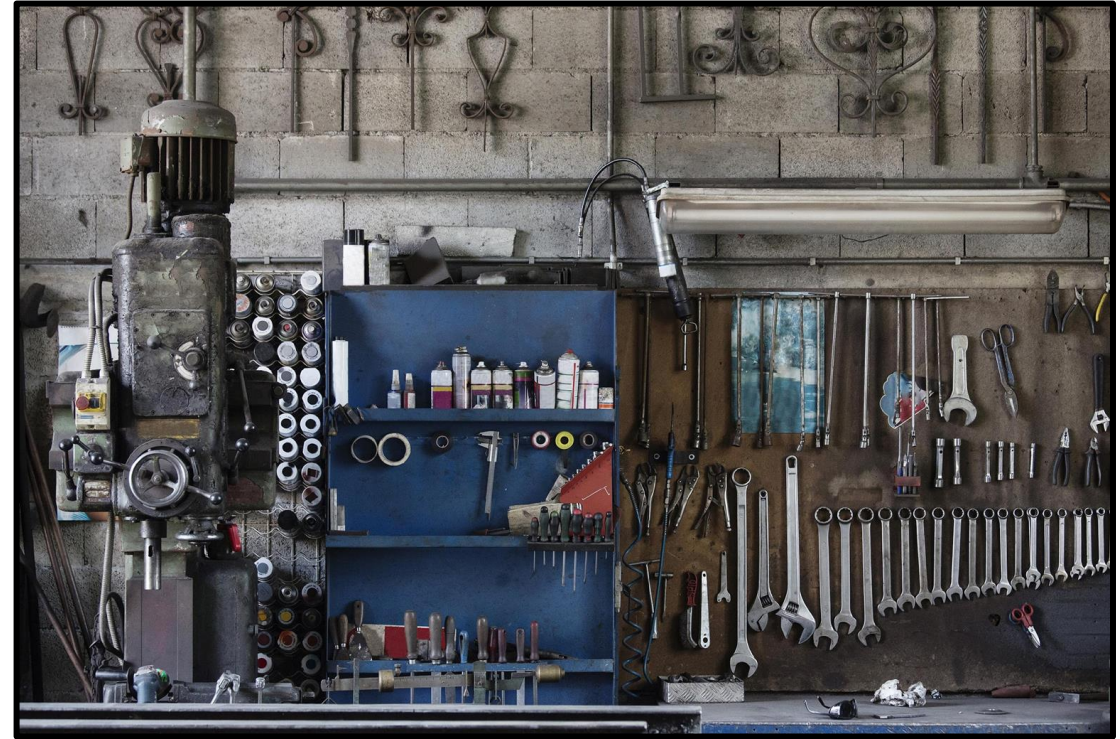
- **It's possible** that corroded or otherwise damaged stack or vent waste pipes extend floor to ceiling within an apartment, and **the nearest satisfactory pipe is located in another apartment.**
- If galvanized or cast-iron horizontal branch waste pipes are damaged or leaking, **the entire line from stack to tub trap must be replaced.**



Leak Repairs (Skilled Trades)

Skilled trade and other crafts might come across the following issues when performing repairs in NYCHA apartments.

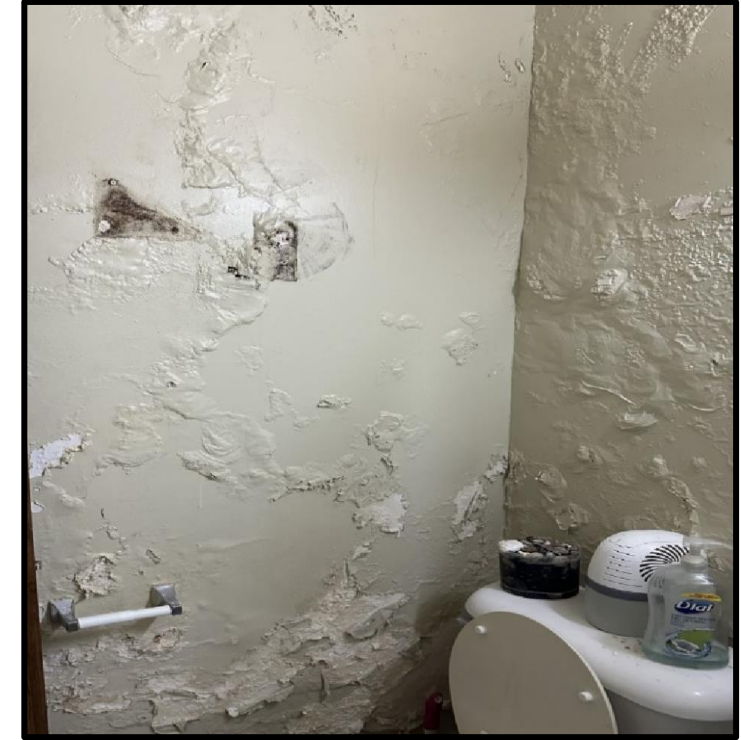
- Active Leak
- Visible Mold
- Suspected Asbestos-Containing Material (ACM).



Scenario #1: Active Leak

If a skilled trade worker observes leak, the worker must:

- Indicate leak in the 'Work Log' (e.g. *leak within chase wall*).
- Notify Supervisor and PMS/APMS.
 - PMS/ APMS must **create a parent Leak WO** or check for an existing WO in Maximo.
 - PMS/ APMS must **promptly assign** maintenance staff.
- Leave **skilled trades WO open** until the root cause of the leak is addressed:
 - PMS or APMS **must coordinate next steps** with the skilled trades supervisor and neighborhood planner.



Wet wall cavities **must be dried** before installing a new drywall or plastering.

Scenario #1: Active Leak

If the leak impacts or is suspected to impact the quality of the repair, **NYCHA staff must immediately stop the work** until the root cause(s) of the leak is addressed!



Scenario #2: Visible Mold

If a skilled trade worker observes mold, the worker:

- Indicate mold in the 'Work Log' (e.g., *mold all over ceiling*).
- Notify Supervisor and PMS/APMS:
 - PMS/APMS must **create a parent Mold WO** or check for an existing Mold WO in Maximo, or
 - Skilled trades worker must **create a parent Mold WO** in the iWM App.
- Leave **skilled trade WO open** until the root cause of mold is addressed:
 - PMS or APMS **must coordinate next steps** with the skilled trades supervisor and neighborhood planner.



See NYCHA Standard Procedure 040:14:1, Mold/Mildew Control in NYCHA Residential Buildings.

Scenario #2: Visible Mold

If mold remediation and repair is expected to impact the quality of the repair, **NYCHA staff must immediately stop the work** until the root cause(s) of the mold is addressed.



Scenario #3: Suspected ACM

If a skilled trades worker observes any suspected ACM that might be disturbed during repair, the worker must:

- **Immediately stop work** and indicate suspect ACM in the 'Work Log' (e.g., *asbestos on insulation*).
- Notify the skilled trade supervisor and PMS or APMS that they are unable to complete work:
 - PMS/ APMS must **create testing or abatement WO**.
 - PMS/APMS must coordinate with NYCHA Asbestos Department **scheduling of asbestos-related work**.
- Leave **skilled trade WO open** until the ACM is addressed.



See NYCHA Standard Procedure 050:25:1, *Asbestos Safe Housing*.

Knowledge Check

What steps should NYCHA skilled trade staff take (e.g., plasterers) if they observe an active leak that might impact the quality of repair work?



Knowledge Check

What steps should NYCHA skilled trade staff take (e.g., plasterers) if they observe an active leak that might impact the quality of repair work?

- Immediately stop the work and leave skilled trade WO open (do not close the ticket!)
- Notify skilled trades supervisor.
- Notify PMS or APMS.
- PMS or APMS should assign maintenance to trace the leak and create necessary repairs.
- Once repairs are completed, plasterers could resume work.



Knowledge Check

Why should you be extra cautious when repairing cast iron and galvanized pipes?



Knowledge Check

Why should you be extra cautious when repairing cast iron and galvanized pipes?

- These pipes have inherent vulnerabilities.
- They can develop rust, mineral buildup, and corrosion, which can result in health concern.
- They can also contain lead which can cause serious health hazards.



Knowledge Check

What could happen if you connect new pipe to a brittle aged pipe?



Knowledge Check

What could happen if you connect new pipe to a brittle aged pipe?

- If the original pipe is weak or damaged, the new pipe can become unsupported resulting in it also becoming damaged or falling.
- There could be new leakage points or exacerbate existing ones.
- A leak in one section of a pipe system can lead to pressure imbalances and problems throughout the pipe system.
- Connecting a damaged pipe to a new one may shorten the lifespan of the new one. The weak connection or pressure issues can put stress on the new pipe, making it more likely to fail prematurely.

NYCHA LEAK TRAINING

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LEAK REPAIRS OUTSIDE NORMAL BUSINESS HOURS



Leak Repairs Outside Normal Business Hours

- **NYCHA Emergency Management & Services Department (EMSD)** responds to emergency work orders outside of normal business hours.
 - EMSD always sends a team of **two maintenance staff**.
 - EMSD staff must ensure they have all tools necessary to complete the job (e.g., *wet vacuums or tools for wall breaks*).
 - EMSD staff must inform EMSD supervisor if any additional tools are needed.



Normal business hours are **8:30 a.m.-4:30 p.m., Monday through Friday**, excluding holidays.

Leak Repairs Outside Normal Business Hours

Resident Not Home or Refuses Access?

- If a resident or other adult **is not home** to allow access to address floods or other emergency leaks, the EMSD maintenance team **may use NYCHA's *Right of Entry*** to access the apartment.
- If a resident **refuses to provide access** to address emergency leaks, EMSD Team must attempt to explain urgency to the resident and if needed:
 - Shut down the riser, or
 - Contact NYPD for assistance.



See Standard Procedure 040:17:3,
*Accessing Public Housing Apartments
When Tenant Not Home to Address
Deficiencies Related to Leaks, Mold, and
Lead-Based Paint.*

Leak Repairs Outside Normal Business Hours (cont.)

Resident Not Home or Refuses Access?

- If condition is not severe, notify the EMSD dispatcher that resident is requesting a day-time service.
 - Note the day-time service request in the 'Work Log' (e.g., *tenant requested work during normal business hours*).
 - The EMSD dispatcher **must change the 'Owner Group'** to property management.



For leaks from above (if condition is not severe), EMSD must inform the resident of the impacted apartment that the property maintenance staff will respond during regular business hours.

Leak Repairs Outside Normal Business Hours

EMSD completes **full scope of repair**.

- **Scenario #1:** No follow up response needed.

EMSD is not able to complete full scope of repair.

- **Scenario #2:** Follow up response needed outside regular business hours.
- **Scenario #3:** Follow up response needed during regular business hours.

Scenario #4: ESMD addresses the root cause but more work is needed.

- **Scenario #4:** Follow up response needed **for cosmetic repairs only**.

Scenario #1: EMSD completes full scope of repair

If EMSD Team completes **full scope of repair** during the initial visit (*i.e., no follow up work needed*), the EMSD team is responsible for **closing Leak WO in iWM App:**

- Complete 'Leak Inspection' in the iWM App.
- Select Root Cause(s).
- Upload photographs.
- Inform residents of the repairs made.



Examples:

- EMSD cleared toilet stoppage
- EMSD repaired running faucet
- EMSD conducted a bowl lift in the apartment above.

Scenario #2: Additional Repairs needed outside business hours.

If the EMSD Team **was not able to address** the emergency and **a follow-up response is needed immediately**, the EMSD is responsible for creating repairs:

- If follow up is needed to **abate flood** or **remove standing water**, follow Leak Inspection prompts to create child WO(s).
- If follow up is needed for **other emergency leak repairs**, create child WO(s) manually.
- Contact EMSD dispatcher **with the disposition**.
 - **(!) Development will be responsible for closing Leak WO and creating additional repairs.**



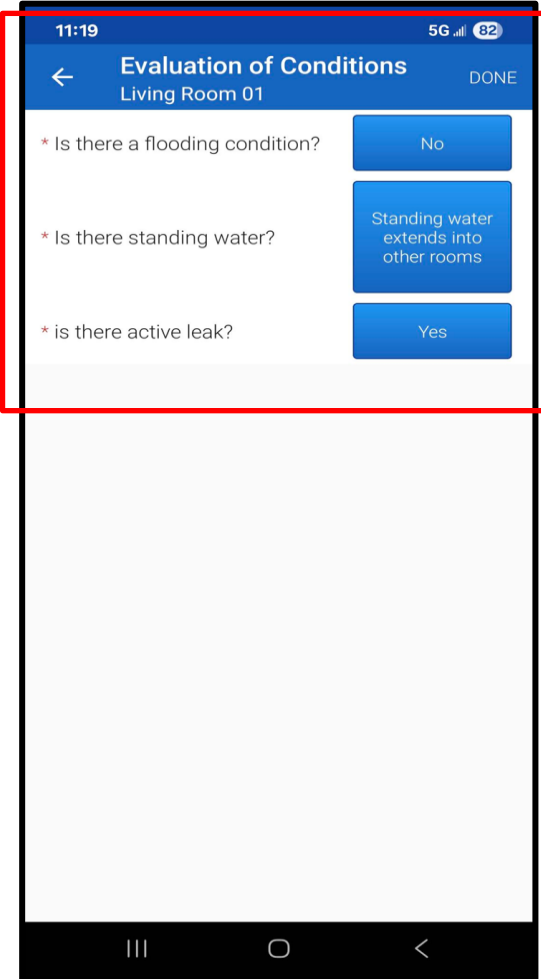
Examples:

- *Flooding Abatement*
- *Standing Water Removal*
- *Broken window glass replacement.*

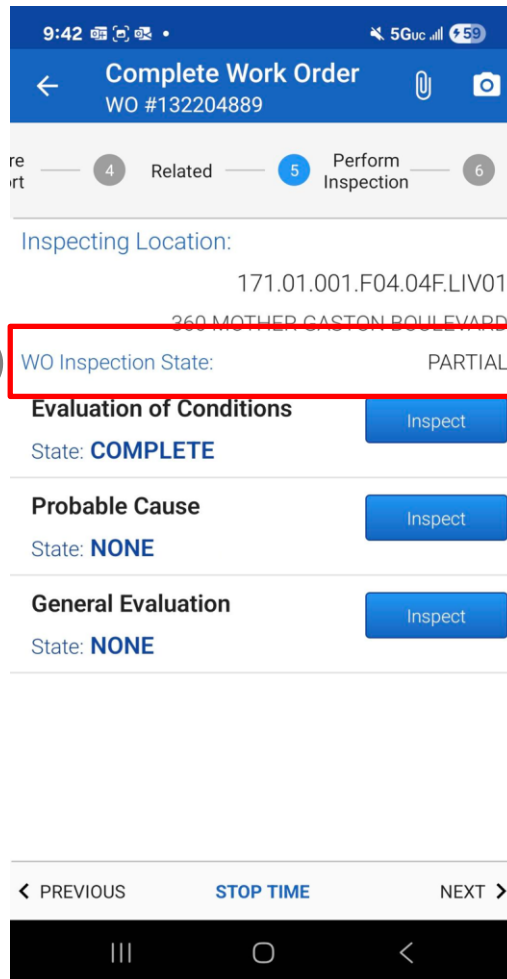
Scenario #2: Additional Repairs needed outside normal business hours.

1. EMSD completes 'Step One: Evaluation of Conditions' in the iWM App.
2. Parent Leak WO should remain **OPEN** with 'Work Order Inspection State = **Partial**'.

1



2



Scenario #3: Additional Repairs needed during business hours.

If the EMSD Team **was able to address** the emergency but **a follow-up is by development staff is needed during business hours**, the EMSD Team:

- Complete Step One: *Evaluation of Conditions*.
 - Add notes in the 'Work Log' describing repairs.
 - Add necessary photographs documenting work.
- The EMSD dispatcher **changes Owner Group** to property management and **unassigns** EMSD Team:
 - **(!) Development will be responsible for closing Leak WO and creating additional repairs.**



Examples:

- *Make a wall break to locate the source of the plumbing leak.*
- *Create work orders to address root cause and cosmetic restoration.*

Scenario #3: Follow up response needed during normal business hours.

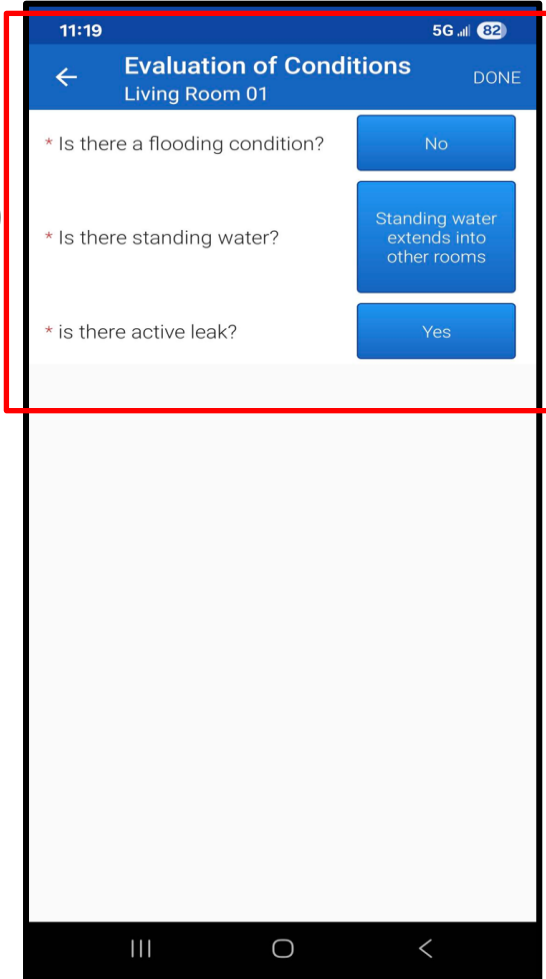
- The EMSD must email property management to **alert them to high priority follow-up items**, e.g.:
 - *EMSD shut off the supply riser.*
 - *Maintenance staff needs to follow up in the a.m. to find the source of the plumbing leak and create repairs.*
- At the end of the EMSD shift **Maximo automatically changes the 'Owner Group'** from EMSD to property management for all unassigned work orders (or work orders with no labor record).



