

NYCHA Compliance Department:
8th Assessment of Compliance with Requirements Of
Paragraphs 14 and 15 of Exhibit A to the January 31, 2019 Agreement
Between NYCHA, HUD, SDNY and the City of New York

I. Introduction and Methodology

On January 31, 2019, the New York City Housing Authority (“NYCHA”), the United States Department of Housing and Urban Development (“HUD”), the Southern District of New York (“SDNY”), and the City of New York (“City”) entered into a settlement agreement (“HUD Agreement”) which sets forth specific requirements for NYCHA to remedy physical conditions in its developments, including lead-based paint. Exhibit A of the HUD Agreement sets forth the requirements pertaining to lead-based paint.

Paragraph 30(b) of Exhibit A requires NYCHA to provide, every 6 months, “the United States and the Monitor a certification describing its compliance with paragraph 8 through 15” of Exhibit A. Paragraphs 8 through 13 of Exhibit A set forth future obligations that NYCHA must comply with concerning long-term lead abatement projects. Paragraphs 14 and 15 represent ongoing compliance obligations for NYCHA under the EPA Abatement Rule (40 CFR § 745.227) (“Abatement Rule”), and the lead safe work practice requirements set forth in the Lead Safe Housing Rule (24 CFR Part 35, subparts B – R) (“Lead Safe Housing Rule”) and the Renovation, Repair, and Painting Rule (40 CFR Part 745, subpart E) (“RRP Rule”). This is NYCHA’s 8th report assessing compliance with Paragraphs 14 and 15. This report also includes an assessment of NYCHA’s progress with respect to Paragraph 8, which requires that NYCHA abate all lead-based paint at Harlem River and Williamsburg within 5 years of the agreement (2024).

To evaluate NYCHA’s ability to certify to the requirements of Paragraphs 8, 14 and 15 on January 31, 2023, the Compliance Department conducted a review of NYCHA records and activities for the period between June 16, 2022 through December 15, 2022 (“Covered Period”). Additionally, the NYCHA Environmental Health and Safety Department (“EHS”) issued a report (annexed as Attachment A) documenting field oversight activities that should be read in tandem with this Report.

The Compliance Department uses the following methodology to evaluate NYCHA’s compliance with Paragraphs 8, 14 and 15:

- **Existence of Written Policies, Procedures or Contract Specifications:** This criterion evaluates whether NYCHA has established specific written policies, procedures, contract specifications, trainings or instructional materials that required staff and/or vendors to perform the requirements set forth in the regulations during the Covered Period.
- **Existence of IT Controls:** This criterion evaluates whether NYCHA’s Maximo Work Order system (or other system) has established IT controls that strengthen compliance with the applicable regulatory requirement during the Covered Period.
- **Quality Assurance or Field Monitoring Protocols:** This criterion evaluates whether NYCHA has performed any quality assurance or any field monitoring during the Covered Period of abatement, interim control, or RRP projects to assess compliance with each specific regulatory requirement and the results of the quality assurance or field monitoring activities.

- **Recordkeeping/File Review:** This criterion evaluates whether project files for work orders closed during the Covered Period contain documentation required by and/or evidencing compliance with each specific regulatory requirement.
- **Overall Assessment of Compliance:** This overall assessment of NYCHA’s compliance during the Covered Period with each specific requirement is based upon the above-described criteria and any additional information provided by NYCHA staff. This shall also disclose any significant identified deficiencies with each specific regulatory requirement and, where available, provide action items that NYCHA must conduct in the next 6 months to address compliance shortfalls.

II. [Update on Compliance-Related Activities Since Last Paragraph 30\(b\) Certification \(July 31, 2022\)](#)

On July 31, 2022, NYCHA was unable to certify to compliance with Paragraphs 14 and 15 for the following main reasons.

- NYCHA needs to improve compliance with the Notice of Hazard Reduction (“NOHR”) requirement set forth in 24 CFR § 35.175 and 40 CFR § 745.227(i) (paragraph 14(g)).
- NYCHA did not have enough controls on collecting and reviewing vendor firm and worker certification requirements under the RRP rule (paragraph 15(b)).
- NYCHA did not have adequate controls to collect RRP checklist and pre-work notice documentation from vendors (paragraphs 15(e), (f), (h), and (i)).
- NYCHA did not have adequate processes for issuing the NOHR (paragraph 15(g)).
- NYCHA was generally not in compliance with the clearance examination requirements due to inadequate worksite controls while waiting for dust wipe results and missed or late clearance examinations (paragraph 15(j)).

On July 31, 2022, NYCHA Compliance did determine that NYCHA had exhibited adequate controls or documentation to demonstrate compliance with the following sub-paragraphs:

- Paragraphs 14(a), (b), (c), (d), (e) and (f): Completion of lead abatement activities pursuant to 40 C.F.R. § 745.227(e)- 2, 4, 5, 10.
- Paragraph 15(a): Establishing sufficient information in NYCHA’s renovation and maintenance computer systems to readily identify renovation and maintenance projects involving work to which lead-safe work practice regulations apply in accordance with 24 CFR §§ 35.1330, 35.1350 and 40 CFR § 745.85, 745.90.
- Paragraph 15(c): Maintaining status as a certified RRP firm.
- Paragraph 15(d): Confirming that its storerooms have sufficient supplies that can be used by NYCHA staff daily to fulfill the lead safe work practice requirements pursuant to 24 CFR § 35.1350 and 40 CFR § 785.85.

Overall, NYCHA continues to struggle with compliance obligations related to documentation for vendor-performed RRP work, clearance examinations for RRP and interim control projects, and the transmittal of timely NOHRs following the completion of abatement or remediation work.

In addition, there are three separate areas of Compliance risk that have been reported in prior Certifications.

First, as of January 5, 2023, NYCHA has received results for a total of 61,079 apartments across 166 developments for buildings that were previously thought to be exempt based on the random sampling method based on the federal standard of 1.0 mg/cm². As of January 5, 2023, of the 61,079 apartments, 54,277 are negative under the federal standard and 6,802 are positive in buildings that were identified as being exempt. Additionally, 28,919 apartments in these developments remain untested, or have been tested but have results that are pending. As of January 5, 2023, LHCD has identified 3,887 positive apartments at the city standard of 0.5 mg/cm² in buildings previously considered exempt. These units will now require annual visual assessments and will require twice per year visual assessments if there is a child under six (“CU6”), as per the TEMPO program.

Second, Compliance has identified that, for 96% (65,425 out of 68,439) of work orders flagged as potentially subject to RRP requirements, NYCHA renovators are indicating on the work order that they are not performing work that requires RRP protocols. This does not necessarily mean these work orders are non-compliant. Indeed, renovators determine whether RRP work is actually required in a flagged unit based on a number of factors, including XRF component-level testing results, where applicable, and the square footage of presumed or known lead-based paint that the work will disturb. RRP work may have not been required in these units if the renovator was not performing work that disturbs more than two square feet or more than 10 percent of a single component of presumed or known lead-based paint in a room. To the extent testing results are available for that unit, renovators can know whether the work being performed is disturbing a known positive component in non CU6 units based on the component level testing at 1.0 mg/cm² and in CU6 units at component level testing at 0.5 mg/cm².

During the Covered Period, the Compliance Department completed work on a data analytics tool that helps identify a subset of higher risk work orders based on a number of fields in the RRP work order, including by filtering out whether work was completed, and by focusing on work orders where work took place in a room with a positive component and the renovator still answered the question “no”. Renovators with several high-risk work orders who answered “no” in all instances are now being reviewed in greater depth by EH&S’ Lead Oversight Team to determine whether this subset of renovators is not following RRP protocols. Material on how to make a proper determination was also included in the RRP Refresher Training, which launched in July 2022. The Compliance Department plans to use its data analytics tool and field monitoring process to conduct an ongoing review of this issue. That review will determine next steps, including flagging particular supervisors and renovators for additional training or oversight. Similarly, Compliance has identified control weaknesses in how the RRP protocols in the work order system are implemented by NYCHA vendors.

Third, during the Covered Period, NYCHA’s IT Department identified a glitch in the transfer of some of the demographic data from NYCHA’s Siebel system to its Maximo system, which caused both under- and over-reporting when flagging units as having a child under six years old living in or regularly visiting the unit for a period of at least 4 months. Approximately 4,702 units went under-reported and should have been flagged as a CU6 unit during the four-month period, and approximately 7,167 units went over-reported and should not have been flagged as a CU6 unit but were flagged during the four-month period. The Compliance Department, in collaboration with the federal Monitor, HUD, and the U.S. Attorney’s Office for the Southern District of New York, reviewed work order data for the 4,702 under-reported units in order to analyze approximately 1,128 work orders in approximately 400 unique apartments where work took place and the unit was not flagged as requiring potential adherence to RRP protocols. The group then

reviewed the data to determine whether the work disturbed lead-based paint components that were positive at 1.0 mg/cm² or whether it had previously been abated or tested negative at the federal standard, among other criteria. Based on that review, the group determined that 12 units would require a risk assessment to make sure no dust hazards are present in the unit. NYCHA Compliance and Lead Hazard Control were also able to update the visual assessment and TEMPO program universes after the glitch was identified so that it had no impact on Round 2 visual assessments or long-term enrollment in the TEMPO program.

Another glitch was also identified at the end of the Covered Period by the IT Department that caused some units to be tagged improperly based on the way the code treats uploaded XRF test results at 1.0 mg/cm² relative to the results at 0.5 mg/cm². The impact of this glitch is still being assessed. These issues reflect an ongoing risk associated with the way unit-level data was constructed in the Maximo system. NYCHA has employed layers of coding and increasing complexity in order to automate how a unit should be tagged based on a wide range of inputs including demographic information, building information, XRF test results at both the 0.5 mg/cm² and 1.0 mg/cm² standard for more than one hundred components per unit, abatement history and other information. If one element of the hierarchy or the code is incorrect, a set of units can be mis-identified in the system.

