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NYCHA FEDERAL MONITOR
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This Monitor report provides an update of NYCHA's efforts to meet its various obligations under the HUD Agreement (Agreement) regarding mold and leaks, and lead-based paint. The Agreement obligates NYCHA to meet specific performance requirements to inspect and remediate mold and leak conditions in specific, relatively short timeframes. It further obliges NYCHA to address deficiencies in lead-based paint and use lead safe work practices when disturbing lead paint, and over time abate (remove) all lead-based paint across its portfolio.



*Bart M. Schwartz, Federal
Monitor*

I. Lead-Based Paint

NYCHA's compliance with the strictures of the Agreement and other related federal and local regulations and laws has consistently improved since the Monitorship began in 2019. NYCHA must comply with HUD's lead safe work rules when disturbing lead in repair work and must abate all lead on its properties by 2039. As a result of comprehensive and precise XRF testing accomplished over the last four years at both the federal testing standard of 1.0 milligrams per cm² and the new, more rigorous standard required by New York City of 0.5 milligrams per cm² (the .5 standard), NYCHA has identified most of the positive components for lead within the apartments in its system. With some limited exceptions, NYCHA is generally in compliance with the EPA's Renovation, Repair and Painting rule (RRP) required to be followed when more than two square feet of lead paint is disturbed. Compliance requires that multiple safety precautions be followed to prevent the spread of lead dust and requires that proper cleanup is accomplished. HUD regulations require a dust wipe process whereby samples of any remaining lead particulate which may be present after cleanup from work be gathered and tested in a laboratory to ensure that any lead content is within safe levels. In this manner "clearance" for occupancy around the work area is obtained.

The number of pending RRP jobs has been reduced over the course of the last three years by almost 50%. This reduction has been accomplished through a combination of precision XRF testing and great improvement in the rate of abatement of lead in NYCHA apartments. Also, as shown below, NYCHA is abating lead, on average, at the rate of over 400 apartments per month. To put this in context, the average number of apartments abated each month in 2019 was approximately 60.

NYCHA also continues to use best efforts to conduct required visual assessments in a timely manner – every six months in apartments occupied by children under six. However, due to

resource constraints and access issues, NYCHA is often unable to comply with the commitment also made in the Lead Action Plan to correct such paint deficiencies within 21 days.

The Benefits of the “TEMPO” Program (Team for Enhanced Management, Planning, and Outreach)

Early in the Monitor’s tenure, we identified gross deficiencies in the way NYCHA addressed lead risks for children under six. For example, in 2019, NYCHA considered a mere 3,000 apartments that contained or were suspected of containing lead paint to be occupied or regularly visited by children under 6. Since then, the Monitor worked with NYCHA to establish the “TEMPO” program under which resources were directed on a priority basis to identify apartments that children might inhabit and protect them from lead hazards. NYCHA has developed vigorous methods to identify “CU6” apartments. The total number of such units has at various times exceeded 30,000 but fluctuates based on NYCHA’s demographics in any given quarter.

NYCHA is currently testing apartments for lead at the “0.5 standard” and prioritizing CU6 units. As of late June 2023, NYCHA has performed XRF testing at the 0.5 standard in over 46,000 apartments and has abated approximately 3,800 apartments since the establishment of the action plan (see chart below).

Continuing Progress

As next steps for continued improvements, NYCHA will be pursuing the following goals:

- In concert with HUD, SDNY and the Monitor, finalizing the methodology for NYCHA to fully comply with HUD’s Lead Safe Housing Rule requiring that occupants of apartments be protected from any lead dust created by work disturbing lead paint.
- Ensuring a sufficient monthly abatement rate to meet the 10-year abatement Agreement obligation.
- Ensuring that all lead abatement impacting apartment turnover is done on a prompt and compliant basis (see discussion below).
- Continuing to use data analytics and field inspection (as documented in “Exceptions Reports”) and twice annual certification reports as required by the Agreement, prepared jointly by NYCHA’s Compliance and Environmental Health & Safety (EHS) Departments to help ensure compliance with reporting on adherence Lead Safe Work Rules.
- Sustaining timely performance of dust-wipes to gain prompt clearance after lead work is performed (see chart below).

XRF Testing Statistics as of June 2023

XRF Data

0.5 Threshold		
as of 06/28/2023	Dashboard	%
Total Testing Universe	77,994	
Attempted	50,191	
Completed	46,057	
Positive	14,465	39%
Negative	22,755	61%
Inspection Complete, Waiting for Results	8,814	
Data Issue	23	
Resident Not Home	2,197	
Unsafe Access	631	
Resident Refused	613	
Total	3,441	

*XRF testing at 0.5 began January 3, 2022 with 1 vendor (KAM) at Edenwald. Currently there are 8 vendors assigned to 11 developments. Numbers are based on Dashboard unless otherwise indicated.

**Units classified as moveout and units with inspection not required are not included.

***Based on internal tracking numbers. LHCD will visit units prior to vendors to aid in increases success rates. Therefore, these numbers are based on LHCD field reporting.

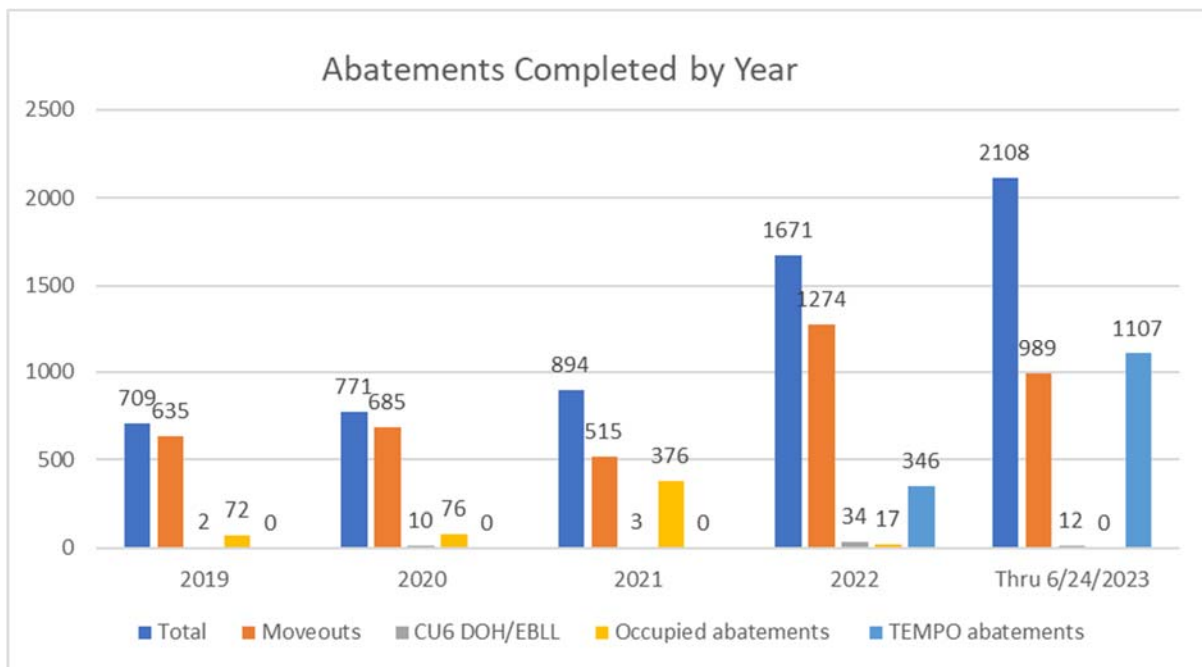
Lead Abatement Statistics as of June 2023

The following table shows significant progress in lead abatements since 2022. EFO/RIIS are internal NYCHA offices that are responsible for abatements and record keeping. As evidenced in the table, NYCHA relies significantly on vendors to sustain its rate of abatements. NYCHA's internal Lead Abatement Unit (LAU), which is part of the Lead Hazard Control Unit (LHC), accomplishes a smaller, though not insignificant, number of abatements. If NYCHA can sustain its current rate of abatement, it stands a very good chance of abating the lead in 30,000 units by 2029. Note that the Agreement requires 50% of all lead, including common areas, by 2029.