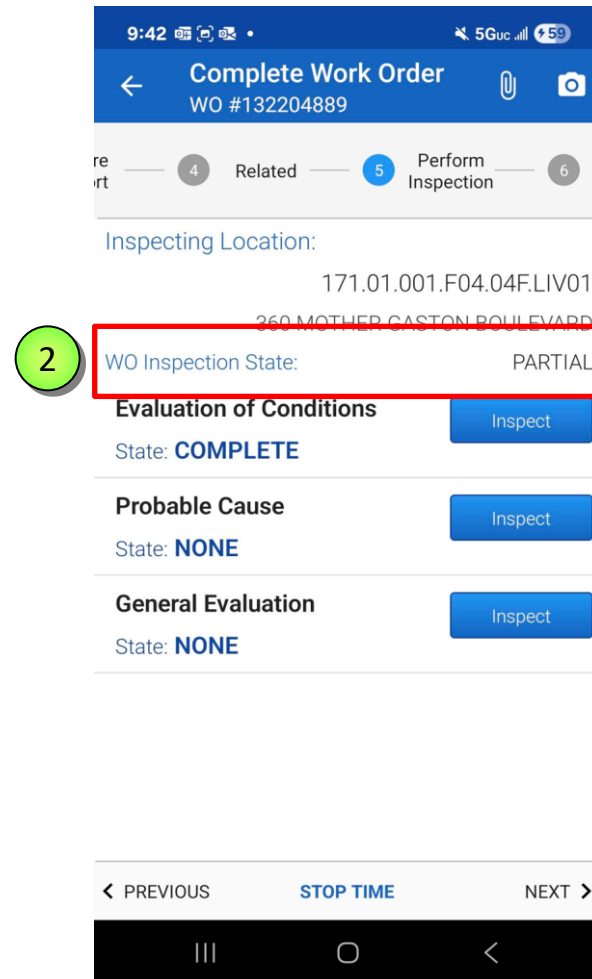
Scenario #3: Follow up response needed during normal business hours.

1. EMSD completes 'Step One: Evaluation of Conditions' in the iWM App.
2. Parent Leak WO should remain **OPEN** with 'Work Order Inspection State = **Partial**'.

1



2



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Scenario #4: ESMD address the root cause (cosmetic repair needed)

If the EMSD addressed the root cause but additional **cosmetic repair(s) are needed**, the EMSD Team must:

- Complete leak inspection and close parent Leak WO in the iWM App.
- Create a child work order with a **failure class 'APARTMENT'** and **problem code 'CHECK'** (sub-work type 'EMSDPFU').
 - **(!) Property maintenance staff must create work orders to address any follow up cosmetic needs.**



Example:

- *Leak around sink was fixed but tenant needs cabinet replacement and fresh paint around that area.*

Knowledge Check

What does EMSD stand for?



Knowledge Check

What does EMSD stand for?

Emergency Management and Services Department



Knowledge Check

For non-severe emergency leaks, what does EMSD maintenance do when the resident requests the staff to return during normal business hours?



Knowledge Check

For non-severe emergency leaks, what does EMSD maintenance do when the resident requests the staff to return during normal business hours?

- **Notify the EMSD dispatcher** that the resident requested daytime service.
- **Add in the 'Notes'** that resident would not provide access outside normal business hours.
- **EMSD Dispatcher will reassign** the work order to development staff to address during regular business hours.

Knowledge Check

What should EMSD maintenance staff do if they have addressed the root cause, but cosmetic repairs are still needed in the unit?



Knowledge Check

What should EMSD maintenance staff do if they have addressed the root cause, but cosmetic repairs are still needed in the unit?

- Complete leak inspection and close parent Leak WO.
- Create a child work order with a failure class 'APARTMENT' and problem code 'CHECK' (sub-work-type "EMSDPFU).
- The property maintenance staff must respond to the APARTMENT CHECK work order and create all cosmetic repairs (*e.g., replace water damaged cabinets or repaint the area*).



Knowledge Check

What does EMSD maintenance staff need to do if they were able to address full scope of repair and no follow up work needed?



Knowledge Check

What does EMSD maintenance staff need to do if they were able to address full scope of repair and no follow up work needed?

Close Leak Work Order in the iWM App. This includes:

- Complete the leak inspection in the iWM App.
- Upload photographs.
- Inform residents of the repairs made.

NYCHA LEAK TRAINING

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WALL BREAKS



Wall Breaks

When a wet wall measures 599+ on a moisture meter and the wet condition does not extend into the apartment above, **inspect conditions inside the wall cavity.**

- If the wet reading is present of the **lower portion of the wall**, the leak most likely originates within a local chase wall.
- If the wet reading extends to be **uppermost section of the wall**, the leak most likely originates in the apartment above and additional leak tracing is needed.



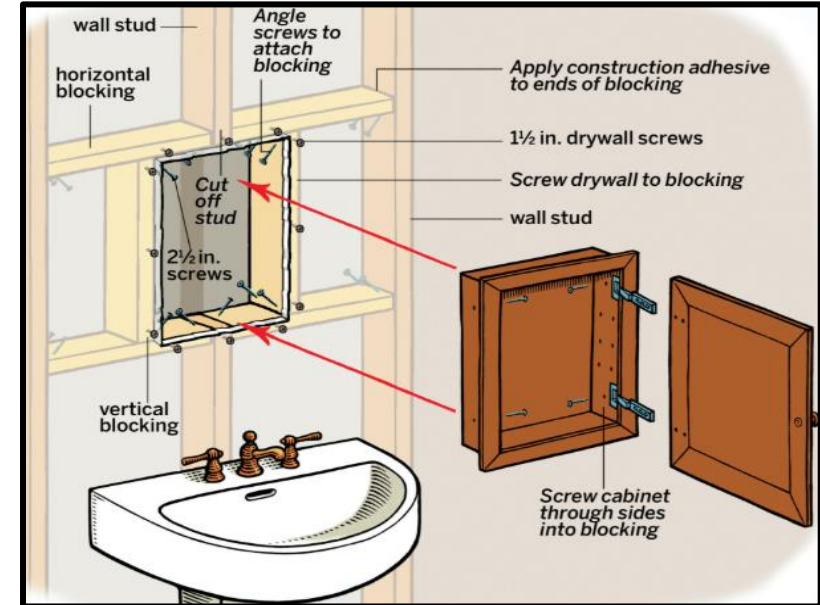
For leaks from above, the root cause apartment is likely to be first apartment where wet conditions do not extend to the upper most section of the chase wall.

Wall Breaks

Step #1: Assessing Conditions Without Wall Break

When possible, attempt to perform an assessment without making a wall break and use borescope to inspect wall cavity.

- **Leak in the Shower Area:** Remove the escutcheon plate to inspect the conditions within the wall cavity.
- **Leak is Behind/Around the Sink/Toilet Area:** Remove the medicine cabinet to determine if there is an existing opening through which conditions can be inspected.



*If **medicine** cabinet is recessed (i.e., installed between the studs in a sheetrock wall), there will be an opening to access the wall cavity.*

Wall Breaks

Step #2: Making Initial Wall Break (~ 1 Square Inch)

If not able to identify the root cause without making wall break, make an **initial wall opening to insert borescope**.

- Use the moisture meter to find where open the wall:
 - Make initial wall break **as close as possible** to suspected root cause; *or*
 - Make initial wall break **behind the medicine cabinet or other central area in the wall**, if not sure.
- Inspect plumbing pipes and conditions behind the wall cavity using borescope.

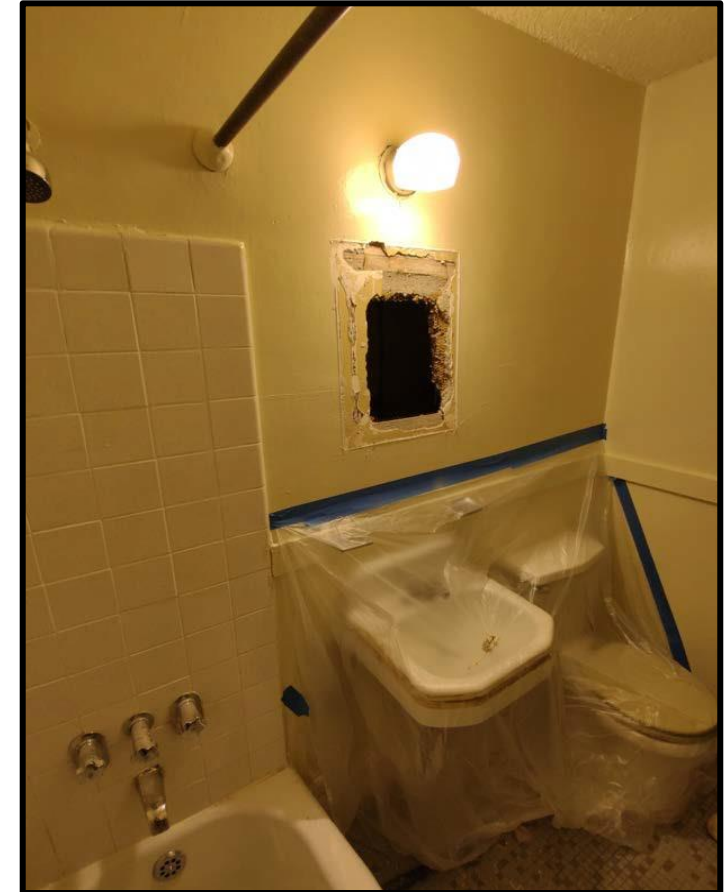


Made a small opening but leak is not there? Use caulk to fill up the hole!

Wall Breaks

Step #3: Enlarging Initial Wall Break (1-2 square feet)

- Once the root cause is identified, **enlarge the wall break** to provide access for repairs:
 - An initial wall break must be enlarged to **at least 1 square foot** to provide access to the plumbing pipes.
 - In some instances, the wall break might need to **be enlarged to up to 2 square feet, or more.**
- Make a temporary repair, when possible, to stop active leak and create child work order(s) for permanent repairs.



Be Careful!

Creating a **1 square foot wall-break** provides great access to investigate the wall cavity but always be sure to **use caution** and **be aware of exposed metal mesh or other sharp objects in the wall cavity** that can pose cut, scrape, or puncture hazards.

(!) For difficult to access areas that cannot be safely assessed, consider using the borescope or creating another small wall break.

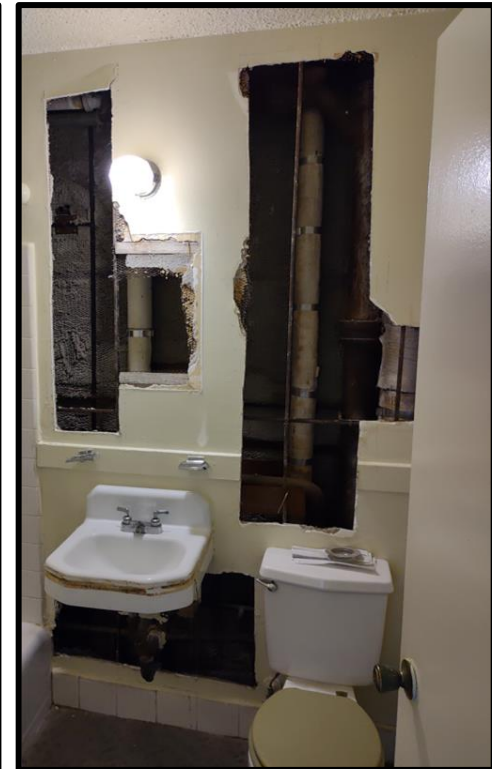


Wall Breaks

Enlarging the Initial Wall Break

An initial wall break must be also enlarged, if you are not able to identify the root cause using the borescope and requires a larger wall break to get good visual access to the plumbing pipes.

Lead-safe work practices and Renovation, Repair, and Painting (RRP) certified workers must be used if (i) Maximo identifies that RRP work is required (the apartment is presumed or known to contain lead-based paint) and (ii) any work would disturb more than 2 square feet of a painted surface per room, or more than 10 percent of the total surface area on an interior or exterior type of component with a small surface area. For more information see Standard Procedure 050:20:1, *Lead Safe Housing Procedure*.



Knowledge Check

When a wet wall measures 599+ and the wet condition does not extend into the apartment above, where do you inspect the condition?



Knowledge Check

When a wet wall measures 599+ and the wet condition does not extend into the apartment above, where do you inspect the condition?

- Inspect conditions inside the wall cavity within current apartment for the possible source of the leak.



Wall Breaks (PPE)

When making an enlarged wall breaks NYCHA staff:

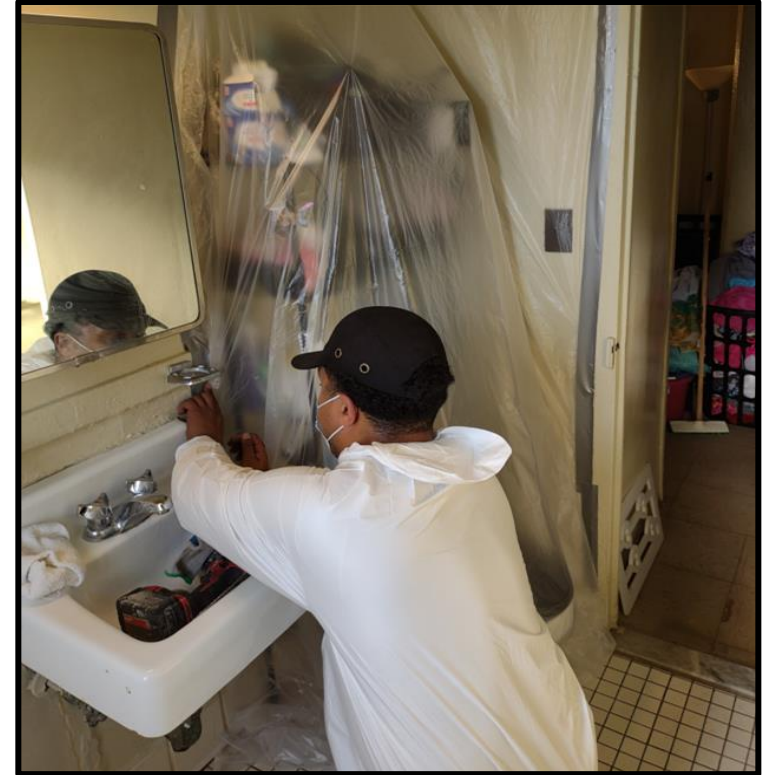
- Must **reduce the generation or migration of airborne dust** and reduce the potential for disturbance of suspected asbestos containing material (ACM).
- **Is recommended** to wear appropriate PPE:
 - Safety glasses
 - Protective clothing
 - N95 respirator



Employees using respirators must follow the requirements in NYCHA Standard Procedure 001:17:2, *Respiratory Protection Safety Program*.

Enlarging Wall Break

1. Instruct the resident **to move any personal property** in the affected area or room before initiating work.
2. Cover all horizontal surfaces in the work area **with poly-sheeting** (e.g., *countertops, cabinets, etc.*), and ensure all drawers are sealed and door(s) are closed.
3. Close and **cover the ventilation system** in the work area (e.g., *bathroom vents*).
4. **Mark the area** of the wall break using a straightedge and marker.



When possible, **avoid** creating wall break directly on areas displaying visible mold.

Enlarging Wall Break

5. **Wet the surfaces** to limit the creation and dispersal of dust:
 - Before applying the water, be sure there are no electrical circuits inside the wall!
 - If electrical circuits are inside the wall, they must be turned off or disconnected.
6. **Make a wall break operating a HEPA-vacuum** with one hand at the point of dust generation and periodically rewet the area.



Use extreme caution when enlarging a wall break to avoid cutting gas risers and electrical wiring concealed behind the walls.

Enlarging Wall Break

7(A). Plaster Constructions:

- **Use a sharp-edged scraper and hammer** to make a cut.
- **Remove plaster** from underlying mesh using a scraper.
- **Use snips** to open underlying mesh to avoid contact with any suspected ACM pipe insulation.
- **Bend inward remaining metal mesh** around the wall break using caution.

7(B). Sheetrock Constructions:

- Use sheetrock saw or alternative to **make a cut**.
- Inspect the **backside of the sheetrock** for mold growth.



Enlarging Wall Break

8. Continue to **operate the HEPA vacuum for 5-10 minutes** to purge remaining particles from the air with the room door closed.
9. Use **a damp cloth or wet wipes** to clean surfaces upon completion of HEPA-vacuuming of dust debris.
10. If **suspected ACM is observed** on pipe insulation:
 - **Immediately stop** the work if suspected ACM could be disturbed during wall break, or
 - Proceed with caution if the suspected ACM **won't be disturbed during the wall break** and **create asbestos testing or abatement** work order depending on further repairs.

Enlarging Wall Break

11. Once the root cause(s) is found/ temp repair is made:

- **Cover the wall break** with a NYCHA approved pest-proof material (e.g., *Masonite* or *Plas-tec Polywall*).
- **Remove poly sheeting.**
- Thoroughly **HEPA-vacuum** the area.

*(!) If Masonite or equivalent cannot be used, temporarily cover the wall break with **rodent exclusion mesh** **secured** by foam.*

12. Instruct the resident to not disturb the temporarily closed wall cavity while awaiting repairs.



See NYCHA Standard Procedure 040:49:6, *Pest Prevention and Control In NYCHA Residential Buildings*.

Enlarging Wall Break (Plaster Developments)



Wall Breaks (Plaster Developments)

If a NYCHA employee observes any suspected ACM that might be disturbed during the wall break, the employee must immediately stop all work in accordance with Standard Procedure 050:25:1, *Asbestos Safe Housing Procedure*.

No NYCHA employee or vendor shall disturb any ACM as part of their duties unless they have been directed to and have had the appropriate required training. Failure to test suspected ACM prior to disturbing the material violates NYCHA's policy for the handling of ACM. Failure to follow the established protocol for the assessment and removal of asbestos can pose a health risk to both NYCHA residents and staff.



Document Wall Break In iWM App

- Document completed wall break in the iWM App:
 - Select a **Repair Code** to document completed wall break (e.g., '**WALLBROKEN**' or '**WALLBREAKCOMPLETED**')
 - Enter notes in the 'Work Log' (e.g. *wall broken*).
 - **Upload photograph** of completed wall break in the iWM App ('*Photos – Post Repair*').