General Update on Compliance with Paragraph 8: NYCHA's PACT partners continued abatement activities at Harlem River and Williamsburg. For the purpose of reporting progress in this report, NYCHA is using the "clearance end date" as provided by the PACT partner to identify units where abatement and clearance are completed. In addition, the report currently provides detail only on units abated and not common areas. The denominator used for the purpose of reporting on progress is currently the total of all the units at the property, as testing at the 0.5 mg/cm² standard is ongoing so the number of positive, planned units is not yet known.

As of December 15, 2022, 184 units (approximately 26.6% of the 693 total units at Harlem River I and Harlem River II) have been abated at Harlem River Houses. At Harlem River, during STV's field inspections, compliance with lead abatement requirements was observed for virtually all compliance tasks, as laid out in detail in this report, and most non-compliant items have either been resolved or improved upon over time. In addition, the documents reviewed demonstrated substantial compliance with the requirements of Paragraph 14, with some deficiencies noted in the report. Overall, the PACT Partner and the abatement subcontractor have been receptive to STV's recommendations and have taken steps to address all deficiencies.

As of December 15, 2022, 402 units (approximately 24.7% of the total 1,630 units) have been abated and cleared at Williamsburg. At Williamsburg, during STV's field inspections, compliance during the Covered Period was observed for virtually all compliance tasks and no findings of non-compliance have been identified since mid-October except that the Williamsburg team has not been able to provide the equipment manufacturer's specification for the HEPA attachments being utilized. Documents reviewed by NYCHA Compliance demonstrated a lack of compliance with abatement documentation requirements for some units with respect to EPA notices of commencement, and some issues with the signature block for Occupant Protection Plans, but overall, the PACT Partner showed progress meeting the abatement documentation requirements of Paragraph 14.

General Update on Compliance with Paragraph 14: NYCHA has made significant strides in building a compliant abatement program. Both documentary and field monitoring from the Covered Period show a high rate of compliance for abatement projects. EHS observed 258 jobs and observed almost 100% compliance rate with various requirements. Compliance’s documentary monitoring exhibited a high rate of compliance in some areas. Based on results from field monitoring and file review, Compliance recommends that NYCHA can continue to certify compliance with the following parts of Paragraph 14: a, b, c, e and f.

However, Compliance’s documentary monitoring also revealed, upon initial review, reductions in compliance rates in the following areas relative to the July certification – (i) the presence of documented methodologies for the collection and lab analysis of dust wipes in uploaded documents, (ii) uploading certifications for risk assessors and laboratories, and (iii) generating and uploading Lead Disclosure Summaries and Notices of Hazard Reduction. After a subsequent review, compliance rates improved when LHC was able to upload documents after the initial review, especially with respect the certifications of risk assessors and laboratories. This reduction in performance impacted NYCHA’s ability to certify compliance with the following parts of Paragraph 14: d and g.

Improving performance in these areas is very important and will be difficult as NYCHA continues its efforts to complete abatement work in units with children under 6 (“CU6”) as part of the TEMPO program.

General Update on Compliance with Paragraph 15: NYCHA continues to make some strides to improve compliance with the RRP Rule and the Lead Safe Housing Rule requirements set forth in Paragraph 15. Field monitoring performed by EHS continues to show that NYCHA renovators are adhering to their training in the field. EHS has also observed improvements in all aspects of RRP performance and availability of RRP equipment in storerooms. The major issues preventing certification with Paragraph 15 are establishing better controls for vendor RRP documentation, maintaining more consistency in issuing Notices of Hazard Reduction in “exception cases” where the notice must be manually generated, and improving performance with respect to clearance examinations.

On clearance examinations, NYCHA is using dashboards and systems that improve the management of clearance examinations. While clearance examinations remain a compliance challenge, performance has generally improved except that NYCHA has seen an increase in the percentage of dust wipes in the “high fail” category relative to the July certification, which suggests that Compliance and LHC will need to re-emphasize the importance of adhering to cleaning protocols.

Based on results from field monitoring and file review, Compliance recommends that NYCHA can continue to certify substantial compliance in the following parts of Paragraph 15: a, c and d. In order to certify to Paragraph 15 b, e, f, g, h, i, and j, NYCHA must strengthen its oversight of vendors performing RRP work, and further improve its clearance protocols.

EHS Escalations: While EHS observed high rates of compliance with RRP procedures and other lead requirements during the Covered Period, they escalated 4 observations to Compliance. Two of these escalations were related to missing lead-disclosure documents. Two of the escalations concerned not displaying the RRP safety sign or inadequate containment of work area. Compliance took the following actions in response to the EHS escalations.

EHS Inspection #	EHS Escalation Report Description	Description	Action Taken
N/A	Lead Disclosure Document Re-Inspection Failures (18 Sites, Dated October 20, 2022)	EHS identified 18 sites that failed an inspection and a re-inspection for lead disclosure documents in violation of Compliance’s “Guidance for Lead Disclosure Rule Documentation” issued in January 2022.	Compliance and EH&S executive leadership hosted a joint briefing with property staff and Neighborhood Administrators on November 16, 2022 for the sites that had not passed a re-inspection. The briefing covered the instructions provided to development staff for compiling Lead Disclosure Rule binders.
N/A	Lead Disclosure Document Re-Inspection Failures (5 Sites, Dated January 3, 2023)	EHS identified five sites that failed an inspection and a re-inspection for lead disclosure documents in violation of Compliance’s “Guidance for Lead Disclosure Rule Documentation” issued in January 2022.	Compliance and EH&S executive leadership hosted a joint briefing with property staff and Neighborhood Administrators on January 24, 2023 for the sites that had not passed re-inspection. The briefing covered the instructions provided to development staff for compiling Lead Disclosure Rule binders.
92648386	Signage at King Towers	EHS identified that the RRP Safety Sign was not posted at the work area. Based on the report, the worker did not have any signs in his supply kit but stated he would retrieve one during his break.	The Chief Compliance Officer sent an e-mail warning to the staff member and his Director attaching the RRP Safety Sign and outlining the requirement that he use the appropriate signage.
94495155	Containment at Red Hook West Houses	Based on the report, EH&S identified that there was inadequate containment in the kitchen during work activities and the work area was very dusty because the plasterer did not adequately wet the disturbed paint surface.	An instructional memo was provided to the plasterer regarding proper containment and dust mitigation protocols and it was signed on October 4, 2022 and discussed with the plasterer.
92654893	Containment at Dyckman Houses	EHS identified work area containment issues. They did not close the door or cover the entrances to the workspace. Before beginning the renovation, the work area must be isolated so that no dust or debris leaves the work area while the renovation is being performed. LOTs asked the painters to adequately contain the work area. The painters complied with the LOT directive to	Compliance suggested to supervisory staff that disciplinary action be taken, but the DPA Supervisor disputed the facts of EH&S findings. DPA did discuss the contents of the memorandum with the painters.

EHS Inspection #	EHS Escalation Report Description	Description	Action Taken
		adequately contain the work area as they created barriers between the work area and the resident. The supervisor was also contacted	

III. Updates on Other Significant Lead Matters

Trainings and Lead Safe Housing Procedure

Pursuant to the interim Lead Action Plan approved by the federal Monitor in January 2021, the Compliance Department worked with other NYCHA business units to launch two trainings during the Covered Period. The first training is an “RRP Refresher Course” that can be viewed in a series of online modules and that lasts three hours. This course is not a method to renew an RRP certification, but it provides a set of lessons on adhering to RRP protocols and provides guidance based on NYCHA’s IT systems and other experiences in adhering to RRP protocols in NYCHA’s units. As of December 31, 2022, 1,906 of the 3,819 (50%) of the staff assigned to the training had completed the coursework.

The second training is a brief twenty-minute online course on the Lead Disclosure Rule for property management and other staff. This course provides a walk-through of the Rule, and then describes each NYCHA form, with numbers, links and a detailed description of which entity is responsible for providing the documents when. Both courses were launched in NYCHA’s Learning Management System so the Compliance Department can track completion by NYCHA staff. As of December 31, 2022, 1,047 of the 1,168 (90%) of the staff assigned to the training had completed the course.