Abatement

EFO/RIIS Report - 2022-Jun 24, 2023								
WO Category	2022	Jan	Feb	Mar	Apr	May	Jun	Total
CU6 Abatements (including DOH/EBLL)	34	0	0	4	1	3	4	46
Moveouts	300	0	4	39	56	87	31	517
Occupied LAW Abatements	17	0	0	0	0	0	0	17
Total LAW	351	0	4	43	57	90	35	580
Vendor Abatement Report - 2022-Jun 24, 2023								
WO Category	2022	Jan	Feb	Mar	Apr	May	Jun	Total
TEMPO Abatements	346	106	184	193	205	198	221	1453
Moveouts	974	134	94	163	125	156	100	1746
Total Vendor	1320	240	278	356	330	354	321	3199
Total Vendor and LAW	1671	240	282	399	387	444	356	3779

As demonstrated by the following graph, from 2019 through 2023, NYCHA has significantly increased the number of abatements completed each year. Previously in 2019 and 2020, NYCHA's abatements were performed after move-outs and in response to city Department of Health & Mental Health "DOHMH" orders to abate lead conditions in units where a child was discovered with an elevated amount of lead in their blood ("EBLL").



A Monitor review of the impact of NYCHA's lead obligations on moveouts since 2022 found that these add (on average) between 80 – 180 days to the moveout process. The NYCHA Lead Hazard Control Unit has recently made significant improvements in its moveout-related operations and has reduced its involvement in turnaround time to approximately 44 – 95 days in 2023. The lead obligations in the moveout process include XRF testing, and, if lead is detected, abatement. This process then includes time needed to schedule testing and receive test results. The longest

delay in the process relating to lead paint was typically in the XRF testing phase, specifically in getting XRF test reports from vendors. NYCHA is working on better training for XRF vendors.

PACT Abatement Progress as of June 2023

The Agreement obliges NYCHA to ensure that lead is properly abated in developments which are converted to Section 8 funding and private management through “PACT” partnerships. The Agreement establishes deadlines for such abatements, including that lead must be abated by February 2024 at Harlem River Houses and Williamsburg Houses. As indicated by the chart below, the rate of progress of abatement by certain developers may not be sufficient to meet the 2024 deadline for these locations. While NYCHA may not meet the 2024 deadline, the total 34% of units abated at the .5 standard is still significant, especially considering the high lead positivity rate at these two sites.

PACT Lead-Based Paint Abatement Progress Summary

PACT Project ¹	Closing Date	Total Units ⁴	Assumed # of Units Needing Abatement ⁵	Assumption Basis	Units Abated/Cleared ⁶	% Abated/Cleared ⁷
Brooklyn Bundle A and B ²	February 12, 2020	2,625	314	Based on 1.0 random sampling and development wide testing	49	16%
Manhattan Bundle ²	November 30, 2020	1,718	0	Based on 1.0 random sampling	0	N/A
Williamsburg ³	December 28, 2021	1,621	1,621	Based on 0.5 positivity rate to date	709	44%
Boulevard BSA FP (Boulevard, Fiorentino Plaza, Belmont-Sutter Area) ²	December 28, 2021	1,673	669	Based on 0.5 positivity rate to date	209	31%
Linden Penn Wortman ²	December 28, 2021	1,922	442	Based on 0.5 positivity rate to date	33	7%
Harlem River I and II ³	February 17, 2022	693	693	Based on 0.5 positivity rate to date	285	41%
TOTAL		10,252	3,739		1,285	34%

1 – Chart includes all converted PACT Projects subject to lead abatement requirements of the 2019 HUD Agreement.

2 – These projects closed before the City and NYCHA changed its testing standard to 0.5 mg/cm².

3 – Early Abatement Sites as defined by the 2019 HUD Agreement.

4 – Each site has common areas that also need to be and have been abated to date, but this chart does not report on that progress.

5 – Assumed # of units is derived from a combination of actual testing results and knowledge of the lead paint history of the development.

6 – Figures based on progress through June 30, 2023, accessed from PACT Partner reporting on July 7, 2023. Not all units have been reviewed by NYCHA as of the date of this report.

7 – Denominator is the assumed # of units needing abatement.

PACT Portfolio Monthly Report: Lead-Based Paint Abatement | June 2023

Status of Visual Assessments as of June 2023

HUD regulations require that units with known or suspected lead be subject to a visual assessment every calendar year. Defects must be corrected within 90 days. The TEMPO Program requires that such visual assessments be conducted every six months and also requires that lead deficiencies be corrected within 21 days.

Visual Assessments – Round 1 Visual Assessments

Round 1 Visual Assessment 2023 – Ongoing		%
Total Inspections Created	27,612	
Moveouts W/O Attempts	174	
Created in Error	8,462	
Decommissioned	0	
Total Net VA Inspections to be completed	18,976	
Total Attempts	18,967	99.95%
Total Inspections Completed	15,918	83.88%
Total RNH or Refused	3,048	
Total Inspections Completed w/ Deficiencies (CU6)	7,016	44.08%

Lead Correction Work Orders from the 2022 Visual Inspections as of June 2023

The following chart demonstrates that NYCHA, though diligently attempting to correct deficiencies, is experiencing some difficulty in completing corrections.

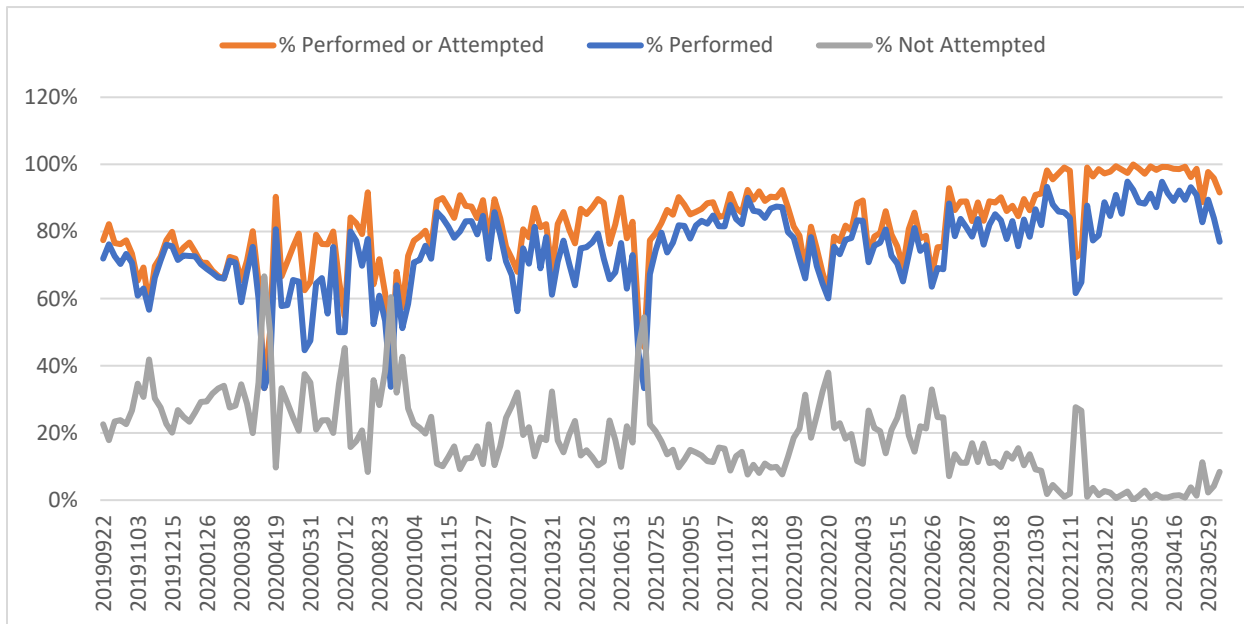
CU6				
Year / Round	Deficiencies Requiring Correction Total	Deficiencies Requiring Correction Complete	Deficiencies Requiring Correction Attempted	Deficiencies Requiring Correction Not Attempted
2022 Round 1	7,721	3,934	3,787	0
2022 Round 2	6,099	1,690	2,770	1,639

Non CU6				
Year / Round	Deficiencies Requiring Correction Total	Deficiencies Requiring Correction Complete	Deficiencies Requiring Correction Attempted	Deficiencies Requiring Correction Not Attempted
2022	4,788	170	134	1

Dust Wipe Performance as of June 2023

¹ NYCHA has 12 months to complete these under the Lead Safe Housing Rule.