3:26 5Guc 74

← Complete Work Order
WO #132391036

2 Failure Report 3 Related 4 P Ins

TANKREPLACED

□ Tank Replaced
TANKREPLACED

□ Toilet Handle Repaired
TOILETHANDLEREPAIRED

□ Toilet Handle Replaced
TOILETHANDLEREPLACED

□ Toilet Reset
TOILETRESET

□ Tub Surround Removed
TUBSURROUNDREMOVED

□ Tub Surround Repaired
TUBSURROUNDREPAIRED

□ Tub Surround Replaced
TUBSURROUNDREPLACED

☒ Wall Broken
WALLBROKEN

□ Wax Gasket Replaced
WAXGASKETREPLACED

SUBMIT

< PREVIOUS STOP TIME NEXT >

3:27 5Guc 74

← Complete Work Order
WO #132391036

5 Materials Optional 6 Ad hoc Insp 7 Work L

Wall Broken User Work Log

Work Log Type: WORK

Created By: Testing ID0082

Create Date: Jun 10, 2025 3:27 PM

Details:

Wall Broken to fix pipes

Leak Inspection Process User Work Log

Work Log Type: WORK

Created By: Testing ID0082

Create Date: Jun 10, 2025 3:24 PM

Details:

Leak Inspection Process

< PREVIOUS STOP TIME NEXT >

Document Wall Break In iWM App

If a follow up visit is needed in the Root Cause apartment (e.g. *resident need to move personal items*), you can create a child work order for the Root Cause unit to document that wall break needs to be made:

- Failure Class '**WALLS**'
- Problem Code '**WALLBREAK REQUIRED**'

1:19 5G 97

← Complete Work Order WO #131797332

orm ction — 6 Materials Optional — 7 Ad hoc Insp — 8

3B: resident needs to move personal items User Work Log

Work Log Type: WORK

Created By: Testing ID0082

Create Date: Nov 17, 2025 1:18 PM

Details:

3B: resident needs to move personal items
Return tomorrow morning to 3B to make wall break

Unit Accessed 11/17/25 User Work Log

Work Log Type: WORK

Created By: Testing ID0082

Create Date: Nov 17, 2025 12:51 PM

Details:

Unit Accessed 11/17/25
2B bathroom - wet 999
2A bathroom - dry

Need access to 3B and 4B

Failure = PIPES, Problem = TRAP LEAKING, Location = User Work Log

← PREVIOUS STOP TIME NEXT >

1:20 5G 97

← Create Child Work Order DONE

Location
135.01.001.F03.03B.BD02
Bedroom 02

Asset
Please select...

Work Type
CM

Sub Work Type
LEAK
Leak

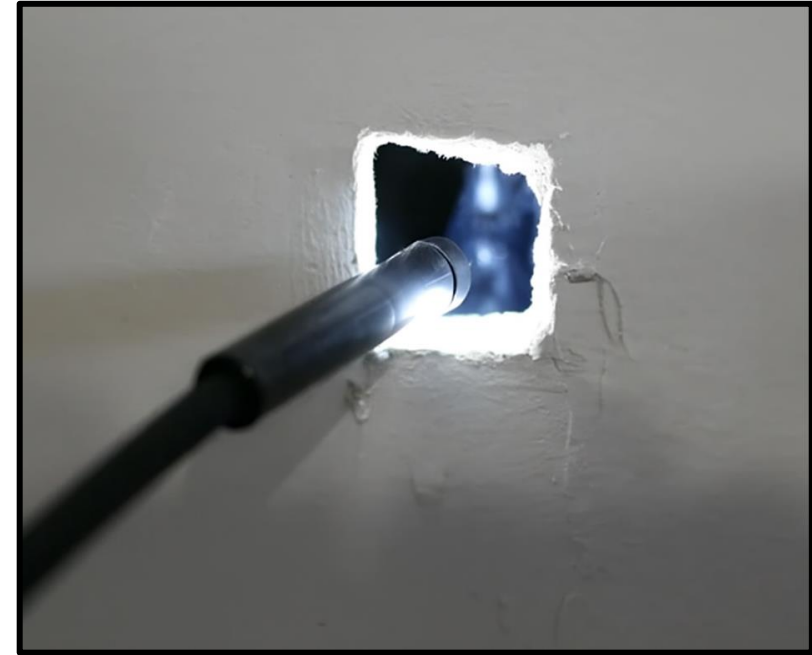
Failure Class
WALLS
Walls

Problem Code
WALLBREAKREQUIRED
WALL BREAK REQUIREMENT

Craft
MAINT
Maintenance

Knowledge Check

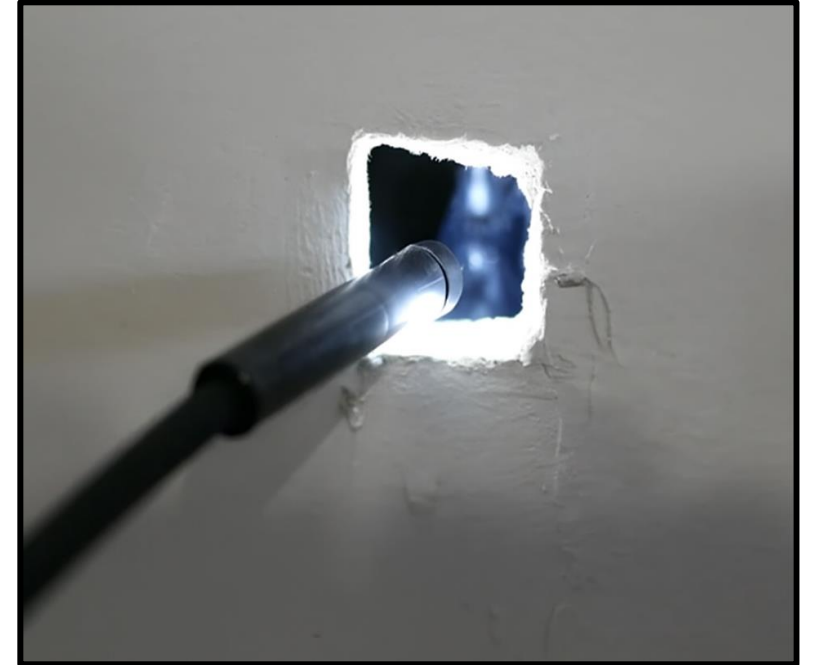
If unable to identify root cause through escutcheon plate or medicine cabinet, how big of an opening do you make on the wall to inspect with a borescope? What tool will you use to determine the location for the wall break?



Knowledge Check

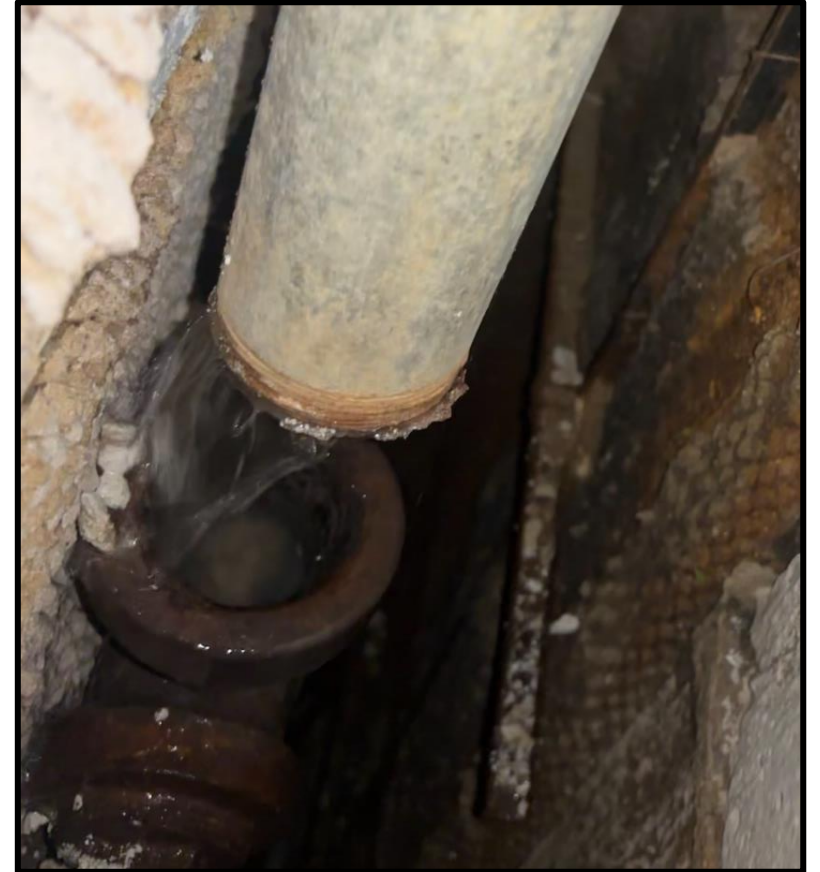
If unable to identify root cause through escutcheon plate or medicine cabinet, how big of an opening do you make on the wall to inspect with a borescope? What tool will you use to determine the location for the wall break?

- Make an initial wall break of approximately **1 square inch** to inspect the conditions in the wall cavity with the help of the borescope.
- Use **the moisture meter** to determine the location for the initial wall break.



Knowledge Check

Once you identify the root cause, how big should the wall be enlarged to provide access to the plumbing pipes?



Knowledge Check

Once you identify the root cause, how big should the wall be enlarged to provide access to the plumbing pipes?

- It must be enlarged to at least **1 square foot** to provide access to the plumbing pipes for repairs.
- In some instances, the wall break might need to be enlarged to at least **2 square feet**, or **larger if needed**.



Knowledge Check

What are some precautions when enlarging a wall break?



Knowledge Check

What are some precautions when enlarging a wall break?

- Beware of cutting gas risers and electrical wiring.
- Beware of metal mesh and other sharp objects inside wall cavity that might present a cut hazard.



Knowledge Check

How can a maintenance worker document in the iWM App that a wall break was made?



Knowledge Check

How can a maintenance worker document in the iWM App that a wall break was made?

- Select repair code “WALLBROKEN” or “WALLCOMPLETED”, or
- Type details in the Work Log (e.g., bathroom wall broken).

3:26 5Guc 74

← Complete Work Order
WO #132391036

2 Failure Report 3 Related 4 P Ins

TANKDOCTORREPLACED

☐ Tank Replaced
TANKREPLACED

☐ Toilet Handle Repaired
TOILETHANDLEREPAIRED

☐ Toilet Handle Replaced
TOILETHANDLEREPLACED

☐ Toilet Reset
TOILETRESET

☐ Tub Surround Removed
TUBSURROUNDREMOVED

☐ Tub Surround Repaired
TUBSURROUNDREPAIRED

☐ Tub Surround Replaced
TUBSURROUNDREPLACED

☒ Wall Broken
WALLBROKEN

☐ Wax Gasket Replaced
WAXGASKETREPLACED

SUBMIT

< PREVIOUS STOP TIME NEXT >

3:27 5Guc 74

← Complete Work Order
WO #132391036

5 Materials Optional 6 Ad hoc Insp 7 Work Log

Wall Broken User Work Log

Work Log Type: WORK

Created By: Testing ID0082

Create Date: Jun 10, 2025 3:27 PM

Details:

Wall Broken to fix pipes

Leak Inspection Process User Work Log

Work Log Type: WORK

Created By: Testing ID0082

Create Date: Jun 10, 2025 3:24 PM

Details:

Leak Inspection Process

PREVIOUS STOP TIME NEXT >

Take a Break!

- We appreciate your participation.
- Our job is to provide training that will give you the capability to conduct leak inspection .
- Please let the instructor or any EEA staff if there's anything we can do to improve your learning experience.



NYCHA LEAK TRAINING

STANDING WATER REMOVAL

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Flooding & Standing Water

Property maintenance or EMSD staff must make best efforts to **abate flooding** or **standing water** during the initial visit.

- If needed, **consider shutting off the supply riser**:
 - Property maintenance must contact APMS or PMS, who request authorization from NA or above title.
 - EMSD maintenance workers are authorized to shut off a supply, when needed.
- **If not able to abate flooding**, create child work order(s) for abatement in the iWM App:
 - **(!) Immediately escalate** to APMS and PMS.



Complete **Step One: Evaluation of Conditions** in the iWM App to document condition or create repairs.

Flooding & Standing Water (PPE)

NYCHA staff must wear appropriate PPE during clean up:

- If **no sewage** in standing water, wear **waterproof boots, gloves and hard hat** (*if overhead debris are present*).
 - If **there is sewage** in standing water, wear **waterproof boots, gloves, safety goggles or face shield, protective clothing (e.g., Tyvek), N95 respirator and hard hat** (*if overhead debris are present*).
 - Wash your hands thoroughly after cleanup.
 - Thoroughly clean PPE or dispose it, if damaged.
- (!)** Immediately **notify APMS or PMS** if standing water contains **sewage**, who can assign removal to vendor or other staff.

Flooding & Standing Water (PPE)

- While **N95 respirators** are not required in all instances, employees **have a right to request it**.
- **Supervisors must ensure that the supplies are available** and could be provided to staff, upon request.
- Employees, who are not required to use a N95, are not enrolled in NYCHA's Respirator Protection Program.
 - Employees electing to use a N95 respirator must complete [NYCHA Form 040.870, OSHA Appendix D, Voluntary Respirator Use Form](#).
 - Use [SafeNYCHA](#) webpage to access the form.

NEW YORK CITY HOUSING AUTHORITY
Respiratory Protection Safety Program
OSHA APPENDIX D
Voluntary Respirator Use Form

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to you. Sometimes, employees may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If respirators are provided to you by NYCHA for your voluntary use, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator's limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

Wearing of any tight-fitting respirator requires your participation in the Respiratory Protection Safety Program and must be first approved by the Office of Safety and Security, Safety Unit and meet all of the applicable requirements of the Respiratory Protection Safety Program.

By my signature below, I certify that I have read, understand and agree to the information provided on this form.


Signature

Printed Name

Date

Title

ID Number


NYCHA 040.870 (Rev. 4/6/17) v2

Employees using respirators must follow the requirements in NYCHA Standard Procedure 001:17:2, *Respiratory Protection Safety Program*.

Steps to Remove Standing Water

1. Tell the resident to **move any personal property** from the affected area.
2. Use a **wet vacuum** to remove most of the water.
3. Use a **squeegee** and/or a **dry mop** to remove remaining water.
4. Clean water damaged areas with a **NYCHA approved low-toxicity cleaner/disinfectant** (*i.e. walls, floors, closets, shelves and other hard surfaces*):
 - Foster 40-80
 - Shockwave



*When using any chemicals during clean up, **NYCHA staff** should wear **appropriate PPE** and follow **safety precautions**.*

Steps to Remove Standing Water (cont.)

5. Dry impacted area for at least 48 hours to remove any remaining moisture and prevent mold growth:
- **Use a portable blower** to dry floors, walls, and other hard to reach places.
 - **Use a dehumidifier** to remove moisture from the air to dry indoor spaces and help prevent mold, or
 - **Use a fan, and open windows and doors to dry impacted areas**, when a dehumidifier is not available.



Steps to Remove Standing Water (cont.)

6. Advise residents **to dry within 48 hours** any damp furnishing and other personal property.
7. Advise residents that **if any personal property was damaged by leak**, residents can contact their Property Management Office to make a claim.
 - The resident must submit a written statement addressing the circumstances and proof of damage.
 - The property manager must investigate each claim, and prepare NYCHA Form 040.126, *Personal Property Damage Claim*.



See Standard Procedure 150:61;1,
*Settlement and Disposition of Claims
in Favor of and Against the Authority.*

Steps to Remove Standing Water (cont.)

Property maintenance and EMSD supervisors must ensure **Standing Water Removal WOs are closed in Maximo** once work is completed:

- **Normal Business Hours:** Workers must notify the SOHC once standing water is removed. SOHC must:
 - Verify in person that the work is completed.
 - Close the WO in Maximo (or request PMS or APMS to close).
- **Outside Normal Business Hours:** The EMSD maintenance team closes the work order after removing the standing water and drying the area.

Knowledge Check

How do you dry flood and standing water impacted areas? What tools do you use and for how long do you dry it for?



Knowledge Check

How do you dry flood and standing water impacted areas? What tools do you use and for how long do you dry it for?

- Use a **wet vacuum** to remove most of the water;
- Use a **squeegee and/or dry mop** to remove remaining water;
- Clean water damaged areas with **low-toxicity cleaner/disinfectant** (Foster 40-80 or Shockwave)
- **Dry impacted area** for at least 48 hours to remove remaining moisture and prevent mold growth;
- **Use a fan** and open window when a dehumidifier is not available.



Knowledge Check

What should you tell resident to do with damp furnishings and other personal property, if it was impacted by flood, to remove moisture?



Knowledge Check

What should you tell resident to do with damp furnishings and other personal property, if it was impacted by flood, to remove moisture?

- Advise residents to clean and dry furnishings and other personal property **within 48 hours.**
- Advise residents that they can contact their Property Management Office **to make a claim**, if needed.

NYCHA LEAK TRAINING

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STRUCTURAL INTEGRITY ISSUES



Structural Integrity Issues

If You Observe a Suspected Structural Issue:

- **Ensure Immediate Safety**
 - Stop work if there is an imminent danger (*e.g., sagging ceilings, shifting walls, unusual sounds*).
 - Evacuate the area, if necessary.
 - Alert others nearby to stay clear.
- **Document Your Observations**
 - Take photos or videos of cracks, sagging, rusted beams, or warped floors.
 - Note the exact location and time the issue was observed.
 - Record any odors, noises, or vibrations.

Structural Integrity Issues



What structural integrity issues do you see here?



Photo #2: ??



Photo #3: ??



Photo #1: ??

Photo #4: ??



What structural integrity issues do you see here? **(Solution)**

Photo #2: Sagging Floor



Photo #3: Bulging Wall



Photo #1: Exposed Rebar

Photo #4: Sagging Ceiling



Structural Integrity Issues

Normal Business Hours

If maintenance suspects any **issue(s) with the building's structural integrity due to a flood or leak condition** (e.g., *exposed rebar, bulging wall, sagging floor or ceiling*):

- **Immediately notify PMS or APMS:**
 - PMS/APMS must evaluate the condition,
 - PMS/APMS must escalate request to skilled trade supervisor(s), skilled trade deputy director or administrator for further evaluation.



See *Standard Procedure 001:15:3, Make it Safe*, which establishes the process to resolve tasks stopped due to health and/or safety conditions that put employees at risk.

Structural Integrity Issues (cont.)

- If Supervisor **confirms structural integrity risks**, they must determine steps to complete immediate stabilization:
 - Complete stabilization by **NYCHA skilled trades staff** or **vendor** (*e.g., existing contract or new procurement*), or
 - Do an **independent assessment by a licensed architect** when stabilization cannot be completed or procured by Operations.
- If licensed architect is needed, escalate the request to NYCHA's Asset & Capital Management (A&CM).



See Standard Procedure 060:88:2,
*Emergency Repair and Procurement
Process for Operations* for reference.