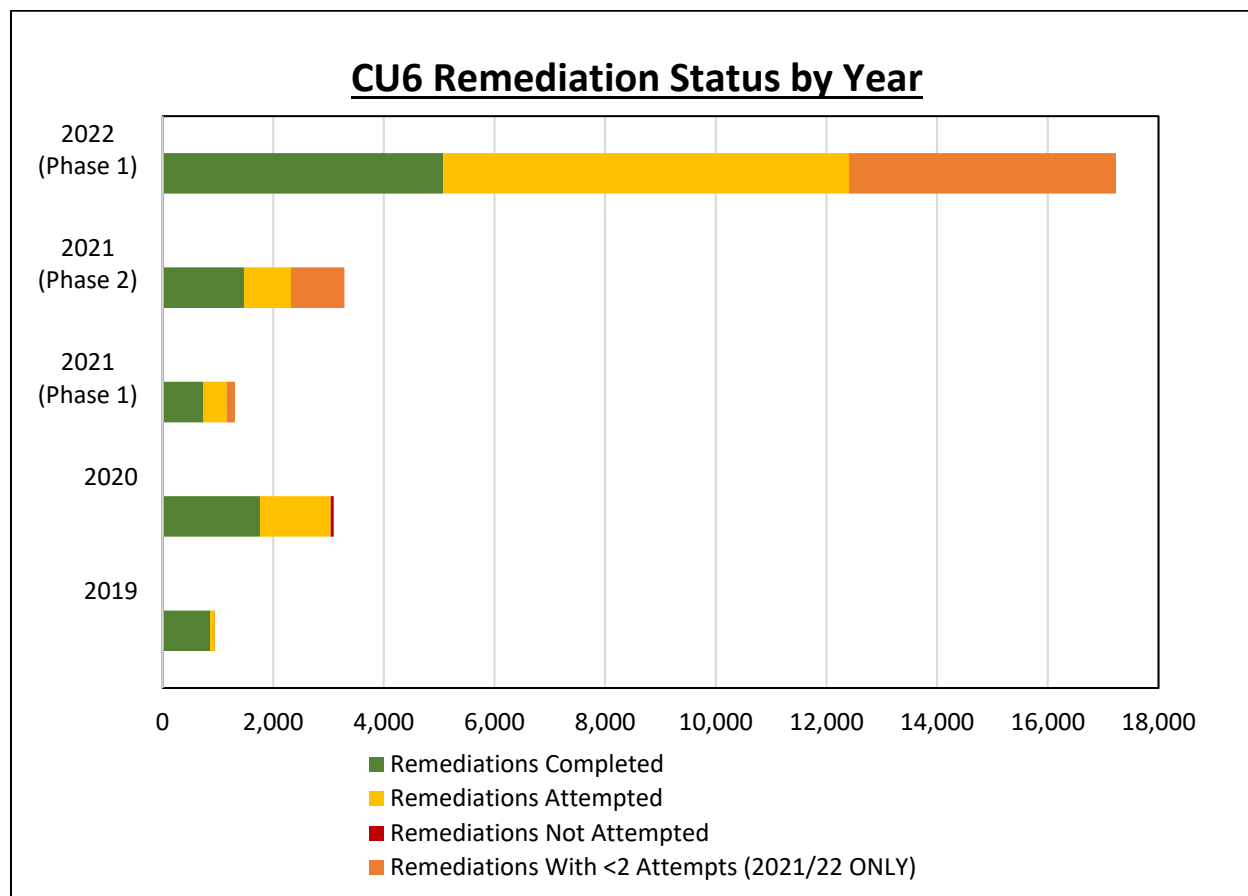
During the Covered Period, NYCHA also completed updates to the Quick Reference Guides entitled (1) Lead Paint Documentation – How to Comply with the HUD Lead Disclosure Rule; (2) Lead-Safe Work Practices – Renovation, Repair and Painting Work; and (3) Lead-Based Paint – Children with Elevated Blood Lead Level. These Quick Reference Guides were updated based on the updates made to the Lead Safe Housing Procedure (SP 050:20:1) on July 5, 2022.

Visual Assessments and Remediations

NYCHA continues to perform visual assessments on an annual basis and now performs two visual assessments per year for child under 6 apartments with known or presumed lead-based paint pursuant to the TEMPO program. While NYCHA has performed over 18,000 remediations¹ over the past approximately three years (and attempted to perform remediation for thousands of other work orders) based on these visual assessments, NYCHA continues to have an ongoing backlog of open work orders for remediation arising from the 2019, 2020, and 2021 visual assessments.

¹ The 40,000 remediations reported in the previous report included a significant amount of work performed in 2018. As previously disclosed in the July 31, 2022 Certification, NYCHA did not perform clearance examinations for all of these remediations.

The total number of completed remediation work orders, open remediation work orders, remediations attempted², remediations not attempted, and remediations pending³ as of December 19, 2022 are below for 2019, 2020, 2021, and Phase 1 2022. Phase 2 visual assessments for CU6 units and 2022 visual assessments in non-CU6 units were completed after the Covered Period, and so progress remediating the deficiencies identified will be covered in the next report.



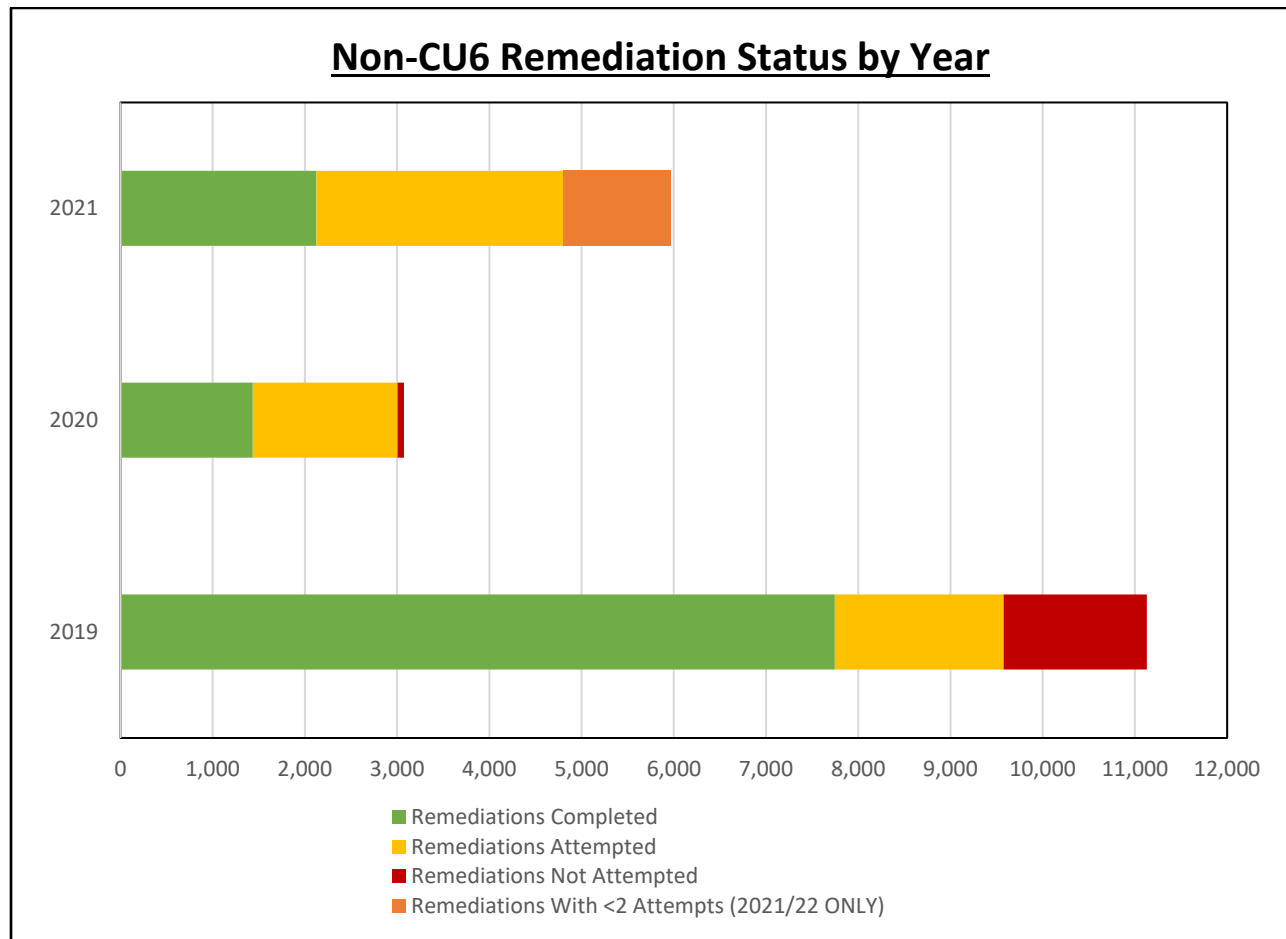
In CU6 units, NYCHA completed or made attempts in 944 of 946 units in 2019 and 3,038 of 3,054 units in 2020. From the Phase 1 2021 visual assessments in CU6 units, NYCHA completed or made at least two attempts in 1,165 of 1,322 units (75 additional units are pending a dust wipe but physical work was completed). From the Phase 2 2021 visual assessments in CU6 units, NYCHA completed or made at least two attempts in 2,361 of 3,266 units (122 additional apartments are pending a dust wipe). During the Phase 1 2022 visual assessments in CU6 units, 17,556 units were identified with deficiencies. NYCHA has completed or made two attempts in 13,212 units (316 additional apartments are pending a dust wipe).

It is important to note that NYCHA expected this large increase in the number of deficiencies identified during the Phase 1 CU6 2022 visual inspections. NYCHA increased the number of visual assessments that

² For 2019 and 2020, Remediations Attempted refers to units with at least 1 attempt. Beginning in 2021, Remediations Attempted refers to units with 2 or more attempts.

³ The data for 2021 and 2022 does not have information regarding a breakdown showing which units had no attempts versus 1 attempt. It is all categorized as "<2 Attempts".

must be conducted because apartments that were exempt or tested negative using the 1.0 mg/cm² standard are now being presumed positive and assessed due to the change in standard to 0.5 mg/cm². Because many of these units have never been inspected and because all components in the units are being presumed positive, there has been an increase in the number of deficiencies identified. Eventually, these deficiencies will need to be mapped against XRF testing results at the 0.5 mg/cm² standard to determine whether the assessed component with a deficiency identified is also positive.



As for non-CU6 units, NYCHA completed or made attempts in 9,577 of 11,130 units from the 2019 visual assessment round and 3,004 of 3,082 units from the 2020 visual assessment round.⁴ For non-CU6 units in 2021, NYCHA completed or made two attempts in 4,900 out of 5,963 units (265 additional units are pending a dust wipe).