The following graph shows NYCHA’s ability to attempt and perform dust wipes after the completion of lead related repairs. The chart demonstrates that NYCHA has materially improved its performance in this area and has recently been able to sustain its excellent performance.



An Open Occupant Protection Question

Over the course of the last six months, HUD, SDNY, and the Monitor have endeavored to conclude discussions over NYCHA’s ability to comply with HUD’s Lead Safe Housing Rule as it relates to occupant protection. We are optimistic that an agreement will soon be reached to use improved safety procedures which will be field tested to protect all occupants from work areas where lead is disturbed and require that residents be relocated only when necessary.

RRP “No” Investigation Summary

The Maximo work order system used by NYCHA requires workers who may be disturbing lead to answer a question before work begins as to whether the component they will be working on is positive for lead (and is larger than 2 square feet in area). As reported in one of NYCHA’s 2022 lead exceptions reports, the Compliance Department found that approximately 95% of these questions relating to whether RRP work was being performed were answered “no”, meaning the worker determined that RRP work is not needed. The Monitor team conducted an analysis of Maximo data and field visits to assess whether workers were incorrectly answering the RRP question. A review of Maximo data found a high percentage of RRP “no” responses was plausible considering:

- The most common lead positive components were lead bends, tub waste pipes, and windows cases, which are relatively small components and present few scenarios where RRP protocols would be required.
- As a precaution, the RRP flag is applied to all work orders in any unit where at least a single component tested positive for lead, regardless of whether or not the work order

pertains to the positive component(s); this precaution overestimates the amount of RRP work.

- Maximo lists the lead positive component(s) on its work orders, but only advises the general area(s) that needs repairs. A worker must compare the conditions of the work area against the lead positive components to determine whether RRP is needed.
- Exemptions are authorized by regulations if the work is “de minimis.”²

Field inspections were attempted to determine whether workers were incorrectly answering the RRP question, however this returned limited results. Forecasting where RRP work was needed was difficult considering the low probability of work requiring RRP, compounded with the unpredictability of worker schedules. Using a risk model developed by NYCHA’s Compliance Department, onsite inspections of painters who were most frequently answering the RRP question “no” found that they were mostly working on non-positive components (though the room may have contained other components positive for lead-based paint). Attempts to examine the most suspicious RRP “no” work orders, after the work was completed, also yielded limited results. These inspections identified whether a lead positive component was disturbed, but these units often received subsequent work, making it difficult to attribute the observations solely to that work order and specific worker. In some cases, the unit was abated following the completion of the RRP “no” work and prior to our inspections.

Based on the foregoing we recommend that NYCHA requires workers to provide a written explanation in Maximo when answering “no” to the RRP question.

EBLL Tally for 2023 to Date

The following chart tallies the number of children identified with elevated blood lead levels. Such occurrences must be immediately reported to HUD and a chain of protective measures must be executed, usually involving abatement of the unit in which the child resides and may involve measures taken in common areas.

² 40 CFR 745.65(d)

2023 – EBLL COTA's		CU6 R.A		Parent Violation WO	
Paint COTA (CU6)	21	Risk Assessment Completed	244	2023 COTA's: Open	5
Paint COTA (CU18)	0	Pending Risk Assessment	17	2023 COTA's: Closed	20
Dust COTA (CU6)	4	Total	261	Pending Investigation	0
Dust COTA (CU18)	0			Private	0
Daycare (CU6)	0	CU6 Remediation		Total	25
Pending Inv	0	Remediation Work Required	209	DOH Complaint (Do not add to total)	3
Not Managed by NYCHA	0	Remediation Work Completed	112	Unconfirmed EBLL	2
Unconfirmed EBLL	2	Pending Scheduling	97		
Total Cases	27				
		Public Spaces R.A 2023			
Abatement Completed	12	Risk Assessment Completed	24	DOH to Close	0
DUST COTA Cleaning Completed	4	Pending Risk Assessment	0	Law to close	0
DUST COTA Cleaning in progress	0	NO R.A Required	3	Both DOH & Law to close	0
Fully Rescinded before Abatement	6	Private	0	In Progress	5
Pending Investigation Index R.A/Remediation Completed	0	Total	27		
Pending Investigation Index R.A/Remediation To Schedule	0				
Pending Abatement	3	Public Spaces Remediation			
RAD before Abatement	1	Remediation Work Required	24		
Private	0	Remediation Work Complete	22		
Unconfirmed EBLL	1	Pending Scheduling	2		
Total	27	Remediation Work In Progress	0		

2022 - EBLL COTA's		CU6 R.A	
Paint COTA (CU6)	31	Risk Assessment Completed	449
Paint COTA (CU18)	6	Pending Risk Assessment	3
Dust COTA (CU6)	10	Total	452
Dust COTA (CU18)	1		
Daycare (CU6)	1	CU6 Remediation	
Pending Inv	4	Remediation Work Required	364
Not Managed by NYCHA	1	Remediation Work Completed	275
Total Cases	54	Pending Scheduling	89
Abatement Completed	31	Public Spaces R.A 2022	
DUST COTA Cleaning Completed	11	Risk Assessment Completed	41
DUST COTA Cleaning in progress	0	Pending Risk Assessment	0
Fully Rescinded before Abatement	7	NO R.A Required	12
Pending Investigation Index R.A/Remediation Completed	4	Private	1
Pending Investigation Index R.A/Remediation To Schedule	0	Total	54
Pending Abatement	0		
Private	1		
Total	54		

A Final Observation Regarding Progress to Date

Considering the state of conditions regarding lead in NYCHA facilities in 2019, NYCHA has made tremendous progress in its handling of all matters relating to lead safety. The TEMPO Program has protected children from the perils of lead, lead related data is increasingly accurate and being applied to make intelligent operational decisions, and abatements are being accomplished at an unprecedented rate. Oversight of lead activities by the Compliance Department and Lead