Structural Integrity Issues

Outside Normal Business Hours (EMSD)

- If emergency stabilization is required outside normal business hours, EMSD follows the process in Standard Procedure 060:88:2, *Emergency Repair and Procurement Process for Operations*.
- If the structural integrity issue is not an emergency, the EMSD supervisor emails the PMS or APMS for follow up during normal business hours.



Structural Integrity Issues

- If **emergency relocation** is needed due to floods, ceiling collapse, water or steam pipe bursts:
 - Property management or EMSD outside normal business hours must ensure that the **tenant(s) is in the safe location** (*e.g., community center or property management office*).
 - Property management or EMSD must **notify Resident Relocation Services Department (RRSD)**, following *NYCHA Standard Procedure 040:24:1. Resident Relocation*.
 - Tenants will be placed in hotel or hospitality unit.

Knowledge Check

What is a structural integrity issue?



Knowledge Check

What is a structural integrity issue?

An issue that occurs when a structure is unable to withstand loads and maintain its ability to perform its intended function.

Knowledge Check

Name some examples of structural integrity issues at NYCHA.



Knowledge Check

Name some examples of structural integrity issues at NYCHA.

Issues pertaining to roof, wall and floor (e.g., exposed rebar, sagging floors or ceilings, budging walls)

Knowledge Check

What can you do to help prevent deterioration and extend the life of NYCHA buildings?

a. With regards to leak visual inspections:



a. Prompt leak and water accumulation repairs:

a. Proactive maintenance:



Knowledge Check

What can you do to help prevent deterioration and extend the life of NYCHA buildings?

a. With regards to leak visual inspections:

- Focus on early detection and prompt repairs
- Maintain partnership with residents and encourage them to report the conditions.



Knowledge Check

What can you do to help prevent deterioration and extend the life of NYCHA buildings?

b. Prompt leak and water accumulation repairs:

- Report severe conditions as soon as they are observed.
- Prioritize severe conditions.
- Improve quality of leak detection and repairs.



Knowledge Check

What can you do to help prevent deterioration and extend the life of NYCHA buildings?

c. Proactive maintenance:

Regularly inspect and repair components before they fail.



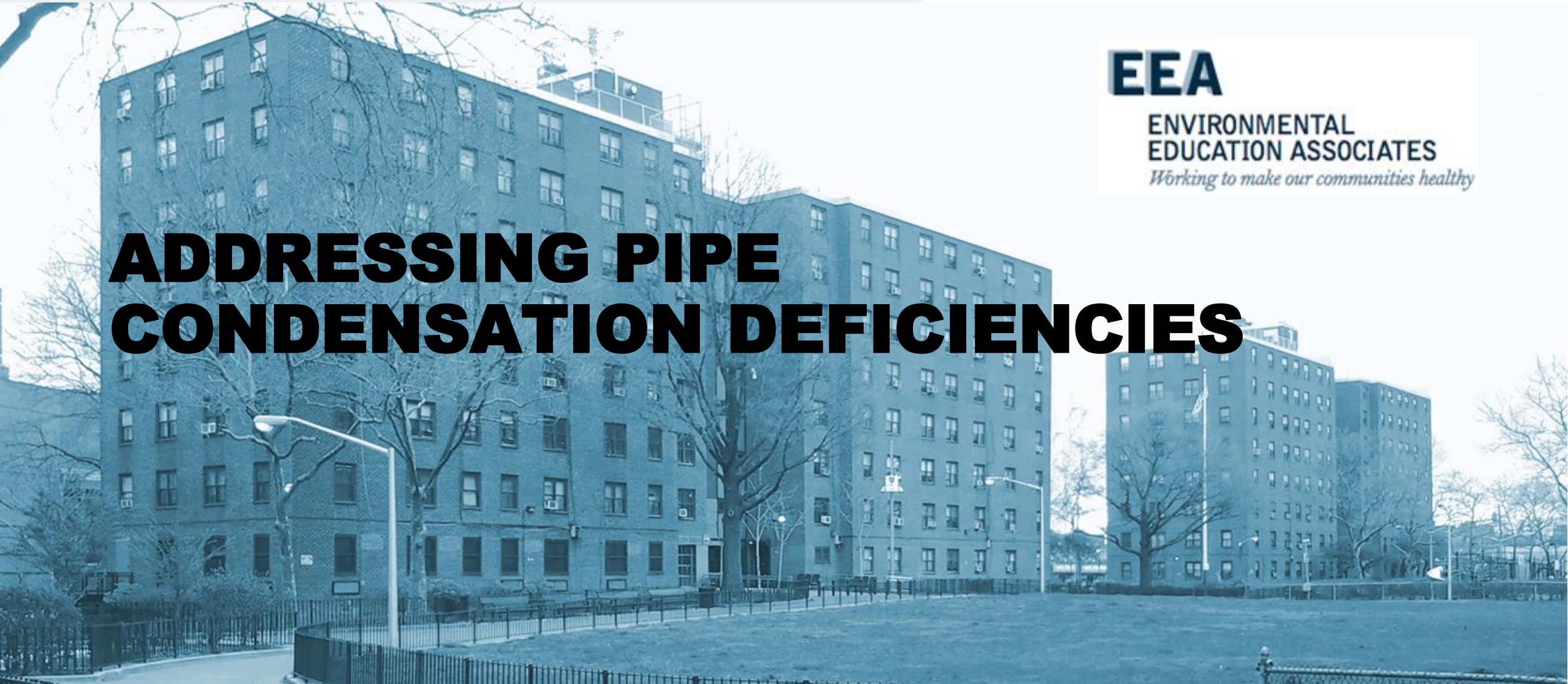
NYCHA LEAK TRAINING

EEA

ENVIRONMENTAL
EDUCATION ASSOCIATES

Working to make our communities healthy

ADDRESSING PIPE CONDENSATION DEFICIENCIES



Pipe Condensation & Insulation

If there is **water damage** or **wet reading** on the lower three feet of the chase wall:

- Make an initial wall break.
- Inspect the wall cavity for an active leak.
 - **If there is an active leak**, address the leak and/or create a follow up repair.
 - **If there is no active leak**, inspect the domestic water supply pipes (cold and hot) **for condensation**.



Pipe Condensation & Insulation (cont.)

- Take steps to identify the root cause of condensation:
 - Inspect the **tank room** or **boiler room** (if directly under the line) for condensation from steam leaks.
 - Inspect apartments up the line for **continuously running shower body valves, toilets, bathroom faucets, and kitchen faucets.**
- Make repairs to **address condensation** or **create follow up work order(s).**



Example: condensation on the cold-water riser.

Pipe Condensation & Insulation (cont.)

- Evaluate the domestic hot and cold-water supply pipes for missing or damaged insulation.
 - Pipe insulation deficiencies can result in **condensation formation (sweating) on cold water plumbing pipes** during the summer months that manifest on the **lower section of chase walls**.
 - Condensation on uninsulated or not properly insulated domestic cold water supply pipes **can lead to mold growth or visible water damage**, if not addressed.



Example: torn pipe insulation.

Pipe Condensation & Insulation (cont.)

- If pipe condensation is contributing Root Cause, select **appropriate method** to address deficiencies.

Method #1: Applying “Interim Controls”



or

Method #2: Insulating Domestic Water Pipes



Method #1: “Interim Controls”

- Applying “**Interim Controls**” can substantially **reduce the potential for mold growth** on chase walls even if there are insulation deficiencies and continued condensation.
- Ideally hot and cold-water supply and branch pipes **must be fully insulated**. However:
 - This requires removing substantial portions of the chase wall, and in many cases, could also require asbestos abatement, and even the temporary relocation of residents.
 - Many domestic water branch pipes were not insulated as part of the original design in many NYCHA buildings and cannot be fully insulated due to obstructions (*e.g., framing, wall surfaces, and other pipes*).
- **When insulating domestic water pipes is not feasible, NYCHA developed the “Interim Controls” procedure by applying NYCHA-approved mold-resistant materials (*e.g., mold-resistant sheetrock and mold-resistant paint*).**

Method#1: “Interim Controls”

- NYCHA staff is recommended to apply “Interim Controls” method when:
 - **Condensation** on cold and/or hot water supply pipes is **the only root cause** of the water damage or wet condition, or
 - Condensation is contributing to the issue along with another root cause (*e.g., plumbing leak*), but the required **wall break won’t provide enough access to insulate the pipes.**
- (!) You must make an **initial wall break** to inspect the wall cavity before confirming this.



Example: Condensation on the cold-water supply pipes.

Method#1: “Interim Controls”

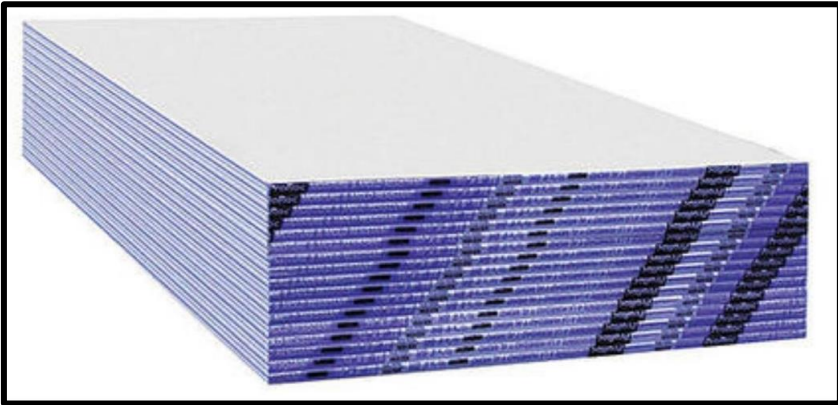
- Document the root cause and create repairs in the iWM App.
 - Select root case ‘Pipe Condensation’.
 - Create child WO(s) to address the deficiencies.

Plaster Constructions	Sheetrock Constructions
<input type="checkbox"/> Create a child WO to replaster the surface, as needed. (e.g., WALLS/NEEDSPLASTERING)	<input type="checkbox"/> Create a child WO to replace water-damaged sheetrock*. (e.g., WALLS/ SHEETROCKDML)
<input type="checkbox"/> Create a child WO to apply mold-resistant paint*. (e.g., WALLS/ MRPAINT)	<input type="checkbox"/> Create a child WO to apply mold-resistant paint*. (e.g., WALLS/ MRPAINT)

Asterisk (*) indicates mandatory step;
‘MRPaint’ is an abbreviation for the ‘Mold-Resistant Paint’

Method#1: “Interim Controls”

- When performing repairs to address condensation, NYCHA skilled trade staff or vendor **must use NYCHA-approved mold resistant materials to prevent any future mold growth.**



Mold Resistant Sheetrock is paperless sheetrock with a fiberglass face that is designed to discourage the growth of mold.



Mold Resistant Paint is paint that contains a chemical fungicide that discourages the growth of mold on surfaces.



Method#1: “Interim Controls” (iWM App)

1

Select root cause ‘**Pipe Condensation**’ in the iWM App.

2

In Plaster Constructions:

- Create a child Mold-Resistant Paint WO by selecting FC/PC ‘**WALLS/MRPAINT**’.

In Sheetrock Constructions:

- Create a child WO to replace sheetrock with fiberglass-faced gypsum board by selecting FC/PC ‘**WALLS/SHEETROCKDML**’.
- Create a child Mold-Resistant Paint WO by selecting FC/PC ‘**WALLS/MRPAINT**’.

1

2:27 5Guc 75

← Probable Cause Living Room 01 DONE

Leak From Above/ Adjacent - Investigate	(None)
Leak From Above - Previously Identified	(None)
Leak Through Facade	(None)
Other	(None)
Pipe Condensation	Yes View Details >
Pipe Condensation - Previously Addressed	(None)
Plumbing Leak - In Unit	(None)
Radiator Unit Leak	(None)
Resident - Caused	(None)
Roof Leak	(None)
Sink Issues - In Unit	(None)
Toilet Issues - In Unit	(None)

2

2:46 5Guc 74

← Create Child Work Order DONE

Condensation on pipes - replace sheetrock with MR

Location 171.01.001.F04.04F.LIV01

Asset Please select...

Work Type CM

Sub Work Type LEAK Leak

Failure Class WALLS Walls

Problem Code SHEETROCKDML Sheetrock DML

Craft CARPENTR

2:44 5Guc 74

← Create Child Work Order DONE

Condensation on pipes behind Wall ?

Location 171.01.001.F04.04F.LIV01

Asset Please select...

Work Type CM

Sub Work Type LEAK Leak

Failure Class WALLS Walls

Problem Code MRPAINT MR Paint

Craft PAINTER

Method#1: “Interim Controls”

If “Interim Controls” were already applied but there are **still wet readings** or **water damage** on the lower portions of the chase wall?

- Select **root case** ‘**Pipe Condensation - Previously Addressed**’.
- Create **child WO(s)** to address the deficiencies, **if needed**.
 - If there is **visible water damage**, create child work order(s) to **reapply mold-resistant materials**, as needed.
 - If there is a **wet reading** (no water damage), **nothing** further is needed.

(!) If the ‘Interim Controls’ were applied there should be no visible mold!

Method#1: “Interim Controls” (iWM App)

1 If **wet reading** is attributed to the pipe condensation that was previously addressed (*e.g., pipes were insulated and/or mold-resistant paint applied*), select **‘Pipe Condensation – Previously Addressed’**.

2 Add **‘Notes’** as needed.

2:27 5Guc 75

← Probable Cause Living Room 01 DONE

Leak From Above/ Adjacent - Investigate	(None)
Leak From Above - Previously Identified	(None)
Leak Through Facade	(None)
Other	(None)
Pipe Condensation	Yes
Pipe Condensation - Previously Addressed	(None)
Plumbing Leak - In Unit	(None)
Radiator Unit Leak	(None)
Resident - Caused	(None)
Roof Leak	(None)
Sink Issues - In Unit	(None)
Toilet Issues - In Unit	(None)

View Details >

2

3:34 5Guc 70

← Probable Cause Living Room 01 DONE

Bathtub Shower Issues	(None)
Caulking DML	(None)
Grouting DML	(None)
Leak Around Window	(None)
Pipe Condensation	(None)
Pipe Condensation - Previously Addressed	Yes
Plumbing Leak - In Unit	(None)
Radiator Unit Leak	(None)

View Details >

Select Response:

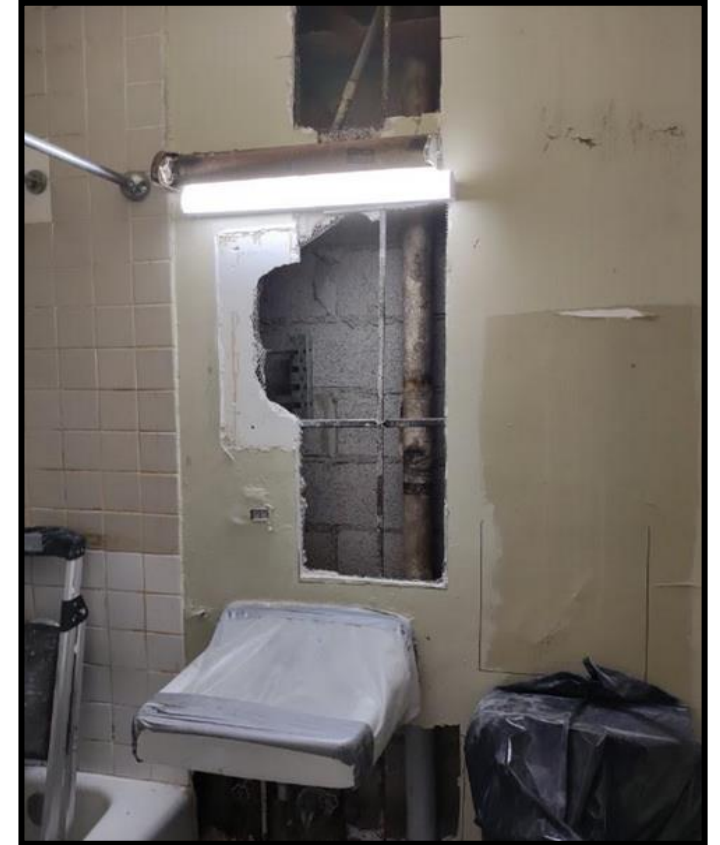
No water damage, no visible mold.
Previously painted with MR paint.

No

Yes

Method #2: Pipe Insulation

- NYCHA staff is recommended to insulate domestic water pipes when:
 - **Condensation** is severe (*e.g., due to a steam leak*).
 - There is **significant mold growth on existing insulation** that requires removal and replacement (*e.g., 1 sq.ft. or more*)
 - Condensation is contributing to the issue along with another root cause and the required **wall break will provide enough access** to insulate pipes (*e.g., plumbing leak*).



Method #2: Pipe Insulation (cont.)

- NYCHA staff is recommended to insulate domestic water pipes when:
 - Performing **large scale** plumbing repairs (*e.g., cold-water riser replacement*).
 - Performing complex **plumbing renovation projects** (*e.g., Building Line Initiative*).
 - Access to plumbing pipes is provided **following completion of asbestos abatement**.



Method #2: Pipe Insulation

The following crafts must **check exposed pipes, valves, and fittings for insulation** and **install new insulation when there is enough access**, before the wall is permanently closed, whenever possible:

- Maintenance Workers
- Heating Plant Technicians
- Plumbers
- Plasterers
- Roofers



How to Apply Insulation

1. Insulate the straight pipe(s) above and below the T-fitting.

- **Install fiberglass insulation**, remove the self-sealing strip and secure adhesive onto the other side of the insulation.
- **Slide the insulation to the top or bottom of the pipe** and install additional pieces of insulation until the pipe is completely covered.
- **Use a staple gun** to reinforce the insulation seam.

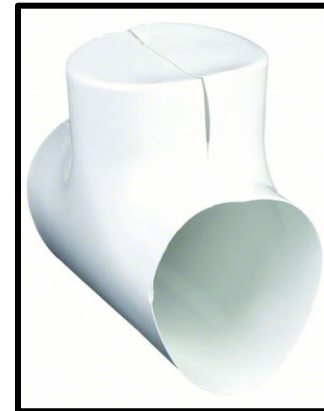
(!) When needed, **thin out sections of the fiberglass to fit into tight spaces** and contour the ends of the insulation to fit flush with uneven sections of the concrete slab.



Use Owens Corning ASJ Max Fiberglass Insulation.

How to Apply Insulation (cont.)

2. Insulate a **small section of the adjacent branch line** *(at least 4-6 inches, or to the next elbow or T-fitting)*.
3. Install **fiberglass pillows over T's & Elbows**, cover with **PVC jackets** and secure using **King Tacks**.
 - PVC cover fits over the fiberglass pillow and the insulation above, below, adjacent to the T-fitting.
 - For T's, the perpendicular end of the PVC jacket will need to be cut to match the size of the pipe.
 - T's can also be insulated with the fiberglass insulation by cutting a hole through the ASJ jacket along the seam of the insulation.