Abatement Progress

NYCHA made progress during the Covered Period with respect to its obligation to abate the portfolio along timelines defined by Paragraphs 9 through 12 of Exhibit A of the HUD Agreement. NYCHA is utilizing several sources of funds to abate the portfolio by January 2039 including (1) the PACT program, (2) a \$771.8 million program now managed by the Lead Hazard Control Department which is funded via the

⁴ The data for 2021 and 2022 does not have information have a breakdown showing which units had no attempts versus 1 attempt. It is all categorized as “<2 Attempts”.

City Capital Action Plan, (3) utilization of recent HUD grants awarded to abate CU6 units and units at Red Hook Houses, (4) as part of the scope of its Comprehensive Modernization program and other capital projects, and (5) all vacant units are tested and abated if found to be positive, which is funded with Community Development Block Grant and other funds.

PACT Program: During the Covered Period, testing and abatement at 0.5 mg/cm² continued at Round 8 sites, including Harlem River Houses, Williamsburg Houses, Boulevard Houses, Fiorentino Plaza, Linden Houses and Penn Wortman. NYCHA has also been working with the Manhattan Bundle and the Brooklyn Bundle⁵ to determine how many units have been and will still need to be abated at the prior 1.0 mg/cm² standard, since those transactions closed before the standard changed on December 1, 2021. In addition, in September 2022, NYCHA's Compliance Department published a "Memorandum on Policies Governing Testing and Abatement of Lead-Based Paint at PACT Sites" which updated requirements for PACT partners in future rounds, requiring that PACT partners test and abate units at the 0.5 mg/cm² standard.

The Boulevard Houses and Fiorentino Plaza PACT Partner began abatement during the Covered Period. Significant gaps in compliance related to both abatement and clearance were identified by NYCHA's Compliance Department and the third-party environmental firm conducting oversight on behalf of NYCHA. These gaps were reported to the federal Monitor, the U.S. Attorney's Office for the Southern District of New York, and the Environmental Protection Agency. Since the gaps were identified, NYCHA Compliance has been working with the PACT Partner to adjust the personnel and firms involved in the project. NYCHA Compliance also worked to draft a corrective action plan that will ensure the PACT Partner re-clean and have a new vendor clear all relevant units. Performance has improved but is still being closely monitored by NYCHA Compliance.

As of December 15, 2022, more than 620 units had been abated and cleared at the Round 8 sites.

City Capital Action Plan, Move-Outs TEMPO Abatement: During the Covered Period, NYCHA's Lead Hazard Control Department made significant progress scaling up its TEMPO Abatement program. As part of the first phase of the program, NYCHA will abate occupied CU6 apartments that test positive at 0.5 mg/cm² where children live or visit for more than 10 hours a week and where the family voluntarily agrees to relocate. During the Covered Period, LHCD rolled the program out to 8 developments: Wagner, Grant, Ingersoll, Jefferson, Red Hook East, Red Hook West, Van Dyke I, and Whitman.

LHCD also secured the Office of Management and Budget's approval of the Certificate to Proceed for the program, including approval for an initial CP on October 20, 2022 and an amended CP was approved on December 28, 2022. The amended CP approves a cost limitation of more than \$51.8 million in Fiscal Year 2023 City Capital funds for abatement and testing to be spent as part of the TEMPO Abatement Program.

From July 18, 2022 through December 15, 2022, NYCHA abated and cleared more than 270 units as part of the TEMPO Abatement program. According to Lead Hazard Control, since the standard changed on December 1, 2021, from January 1, 2022 to December 14, 2022, NYCHA abated 1,570 units at 0.5 mg/cm²

⁵ Pre-1978 buildings for the Brooklyn bundle include 572 Warren Street, Armstrong I, Armstrong II, Independence, Weeksville Gardens and Williams Plaza. Pre-1978 buildings for the Manhattan bundle include 335 East 111th Street, 344 East 28th Street, Park Avenue-East 112nd (123rd Street), Wise Towers, Fort Washington Avenue Rehab, Grampion, Manhattanville Rehab (Group 2 and Group 3), Public School 139, Samuel (MHOP) I, II and III, and Washington Heights Rehab (Groups 1 & 2, Phase III, Phase IV(C) and Phase IV(D)).

across the portfolio via a range of programs including its move-out program, TEMPO abatement program and other special projects.

General Abatement Reporting: NYCHA plans to create a single dashboard to track abatement across the portfolio in calendar year 2023, so it can begin reporting on the metrics outlined in Paragraphs 9 through 12 of Exhibit A of the HUD Agreement with more precision. Note that during NYCHA's XRF initiative, NYCHA identified approximately 25,528 units that were positive at the federal standard of 1.0 mg/cm² out of 102,250 units tested, which is a positivity rate of approximately 24.4% (more than 5,980 units are pending results). Thus, NYCHA expects that the denominator for the purposes of Paragraphs 9 through 12 of Exhibit A of the HUD Agreement will include approximately 27,000 units that will need to be abated at the 1.0 mg/cm² standard. At 0.5 mg/cm², NYCHA's positivity rate is approximately 35.7%, and so NYCHA expects a significant number of additional units will need to be abated at the new standard, even if they did not need to be abated at the 1.0 mg/cm² standard. If NYCHA, as expected, can increase its 2022 pace of approximately 1,500 units abated at 0.5 mg/cm² each year to a pace of approximately 3,500 units abated per year as the programs scale up, it should be able to far exceed the requirement that 13,500 units be abated, which is the current estimate for the 50% metric that must be abated by January 2029. Based on the pace of the PACT program and the TEMPO abatement program as each program scaled up in the latter half of 2022, NYCHA should be able to exceed that annual total.

[IV. Assessment of Compliance with Paragraph 8 for the Covered Period](#)

The HUD agreement sets forth specific requirements for abating lead-based paint across the portfolio, including for Project Site(s) that have converted under the PACT program if such conversions have occurred more than six (6) months after January 31, 2019, the effective date of the HUD Agreement. These obligations are set forth in Exhibit A of the HUD Agreement.

[Regulatory Requirements for Paragraph 8:](#)

Exhibit A Paragraph 8 requires that NYCHA abate all lead-based paint within 5 years of the execution of the HUD Agreement (January 31, 2024) at the Harlem River Houses and Williamsburg Houses in accordance with 40 C.F.R. Part 745 Subpart L. Abatement that takes place under Exhibit A Paragraph 8 must meet the standards established under Exhibit A Paragraph 14, and the biannual certifications required under Exhibit A Paragraph 30(b) must cover the work performed under Paragraphs 8 and 14 and must be submitted to the federal Monitor, SDNY, and HUD.

This section constitutes the second update pertaining to the abatement progress at Harlem River Houses and Williamsburg Houses and so general background on the projects and the methods NYCHA is using to monitor compliance using field monitoring and documentation review will be discussed in detail in this report.

[Background on the PACT Program, Harlem River Houses and Williamsburg Houses:](#)

HUD's Rental Assistance Demonstration ("RAD") is a program created by the Consolidated and Further Continuing Appropriations Act of 2012 (Public Law 112-55) and the corresponding HUD Notice H 2019-09/PIH-2019-23 REV-4 (September 5, 2019) ("RAD Notice"), as both may be amended, for the conversion of public housing to long-term Section 8 assistance to enable public housing authorities to make necessary repairs and ensure long term affordability of units. NYCHA also implements the conversion of public housing to Section 8 housing using Section 18 of the U.S. Housing Act 1937 and retention pursuant to 24

C.F.R Part 200 (“Part 200”). All such conversions are implemented under NYCHA’s Permanent Affordability Commitment Together (“PACT”) program.

Williamsburg Houses and Harlem River Houses were previously operated by NYCHA pursuant to Section 9 of the United States Housing Act of 1937 but were converted through the PACT Program. The PACT conversion allows the PACT Partner to finance a rehabilitation and modernization project to upgrade the developments. In addition, the PACT Partner will employ a managing agent who will serve as the new day-to-day property manager. The Harlem River Houses PACT transaction closed on February 17, 2022 and the Williamsburg Houses PACT transaction closed on December 28, 2021.

1. Harlem River Houses

Harlem River Houses (HRH) and Harlem River II (HRII) consists of 693 total units. As part of the PACT transaction, Settlement Housing Fund and West Harlem Group Assistance (the “PACT Partners”) are the lead developers of the project. C+C Apartment Management LLC was retained to oversee day-to-day management at this development. L+M Builders was retained as the general contractor to lead the capital rehabilitation of the development. L+M Builders retained a subcontractor, GM Enterprises, to abate lead-based paint at the property. In conformance with local and federal requirements, abatement clearance activities are being independently certified by another entity, Airtek Environmental Corp.

The PACT Partner is obligated, under the transaction documents, to abate all lead-based paint in units and interior common areas available for use by residents. The PACT Partner is abating all lead-based paint via removal and is removing all components that test positive at the 0.5 mg/cm² standard to ensure the development is “lead-free”.

Abatement activities began on March 7, 2022. As of December 15, 2022, 184 units (approximately 26.6% of the total units) have been abated and cleared at Harlem River Houses. This is an improvement in abatement production rates compared to 10% at the end of the previous reporting period. The photographs below depict a sample of the abatement work completed at Building 3 and 7.