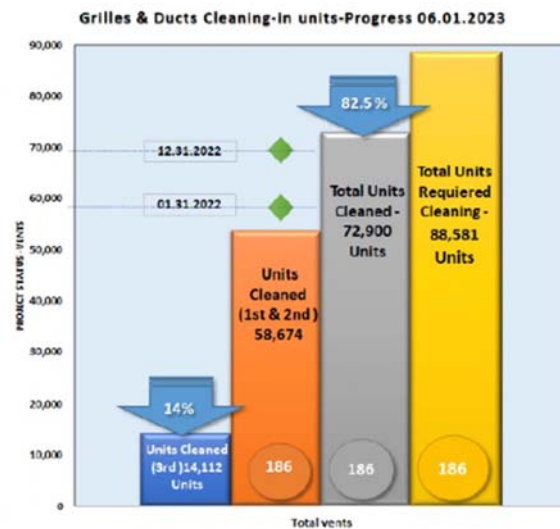
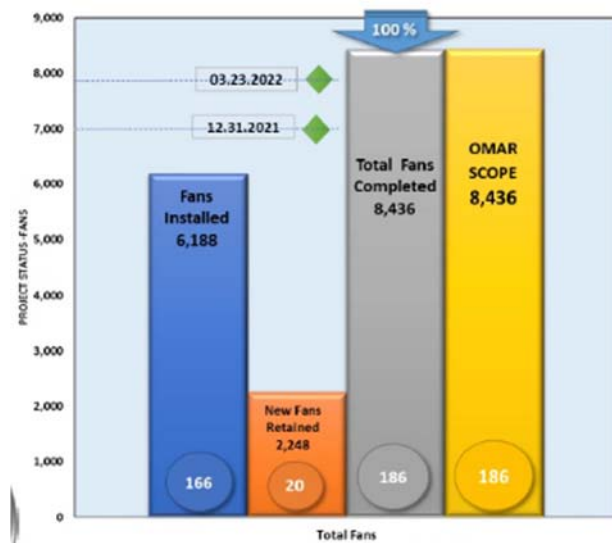
Oversight Team from the EHS Department are zealous, thorough, and well reported. Though there is room for improvement in some areas of data recordation and lead records kept at developments, as well as with records kept by vendors, NYCHA is to be generally commended for this progress and exhorted to continue to refine and sustain these various improvements.

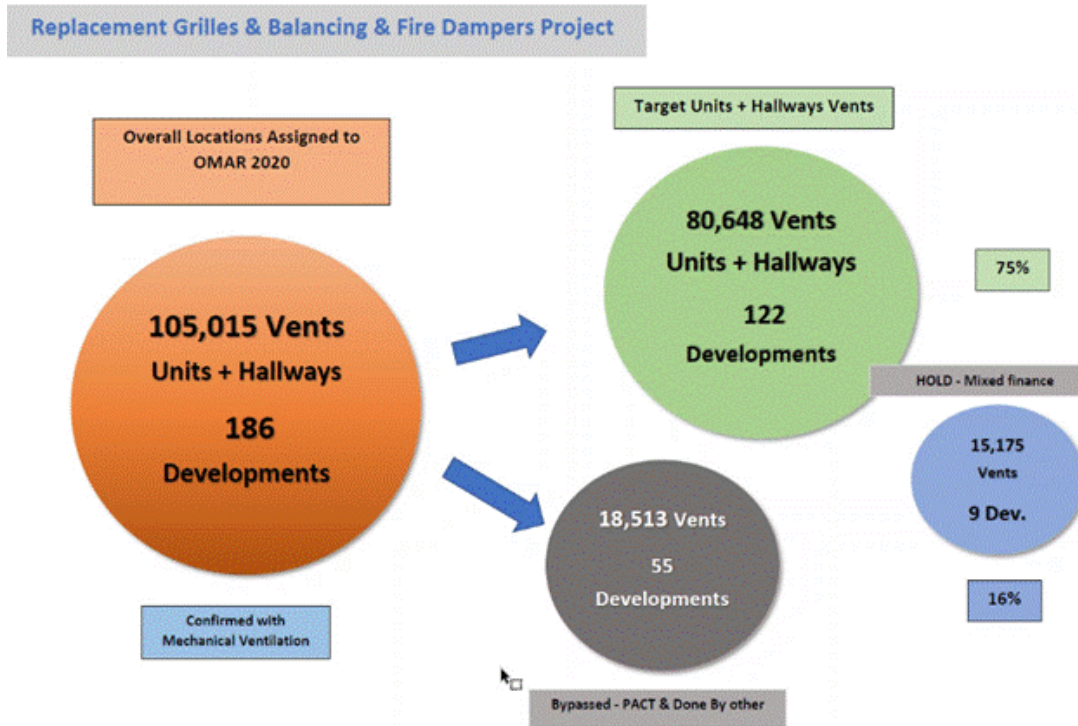
II. Mold and Leaks

Mold growth in most NYCHA buildings is the result of excessive moisture and inadequate ventilation. The disintegrating infrastructure and failure by NYCHA operations staff to timely and effectively respond to mold and leak complaints exacerbates the problem. Leaks from pipes and defective building envelopes are a significant problem. The Agreement requires that NYCHA promptly address leaks and mold. Despite NYCHA's need for significantly more skilled trades staff to timely address mold and leak work orders, NYCHA has made progress in addressing the ventilation issue as well as cleaning mold and thus removing the immediate health threat. NYCHA has also, working with the Monitor and the Independent Data Analyst (IDA) (Neil Steinkamp from Stout), established disciplined data analytic techniques to direct resources where most urgently needed.

Since implementation of the Mold and Leak Action Plan in March 2020, NYCHA has achieved many of the important components of the Action Plan. This has served to materially reduce confirmed mold cases in its developments. A discussion of various aspects of NYCHA's Mold and Leak work follows.

Ventilation Project Update as of June 2023





NYCHA's Fire Damper Project

NYCHA is estimating that there are 80,000 apartments with dampers that need to be replaced. NYCHA has started a soft launch of its damper project at five developments, representing 1,700 dampers. NYCHA has completed 61% of Phase one of this project--1,030 dampers have been installed in vents in four of the five developments. Due to its scale, the damper project will have a multiyear rollout. It will encompass conventional and mixed finance developments and exclude PACT and privately managed sites.

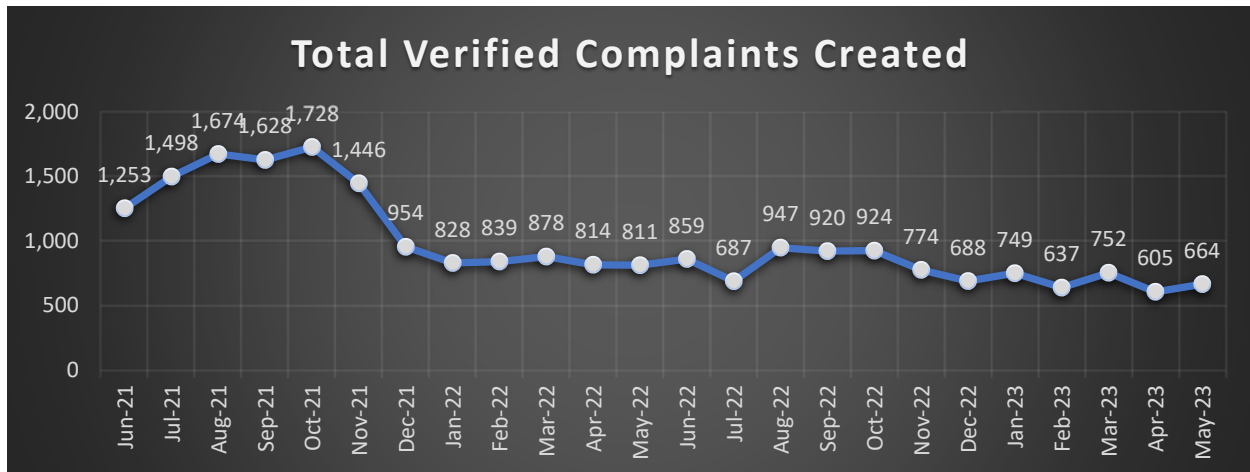
Reduction of Mold Cases Since October 2021 through May 2023

There have been various factors contributing to the reduction of mold cases:

- The Ventilation Upgrade Program which included installation of thousands of new roof fans and vent cleaning initiatives, has improved air flow and reduced moisture in thousands of units. At the end of July 2021, NYCHA reported having cleaned 24,600 in-unit and hallway vents and having replaced or retained (after being inspected and certified as fit for purpose) 4,111 roof fans. By the end of January 2022, NYCHA had cleaned 62,873 vents and either replaced or retained 7,152 roof fans. By May of 2022, NYCHA had replaced or certified over 8,400 fans and by early 2023 had cleaned some 73,000 vents. This work resulted in a material reduction of verified mold complaints from a high of 1,728 in October 2021 to an average of less than 700 per month as of the first half of 2023.
- The implementation of the Mold Busters process (the popular term for NYCHA's mold standard procedure as required by the *Baez* litigation) and the update to the Mold

Standard Procedure have improved recurrence rates and aided in prevention of mold cases.³

- In the early months of the pandemic and subsequent lockdown, a backlog of mold inspections accumulated, largely due to reduced staffing levels and the reluctance of residents to report and/or allow access to their units for remedial mold work. However, as the lockdown eased and resources/staffing returned to normal levels, NYCHA has begun to address the backlog of pending mold cases.