How to Apply Insulation (cont.)

4. Use waterproofing mastic material (e.g., Childers CP-11) to coat the top edge of the domestic supply pipe insulation and exposed edge of the branch line pipe insulation, as well as all joints and seams.

(!) Waterproof mastic material **protects** newly installed insulation from the damage caused by future moisture (e.g., leaks from above or condensation on the adjacent sections of cold-water supply branch pipes).



How to Apply Insulation (cont.)

5. Install aluminum banding:

- Aluminum banding is installed on the straight runs of insulation at approximately 2-foot intervals **as an additional layer of protection**.
- The banding **is cut to size** from a 200-foot roll and secured around the insulation by crimping a wing seal onto one end, threading the other end through the wing seal, and then bending the banding back on itself.



Method #2: Pipe Insulation

- Document the root cause in the iWM App
 - Select root case 'Pipe Condensation'
 - Document the repairs:
 - If you were able to insulate (or repair insulation) during the visit, enter a **Repair Code 'PIPES INSULATED'**.
 - If you were not able to insulate (or repair insulation), **create a child WO** for a follow up response with failure class 'PIPE INSULATION' and the problem code 'INSULATIONDML'.

9:55 5Guc 83

← Complete Work Order WO #127951928

2 Failure Report 3 Related 4 P Ins

Leak Tracing LEAKTRACING

Pipes Asbestos Tested PIPESASBESTOSTESTED

Pipes Clamped PIPESCLAMPED

Pipes Installed PIPESINSTALLED

☒ Pipes Insulated PIPESINSULATED

Pipes Lead Tested PIPESLEADTESTED

Pipes Painted PIPESPAINTEED

Wire Mesh On Vent Installed WIREMESHVENTINSTALLED

Wire Mesh On Window Well Installed WIREMESHWINWELLINSTALLED

SUBMIT

< PREVIOUS START TIME NEXT >

9:58 5Guc 82

← Create Child Work Order DONE

Description Pipes need insulation

Location 169.01.021.F08.08F.KIT01

Asset Please select...

Work Type CM

Sub Work Type LEAK Leak

Failure Class PIPEINSULATION Pipe Insulation

Problem Code INSULATIONDML Insulation DML

How to Apply Insulation (cont.)

See '[Appendix A - HA Numbers for Leak Tools & Supplies](#)' for full list of HA#.



Fiberglass Pillow



King Tacks



Childers CP-11

How to Apply Insulation (cont.)

See ‘*Appendix F – Guidance on Measuring Pipes & Selecting Properly Sized Insulation*’ for detailed instructions.

Staff Guide: How to Select Properly Sized Pipe Insulation?

Type of the Pipe: Iron, Brass and PVC

Iron, Brass and PVC Pipe Size (IPS)	Pipe Insulation Diameter (Size)	PVC Covers Size for Elbow & T's
1/2"	1/2	Size 7
3/4"	3/4	Size 7
1"	1	Size 9
1-1/4"	1-1/4	Size 9
1-1/2"	1-1/2	Size 10
2"	2	Size 11
2-1/2"	2-1/2	Size 12
3"	3	Size 13

Knowledge Check

What is known as “Interim Controls”?



Knowledge Check

What is known as “Interim Controls”?

“Interim Controls” is practical and less invasive approach to addressing deficiencies on uninsulated cold-water pipes by applying NYCHA-approved mold-resistant materials when insulating domestic water supplies pipes is not practical or feasible (e.g., *mold-resistant sheetrock and mold-resistant paint*).



Knowledge Check

Name some scenarios when “Interim Control” would be recommended approach to address pipe condensation deficiencies?



Knowledge Check

Name some scenarios when “Interim Control” would be recommended approach to address pipe condensation deficiencies?

When insulating domestic water pipes **is not practical or feasible**, e.g:

- When pipe condensation appears **to be the only root cause** of the wet condition or water damage.
- When there are other contributing root causes (*e.g., plumbing leak*) but **wall break** to address it **won't provide enough access to insulate all domestic water pipes.**
- When there are significant obstructions within wall cavity that would prevent insulating all domestic pipes (*e.g., tight plumbing configuration*)

Knowledge Check

If condensation on domestic water pipes is the only root cause of water damage on the bathroom wall in sheetrock development, what work orders will you create to remediate the issue?



Knowledge Check

If condensation on domestic water pipes is the only root cause of water damage on the bathroom wall in sheetrock development, what work orders will you create to remediate the issue?

- Create a child WO to replace water-damaged sheetrock (e.g., **WALLS/SHEETROCKDML**). It is recommended to put in the Work Order Notes that “need mold-resistant sheetrock”.
- Create a child WO to apply mold-resistant paint (e.g., **WALLS/MRPAINT**)

iWM Practice – Scenario #5

Walls - Water Damage

You enter a resident's apartment who is complaining of water stains on their bathroom wall. The resident states that the stain first started appearing about 2 weeks ago, and it has continued to grow. The resident also stated that last year they noticed similar water stains on that area, but it dried out as the weather cooled down and they didn't put a ticket.

Failure Class: WALLS

Problem Code: WATER DAMAGE

Location: BATHROOM



iWM Practice – Scenario #5 (Response)

10:50 5G 25

Complete Work Order
WO #132396758

1 Select Labor Type 2 Failure Report 3 Related

Please select type of labor:

☐ Work Done No Sequence Required (WORK)

☒ Work Done with Sequence (WORKWITHSEQ)

☐ No Work Done with Sequence (NOWORKDNEWITHSEQ)

☐ Resident Not Home (RESNOTHOME)

☐ Condition not Founded (UNFOUNDED)

☐ Previously Corrected (PREV CORRECTED)

☐ No Building Access (NOBLDGACCESS)

☐ Completed on Arrival (COMPLETEONARRIVAL)

☐ No Adult (NOADULT)

☐ Unsafe Condition (UNSAFECOND)

☐ Resident Refused (RESREFUSED)

☐ No Floor Access (NOFLRACCESS)

☐ No Room Access (NORMACCESS)

☐ Waiting for materials (WMATL)

PREVIOUS STOP TIME NEXT

3:05 5G 12

Complete Work Order
WO #132396758

2 Failure Report 3 Related 4

☐ Exposed Rebar Repaired
EXPOSEDREBARREPAIRED

☐ Exposed Rebar Replaced
EXPOSEDREBARREPLACED

☐ Glass Block Replaced
GLASSBLOCKREPLACED

☐ Graffiti Cleaned
GRAFFITICLEANED

☐ Lead Abated
LEADABATED

☐ Lead Tested
LEADTESTED

☒ Leak Tracing
LEAKTRACING

☐ PG Tiles Repaired
PGTILESREPAIRED

☐ PG Tiles Replaced
PGTILESREPLACED

☐ Rebar Repaired

PREVIOUS STOP TIME NEXT

3:14 5G 11

Probable Cause
Bathroom 01

DONE

Is moisture meter equal or higher than 599?

Yes

Is Wall-break required?

Yes

Is there (suspected) asbestos on pipe insulation that will be disturbed?

No

Is there mold on the backside of sheetrock?

No

Appliance Issues

(None)

Bathtub Shower Issues

(None)

Caulking DML

(None)

Grouting DML

(None)

Leak Around Window

(None)

Leak From Above/ Adjacent - Investigate

(None)

Leak From Above - Previously Identified

(None)

PREVIOUS STOP TIME NEXT

3:14 5G 11

Select Areas Affected

DONE

C Ceiling

F Floor

W1 Wall 1 (Near)

W2 Wall 2 (Left)

650 W3 Wall 3 (Far)

W4 Wall 4 (Right)

PREVIOUS STOP TIME NEXT

A
VIRONMENTAL
UCATION ASSOCIATES
Working to make our communities healthy

iWM Practice – Scenario #5 (Response)

3:14 5Guc 11

Probable Cause
Bathroom 01

DONE

Leak From Above/
Adjacent - Investigate

(None)

Leak From Above -
Previously Identified

(None)

Leak Through Facade

(None)

Other

(None)

Pipe Condensation

Yes

View Details >

Pipe Condensation -
Previously Addressed

(None)

Plumbing Leak - In Unit

(None)

Radiator Unit Leak

(None)

Resident - Caused

(None)

Roof Leak

(None)

Sink Issues - In Unit

(None)

Toilet Issues - In Unit

(None)

3:15 5Guc 11

Complete Work Order
WO #132396758

5 Materials Optional 6 Ad hoc Insp 7 Work Log

Wall break completed

User Work Log

Work Log Type: WORK

Created By: Testing ID0082

Create Date: Jun 20, 2025 3:15 PM

Mold resistant sheetrock
needed

User Work Log

Work Log Type: WORK

Created By: Testing ID0082

Create Date: Jun 20, 2025 3:15 PM

Leak Inspection Process

User Work Log

Work Log Type: WORK

Created By: Danan Pooladi

Create Date: Jun 20, 2025 1:43 PM

Details:
Leak Inspection Process

PREVIOUS

STOP TIME

NEXT >

3:18 5Guc 10

Create Child Work Order

DONE

Location

171.01.001.F04.04E.BTH01

Asset

Please select...

Work Type

CM

Sub Work Type

LEAK

Leak

Failure Class

WALLS

Walls

Problem Code

SHEETROCKDML

Sheetrock DML

Craft

CARPENTR

Carpenter

3:18 5Guc 10

Create Child Work Order

DONE

Location

171.01.001.F04.04E.BTH01

Asset

Please select...

Work Type

CM

Sub Work Type

LEAK

Leak

Failure Class

WALLS

Walls

Problem Code

MRPAINT

MR Paint

Craft

PAINTER

Painter

Breaktime!

- We appreciate your participation!
- Our job is to provide training that will give you the capability to conduct leak inspection.
- Please let the instructor or any EEA staff if there's anything we can do to improve your learning experience.
- **Stretch!**



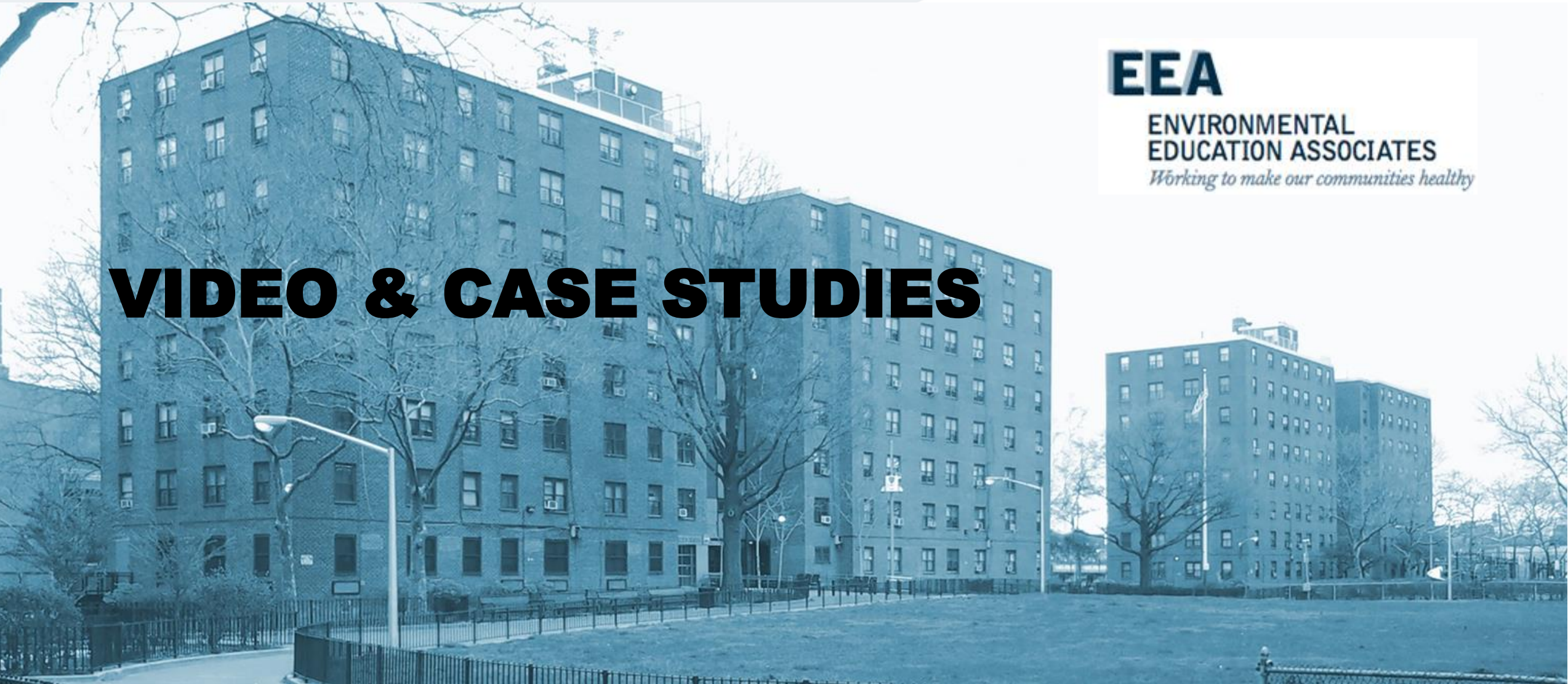
NYCHA LEAK TRAINING

EEA

ENVIRONMENTAL
EDUCATION ASSOCIATES

Working to make our communities healthy

VIDEO & CASE STUDIES



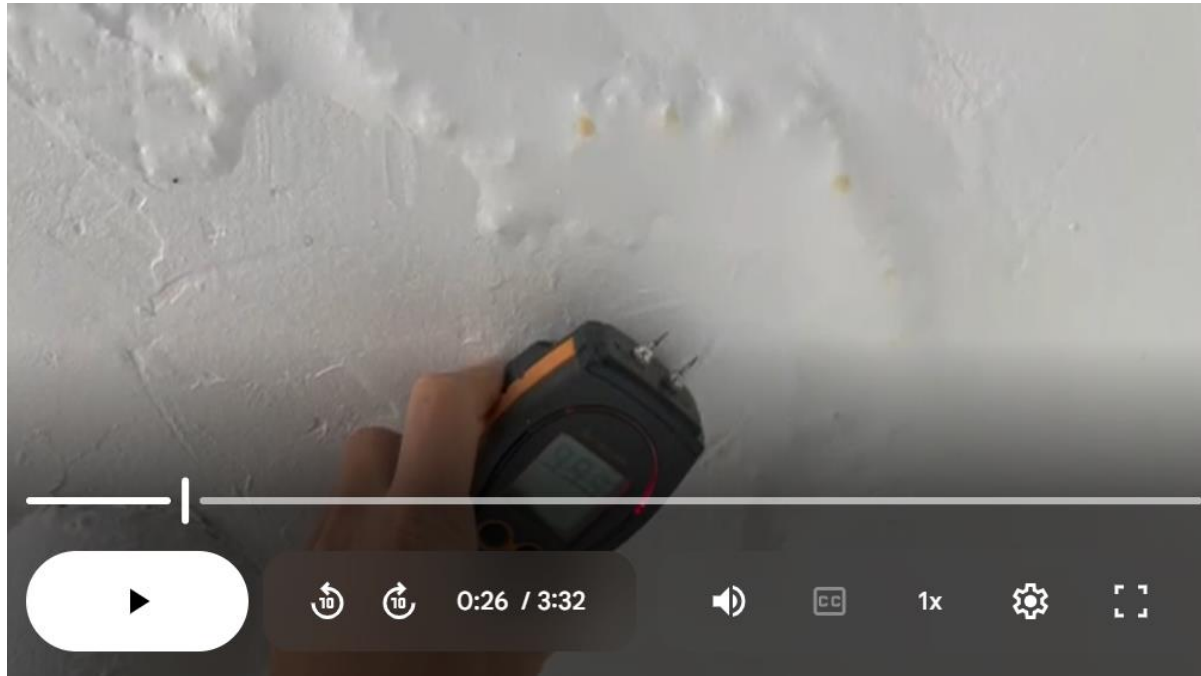
Video #1: Simple LFA

- **Question:** What work orders need to be created for impacted apartments in this scenario?