Chemical stripper/peel away (Building 3, 211G)



Chemical stripper/peel away (Building 3, 211G)



Chemical stripper/peel away (Building 7, 191V)



Chemical stripper/peel away (Building 3, 191V)

Photo 1 – Abatement taking place at Harlem River

2. Williamsburg Houses

Williamsburg Houses consists of approximately 1,630 apartment units. MDG Design and Construction (the “PACT Partner”) is the lead developer of the project. The PACT Partner retained the services of Wavecrest Management to oversee the day-to-day management at this development. MDG Design and Construction is leading the rehabilitation work on the site and retained Belgrave Enterprise, Meridian ESG and TLD Services, Inc. as the abatement subcontractors. Belgrave has not performed work since the early part of the project and has struggled to produce requisite documentation to the PACT Partner for the limited work performed in February 2022. In conformance with local and federal requirements, abatement clearance activities have been independently conducted by another entity, ALC Environmental.

The PACT Partner is obligated, under the transaction documents, to abate all lead-based paint in units and interior common areas accessible to residents. The PACT Partner is abating all lead-based paint via removal and is removing all components that test positive at the 0.5 mg/cm² standard to ensure the development is “lead-free”.

Abatement activities began on February 18, 2022. As of December 2022, 402 units (approximately 24.7% of the total units) have been abated and cleared at Williamsburg. This is an increase in abatement production rates compared to the previous reporting period of 6%, especially when the abatement method frequently involves total demolition and removal of the affected components. The photos below show a sample of the abatement work completed at this development.



Hand wash station/decon
(Building 5 SH30 entrance)



Abated walls and ceiling
(Building 5 SH30, Apt 4C)



Critical Barrier (Building 5
SH32, Apt 1B)



Administrative Postings
(Building 5 SH32 entrance)

Photo 2 – Abatement at Williamsburg.

[IT Controls for Paragraph 8:](#)

Because all of the PACT Partners do not use one system to collect documentation and information on each abatement project, NYCHA Compliance, Real Estate Development and Sustainability established a uniform reporting system using Smartsheet. PACT Partners must upload information on a unit-by-unit basis into individual rows and attach documents to each row so that NYCHA can track the developers progress towards project completion by the deadline laid out in Paragraph 8. The Smartsheet also functions as a central repository to conduct file reviews and track compliance with the obligations under Paragraph 14. Review and assessment of these uploaded documents is covered in the following section. The Smartsheets requires the completion of the following fields:

PACT Project	ID#	Development	Building
Location Type	Stairhall	Address	Unit / Location
EPA Notification Date	DOHMH Notification Date	Abatement Contractor Name	Abatement Supervisor Name
Abatement Worker Names	Abatement Method	Components Abated	CU6 Unit (Y/N)
Tenant Occupied During Abatement (Y/N)	Resident Relocation Required (Y/N)	Occupant Protection Plan Date	Abatement Start Date
Abatement End Date	# of Clearance Samples Taken	# of Clearance Samples Passed	# of Clearance Samples Failed
Clearance End Date	Resident Notification of Hazard Reduction Date	Abatement Final Report Received Date	HPD Exemption Date

The reporting system also allows for fields for the PACT Partner, NYCHA, the NYCHA Field Monitor and others to leave comments and a cell for each unit where supervisor and worker certifications, clearance results, notices, EPA notifications, abatement reports, occupant protection plans, and other documents are to be uploaded by the developer for review by NYCHA.

[File Review for Paragraph 8 and Paragraph 14:](#)

The Compliance Department conducted a review of the abatement documents for a random sample of units that were marked as having been abated and cleared during the Covered Period. NYCHA reviewed the documentation for 20 abated and cleared units at each of Williamsburg and Harlem River. Each document was evaluated for compliance with regulatory requirements listed under Paragraph 14 including the presence of:

Indicator	Description	Regulations	Agreement Section Referenced
1. EPA Notification	EPA was notified of abatement, and original notification is uploaded to Maximo	40 C.F.R. § 745.227(e)(4)	14(b)
2. Meets 5-Day EPA Requirement	EPA must be notified 5 full business days prior to the start of abatement	40 C.F.R. § 745.227(e)(4)	14(b)
3. Occupant Protection Plan	Completion of the Occupant Protection Plan	40 C.F.R. § 745.227(e)(5)	14(c)

Indicator	Description	Regulations	Agreement Section Referenced
4. Certified Supervisor Assigned	Certified lead abatement supervisor assigned to abatement with current certification on file	40 C.F.R. § 745.227(e)(1) – (3)	14(a)
5. Abatement Report	Completion of Abatement Report	40 C.F.R. § 745.227(e)(10)	14(f)
6. LAW Certificates	Certifications on file for each lead abatement worker assigned to abatement	40 C.F.R. § 745.227(e)(1) – (3)	14(a)
7. Passing Dust Wipe Results	Final passing dust wipe results	40 C.F.R. § 745.227(e)(8)	14(e)
8. Chain of Custody	Chain of Custody completed for final passing dust wipe results	40 C.F.R. § 745.227(e)(8).	14(e)
9. Final Visual Clearance Form	Visual Clearance form completed for final passing dust wipe results	40 C.F.R. § 745.227(e)(8).	14(e)
10. DW Vendor Certifications	ELLAP and NLLAP Certifications	40 C.F.R. § 745.227(e)(8)	14(e)
11. DW Methodologies	Specified methods of collection and lab analysis of dust wipes	40 C.F.R. § 745.227(f)	14(d)
12. Notice of Hazard Reduction	LHC sends to development for future or present tenants detailing components abated in unit	24 CFR § 35.125	14 (g)

1. Harlem River Houses

NYCHA reviewed the supporting documents for 20 units abated and cleared. Overall, the documents reviewed demonstrated compliance with the requirements of Paragraph 14. NYCHA Compliance noted the following items:

- **Paragraph 14(a):** For all 20 units, a certified abatement supervisor was assigned to oversee the work, and current certifications for lead abatement workers and supervisors assigned to the unit were attached to the row for that unit.
- **Paragraph 14(b):** With respect to Paragraph 14(b), the PACT Partner uploaded EPA notifications for all 20 units. However, the document was not a time stamped screenshot and so NYCHA Compliance could not confirm it was uploaded on the date claimed by the PACT Partner in the Smartsheet.
- **Paragraph 14(c):** Occupant Protection Plans were uploaded by the PACT Partner for all 20 units. However, the Plans were signed by an individual who works for the abatement firm but who was not the certified abatement supervisor for the project. It is important to note that all units were vacant during the abatement and tenants did not re-occupy the units until satisfactory clearance was met. The developer was made aware of this finding and will ensure that moving forward OPP plans are signed by the on-site supervisors.

- **Paragraph 14(d):** For 19 of 20 cases, a dust wipe clearance report was uploaded by Airtek, and it included dust wipe methodologies.
- **Paragraph 14(e):** For all 20 cases, a dust wipe vendor with proper certifications was retained and a current certification was found in the attachment for the row for that unit.
- **Paragraph 14(f):** For 19 of 20 cases, an abatement report was properly uploaded to the Smartsheet. When the developer was made aware of the unit missing an abatement report in the Smartsheet, it was promptly uploaded for NYCHA Compliance to review.
- **Paragraph 14(g):** For all 20 cases, a Notice of Hazard Reduction was uploaded to the Smartsheet. NYCHA is not tracking the obligation to provide Lead Disclosure Summaries as part of this file review for the abatement work to take place during the construction period.

2. Williamsburg Houses

NYCHA reviewed the supporting documents for 20 units abated and cleared. Overall, the documents reviewed demonstrated partial compliance with the requirements of Paragraph 14. NYCHA Compliance noted the following items:

- **Paragraph 14(a):** For all 20 units, a certified abatement supervisor was assigned to oversee the work, and a current certification was attached to the row for that unit for each worker and supervisor. Upon initial review, 2 of the 20 units had certifications uploaded for a different supervisor employed by a different vendor than the one named in that particular row in the Smartsheet, but this was corrected by the PACT Partner upon request.
- **Paragraph 14(b):** With respect to Paragraph 14(b), the PACT Partner uploaded EPA notifications for 13 of the 20 units. The 7 units were among 3 separate stair halls, and the PACT Partner has been announcing abatement of the stair-hall as one abatement job. The PACT Partner was made aware of this deficiency but has not yet provided evidence the EPA notifications were submitted.
- **Paragraph 14(c):** Occupant Protection Plans were uploaded by the PACT Partner for 19 of 20 units. However, the OPPs uploaded were not signed by an individual. According to 40 CFR § 745.226, OPPs must be prepared and signed either by a certified project designer or certified abatement supervisor. It is important to note that all units were vacant during the abatement and tenants did not re-occupy the units until satisfactory clearance was met. The developer was made aware of this finding and will ensure that moving forward OPP plans are signed by the on-site supervisors.
- **Paragraph 14(d):** For all 20 cases, a dust wipe clearance report was uploaded by ALC, and it included dust wipe methodologies.
- **Paragraph 14(e):** For all 20 cases, a dust wipe vendor with proper certification was retained and a current certification was found in the attachment for the row for that unit.
- **Paragraph 14(f):** For all 20 cases, an abatement report was properly uploaded to the Smartsheet.
- **Paragraph 14(g):** For all 20 cases, a Notice of Hazard Reduction was uploaded to the Smartsheet. NYCHA is not tracking the obligation to provide Lead Disclosure Summaries as part of this file review for the abatement work to take place during the construction period.

[Field Monitoring for Paragraph 8:](#)

NYCHA continued using STV Inc. to serve as NYCHA’s third-party environmental monitoring firm to oversee compliance with lead abatement requirements at PACT sites. STV uses a checklist modeled on NYCHA’s EH&S checklist to perform these site inspections. Using the checklist, STV’s certified professionals conducted periodic inspections of abatement work in units at both Harlem River Houses and Williamsburg Houses in order to generate weekly and monthly reports for NYCHA on the PACT Partners compliance with Paragraph 14 and other requirements. In the next 30(b) certification report, STV will have a sufficient sample size to report out on field monitoring of the clearance vendors at Harlem River Houses and Williamsburg Houses.