Operation Mold Cleanup as of June 2023

- In May 2022, OMAR assembled a team of seasonal staff to remove mold in units that covered up to 50 sq. ft. and reduce the backlog of Caretaker X cleanings, as well as directing painters to clean mold earlier in the Mold Busters 2.0 repairs process (instead of waiting until the end after all trades completed their respective repairs).
- Another smaller team was mobilized for circumstances involving larger square footage in units (50 to 99 square feet). OMAR implemented this initiative at 25 developments, including the Enhanced Oversight Program (“EOP”) sites and the developments with the largest backlogs of mold removal work orders. OMAR is allocating 20 cleanup technicians and two supervisors to staff this team. (This information from OMAR is contained in the *NYCHA 2023 Report on Mold and Leak Response Efforts: Progress, Challenges and Next Steps* (“2023 Report”) at page 33, provided by NYCHA to Congressman Ritchie Torres’ office earlier this year. This is the link to the full 2023 Report: <https://www.nyc.gov/assets/nycha/downloads/pdf/NYCHA-Report-on-Mold-and-Leak-Response-Efforts-2023.pdf>)

³ The *Baez* litigation is the longstanding federal class action matter brought by plaintiffs against NYCHA in the Southern District of New York in 2013 to force NYCHA to appropriately address Mold and Leak remediation and Mold prevention. There is a revised consent decree agreed upon by the parties with which NYCHA must comply.

Operation Mold Cleanup Phase IV - Quick Overview (NYCHA Wide)				
WO Flag	Total WO (Phase I - 13,002) (Phase II - 6,631) (Phase III - 3,830) (Phase IV - 3,094)	Number of Open WO as of 6/12	Number of Closed WO as of 6/12	Percentage of Closed WO as of 6/12
Caretaker X Mold Cleaning	2,820	16	2,804	99.43%
Painter Mold Cleaning	11,003	1,376	9,627	87.49%
Painter Mold Resistant Paint	12,734	2,732	10,002	78.55%
Grand Total	26,557	4,124	22,433	84.47%

Operation “Dry Out”

On April 12, 2023, NYCHA announced a new mold and leak project to address work order backlog, “Operation Dry Out.” This project tackles the universe of apartments with open tub enclosure and selected plumbing work orders over 250 days old⁴. As of April 6, 2023, NYCHA had 3,502 open tub enclosure work orders over 250 days old and 6,235 open plumbing work orders older than 250 days. NYCHA will be addressing a specific sub-set of aging plumbing tickets focusing on pipe, tub enclosure and bathtub issues that are more likely to cause damage to building components, impact additional units, and may lead to excessive moisture conditions and mold growth. The expectation is that all work will be conducted to ensure that the repairs associated with these work orders are high quality and work will be closely coordinated between the trades. NYCHA hopes to complete 50% of these work orders by August 31, 2023, and 100% by December 31, 2023. Work to date has proceeded according to plan.

⁴ Tub enclosures (also called ‘tub surrounds’) involve installations made to cover and protect the walls of the bathtub from water leaks, mold and mildew. They are made of several materials, most commonly molded acrylic panels fused together to make a seamless surface to essentially make the tub area watertight. Because of the prevalent leaks in and around unit tub areas, NYCHA’s use of tub enclosures is an important strategy to reduce leaks in its bathrooms.

Operation Dry Out (April 2023 – ongoing)
Data Date: 6/26/2023

Operation Dry Out - Quick Overview (By Borough)				
Borough / Craft	Total WO	Number of Open WO as of 6/26	Number of Closed WO as of 6/26	Percentage of Closed WO as of 6/26
Bronx	2,810	1,797	1,013	36.05%
CARPENTR	960	677	283	29.48%
PLUMBER	1,816	1,094	722	39.76%
VENDOR	34	26	8	23.53%
Brooklyn	3,172	2,282	890	28.06%
CARPENTR	917	656	261	28.46%
MAINT	3	1	2	66.67%
PLUMBER	2,216	1,599	617	27.84%
VENDOR	36	26	10	27.78%
Manhattan	3,011	2,001	1,010	33.54%
BRKLAYER	2	0	2	100.00%
CARPENTR	1,318	1,061	257	19.50%
MAINT	1	0	1	100.00%
PLUMBER	1,646	901	745	45.26%
VENDOR	44	39	5	11.36%
Queens-Staten Island	720	348	372	51.67%
CARPENTR	148	66	82	55.41%
PLUMBER	557	277	280	50.27%
VENDOR	15	5	10	66.67%
Grand Total	9,713	6,428	3,285	33.82%

The Effective Use of Mold and Leak Data in the Scorecard and Enhanced Oversight Program

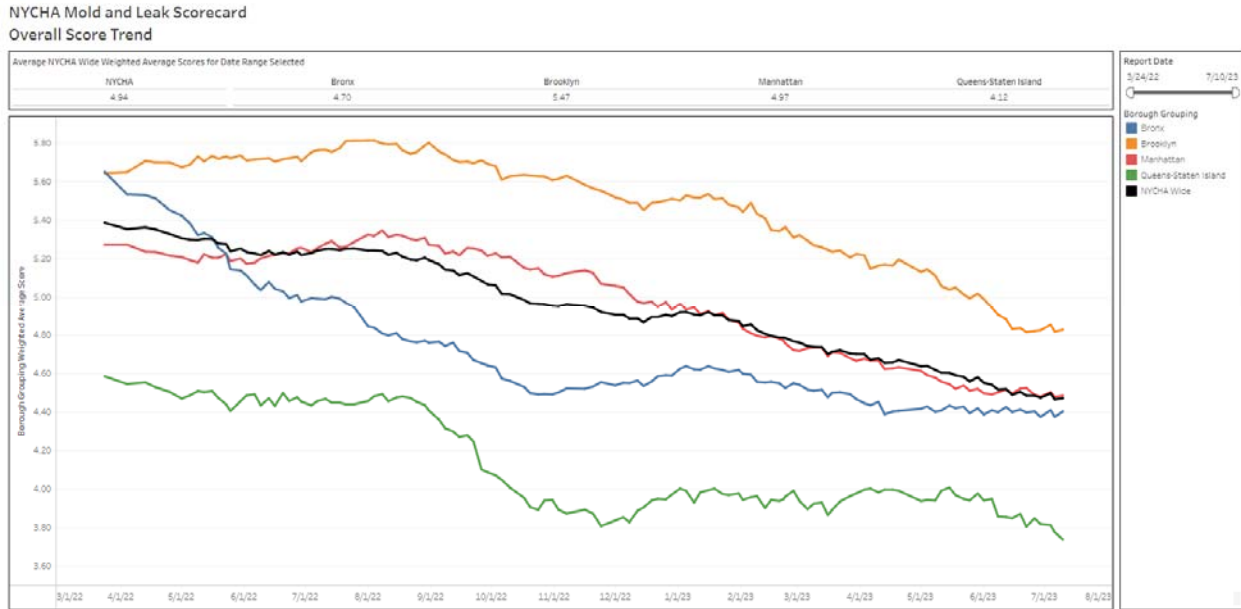
Mold and Leaks Scorecard:

- As NYCHA reported to Congressman Torres in 2023, NYCHA, in partnership with the IDA and the Monitor, developed the *Mold and Leaks Scorecard*, which is an assessment tool consisting of vigorous data analytics techniques which allows for more precise targeting of resources to assist developments with mold compliance through the EOP. This tool also assists in evaluating NYCHA's overall performance on mold and leaks. This tool provides NYCHA with key performance metrics and equips Operations with actionable data that was once unavailable enabling NYCHA management to monitor staff productivity and to intervene when troubling performance areas are identified in each location.
- The Mold and Leaks Scorecard currently evaluates mold and leak performance based on 11 key metrics which correlate to the *Baez* compliance requirements. Each metric has a predetermined weight assigned by NYCHA and the IDA. Performance is determined by a ranking system that lists each consolidation's weighted average score from lowest (i.e., the best performing sites) to highest (i.e., the poorest performing

sites). The 11 metrics are calculated by consolidation, neighborhood, borough, and NYCHA-wide levels.