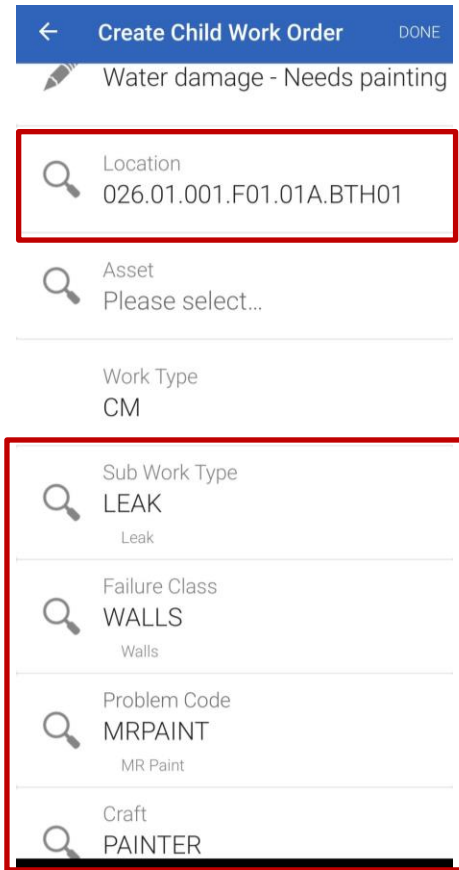


Video #1: Simple LFA

“Tracing Simple Leaks From Above”



Video #1: Simple LFA (Response)

Impacted Unit (e.g., 1A)	Root Cause Unit (e.g., 2A).
 <p>Create Child Work Order DONE</p> <p> Water damage - Needs painting</p> <p> Location 026.01.001.F01.01A.BTH01</p> <p> Asset Please select...</p> <p>Work Type CM</p> <p> Sub Work Type LEAK Leak</p> <p> Failure Class WALLS Walls</p> <p> Problem Code MRPAINT MR Paint</p> <p> Craft PAINTER</p>	<p>N/A</p>

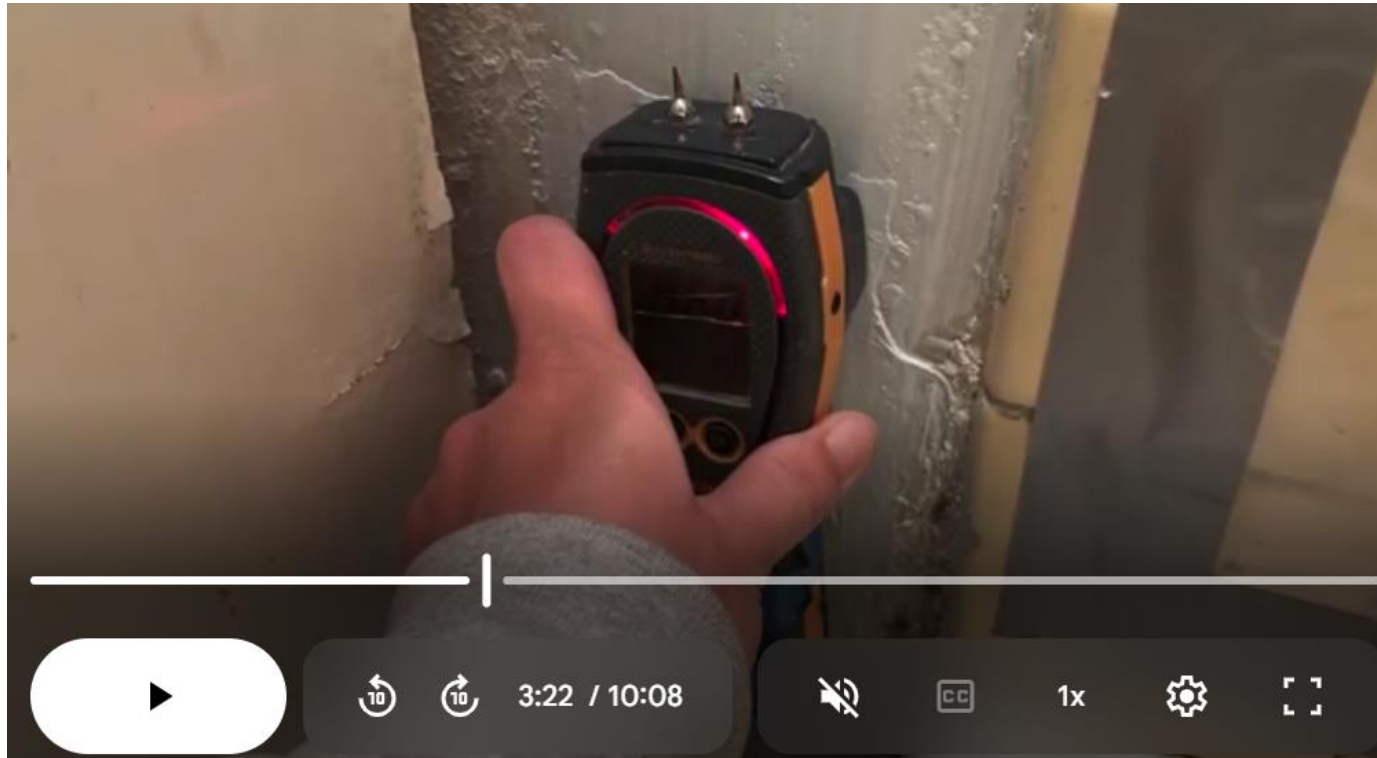
Video #2: Complex LFA

- **Question 1:** How many separate leak issues do you see in this scenario?
- **Question 2:** What work orders need to be created for impacted apartments in each scenario?



Video #2: Complex LFA

“Tracing Complex Leaks From Above”



Video #2: Complex LFA

(Solution)

- **Question 1:** How many separate leak issues do you see in this scenario? **Five (5)**
 - **Issue 1:** Plumbing leak in apartment #3B impacting #1B and #2B.
 - **Issue 2:** Wet reading on the ceiling in #2B attributed to toilet issues in #3B (e.g., *gasket or flange*).
 - **Issue 3:** Wet reading on the ceiling above the toilet and shower in #3B attributed to the toilet issues and plumbing leak in #4B.
 - **Issue 4:** Mold growth on multiple surfaces in #4B.
 - **Issue 5:** Wet reading around the toilet in apartment #6B.
- **Question 2:** What work orders need to be created for impacted apartments in each scenario? **See next slides.**

Video #2: Complex LFA

(Solution – Issue 1)

Impacted Unit (#1B)	Additional Impacted Unit (#2B)			Root Cause Unit (#3B)		
<div><div>← Followup Info DONE</div><div><div>Failure Class</div>MILDEWCONDITION</div><div><div>Problem Code</div>MILDEW</div><div><div>Location</div>026.01.001.F01.01B.BTH01</div><div><div>Craft</div>SUPT</div></div>	<div><div>← Create Child Work Order DONE</div><div>Missing Tiles Tub enclosure</div></div> <div><div>← Create Child Work Order DONE</div><div>Wall break was done</div></div> <div><div>← Create Child Work Order DONE</div><div>Water damage - Needs painting</div></div> <div><div>Location</div>026.01.001.F02.02B.BTH01</div> <div><div>Asset</div>Please select...</div> <div><div>Work Type</div>CM</div> <div><div>Sub Work Type</div>LEAK Leak</div> <div><div>Failure Class</div>WALLS Walls</div> <div><div>Problem Code</div>TILESDDL Tiles DML</div> <div><div>Craft</div>BRKLYER</div>	<div><div>← Create Child Work Order DONE</div><div>Wall break was done</div></div> <div><div>← Create Child Work Order DONE</div><div>Water damage - Needs painting</div></div> <div><div>Location</div>026.01.001.F02.02B.BTH01</div> <div><div>Asset</div>Please select...</div> <div><div>Work Type</div>CM</div> <div><div>Sub Work Type</div>LEAK Leak</div> <div><div>Failure Class</div>WALLS Walls</div> <div><div>Problem Code</div>NEEDSPLASTERING Needs Plastering</div> <div><div>Craft</div>PLASTER</div>	<div><div>← Create Child Work Order DONE</div><div>Water damage - Needs painting</div></div> <div><div>Location</div>026.01.001.F02.02B.BTH01</div> <div><div>Asset</div>Please select...</div> <div><div>Work Type</div>CM</div> <div><div>Sub Work Type</div>LEAK Leak</div> <div><div>Failure Class</div>WALLS Walls</div> <div><div>Problem Code</div>MRPAINT MR Paint</div> <div><div>Craft</div>PAINTER</div>	<div><div>← Create Child Work Order DONE</div><div>Pipe is leaking</div></div> <div><div>← Create Child Work Order DONE</div><div>Wall break was done</div></div> <div><div>← Create Child Work Order DONE</div><div>Water damage - Needs painting</div></div> <div><div>Location</div>026.01.001.F03.03B.BTH01</div> <div><div>Asset</div>Please select...</div> <div><div>Work Type</div>CM</div> <div><div>Sub Work Type</div>LEAK Leak</div> <div><div>Failure Class</div>PIPES Pipes</div> <div><div>Problem Code</div>PIPEREPAIR Pipe Needs Repair</div> <div><div>Craft</div>PLUMBER</div>	<div><div>← Create Child Work Order DONE</div><div>Wall break was done</div></div> <div><div>← Create Child Work Order DONE</div><div>Water damage - Needs painting</div></div> <div><div>Location</div>026.01.001.F03.03B.BTH01</div> <div><div>Asset</div>Please select...</div> <div><div>Work Type</div>CM</div> <div><div>Sub Work Type</div>LEAK Leak</div> <div><div>Failure Class</div>WALLS Walls</div> <div><div>Problem Code</div>NEEDSPLASTERING Needs Plastering</div> <div><div>Craft</div>PLASTER</div>	<div><div>← Create Child Work Order DONE</div><div>Water damage - Needs painting</div></div> <div><div>Location</div>026.01.001.F03.03B.BTH01</div> <div><div>Asset</div>Please select...</div> <div><div>Work Type</div>CM</div> <div><div>Sub Work Type</div>LEAK Leak</div> <div><div>Failure Class</div>WALLS Walls</div> <div><div>Problem Code</div>MRPAINT MR Paint</div> <div><div>Craft</div>PAINTER</div>

Video #2: Complex LFA

(Solution – Issue 2)

Impacted Unit (#2B)	Root Cause Unit (#3B)
<p>Observation: Wet reading on the ceiling above the toilet</p>	<p>Next Step: create new <u>parent</u> Leak work order (bowl lift).</p> <div><div>Create Parent Work Order</div><div>Toilet leak - bowl lift</div><div><div>Location</div><div>026.01.001.F03.03B.BTH01</div><div>Bathroom 01</div></div><div><div>Asset</div><div>Please select...</div></div><div>Work Type</div><div>CM</div><div><div>Sub Work Type</div><div>LEAK</div><div>Leak</div><div><div>Failure Class</div><div>TOILET</div><div>Toilet</div><div><div>Problem Code</div><div>BOWLLEAKING</div><div>Bowl Leaking</div><div><div>Craft</div><div>MAINT</div></div></div></div></div></div>

Video #2: Complex LFA

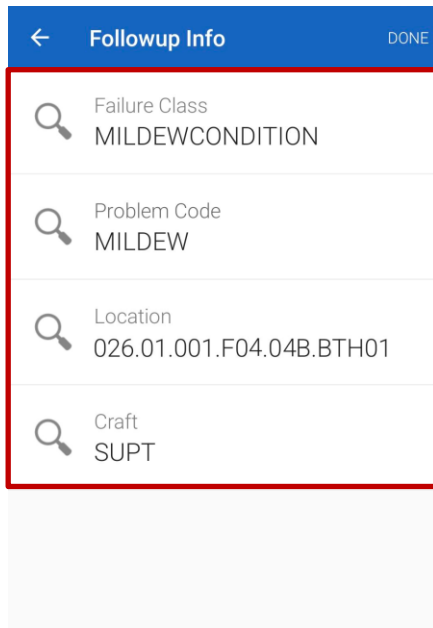
(Solution – Issue 3)

Impacted Unit (#3B)	Root Cause Unit (#4B)
<p>Observation: Wet reading on the ceiling above the toilet & shower. Create a new <u>parent</u> Leak work order.</p> <div><div>Create Parent Work Order</div><div>Water penetration from above</div><div><div>Location</div><div>026.01.001.F03.03B.BTH01</div><div>Bathroom 01</div></div><div><div>Asset</div><div>Please select...</div></div><div><div>Work Type</div><div>CM</div></div><div><div><div>Sub Work Type</div><div>LEAK</div><div>Leak</div></div><div><div>Failure Class</div><div>LEAKFROMABOVE</div><div>Leak From Above</div></div><div><div>Problem Code</div><div>WATERPENETRATION</div><div>Water Penetration</div></div><div><div>Craft</div><div>MAINT</div></div></div></div>	<p>Next Step: address leak from above ticket for apartment 3B and create follow up repairs.</p> <div><div>Create Child Work Order</div><div>Pipe is leaking</div><div><div>Location</div><div>026.01.001.F04.04B.BTH01</div></div><div><div>Asset</div><div>Please select...</div></div><div><div>Work Type</div><div>CM</div></div><div><div><div>Sub Work Type</div><div>LEAK</div><div>Leak</div></div><div><div>Failure Class</div><div>PIPES</div><div>Pipes</div></div><div><div>Problem Code</div><div>PIPENEEDSREPAIR</div><div>Pipe Needs Repair</div></div><div><div>Craft</div><div>PLUMBER</div></div></div><div><div>Create Child Work Order</div><div>Wall break is required</div><div><div>Location</div><div>026.01.001.F04.04B.BTH01</div></div><div><div>Asset</div><div>Please select...</div></div><div><div>Work Type</div><div>CM</div></div><div><div><div>Sub Work Type</div><div>LEAK</div><div>Leak</div></div><div><div>Failure Class</div><div>WALLS</div><div>Walls</div></div><div><div>Problem Code</div><div>NEEDSPLASTERING</div><div>Needs Plastering</div></div><div><div>Craft</div><div>PLASTER</div></div></div><div><div>Create Child Work Order</div><div>Water damage - Needs painting</div><div><div>Location</div><div>026.01.001.F04.04B.BTH01</div></div><div><div>Asset</div><div>Please select...</div></div><div><div>Work Type</div><div>CM</div></div><div><div><div>Sub Work Type</div><div>LEAK</div><div>Leak</div></div><div><div>Failure Class</div><div>WALLS</div><div>Walls</div></div><div><div>Problem Code</div><div>MRPAINT</div><div>MR Paint</div></div><div><div>Craft</div><div>PAINTER</div></div></div></div></div></div>

Video #2: Complex LFA (Solution – Issue 4)

Impacted Unit (#4B)

Observation: Mold growth on multiple surfaces and suspected leak from above. Create a parent mold inspection work order.



The screenshot shows a mobile application interface titled "Followup Info" with a blue header bar containing a back arrow and a "DONE" button. Below the header, there are four input fields, each with a magnifying glass icon on the left. The fields are: "Failure Class" with the text "MILDEWCONDITION", "Problem Code" with the text "MILDEW", "Location" with the text "026.01.001.F04.04B.BTH01", and "Craft" with the text "SUPT". A red rectangular box highlights the entire area containing these four input fields.

Field	Value
Failure Class	MILDEWCONDITION
Problem Code	MILDEW
Location	026.01.001.F04.04B.BTH01
Craft	SUPT

Suspected Root Cause Unit (#5B)


Next step: Gain access to 5B.


Video #2: Complex LFA (Solution – Issue 5)


Impacted Unit (#6B)

Observation: wet reading around the toilet in apartment 6B.


Next steps: create a new parent work order for the bowl lift.

 Create Parent Work Order DONE

 Toilet leak - bowl lift




Location
026.01.001.F06.06B.BTH01
Bathroom 01




Asset
Please select...


Work Type
CM




Sub Work Type
LEAK
Leak



Failure Class
TOILET
Toilet



Problem Code
BOWLLEAKING
Bowl Leaking



Craft
MAINT

NYCHA LEAK TRAINING

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QUALITY ASSURANCE



Quality Assurance for Leaks

- NYCHA's Office of Quality Assurance **conducts random quality assurance (QA) inspections** for closed Leak work orders.
 - **1 development** per week.
 - **Up to 30 closed leak WOs** per development.
- Ensures that **root cause of the leak was addressed**, and all repairs were completed **satisfactory**.
- **(!)** The NYCHA QA Inspector should assess the quality of repairs **related to the initial complaint** (parent WO).



See Standard Procedure 059:17:1,
Public Housing Quality Assurance Program.

Quality Assurance for Leaks

- NYCHA QA Unit creates a **QA inspection in Maximo** prior to the visit (job plan '**INSQA**') related to parent Leak WOs.
 - NYCHA QA Inspector **evaluates quality** of repairs:
 - If repairs were completed '**satisfactory**', Maximo will close INSQA work order.
 - If repairs were completed '**unsatisfactory**', Maximo will close INSQA work order and will create a **new related Leak WO** (maintenance) to address the deficiencies.
- (!) QA Inspector should add details in the Work Log describing deficiencies.



*The QA inspector **takes moisture meter measurements**, as needed, to determine if the root cause(s) of the leak is addressed.*

Quality Assurance for Leaks (Case Study)

- A maintenance worker responded to a leak in **apt. #3F**, traced it to a toilet issue in **apt. #4F**, replaced the gasket, and reset the toilet. A follow-up work order was created to repaint the bathroom in **apt.#3F**.
- Two weeks after completion of all repairs, the QA Inspector inspected **apt. #3F**.
 - The walls and ceiling **measured dry**, and all surfaces appeared **freshly painted**.
 - However, the inspector observed a significant **bathroom stoppage** - the tenant reported the **issue had recurred** despite earlier repairs.
- **Question:** Should QA Inspector **pass** or **fail** this inspection?

Quality Assurance for Leaks (Solution)

- The QA Inspector should 'pass' this inspection because:
 - Dry moisture meter readings on the ceiling and walls confirm there is **no ongoing leak**.
 - The bathroom was **freshly painted** to address any leak from above damage.
 - The **bathroom stoppage**, while recurring, is **unrelated** to the initial leak issue the QA Inspection was created for.
- The QA Inspector should advise the tenant to **submit a new repair request** for the stoppage or **follow up with property management** regarding any existing work order.

Quality Assurance for Leaks (Maximo View)

The QA inspection for leaks is created **as related work order** to the initial leak complaint (job plan 'INSQA').

The screenshot displays the IBM Maximo Work Order Tracking interface. The top navigation bar includes links for Home, Query, Find Work Order, and Select Action. Below this, a series of tabs allows navigation between different views: List, Work Order, Actuals, Log, Specifications, Related Work Orders, Inspection, RRP, Pesticide Details, Mold / Mildew / Excessive Moisture, Plans, Safety Plan, XRF Data, Asbestos, Lead, PM Steps, Paint, and Job View. The main content area shows a list of work orders for a specific job, with columns for Work Order, Parent WO, Description, Location, Craft, Owner Group, Priority, Failure Class, Problem Code, Actual Reported Date, Status, Status Date, Actual Start, Actual Finish, Court Order Mandated Date, Resolution Code, Target Start, Job Age, WO Age, and Days to Cor.

Below the main list, a red box highlights the 'Related WO' section, which shows work orders related to the selected work order (120203053). This section includes a table with the same columns as the main list, showing a single related work order (136657601) for a QA Inspection.

Work Order	Parent WO	Description	Location	Craft	Owner Group	Priority	Failure Class	Problem Code	Actual Reported Date	Status	Status Date	Actual Start	Actual Finish	Court Order Mandated Date	Resolution Code	Target Start	Job Age	WO Age	Days to Cor
120203053		Leak Inspection Process	010.04.008.F04.04F.BTH01	MAINT	DEV010	7	LEAKFROMABOVE CONSTANTLEAKING	2/2/24 10:25 AM	CLOSE	2/4/24 11:57 AM	2/4/24 8:49 AM	2/4/24 11:45 AM				2/2/24 10:37 AM	436	2	
120303195	120203053	cast bend leaks	010.04.008.F04.04F.BTH01	PLUMBER	BKPLUMB	7	LEAKFROMABOVE CONSTANTLEAKING	2/4/24 11:56 AM	CLOSE	4/11/25 12:02 PM	4/11/25 8:23 AM	4/11/25 12:01 PM				4/11/25 8:00 AM	436	431	
136174795	120203053	bricklayer needed to soft patch ceiling	010.04.008.F04.04F.BTH01	BRKLYER	BKMASON	6	BRICKWORK	FOLLOWUP	4/11/25 12:01 PM	CLOSE	4/14/25 3:15 PM	4/14/25 8:54 AM	4/14/25 3:15 PM				436	3	

Work Order	Parent WO	Description	Location	Craft	Owner Group	Priority	Failure Class	Problem Code	Actual Reported Date	Status	Status Date	Actual Start	Actual Finish	Court Order Mandated Date	Resolution Code	Target Start	Job Age	WO Age	Days to Cor
136657601		QA Inspection	010.04.008.F04.04F.BTH01	QA	DEV010	3			5/5/25 12:38 PM	CLOSE	5/9/25 11:36 AM	5/9/25 11:10 AM	5/9/25 11:13 AM				4	4	

Quality Assurance for Leaks (Maximo View)

- If repair was completed **'Satisfactory'**, QA Team will **close the WO** (no action needed).