Field inspections focus on three areas:

1. Administrative Requirements: For example, whether the abatement subcontractor properly posted lead abatement notifications to the resident and regulatory agencies, whether it posted current supervisor and worker certifications, and whether occupant protection plans are present at the job site.
2. Engineering Controls: For example, whether a decontamination unit is present at the site, whether workers are utilizing proper personal protection equipment, the presence of signage and warning tape, and controls around the work area, including established containment.
3. Waste Management: For example, whether the waste is segregated and containerized, among other items.

STV also reviews the method of abatement being utilized and describes it in the report for each unit.

1. Harlem River Houses

As of December 15, 2022, STV has conducted 98 inspections at Harlem River Houses. This is an increase of 79 inspections with respect to the previous reporting period. Not all tasks can be reviewed during each inspection, and so tasks are marked not applicable, and thus an inspection will not be noted for that task. The results of the aggregate inspections since the beginning of the monitoring program in May 2022 through December 15, 2022 are detailed in the below table:

Compliance Categories	Compliance Task	Number in Compliance	Number Inspected	Compliance Rate (%)
Administrative Controls	Resident Notification Posted	98	98	100%
Administrative Controls	LBP Contractor's EPA/NYC Notification Posted	98	98	100%
Administrative Controls	LBP Supervisor's EPA/NYC Certifications Posted	98	98	100%
Administrative Controls	LBP Worker's EPA/NYC Certifications Posted	98	98	100%
Administrative Controls	NYCHA Approved Work Plan Posted	98	98	100%

Administrative Controls	OSHA Compliance Air Monitoring Provided	96	98	98%
Administrative Controls	Safety Data Sheets Provided On-site	98	98	100%
Administrative Controls	Respiratory Protection Program On-site	98	98	100%
Administrative Controls	Hazard Communication Program On-site	98	98	100%
Administrative Controls	Log Book On-site with Current Entries	98	98	100%
Administrative Controls	Equipment Manufacturer's Specification/Cut Sheet	42	42	100%
Engineering Controls	Decontamination Unit Present & Operational	93	98	95%
Engineering Controls	Full Decon	93	98	95%
Engineering Controls	Eye Wash Station	98	98	100%
Engineering Controls	Worker Personnel Protection Equipment	98	98	100%
Engineering Controls	Protective Suit	98	98	100%
Engineering Controls	Respiratory Protection	98	98	100%
Engineering Controls	Chemical Resistant Gloves & Eye Wear	98	98	100%
Engineering Controls	Warning Tape & Signs Present	98	98	100%
Engineering Controls	Lead Work Area Controls Present	97	97	100%
Engineering Controls	Moveable Objects Cleaned & Removed	97	97	100%
Engineering Controls	Critical Barriers Established & Maintained	83	83	100%
Engineering Controls	Containment Established	82	82	100%
Engineering Controls	Mechanical Ventilation System Present	88	88	100%
Waste Management	Hazardous/Non-Hazardous Waste Storage Area Identified/Posted	98	98	100%
Waste Management	Lead Waste Segregated & Containerized	98	98	100%

STV's field inspections were generally positive with respect to lead abatement requirements. In June, STV observed insufficient critical barriers and containment in three units, but issues were repaired immediately while STV's inspector was still on site and therefore the field monitor marked the observation as being in compliance. Overall, the PACT Partner and the abatement subcontractor continue to be receptive to STV's recommendations and have taken steps to swiftly address any deficiencies that are identified.

2. Williamsburg Houses

As of December 15, 2022, STV has conducted 134 field inspections since the monitoring program started in March 2022. Not all tasks can be review during each inspection, and so tasks are marked not applicable, and thus an inspection will not be noted for that task. The results of the aggerate inspections since the beginning of this monitoring program in March 2022 through December 15, 2022 are detailed in the below table:

Compliance Categories	Compliance Task	Number in Compliance	Number Inspected	Compliance Rate (%)
Administrative Controls	Resident Notification Posted	131	134	98%
Administrative Controls	LBP Contractor's EPA/NYC Notification Posted	131	134	98%
Administrative Controls	LBP Supervisor's EPA/NYC Certifications Posted	131	134	98%
Administrative Controls	LBP Worker's EPA/NYC Certifications Posted	131	134	98%
Administrative Controls	NYCHA Approved Work Plan Posted	131	134	98%
Administrative Controls	OSHA Compliance Air Monitoring Provided	85	134	63%
Administrative Controls	Safety Data Sheets Provided On-site	131	134	98%
Administrative Controls	Respiratory Protection Program On-site	131	134	98%
Administrative Controls	Hazard Communication Program On-site	131	134	98%
Administrative Controls	Log Book On-site with Current Entries	131	134	98%
Administrative Controls	Equipment Manufacturer's Specification/Cut Sheet	12	74	16%
Engineering Controls	Decontamination Unit Present & Operational	131	134	98%
Engineering Controls	Full Decon	89	128	70%
Engineering Controls	Eye Wash Station	134	134	100%
Engineering Controls	Worker Personnel Protection Equipment	134	134	100%
Engineering Controls	Protective Suit	134	134	100%
Engineering Controls	Respiratory Protection	134	134	100%
Engineering Controls	Chemical Resistant Gloves & Eye Wear	128	131	98%
Engineering Controls	Warning Tape & Signs Present	134	134	100%
Engineering Controls	Lead Work Area Controls Present	131	131	100%
Engineering Controls	Moveable Objects Cleaned & Removed	134	134	100%
Engineering Controls	Critical Barriers Established & Maintained	108	111	97%
Engineering Controls	Containment Established	124	127	98%
Engineering Controls	Mechanical Ventilation System Present	120	125	96%
Waste Management	Hazardous/Non-Hazardous Waste Storage Area Identified/Posted	119	122	98%
Waste Management	Lead Waste Segregated & Containerized	108	111	97%

During this reporting period STV's noted several instances of non-compliance in tasks covered under administrative requirements and engineering controls. In July, STV observed that there was no OSHA air monitoring posted or negative exposure assessments were not provided; the equipment manufacturer's specifications for the HEPA attachments being used in the mechanical removal of lead components were also not on site; and one of the apartment units was missing a full decontamination or mechanical ventilation system.

The contractor was receptive to STV's recommendations and no findings of non-compliance have been identified since mid-October except that the Williamsburg team has not been able to provide the equipment manufacturer's specification for the HEPA attachments being utilized. Although STV did not identify potential impacts due to a lack of equipment compatibility, the equipment manufacturer's specifications are required to be kept on-site to demonstrate equipment joint assemblies are compatible with one another and thus eliminate potential fugitive dust emissions due to equipment connection gaps.

Overall Compliance Assessment for Paragraph 8:

During the Covered Period, the PACT Partners have made progress towards the abatement of lead-based paint at Harlem River Houses and Williamsburg Houses at the 0.5 mg/cm² level. Both developers have abated more than 25% of the development's total units in less than a year. Most of the progress has occurred over this reporting period. The PACT Partners are not on pace to meet the January 2024 deadline but should be able to complete abatement expeditiously in calendar year 2024.

Additionally, based on the field monitoring results, the work performed by both developers is substantially compliant with the requirements of paragraph 14. The file review shows gaps especially at Williamsburg Houses, but in general the PACT Partners are partially compliant with the requirements of paragraph 14. NYCHA Compliance will continue to work with the PACT Partners and perform oversight.

The PACT Partners have also been asked to forecast a firm close-out abatement date for these sites and a more precise updated completion date will be provided over the next reporting period.

V. Assessment of Compliance with Paragraph 14 for the Covered Period

General Statement

Like the PACT portfolio, NYCHA's Compliance Department uses two methods for tracking Compliance against the requirements of Exhibit A Paragraph 14 of the HUD Agreement for work impacting the public housing portfolio:

- 1. Field Monitoring Report:** Documentation of the abatement field monitoring performed by EHS that is described in this section is set forth in Attachment A.
- 2. Abatement File Review:** The Compliance Department Monitoring Unit ("MU") performed file⁶ reviews of 75 abatements, including 49 abatements in vacant units ("moveouts") and 26 abatements in occupied units. Reviews took place two times during the Covered Period, in

⁶ For the purposes of this review, "files" refers to Maximo work orders associated with a particular abatement.

September 2022 and December 2022 as part of ongoing compliance monitoring. The MU selected a random sample of 49 moveout abatement work orders out of a total of 410 work orders that had an “Actual Finish” date between June 16, 2022, and December 15, 2022 (“Covered Period”), and a work order status of “CLOSE” as of December 15, 2022. The MU selected all 13 closed abatements in units occupied by children under the age of 6, all of which were completed by vendors. Finally, the MU reviewed 13 EBLL abatements closed during the Covered Period. The results of this review are set forth in Attachment C.