- Since NYCHA Operations adopted the Scorecard, users have expressed positive feedback about its visual presentation of data, transparency of WO trends, and usability. (See 2023 Torres Report at 22).

The chart below shows the current Scorecard trends by Borough. Note that a downward trend represents success under the Scorecard methodology.



Enhanced Oversight Program (EOP):

- As stated by NYCHA in its 2023 Report to Congressman Torres, to improve compliance metrics related to existing WOs at high-risk consolidations, OMAR, in partnership with the IDA, the Ombudsman Call Center, and the Independent Mold Analyst (Bill Southern/Microecologies) (the “IMA”), engages lower performing consolidations as part of the EOP.⁵ The EOP establishes overall performance milestones consistent with *Baez* requirements and identifies site-specific roadblocks that hinder performance (i.e., staffing shortages, lack of managerial oversight, access issues to occupied units, scheduling disruptions, procurement delays, material shortages, or the need for training). OMAR works with consolidations to address roadblocks by engaging Operations leadership to develop strategic response plans and allocating internal specialized teams to address priority work backlogs.
- OMAR, along with the IDA, OCC and IMA, works with consolidations by having weekly check-ins to review progress, prioritize tasks, discuss priority OCC resident-reported

⁵ The Ombudsman Call Center or “OCC” was established as part of the *Baez* litigation to receive Mold and leak complaints from NYCHA residents which information is then forwarded to NYCHA to address. The IDA also reviews the complaints made to the OCC.

complaints, and develop strategies to tackle the root causes of mold and leaks and WO backlogs. The strategies discussed at check-ins improve consolidations' performance on the Scorecard when implemented. (See 2023 Torres Report at page 28).

- The Monitor Team has recommended to NYCHA that after the OMAR EOP Team leaves a development, responsible managers in the operations division conduct periodic performance checks using the Scorecard methodology to assess whether the improvements during the EOP period have been sustained. If analysis reveals that certain problems still remain, operations managers should respond accordingly, including by recontacting OMAR if necessary. Such oversight should be done at the Neighborhood Administrator level or higher.

Building Line Initiative

OMAR created a building line rehabilitation program called the "Building Line Initiative," or "BLI." The process begins with careful study of building line leak data available in Maximo. The analysis reveals building lines which are most afflicted by leaks (which produce mold) and confirms that replacement of piping systems will address the leak and associated mold issues. The objectives are to target the problem holistically, resolve the underlying root cause, reduce the chances of mold and leak recurrence, and make a long-term investment in the building. The first project was conducted in a 6-story building at NYCHA's Red Hook East development in 2022. The cost per unit was approximately \$140,000. The scope included mold remediation, replacement of bathroom and kitchen fixtures, new tub surrounds, painting with mold resistant paint, replacement of tiles and flooring, replacement of all waste traps, door replacement, electrical work, window glass replacement, lead and asbestos testing and abatement, stack line replacement, and hot and cold-water branch line replacement. The following are before and after photos of the work at Red Hook East.



RHE Before



RHE After





5

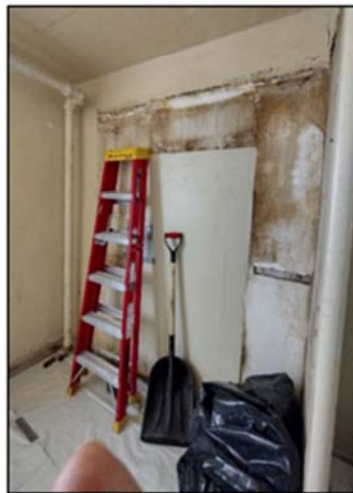
RHE Before



RHE After



RHE Before



RHE Midstream



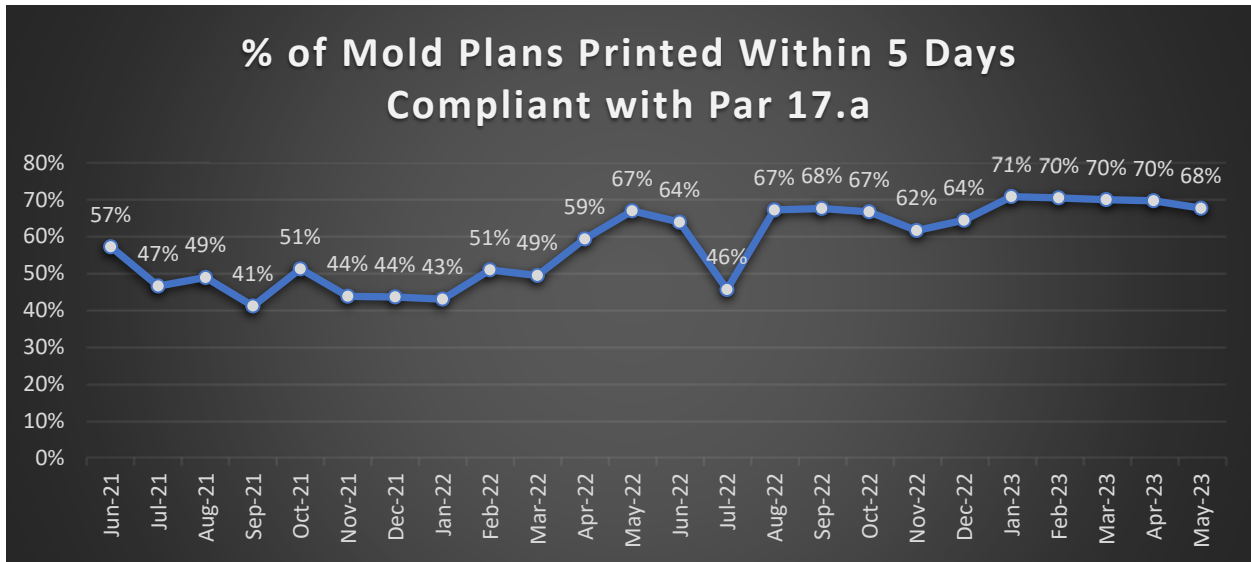
RHE After

A second BLI project is currently underway at Tompkins Houses (85 Tompkins Avenue, “A” line). This is a 16-story building with 15 apartments on the “A” line and one storage area. NYCHA expects the project to be complete and residents to return to their units by July of 2024. The project will cost approximately \$1.7 to \$2.0 million and will include plumbing repairs, electrical repairs and general construction.