This screenshot shows the 'Results' tab of a QA inspection. The 'Sequence' is 1, the 'Result' is 'S' (Satisfactory), and the 'Notes' are 'tenant stated no more leaks, need p...'. A red box highlights the 'Results' tab and the 'S' result. A green circle with the number '1' points to the 'Notes' field.

Sequence	Result	WO #	Notes
1	S		tenant stated no more leaks, need p...

- If repair was completed **'Unsatisfactory'**, QA Team will create a **follow up parent Leak WO (MAINT)** to correct the deficiency

This screenshot shows the 'Results' tab of a QA inspection. The 'Sequence' is 1, the 'Result' is 'U' (Unsatisfactory), and the 'Notes' are 'no leak in the kitchen leak in bathroom'. A red box highlights the 'Results' tab and the 'U' result. A green circle with the number '2' points to the 'Notes' field.

Sequence	Result	WO #	Notes
1	U	103890667	no leak in the kitchen leak in bathroom

Below the results, the 'Work Orders for Job' table is visible. A red box highlights the row for the follow-up work order.

Work Order	Parent WO	Description	Location	Craft	Owner Group	Priority	Failure Class	Problem Code	Actual Reported Date	Status	Status Date	Actual Start	Actual Finish	Court Order Mandated Date	Resolution Code	Target Start	Job Age	WO Age	Days to Complete	Labor Na
103890667	103882312	Leak Inspection Process/mw rodrigue	308.02.005.F02.02D.KIT01	MAINT DEV308		3	WALLS	WALLDAMAGED	5/1/23 12:18 PM	CLOSE	5/12/23 2:19 PM	5/12/23 1:17 PM	5/12/23 2:07 PM			5/1/23 1:58 PM	11	11	11	

Knowledge Check

What steps supervisors (PMS or APMS) should take to ensure maintenance repairs were done satisfactory?



Knowledge Check

What steps supervisors (PMS or APMS) should take to ensure maintenance repairs were done satisfactory?

- Conduct **regular quality assurance (QA) inspections** of closed maintenance work orders.
- Randomly select **up to 3 closed WOs** per worker each week for QA inspections.
- Pay close attention **to closed Leak From Above (LFA) WOs** to ensure their root causes are identified and follow up repairs are created.



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**TIMELINES
PERFORMANCE REPORTING &
NON-COMPLIANCE**



Leak Timelines (SLAs)

- Flooding conditions must be **abated within 24 hours** of the initial complaint provided that NYCHA has access to the impacted areas.
- All standing water must be removed, and water-soaked areas, except for residents' personal property, must be dried **within 48 hours**.
- Simple repairs must be completed within **seven calendar days** after the leak is reported.
- Complex repairs must be completed **within 15 calendar days** after the leak is reported.



*If NYCHA is unable to comply with these timeframes, NYCHA uses **best efforts** to prioritize the scheduling and completion of these work orders.*

Performance Reporting

●	Percent of flood and emergency leak conditions abated within 24 hours after the initial leak complaint was reported to NYCHA.
●	Percent of standing water conditions removed within 48 hours after the initial leak complaint was reported to NYCHA.
●	Number of calendar days to complete simple repairs .
●	Number of calendar days to complete complex repair .
●	Percentage of leak recurrence .
●	Percent of passed and failed Leak Work Order QA inspections.
●	Ratio of parent and child work orders closed without any work done and/or without properly sequencing repairs .

Non-Compliance

- NYCHA staff involved with working with leaks complaints (including supervisors) are required to comply with *Leak & Excessive Moisture Control Procedure*.
- NYCHA departments are required **to take corrective actions** to bring NYCHA into compliance.
- Supervisory staff must take the following actions if unsatisfactory work or non-compliance is identified:
 - Identify **areas for follow up training**.
 - **Reinforce with the employee(s)** the job expectations, accountabilities, and the progressive discipline process.



Non-Compliance

- For work performed by vendors, **supervisors must certify the completion of work** performed to industry standards. Copies of all correspondence with the vendor must be filed in the contract folder.
 - If vendor work completed **‘unsatisfactory’**, supervisors must request that the vendor complete the work to NYCHA’s satisfaction by a specified date.
 - If the vendor **has not corrected the work by the specified date**, the supervisor must follow the guidance in the contract.



Knowledge Check

What are the timeframes to complete leak repairs?



Knowledge Check

What are the timeframes to complete leak repairs?

- Flooding is to abated in 24 hours
- Standing is to be removed in 48 hours.
- Simple repairs are to be completed in 7 days.
- Complex repairs are to be completed in 15 days.

NYCHA LEAK TRAINING

NYCHA FORMS

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NYCHA Forms

NYCHA Form Number	Form Name
NYCHA Form 042.727	48 Hour Notice of Health and Safety Repairs
NYCHA Form 040.534A	Notice of Visit by NYCHA Staff
NYCHA Form 010.126	Personal Property Damage Claim
NYCHA Form 040.507	NYCHA Resident Lease Agreement
NYCHA Form 040.185	Termination of Tenancy & Possibly Subsidy
NYCHA Form 042.800	Repairs to Schedule Slip
NYCHA Form 042.861	Notice of Skilled Trade Appointment
NYCHA Form 042.862	Reminder Notice of Skilled Trade Appointment
NYCHA Form 042.863	Notice of Rescheduled Skilled Trade Appointment

NYCHA LEAK TRAINING

OUTPUTS, REPORTS AND RECORDKEEPING

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Outputs

Leaks and excessive moisture conditions addressed



Root cause identified & corrected within established timeframes

Leaks and excessive moisture recurrence



Reduced

Leak inspection and leak repairs monitored



Ensures compliance with this Standard Procedure



Reports

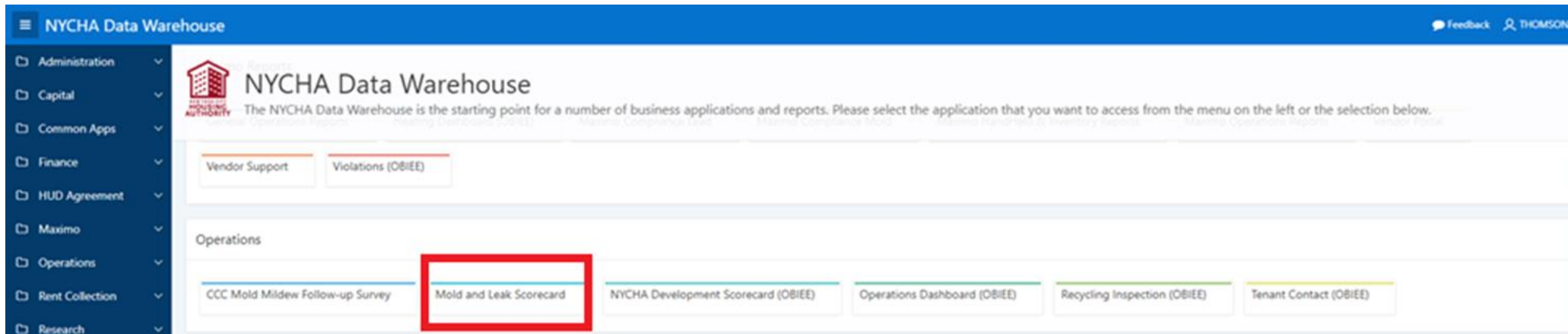


To access the Scorecard from the NYCHA Connect Homepage, select Data Warehouse from the Apps tab. From there, click on the dropdown menu for "Operations" and select "Mold and Leak Scorecard." Multi-Factor Authentication (MFA) setup is required to log in successfully to the scorecard.

If a new staff member with a title listed directly above and in Section VII, Responsibilities requires access to the Scorecard, access may be requested by contacting OMAR by email at mold.busters@nycha.nyc.gov.

Scorecard

Mold & Leaks Scorecard



The screenshot displays the NYCHA Data Warehouse homepage. On the left is a dark blue sidebar with a menu containing categories like Administration, Capital, Common Apps, Finance, HUD Agreement, Maximo, Operations, Rent Collection, and Research. The main content area has a blue header with the title 'NYCHA Data Warehouse' and a 'Feedback' link. Below the header, a message states: 'The NYCHA Data Warehouse is the starting point for a number of business applications and reports. Please select the application that you want to access from the menu on the left or the selection below.' A horizontal row of application tiles is shown, including 'Vendor Support', 'Violations (OBIEE)', and others. Under the 'Operations' section, a row of tiles includes 'CCC Mold Mildew Follow-up Survey', 'Mold and Leak Scorecard' (which is highlighted with a red rectangular border), 'NYCHA Development Scorecard (OBIEE)', 'Operations Dashboard (OBIEE)', 'Recycling Inspection (OBIEE)', and 'Tenant Contact (OBIEE)'.

Link: [Data Warehouse Home](#)

Scorecard

Mold & Leaks Scorecard

NYCHA Mold and Leak Scorecard
Overall Score Card

NYCHA Wide Weighted Average Scores for Report Date Selected									
NYCHA		Bronx		Brooklyn		Manhattan		Queens-Staten Island	
4.10		4.33		4.04		4.24		3.62	

Consolidated Name	Borough Grouping	Neighborhood	Residential Buildings	Current Apartments	Population	Overall Rank (as filtered)	Weighted Average Score	Total Score	Total Count of Scores
Stuyvesant Gardens	Brooklyn	BK06	6	445	884	121	5.18	88	1
Fort Independence	Bronx	BX06	2	546	1,107	120	5.06	86	1
Gun Hill	Bronx	BX01	6	727	1,359	119	5.00	85	1
Hammel	Queens-Staten Island	QS03	15	874	1,858	118	4.94	89	1
Whitman	Brooklyn	BK08	15	1,546	3,399	117	4.89	93	1
Rangel	Manhattan	MN09	8	940	1,957	116	4.79	91	1
Sotomayor	Bronx	BX03	30	1,722	3,250	113	4.74	90	1
Throggs Neck	Bronx	BX02	36	1,720	3,350	113	4.74	90	1
Wagner	Manhattan	MN05	22	2,147	4,276	113	4.74	90	1
Wyckoff Gardens	Brooklyn	BK09	4	777	1,516	112	4.71	80	1
Polo Grounds Towers	Manhattan	MN09	4	1,519	3,604	111	4.68	89	1
Borinquen Plaza	Brooklyn	BK07	15	929	1,968	108	4.63	88	1
Claremont Consolidated	Bronx	BX07	26	729	1,412	108	4.63	88	1
Monroe	Bronx	BX03	58	1,476	3,229	108	4.63	88	1
Tompkins	Brooklyn	BK06	8	1,031	2,545	107	4.61	83	1
Castle Hill	Bronx	BX02	14	2,022	4,459	104	4.58	87	1
Saint Mary's Park	Bronx	BX05	8	1,447	2,975	104	4.58	87	1
Wilson	Manhattan	MN05	7	867	1,896	104	4.58	87	1
Parkside	Bronx	BX01	14	878	1,604	102	4.56	82	1
Sedgwick	Bronx	BX07	8	917	1,550	102	4.56	82	1
Dyckman	Manhattan	MN09	7	1,165	1,983	100	4.53	86	1
Queensbridge North	Queens-Staten Island	QS01	13	1,526	2,817	100	4.53	86	1
Carey Gardens	Brooklyn	BK01	7	1,251	2,384	98	4.50	81	1
Jackie Robinson	Manhattan	MN07	4	541	818	98	4.50	81	1
Ingersoll	Brooklyn	BK08	20	1,604	3,709	96	4.47	85	1
Melrose	Bronx	BX05	10	1,224	2,519	96	4.47	85	1
Lincolnton Gardens	Brooklyn	BK09	7	898	2,166	94	4.44	87	1

1 Year Date Range6/10/2024 - 6/9/2025

6 Month Date Range12/9/2024 - 6/9/2025

Report Date6/9/2025

Borough Grouping(All)

Neighborhood(All)

Residential Buildings(All)

Current Apartments2672,390

Population3105,114

Link: [Consolidated Name Scorecard: ScoreCard - Tableau Cloud](#)

Reports

Baez Quarterly Leak Mold and Excess Moisture Remediation Compliance Reports

OMAR submits this report to the Special Master and the *Baez* Plaintiffs as required under the Amended Stipulation and Order of Settlement under the *Baez* Consent Decree.

OMAR also shares this report with NYCHA stakeholders (e.g., Operations, Compliance, EH&S, Law, Strategy and Innovation) and external stakeholders (e.g., HUD Monitor) but it is not required by the order.

New York City Housing Authority Quarterly Monitorship Reports

The HUD Monitor issues this public report available at [Reports — NYCHA Monitorship](#)

Recordkeeping

The Information Technology Business Solutions Technology Department - Maximo Unit retains electronically created and stored completed work orders for at least seven years.

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WHAT'S NEXT?



What is Next?

- ❖ OMAR Team (Superintendent and Assistant Superintendents) will provide **additional field training** to development staff once new IT functionality is live.
 - The field training will be provided **1 – 2 weeks after 'go live' date**.
 - OMAR will spend **2 – 5 days per development**.



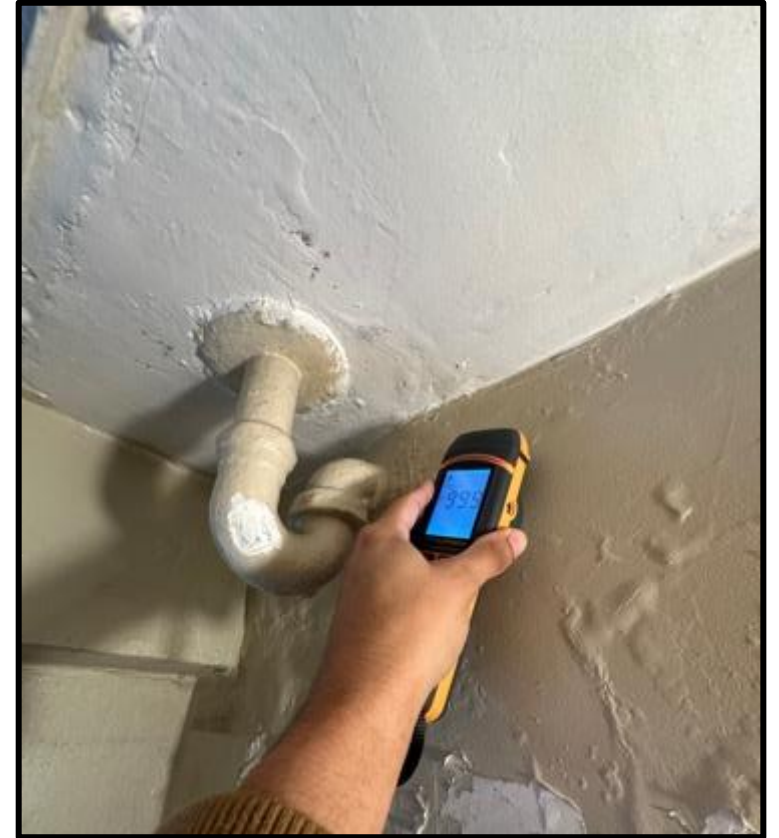
What is Next?

- ❖ NYCHA will turn on new **IT functionality** 'live' once majority of development staff complete this training.
 - **80 – 100%** of maintenance staff per development must be trained.



What is Next?

- ❖ NYCHA's Independent Mold Analyst (Microecologies) will conduct **quality assurance inspections** for closed leak work order.
 - 250 work orders per year.
 - Focus on leak from above work orders.



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TOOLS & SUPPLIES



TOOLS

HA #	Material Item	Material Item Specification	Application
2004994492	Hammer	Sledgehammer, 3lb	Used in a variety of maintenance tasks.
0615925841	Utility Knife	Stiff Tip	Used in a variety of maintenance tasks.
2006938949	Drill Bits	BIT, 3/4", Straight	Used in a variety of maintenance tasks (including making a small wall opening to insert borescope).
2003925185	Auger (Hand Drum)	5/16" x 25 ft, Hollow Core Cable with Bulb head, Hand Spin Type with Molded Plastic Drum	Sewer cleaning tool.
2003053010	Auger (Hand Drum)	1/4" x 25', Cleaner, Drain, Manual	Sewer cleaning tool.



TOOLS

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2003001010	Toilet Auger	General Wire® Toilet Auger with Flexicore Cable®, 3', Non-Telescoping	Sewer cleaning tool.
2003001015	Toilet Auger	Generak Wire 3' Flexicore, With Down Head	Sewer cleaning tool.
2012497150	Allway Handy Saw	Saw, Hole, Handy, Pistol Handle with Blade, Flush Cutting	Multipurpose keyhole saw.
2022966222	Snips		Used to cut sheet metal (i.e., when wall break is made, snips could be used to cut wire mesh).
2016150023	Scraper	Knife, Warner Tool® Progrid™ Stiff 3" Scraper, Carbon Steel Blade	For scraping excess mortar, putty, caulk, paint and wallpaper from floors and walls (When wall break is made using electric grinder, a scraper is used to pry out pieces of plaster).



TOOLS

HA #	Material Item	Material Item Specification	Application
2003928503	Seesnake Micro Inspection Camera Borescope	Model CA-300 with 3 ft. Cable, Complete with Accessories, Rigid #37888	Assist in recording and saving still images and videos of problems in hard-to-reach areas.
2018620243	Sheetrock Saw	Saw, hand, Crosscut type with 26" Blade & hardwood handle, Stanley #15- 300	Assist in performing wall breaks (sheetrock constructions).
2006984254	DEWALT Screw Gun	DW255/660	Used for driving screws into a variety of surfaces.