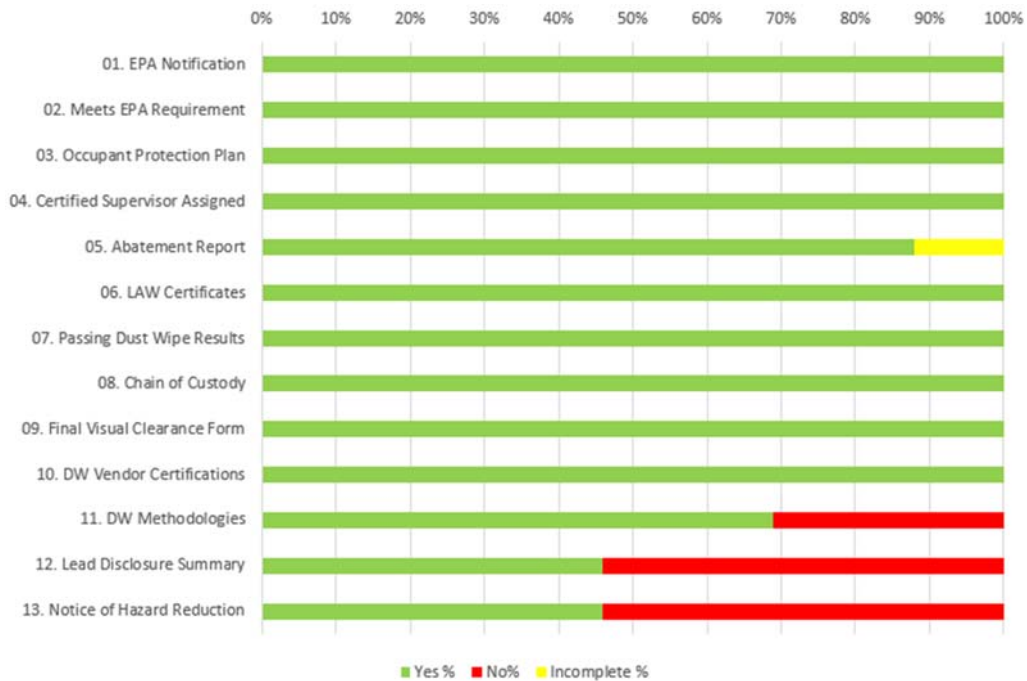
Indicator	Description	Regulations	Agreement Section Referenced
1. EPA Notification	EPA was notified of abatement, and original notification is uploaded to Maximo	40 C.F.R. § 745.227(e)(4)	14(b)
2. Meets 5-Day EPA Requirement	EPA must be notified 5 full business days prior to the start of abatement	40 C.F.R. § 745.227(e)(4)	14(b)
3. Occupant Protection Plan	Completion of the Occupant Protection Plan	40 C.F.R. § 745.227(e)(5)	14(c)
4. Certified Supervisor Assigned	Certified lead abatement supervisor assigned to abatement with current certification on file	40 C.F.R. § 745.227(e)(1) – (3)	14(a)
5. Abatement Report	Completion of Abatement Report	40 C.F.R. § 745.227(e)(10)	14(f)
6. LAW Certificates	Certifications on file for each lead abatement worker assigned to abatement	40 C.F.R. § 745.227(e)(1) – (3)	14(a)
7. Passing Dust Wipe Results	Final passing dust wipe results	40 C.F.R. § 745.227(e)(8)	14(e)
8. Chain of Custody	Chain of Custody completed for final passing dust wipe results	40 C.F.R. § 745.227(e)(8).	14(e)
9. Final Visual Clearance Form	Visual Clearance form completed for final passing dust wipe results	40 C.F.R. § 745.227(e)(8).	14(e)
10. DW Vendor Certifications	ELLAP and NLLAP Certifications	40 C.F.R. § 745.227(e)(8)	14(e)
11. DW Methodologies	Specified methods of collection and lab analysis of dust wipes	40 C.F.R. § 745.227(f)	14(d)
12. Lead Disclosure Summary	LHC sends to development for future tenants to sign prior to move-in disclosing abatement of lead hazard	24 CFR Part 35 Subpart A	14(g)
13. Notice of Hazard Reduction	LHC sends to development for future or present tenants detailing components abated in unit	24 CFR § 35.125	14 (g)

A summary of the overall results of the file review based on the 13 indicators is set forth below.

Summary of File Review for Abatements Performed in 49 Vacant Units



Summary of File Review for Abatements Performed in 26 Occupied Units



The MU reviewed a sample of 49 of 410 total moveouts with an “Actual Finish” date between June 16, 2021, and December 15, 2022 (“Covered Period”), and a work order status of “CLOSE” as of December

15, 2022. The MU also selected 13 of 13 abatements in units abated as part of the TEMPO Abatement Program, which are occupied by children under the age of 6,⁷ and 13 of 13 EBLL abatements closed during the covered period. The results of this review are set forth in Attachment C. The MU reviewed all available abatements that were completed in occupied units during the Covered Period.

In moveout abatements, NYCHA struggled most often with timely uploading of dust wipe vendor certifications and, in general, with the uploading of methodologies. In fewer occasions, NYCHA struggled to submit Notices of Hazard Reduction (“NOHR”) and Lead Disclosure Summary documents in the required timeframe. However, performance on this issue improved, with none of the sampled abatements missing these documents in December 2022. Similarly, for occupied abatements, NYCHA failed to upload NOHRs and Lead Disclosure Summaries within the required timeframe. Some work orders were also closed without dust wipe vendor methodologies.

Paragraph 14(a): NYCHA shall ensure that a certified supervisor is onsite or otherwise available in accordance with 40 CFR § 745.227(e).

Regulatory Requirements for 14(a):

40 CFR §745.226(a) and (b)(1) sets forth the EPA-certification requirements for certified supervisors.

40 CFR §745.227(e)(2) states “A certified supervisor is required for each abatement project and shall be onsite during all work site preparation and during the post-abatement cleanup of work areas. At all other times when abatement activities are being conducted, the certified supervisor shall be onsite or available by telephone, pager or answering service, and able to be present at the work site in no more than 2 hours.”

Applicable NYCHA Written Policies, Procedures, and/or Contract Specifications for 14(a):

Written Policies and Procedures: The Lead SP (annexed as Attachment D) sets forth the following procedures related to requirement set forth in paragraph 14(a):

- A certified abatement supervisor:
 - Must be onsite during all work area preparation. The certified abatement supervisor confirms they are on site by entering the actual start time in Maximo. See Lead SP, § VII.H.1.i.(1)(b)(i).

⁷ LHC says an enhancement that allowed them to close work orders was rolled out on August 15, 2022, however the work orders still could not be closed because the creation of these work orders pre-dated the enhancement and the restriction still applied. Compliance asked LHC to produce work orders where work was completed and the disclosure documents were completed and uploaded, even if the actual work order could not be closed in the Maximo system. Compliance then began a review of abatement work orders that had been completed and disclosed even if the work order was not yet closed. In reviewing these work orders, Compliance found that the work orders did not have clearance and other documentation uploaded, and there were significant gaps across all requirements. LHC stated that the documentation was available and being kept in a Teams channel outside the Maximo system but that they were not being uploaded to Maximo on a timely basis. LHC also says there is a significant backlog of abatement work orders that could not be closed in the system and that will need to be closed out over time. The project management firm assigned to the CU6 abatement project will need to systematically upload documentation, come up with a plan to close work orders now that the enhancement has been rolled out, and then LHC will need to work with the external consultant to ensure they consistently upload documentation as the program scales up.

- Must be onsite or available on call and able to be present at the work area in no more than two hours at all other times when abatement activities are being performed. The certified abatement supervisor must post their telephone number at the abatement location to ensure they can be contacted. *See Lead SP, § VII.H.1.i.(1)(b)(ii).*

Contract Specifications: During the Covered Period, NYCHA utilized six vendors to perform abatements. The specifications for the contracts (annexed in Attachment E) are described below:

Vendor Name	Agreement to comply with 40 CFR § 745.227 (e)
Linear	<i>See Attachment E.00, § 1.1.6; Id, § 1.2.1; Id, § 1.4.5.</i>
Joseph Environmental	<i>See Attachment E.01, § 1.1.6; Id, § 1.2.1; Id, § 1.4.5.</i>
AGD	<i>See Attachment E.02 § 1.1.6; Id § 1.2.1; Id § 1.4.7.</i>
Abatement Unlimited	<i>See Attachment E.03, § 1.1.6; Id, § 1.2.1; Id, § 1.4.7.</i>
Empire Control	<i>See Attachment E.04, § 1.1.6; Id, § 1.2.1; Id, § 1.4.8.</i>
New York Environmental Systems	<i>See Attachment E.05, § 1.1.6; Id, § 1.2.1; Id, § 1.4.8.</i>

IT Controls for 14(a):

As reported in the July 2021 HUD Certification, in December 2019, NYCHA placed controls within Maximo to reinforce the requirement for the lead abatement supervisor to be onsite during the set up and clean-up phases for apartment work orders. The business requirements document (“BRD”) explaining the scope of this, and other abatement-related IT controls is annexed as Attachment B. Maximo now has the following requirements for NYCHA performed and vendor performed abatement work orders:

- The system maintains the list of vendor personnel and NYCHA personnel who are certified as Lead Abatement Supervisors;
- Adding a trade skill level that is set to “Supervisor”;
- The abatement work order must have at least one labor transaction where the craft is that of a lead abatement supervisor. If it does not, the system will not allow the work order to be closed;
- Lead abatement work orders now must be made visible on handheld devices to both lead abatement workers and lead abatement supervisors.

During the covered period, IT reported that these controls continued to be in place, and no further controls were implemented.

Field Monitoring/QA for 14(a):

During the Covered Period, EHS observed 258 abatement jobs. A certified supervisor was present for 258 (100%) of these jobs. The EHS Lead Oversight Team (“LOT”) evaluates whether the abatement supervisor is present on the jobsite during the required times, whether this is the supervisor listed on the EPA Notice of Commencement (“NOC”), and if the supervisor’s credentials are available for review and valid. *See EHS Report (Attachment A) for additional information.*

File Review for 14(a):

The MU conducted a review of work order records in Maximo to determine if certified supervisors were identified for each abatement, either as indicated in the Labor Information field in Maximo, or consistently listed on the abatement report, occupant protection plan (“OPP”), and EPA notification.