Mold Compliance Statistics (Agreement, Exhibit B, Par. 17.a-c) as of June 2023

1. Mold and Leak Inspections and Remediation Plans Mailed within 5 Days as of June 2023:
 - With insufficient staffing levels in the Operations function during the pandemic, NYCHA struggled to comply with its obligation to inspect mold cases and provide Mold Remediation Plans to residents within five business days. However, they were able to gradually improve their performance over the past year and half up to nearly 70% compliance in 2023 thus far.
 - Mold Inspection Initiative – According to NYCHA’s 2023 Report to Congressman Ritchie Torres, “As of January 2022, OMAR has been using the Scorecard to

determine which developments have the highest mold inspection backlog and deploying Superintendents on its team to help those developments. This includes conducting initial mold inspection, QA, and reinspection of WOs. While EOP sites are currently prioritized, OMAR continuously monitors NYCHA-wide trends and, when needed, dispatches inspectors to the consolidations with the highest open mold inspection WO counts. As of March 28, 2023, OMAR staff completed 1,771 mold inspections, including initial inspections, QA inspections, and re-inspections across 24 consolidations.”



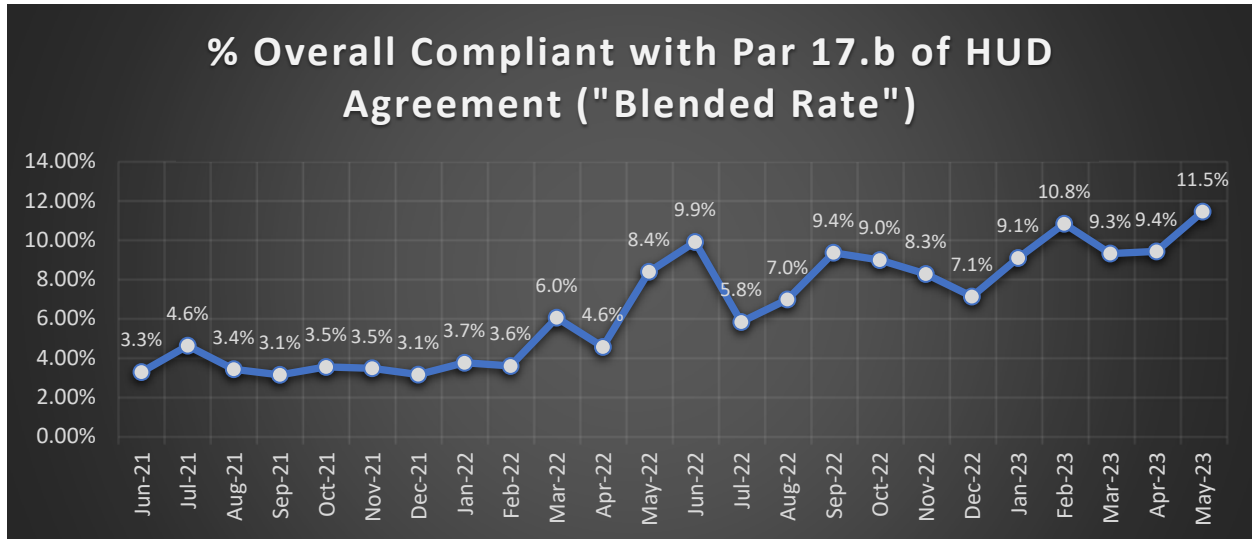
2. “Blended Rate” Compliance Performance with Par 17.B as of June 2023:

- The Monitor and federal stakeholders allowed NYCHA to report mold compliance on a so called “Blended Rate” basis whereby all the provisions of Agreement paragraph 17(b) are considered to determine an overall rate of compliance.
- During the past two years, NYCHA’s overall performance with paragraph 17(b) (using the Blended Rate) has improved significantly from a low 3.1% in September 2021 to over 11% in May 2023.

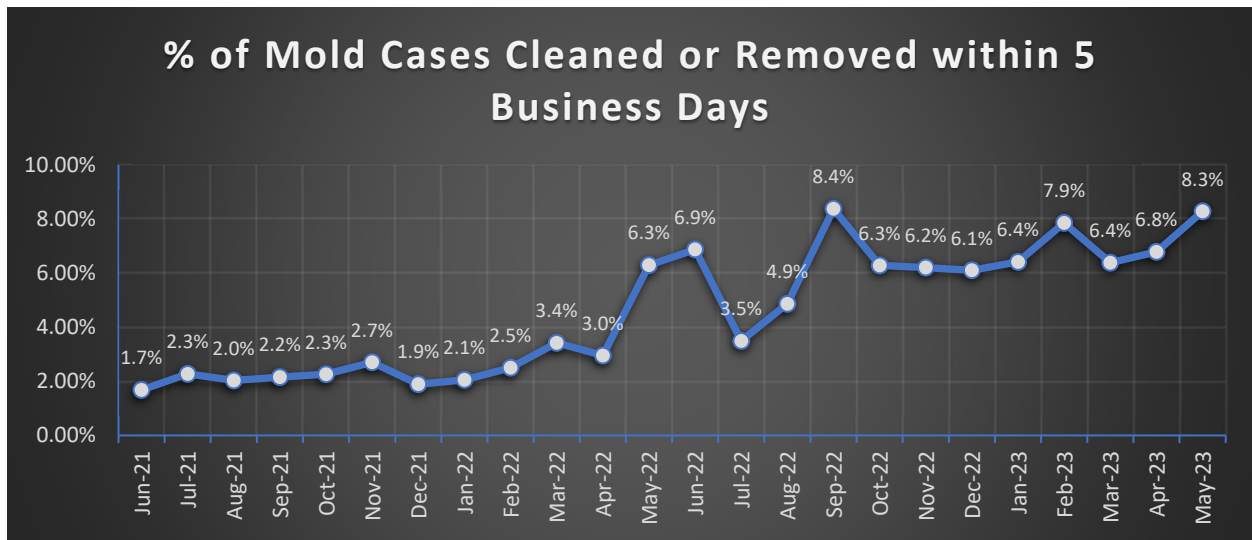
The factors contributing to this increased compliance include:

- Mold Cleanings – The trendlines in the following two charts, “Blended Rate” and Mold Cases Cleaned, track closely with one another. Starting in May 2022, NYCHA directed additional personnel to clean mold by increasing the square footage of mold that Caretaker X’s were allowed to clean from 10 sq. ft. to 20 sq. ft. The additional cleanings also drove their overall compliance with paragraph 17(b) because they reduced the quantity of mold cases that were dependent on the completion of skilled trades repairs and cleanings performed painters at the end of those repairs (see chart below “% of Mold Cases Cleaned or Removed within 5 Business Days”).

- The EOP in which developments with significant compliance deficiencies are given special attention by OMAR and during the oversight period receive additional resources as well (see discussion below).
- As discussed above, OMAR has also implemented special Mold Inspection Initiatives which have helped improve compliance.