TOOLS

HA #	Material Item	Material Item Specification	Application
2022986560	Staple Gun	Gun, staple, non-jamming	Used to securely fasten lightweight materials like fabric, insulation, thin wood panels, or wire mesh to various surfaces.
0304920051	HEPA Vacuum Cleaner	1 1/2" Static-Dissipating Vacuum Hose, 50' Extension Cord, Two Intercept Micro Filters, 17" Crevice Tool, 3" Dust Brush w/ Reduce, 5" Upholstery Tool, Xover Floor Tool, 42 to 59" Aluminum Telescoping Wand	Assist in controlling airborne particles.
0304939762	Vacuum, Wet/Dry*	17-Gal Tank x 1.2" Vacuum Hose DIA, 114 CFM, Peak 1 5/8 HP, Two Stage Motor, with Brush, Crevice Tool, Floor Tool, Hose & Squeegee Attachment	Used to vacuum up large quantities of standing water.



TOOLS - HA Numbers

HA #	Material Item	Material Item Specification	Application
1701920185	Moisture Meter	Rugged construction, large backlit display, pin moisture measurement, non-invasive measurement up to 3/4" - 20mm below the surface	Assist in detecting excessive moisture.
0308940334	Step Ladder	4 ft. ladder	Used to inspect or access surfaces that are above ground level (e.g., ceilings).
2006939047 2006939048	Pipe Wrench	Wrench, Pipe, Straight, 1-1/2" Capacity, 10" LG, Alum, Heavy Duty	Used to turn threaded pipe and pipe fittings for installation or removal.
2020130492	Tongue and Groove Pliers	Pliers, Irwin Vise-Grip 3-Piece Grooveloek Pliers Set, 8", 10" and 12"	Provide purpose jaw grips on round, flat, square and hex shapes.
2019170124	Hammer	Hammer, 16 oz, Fiberglass handle crew hammer	Used in a variety of maintenance tasks.



TOOLS

HA #	Material Item	Material Item Specification	Application
0304939984	Vacuum, Wet/Dry	16 Gal 11.5A 4 HP, 100 CFM, 2-stage	Used to vacuum up large quantities of standing water.
0304942687	Vacuum, Wet/Dry*	6 Gal, 2 HP, with HEPA Filter, 10' Hose, Extension Wands & Accessory Nozzles	Used to vacuum up large quantities of standing water.
0304945120	Vacuum, Wet/Dry*	20.6 Gal, 115V 15A 50/60HZ, Capacity, SS Tank, Twin Motor Pump out with Tilt Bar Vacuum with Accessories & Casters	Used to vacuum up large quantities of standing water.
0304947111	Vacuum, Wet/Dry*	8 Gal, 4 HP, Poly Tank, with 7' Hose, Utility Nozzle, Brush Insert, Out Board Caster Feet	Used to vacuum up large quantities of standing water.
0304953817	Vacuum, Wet/Dry	20 Gal, Heavy Duty, 11A 3 HP	Used to vacuum up large quantities of standing water.



TOOLS

HA #	Material Item	Material Item Specification	Application
0304959081	Vacuum, Wet/Dry	1.5 Gal, 2HP, Poly Tank, with Crevice Tool, Utility Nozzle, Dusting Brush, Foam Sleeve & Dry Disc Filter, 18' Power Cord	Used to vacuum up large quantities of standing water.
0309929324	Blower (Portable Dryer)	115V, 1/5 HP, Horizontal/Vertical Airflow, 700 CFM High, 3 Speeds, 10' Power Cord	Used to dry floors, walls and other hard to reach places after flooding.
0309926838	Blower (Portable Dryer)	120V 1PH, Heavy Duty	Used to dry floors, walls and other hard to reach places after flooding.
1601951893	Dehumidifier	Portable Ind.commercial uses 142-250 pints daily capacity, built in drain pump, 10ft cord 115v ac, 10AMPS. Includes air filter & 40 ft drain hose.	Used to remove moisture from the air to dry indoor spaces and help prevent any mold growth.
1601951890	Dehumidifier	Portable, 85-165 Pints Daily Capacity, 115V 5.6A, Ind.Job Sites Uses, 20' Darin Hose, Built in Drain Pump, 10' Cord, Air Filter	Used to remove moisture from the air to dry indoor spaces and help prevent any mold growth.



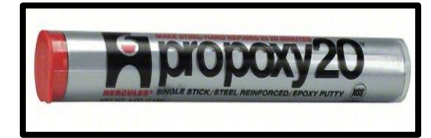
TOOLS

HA #	Material Item	Material Item Specification	Application
2022939347	Insulation Knife	Insulation boning knife with wide 7" carbon steel blade and hardwood handle	Used for pipe insulation and cutting thick material.
2022949877	Pipe Caliper		Used to measure pipe diameter to select the size of pipe insulation materials.
1401823764	Paint Brush	Wooster 5222 2-1/2" silver tip varnish brush	Used to apply weather-resistant mastic over pipe insulation.



SUPPLIES

HA #	Material Item	Material Item Specification	Application
1308924586	Epoxy	Adhesive, Repair Pro Poxy/ Epoxy Putty Stick, 4 oz Tubes	Used to temporary fix leaks, holes, or cracks in a variety of pipes. Used for metal, masonry, wood or glass.
1909967353	Poly Sheeting Roll	6-mil, 20" x 100" Sheet	Used to set up containment area during work by creating the barrier to isolate hazardous materials and prevent their spread.
1909929406	Duct Tape Roll	Duct tape, silver 3' core, 9 mil waterproof, 2"x60 yards	Used in a variety of maint. tasks (e.g., secure a contained area).
1210926515	Masonite	1/4"x4'x4' Sheet 1/4"x2'x2' Sheet	Used to provide temporary wall covering after wall break is made.
1210926516			
1214922226	Plas-tec Panels, Polywall and Silk Waterproof Wall Panels	1/16"x4'x8' Sheet	Used to provide waterproof barrier behind toilet or temporary wall covering after wall break is made.



SUPPLIES

HA #	Material Item	Material Item Specification	Application
1219924836	Heavy Duty Adhesive	Multipurpose Type for Various Construction Projects, Liquid Nails # LN603	Used as adhesive for plastic panel.
1220991245	White Tub & Tile Sealant Caulking Silicone	10.1 oz Cartridge Packed 24/box G.E. SCS1702	Used to seal base of toilets and shower walls.
1216984470	Silicone Caulking Sealant and Adhesive, Clear Color	Silicone, kitchen and bath caulking sealant and adhesive, clear color, mold free protection-waterproof	Used to seal base of toilets and shower walls.
1610929059	Headlamp		Used to increase visibility and provide sufficient lighting while performing various maint. tasks.
1610967499	Flashlight		Used to increase visibility and provide sufficient lighting while performing various maint. tasks.



SUPPLIES

HA #	Material Item	Material Item Specification	Application
1906980863	Safety goggles	3M, 100 series	Used to protect eyes from a variety of hazards including chemicals, dust and flying objects.
1905930210	Box of N95 respirators	20/box	Used as a disposable respirator.
0802937621	Bucket	Under 6-gallon ProBucket, Window cleaning bucket, Plastic	Used as part of the cleaning supplies.
0807964138	Betco All Purpose Cleaner	Detergent, Betco all-purpose cleaner concentrate, 1 gallon case	Used as part of the cleaning supplies.
0908200100E	Rags	Rag, Maintenance warehouse 14"x 17", Terry cloth cleaning towel	Used as part of the cleaning supplies.



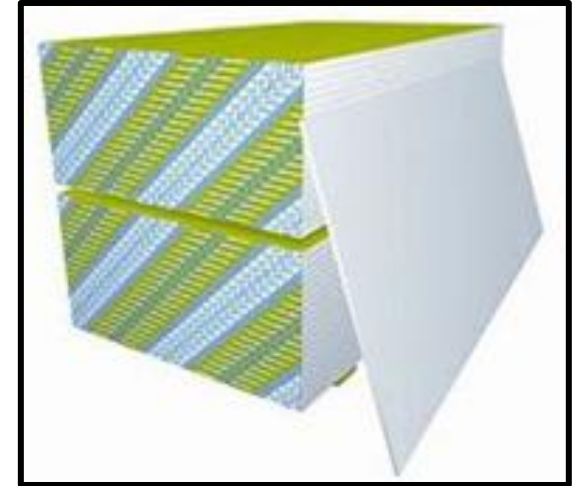
SUPPLIES

HA #	Material Item	Material Item Specification	Application
0907970631 0907975458 0907975459 0907968233	Nitrile Gloves	Various sizes	Used in a variety of maintenance tasks.
0907951691	Neoprene Gloves	Gloves, disposable power- free	Gloves for handling insulation products.
0907927937	HexArmor Gloves	HexArmor® 9014 Cut Resistant Gloves, Needle-resistant	Gloves for sharps and waste handling.
0907927936	Long Cuff PVC - Large Gloves	Needle stick resistant	Gloves for handling hot pipes.
0304920052	Micro Filter	Micro Filter, 10 Quantity replacement filters.	Used with backpack vacuum.



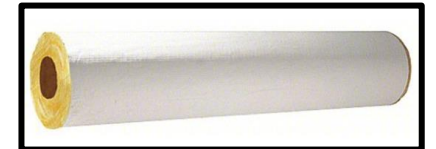
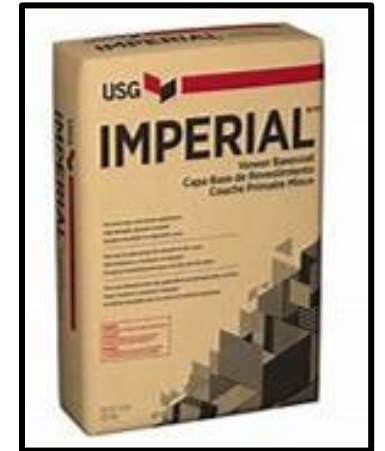
SUPPLIES

HA #	Material Item	Material Item Specification	Application
1210945694	Georgia-Pacific DensArmor Plus Mold & Moisture Resistant Interior Panel	Armor plus 5/8" x 4'x8', moisture and mold resistant interior panel	Mold-resistant sheetrock.
1225963003	USG Sheetrock Brand Glass Mat Mold Tough (regular)	Sheet rock, USG sheet rock brand glass- mat panel mold tough (regular), ½' x4'x 8', interior, moisture and mold resistant glass- mat	Mold-resistant sheetrock.
1225963002	Gold Bond eXP Interior Extreme Gypsum Panel		Mold-resistant sheetrock.
1404924256	FibaTape Mold-X 10	1-7/8 inch by 300 ft roll.	Mold-resistant tape used for seam taping when sheetrock is replaced with fiberglass-faced gypsum board.



SUPPLIES

HA #	Material Item	Material Item Specification	Application
1212919100	USG Imperial Natural Veneer Plaster Basecoat	50-pound bag	Mold-resistant plaster basecoat used for sealing seams when sheetrock is replaced with fiberglass-faced gypsum board.
1212919101	USG Diamond Veneer Plaster Finish	50-pound bag	Mold-resistant plaster finish used for sealing seams when sheetrock is replaced with fiberglass-faced gypsum board.
1207923801	Owens Corning ASJ Max Fiberglass Pipe Insulation	0.5" diameter	Used for pipe insulation.
1207923804	Owens Corning ASJ Max Fiberglass Pipe Insulation	0.75" diameter (3/4)	Used for pipe insulation.



SUPPLIES

HA #	Material Item	Material Item Specification	Application
1207923807	Owens Corning ASJ Max Fiberglass Pipe Insulation	1" diameter	Used for pipe insulation.
1207923810	Owens Corning ASJ Max Fiberglass Pipe Insulation	1.5" diameter	Used for pipe insulation.
1207923813	Owens Corning ASJ Max Fiberglass Pipe Insulation	2" diameter	Used for pipe insulation.
1207923816	Owens Corning ASJ Max Fiberglass Pipe Insulation	2.5" diameter	Used for pipe insulation.
1207993960	Insulation, Fiberglass Copper Pipe Insulation	5/8" pipe size with 1" pipe thickness. Owen Corning/Manville Part #0110006	Used for pipe insulation.

IRON PIPE SIZE	OUTSIDE DIAMETER	PIPE CIRCUMFERENCE	ORDER THIS SIZE
1/2"	7/8"	2-5/8"	1/2 x
3/4"	1-1/8"	3-1/4"	3/4 x
1"	1-3/8"	4-1/8"	1 x
1-1/4"	1-5/8"	5-1/4"	1-1/4 x
1-1/2"	1-7/8"	6"	1-1/2 x
2"	2-3/8"	7-1/2"	2 x
2-1/2"	2-7/8"	9"	2-1/2 x
3"	3-3/8"	11"	3 x
4"	4-3/8"	14-1/8"	4 x
5"	5-3/8"	17-1/2"	5 x
6"	6-5/8"	20-3/4"	6 x
7"	7-5/8"	24"	7 x
8"	8-5/8"	27-1/8"	8 x
9"	9-5/8"	30-1/4"	9 x
10"	10-3/4"	33-3/4"	10 x
11"	11-3/4"	36-7/8"	11 x
12"	12-3/4"	40"	12 x

SUPPLIES

HA #	Material Item	Material Item Specification	Application
1207930275	Insulation, Fiberglass Copper Pipe Insulation	1-1/4" pipe size with 1" pipe thickness. Owen Corning/Manville Part #0110012	Used for pipe insulation.
1207993962	Insulation, Fiberglass Copper Pipe Insulation	2-1/8" pipe size with 1" pipe thickness. Owen Corning/Manville Part #0110021	Used for pipe insulation.
1207993963	Insulation, Fiberglass Copper Pipe Insulation	2-5/8" pipe size with 1" pipe thickness. Owen Corning/Manville Part #0110026	Used for pipe insulation.



SUPPLIES

HA #	Material Item	Material Item Specification	Application
1207930272	Insulation PVC Elbow, PVC 90° Degree PVC Elbow Pipe Fitting Cover	1" thickness for 1/2" pipe (Size 7). Proto/JM SKU #300790	Used for pipe insulation.
1207930274	Insulation PVC Elbow, PVC 90° Degree PVC Elbow Pipe Fitting Cover	1" thickness for 1" pipe (Size 9). Proto/JM SKU #300990	Used for pipe insulation.
1207930275	Insulation PVC Elbow, PVC 90° Degree PVC Elbow Pipe Fitting Cover	1" thickness for 1-1/2" pipe (Size 10). Proto/JM SKU #301090	Used for pipe insulation.
1207930276	Insulation PVC Elbow, PVC 90° Degree PVC Elbow Pipe Fitting Cover	1" thickness for 2" pipe (Size 11). Proto/JM SKU #301190	Used for pipe insulation.
1207930277	Insulation PVC Elbow, PVC 90° Degree PVC Elbow Pipe Fitting Cover,	1" thickness for 2-1/2" pipe (Size 12); Proto/JM SKU #301290	Used for pipe insulation.



SUPPLIES

HA #	Material Item	Material Item Specification	Application
1207930280	Insulation PVC Tee/Valve Cover, Tee PVC Fitting,	1" thickness for 1/2" pipe (Size 7); Proto/JM SKU #3007TV	Used for pipe insulation.
1207930281	Insulation PVC Tee/Valve Cover, Tee PVC Fitting,	1" thickness for 1" pipe (Size 9); Proto/JM SKU #3009TV	Used for pipe insulation.
1207930282	Insulation PVC Tee/Valve Cover, Tee PVC Fitting	1" thickness for 1-1/2" pipe (Size 10); Proto/JM SKU #3010TV	Used for pipe insulation.
1207930283	Insulation PVC Tee/Valve Cover, Tee PVC Fitting	1" thickness for 2" pipe (Size 11); Proto/JM SKU #3011TV	Used for pipe insulation.
1207930284	Insulation PVC Tee/Valve Cover, Tee PVC Fitting	1" thickness for 2-1/2" pipe (Size 12); Proto/JM SKU #3012TV	Used for pipe insulation.



SUPPLIES

HA #	Material Item	Material Item Specification	Application
1216995800	Childers CP-11	Coating, weather barrier coating for thermal insulations for both indoors and outdoors, CP-11 VI-CRYL one (1) gallon pail	Used for pipe insulation as a waterproofing and adhesive barrier, and sealant.
1207993953	ASJ Insulation Tape	Insulation ASJ Max tape, fiberglass material, 3" wide x 150 feet length roll, Owen Corning Brand SKU Part #50MAXASJ3	Used for pipe insulation.
1207993951	King Tacks	PVC fitting tacks (50 tack per bag), color white, stainless steel annular serrated tack with round head	Used for pipe insulation as a closure system for PVC insulation fitting covers.
2006965078	Hilti Mineral Wool Board	Firestop, mineral wool, packed (4) sheets per case, 46"X24"x4' Hilti #236993	Used for pipe insulation.
1207993952	Aluminum Banding Roll	200 feet, 1/2" wide, 0.020" thick, coiled & stored in cardboard box, metal brand	Used to secure aluminum pipe jacket covers over pipe insulation.



SUPPLIES

HA #	Material Item	Material Item Specification	Application
1207993950	Aluminum Seal Clips	100 seals per bag designed for ½” strapping	Used to secure aluminum fitting covers over pipe insulation.
1404922227	Foster 40-50 Paint	5 Gallon Container	Mold-resistant paint.
1404981941	Sherwin Williams – Emerald Interior Satin Extra	5 Gallon Container	Mold-resistant paint.



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NYCHA LEAK TRAINING

KNOWLEDGE ASSESSMENT QUIZ

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That's all folks!

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Training Course Evaluation

Name (Optional):

Date:

Course Name:

Course Location:

The purpose of this evaluation is for you to provide information to enhance our training services. Your feedback may be helpful towards the improvement of course objectives, progress of students and performance of instructor(s). Please give honest answers in order to improve this course for yourself and others.

A. Please indicate the extent to which you agree or disagree with each of the following statements. Circle a number, 1 – 5, 1 indicating strong agreement, 5 indicating strong disagreement.

	Excellent	Poor
1. Course objectives were clearly stated.	1 2 3 4 5	
2. The course was well organized and conducted.	1 2 3 4 5	
3. There were ample opportunities for students to actively participate in class.	1 2 3 4 5	
4. The class time was wisely and effectively used.	1 2 3 4 5	
5. The instructional aids (i.e. Power Point, video, online tools) were helpful	1 2 3 4 5	
6. The practical exercises were helpful to my personal learning experience.	1 2 3 4 5	
7. The exam questions were appropriate for the information given during the course.	1 2 3 4 5	

B. Please answer the following questions:

1. How did you find out about this course?
2. Major strengths of the course were:
3. The course could have been improved by:
4. Other comments:
5. May we contact you to follow up on this evaluation?

Please complete instructor evaluations on the other side. Thank you

- We appreciate your participation.
- We hope that this training will give you the capability to conduct leak evaluation & control.
- Please let the instructor or any EEA staff if there's anything else we can do to help you accomplish these goals.
- Please provide feedback on our evaluation so we can improve this training for future learners

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