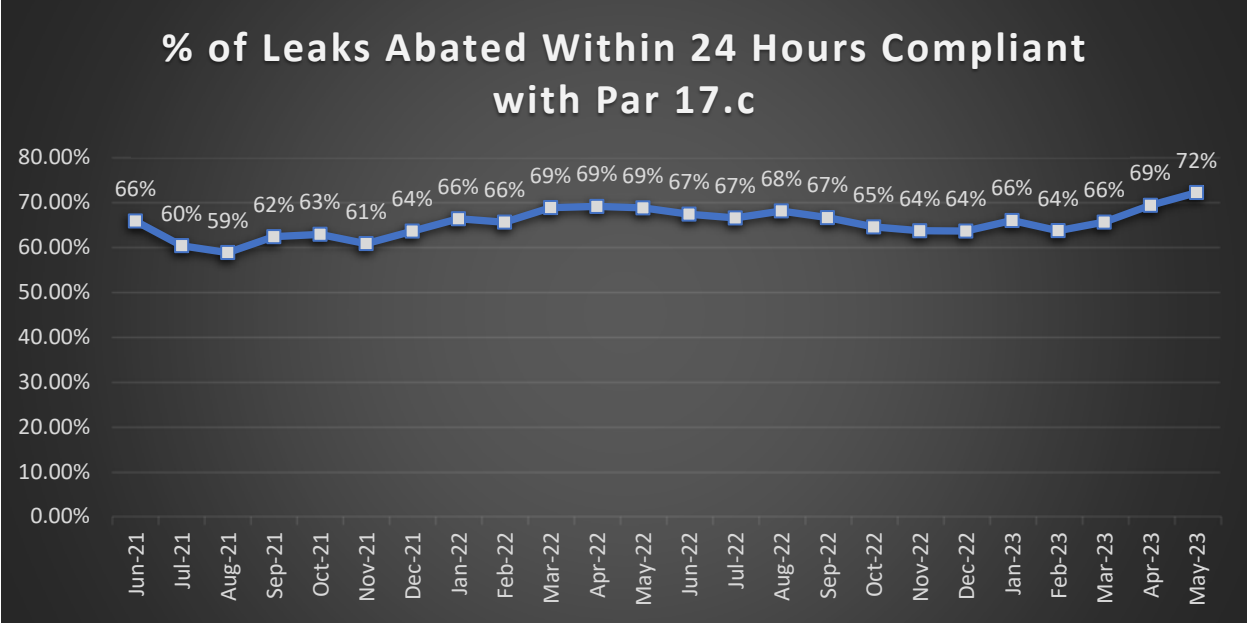


3. Mold Cleaning Progress as of June 2023:



4. Emergency Leaks Addressed within 24 Hours as of June 2023:

- Since 2021, NYCHA has slowly improved its performance in addressing emergency leaks within 24 hours, with an average compliance rate of approximately 65%.



Joint Mold Response Recommendations for NYCHA from the Monitor, IDA, and IMA

In February 2023, the Monitor Team, IMA and IDA Teams met and conferred to create a comprehensive list of recommendations for NYCHA regarding how to respond to, prevent, and prevent recurrence of mold cases. In June 2023, all parties met to discuss the various recommendations. The Monitor requested at the time NYCHA respond to each recommendation in writing within 30 to 45 days. One of the themes of the recommendations is the proposition that NYCHA must improve its productivity amongst skilled trades and maintenance personnel in responding to mold and leak work orders. Even after receiving NYCHA’s responses, discussions are ongoing in this area.

Important accomplishments include:

- The Ventilation Upgrade Project, which added over 6,200 new roof fans and certified over 2,000 more as fit for purpose (after inspection by engineers), combined with the cleaning of over 73,000 vents which work with the roof fans to draw moisture out of units, has decreased the number of new mold cases by over 50% since October 2021 when there were 1,728 new mold cases.
- The office of the IDA has identified a 54% decline in the number of Mold Busters inspections where inadequate ventilation was reported in CY 2020 compared to a rolling 12-month period directly preceding either or both roof fan replacements at a consolidation or vent cleanings at a consolidation. The work orders included in the analysis only include Mold Busters inspections where inadequate ventilation and visible mold were found, but not water damage or a wet reading. Founded Mold Busters inspections with water damage or a wet reading were excluded from this calculation due to the root cause not being isolated to inadequate ventilation.
- The IDA also identified a 32% decline in the number of founded Mold Busters inspections in bathrooms with mechanical ventilation reported in CY 2020 compared to a rolling 12-

month period directly preceding either or both roof fan replacements at a consolidation or vent cleanings at a consolidation. For the pre and post intervention work order counts, only work orders where the question, “Is there mold?” was answered “yes” were counted. Founded work orders where the question, “Is there water?” or “Is there moisture?” are answered “yes” but the mold question is answered “no”, were not counted.

- The Mold Cleaning Initiative (“MCI”), which directs resources to cleaning mold, has materially increased NYCHA’s ability to remove mold and thus the immediate health threat. The MCI has worked through the coordination of additional resources by OMAR. Mold is being cleaned by Caretaker X’s and seasonal employees, and other mold remediation cases are being pre-screened through this effort. Since the effort began in May 2022, approximately 2,600 mold cleanings have been addressed.
- The Mold Inspection Initiative established by OMAR in February 2022, has improved the inspection rate by supplementing local operations resources. Since inception through June 2023, NYCHA was able to address 1,950 mold inspections.
- NYCHA’s Mold standard procedure was revised in February 2020 with the assistance of the Monitor, the IDA and the IMA from the *Baez* matter. These improvements have also served to decrease occurrence and recurrence of mold cases. Notable among the improvements was an improved method for inspectors to identify the root cause of mold.
- The Monitor and the IDA have worked closely with NYCHA to establish the Scorecard system described above to assist property management staff with their mold compliance through EOP. Under this program subject matter experts from OMAR work with a development to deconstruct the various difficulties in achieving mold compliance and make improvements.
- To assist NYCHA in ensuring that mold inspections are properly conducted using Mold Busters procedures, the Monitor team rigorously inspects a sample of mold inspections each day to identify compliance deficiencies and report such findings to NYCHA for action as required. Over the past two years, the Monitor has forwarded approximately 1,300 faulty inspections for review by NYCHA. As necessary, NYCHA will counsel, retrain or discipline the inspectors through this process.

As next steps for continuing this process of improvement (many of which are described above) the Monitor Team recommends that NYCHA take the following actions:

- Continue addressing the backlog of tub enclosures and plumbing work orders which are over 250 days old. As of April 6, 2023, NYCHA identified 3,502 open tub enclosure and 6,235 associated plumbing work orders. NYCHA has rolled out a project to accomplish this mission which it refers to as “Operation Dry Out.” As of June 26, 2023, NYCHA has closed a total of 3,285 tub enclosures and associated plumbing work orders.
- Continue to analyze and improve skilled trade work order efficiency. In this regard, the Monitor’s Team is working with the office of the IDA to analyze work order execution by skilled trades persons at NYCHA to determine their work performance and productivity levels. This endeavor includes major trades such as plumbers, plasterers, carpenters, and painters.

- Roll out the systemwide program to install approximately 90,000 fire dampers in bathroom vents as required by the Mold Action Plan.⁶ Managers within OMAR have worked closely with the IMA to design and select various damper configurations which include the ability to properly adjust upward air flow. NYCHA predicts that some 15,000 to 20,000 dampers will be installed by May 2024 at which point significant additional funding will be required (possibly more than 50 million dollars).
- Senior NYCHA Operations officials should mandate that staff at every NYCHA development use the Mold and Leaks Scorecard system to deconstruct and remedy mold and leak issues, rather than making it an aspect of assessing annual performance of certain management personnel in the 30 NYCHA Neighborhoods.
- Continue to add locations for the Building Line Initiative. Under this approach a rigorous data analysis is performed on leak work orders in particular building lines to reveal the lines with apparent significant leak issues. The data analysis is followed by onsite inspections to confirm that significant leak problems exist which have caused mold, which can be remediated through comprehensive improvements. Though the first two locations for the BLI were identified because of referrals by the Monitor team, subsequent cases should be identified through this two-part process. The Building Line Initiative should always be considered by NYCHA as a viable approach when funds are not available for comprehensive modernization (which are much more costly and time-consuming to complete). In some cases, it may indeed be an alternative to comprehensive modernization. NYCHA should pursue all available funding options for the Building Line Initiative and grantors should give it due consideration.

Conclusion

As demonstrated by the foregoing, NYCHA is making important progress in its commitments to address mold, leak and lead paint issues. This progress must be sustained but may be at risk in certain regards if adequate resources are not available to NYCHA. NYCHA will need over 50 million dollars just to finish the fire damper project. And, of course, repairs to deteriorating buildings and piping systems (or new construction if more cost effective) will require billions of dollars in funding which has not yet been identified. NYCHA must continue to use best efforts to ameliorate mold and lead conditions until such time as its portfolio can be appropriately updated to provide decent, safe and sanitary housing to its residents.

⁶ Fire dampers are located within ventilation ducts. Fire dampers are essential safety measures that will automatically close. They are being installed as part of NYCHA's ventilation project.