For Moveout Units:

The MU found that certified supervisors were assigned on all 49 moveout work orders. All of these supervisors had valid certifications which were uploaded to the Maximo work order. Certifications for all lead abatement workers, including the certified supervisor, were uploaded to the Maximo work order in 49 out of 49 cases. A detailed table documenting this file review is annexed as Attachment C.

For Occupied Units:

All 26 of the reviewed work orders included assigned supervisors and LAWs with valid certifications. In 26 of the 26 cases, such certifications were uploaded to the Maximo work order. A detailed table documenting this file review is annexed as Attachment C.

Overall Description of Compliance for 14(a):

During the Covered Period, NYCHA demonstrated substantial compliance with the requirement set forth in Paragraph 14(a) of the HUD Agreement. Evidence of compliance consists of:

- 100% of moveout abatements and 100% of occupied abatements reviewed were assigned a Certified Supervisor.
- EHS observed 258 abatement jobs, 100% of which had certified supervisors.

Based on this documentation, there is evidence supporting NYCHA’s substantial compliance with the requirements set forth in 14(a).

Paragraph 14(b): “NYCHA shall notify EPA of lead-based paint abatement activities electronically using EPA’s Central Data Exchange (CDX) in accordance with 40 CFR § 745.227(e)(4)(vii).”

Regulatory Requirements for 14(b):

40 CFR § 745.227(e)(4)(vii) states as follows: “Notification must be accomplished using any of the following methods: Written notification, or electronically using the Agency’s Central Data Exchange (CDX). Written notification can be accomplished using either the sample form titled “Notification of Lead-Based Paint Abatement Activities” or similar form containing the information required in paragraph (e)(4)(vi) of this section. All written notifications must be delivered by U.S. Postal Service, fax, commercial delivery service, or hand delivery (persons submitting notification by U.S. Postal Service are reminded that they should allow 3 additional business days for delivery to ensure that EPA receives the notification by the required date). Instructions and sample forms can be obtained from the NLIC at 1-800-424-LEAD (5323), or on the Internet at <http://www.epa.gov/lead>.”

[Applicable Written Policies, Procedures, and Contract Specifications for 14\(b\):](#)

Policies and Procedures: The Lead SP sets forth the following procedures related to requirements set forth in paragraph 14(b):

- A Lead Hazard Control Department assistant director ensures the EPA is notified at least five business days prior to the abatement using the EPA’s Central Data Exchange online portal. *See* Lead SP, § VII.H.2.b.(2)(b).
- If a vendor is performing the abatement, the vendor notifies the EPA at least five business days prior to the abatement using the EPA’s Central Data Exchange online portal. The vendor sends the EPA notice to a Lead Hazard Control Department assistant director. *See* Lead SP, § VII.H.2.b.(2)(b)(i).
- The EPA notice is printed and attached to the work order. *See* Lead SP, § VII.H.2.b.(2)(c).
- If an abatement start date is changed so it will start before the original start date provided to the EPA, the updated notification must be provided to the EPA at least 5 business days before the new start date. *See* Lead SP, § VII.H.2.g.(c).
- The updated notifications are attached to the work order. If a vendor performs these steps, they send the updated notifications to a Lead Hazard Control Department assistant director. *See* Lead SP, § VII.H.2.g.(e).

Contract Specifications: During the Covered Period, NYCHA utilized six vendors to perform abatements. The specifications for the contracts are described below:

Vendor Name	Agreement to comply with 40 CFR § 745.227 (e)(4)(vi)
Linear	<i>See</i> Attachment E.00, § 1.4.2; <i>Id</i> § 1.5.2; <i>Id</i> 2.4.2; <i>Id</i> § 2.6.3.
Joseph Environmental	<i>See</i> Attachment E.01, § 1.4.2; <i>Id</i> § 1.5.2; <i>Id</i> 2.4.2; <i>Id</i> § 2.6.3.
AGD	<i>See</i> Attachment E.02 § 1.42; <i>Id</i> § 1.5.2; <i>Id</i> § 2.4.2, <i>Id</i> § 2.6.3.
Abatement Unlimited	<i>See</i> Attachment E.03 § 1.42; <i>Id</i> § 1.5.2; <i>Id</i> § 2.4.2, <i>Id</i> § 2.6.3.
Empire Control	<i>See</i> Attachment E.04 § 1.42; <i>Id</i> § 1.5.2; <i>Id</i> § 2.4.2, <i>Id</i> § 2.6.3.
New York Environmental Systems	<i>See</i> Attachment E.05 § 1.42; <i>Id</i> § 1.5.2; <i>Id</i> § 2.4.2, <i>Id</i> § 2.6.3.

[IT Controls for 14\(b\):](#)

As reported in the July 2021 HUD Certification, in December 2019, NYCHA IT instituted additional controls for abatement work orders. One of these controls requires LHC to upload a copy of the EPA notification as an attachment to the Maximo work order. Without this attachment, the work order cannot be closed. *See* Attachment B.

During the covered period, IT reported that these controls continued to be in place, and no further controls were implemented.

[Field Monitoring/QA for 14\(b\):](#)

EHS has developed field monitoring checklists for assessing compliance with abatement requirements, including the requirements set forth in Paragraph 14(b). *See Attachment A.* The Lead Abatement Inspection Work Order contains the following items:

- Is the EPA Notice posted at the entrance of the work area?
- Does the work location including the unit number match the location on the NOC?
- Is the abatement occurring within the timeframe specified on the NOC?
- Certified Abatement Supervisor: Does the abatement supervisor's name match the name on the EPA NOC?

The NOC must include when work will start and end, the form's EPA certification number, and the location where work will be conducted. During an Abatement observation, LOTS verifies that the notice is present, the required information is documented and accurate, and work is occurring within the timeframe indicated on the notice.

The LOT conducted 258 inspections and all 258 had NOCs. 257 (99.6%) of the observed jobs also included proper signage in compliance with the NOC requirements. *See Attachment A* for more details.

[File Review for 14\(b\):](#)

The MU conducted a review of work order records in Maximo to determine if the EPA notification required by 40 CFR § 745.227(e)(4)(vii) was present in the relevant project files.

For Moveout Units:

The MU reviewed a total of 49 moveout work orders completed during the Covered Period and found that all 49 included the EPA notification. In all of these work orders, NYCHA or the abatement vendor notified the EPA at least five or more business days ahead of the scheduled abatement or the abatement was an emergency case. *See Attachment C.*

For Occupied Units:

The MU reviewed a total of 26 occupied work orders completed during the Covered Period and found that all of these work orders included the EPA notification. In all 26 work orders, NYCHA or the abatement firm notified the EPA at least five or more business days ahead of the abatement or the abatement was an emergency case. *See Attachment C.*

[Overall Description of Compliance for 14\(b\):](#)

During the Covered Period, NYCHA demonstrated substantial compliance with the requirement set forth in Paragraph 14(b) of the HUD Agreement. Evidence of compliance consists of:

- 100% of moveout abatements and 100% of occupied abatements reviewed contained EPA notifications sent prior to commencement.
- 100% of the field observations had complete and accurate NOCs.
- 99.6% of the observed jobs had the proper signage posted throughout the work area in compliance with the NOC requirements.

Based on this documentation, there is evidence supporting that NYCHA is in substantial compliance with the most requirements set forth in 14(b).

Paragraph 14(c): NYCHA shall prepare and implement written occupant protection plans for all abatement projects in accordance with 40 CFR § 745.227(e)(5).

Regulatory Requirements for 14(c):

40 CFR § 745.227(e)(5) states: “A written occupant protection plan shall be developed for all abatement projects and shall be prepared according to the following procedures: (i) The occupant protection plan shall be unique to each residential dwelling or child-occupied facility and be developed prior to the abatement. The occupant protection plan shall describe the measures and management procedures that will be taken during the abatement to protect the building occupants from exposure to any lead-based paint hazards. (ii) A certified supervisor or project designer shall prepare the occupant protection plan.”

Applicable Written Policies, Procedures, and Contract Specifications for 14(c):

Policies and Procedures: The Lead SP sets forth the following procedures related to the requirements set forth in paragraph 14(c):

- Requires lead abatement supervisor or vendor to prepare and sign the Occupant Protection Plan (“OPP”). See Lead SP, § VII.H.1.d. The Lead SP includes requirements on what must be included in the OPP. *Id.* The Lead SP includes a template OPP. *Id.*, Appendix F.
- Requires that the OPP be annexed to the abatement work order. See Lead SP, § VII.H.1.e.(1). The plan must be provided to the resident if the unit is occupied. *Id.*, § VII.H.1.f. It must be posted in common areas. *Id.* § VII.H.2.d.(3).

An updated Lead SP, effective July 5, 2022, was released and provided a new template for the OPP.

Contract Specifications: During the Covered Period, NYCHA utilized six vendors to perform abatements. The specifications for the contracts are described below:

Vendor Name	Agreement to comply with 40 CFR § 745.227 (e)(5)
Linear	See Attachment E.00, § 3.6.1.
Joseph Environmental	See Attachment E.01, § 3.6.1.
AGD	See Attachment E.02, § 3.3.3.
Abatement Unlimited	See Attachment E.03 § 3.3.3.
Empire Control	See Attachment E.04 § 3.3.3.
New York Environmental Systems	See Attachment E.05 § 3.3.3.

IT Controls for 14(c):

In December 2019, IT enhanced Maximo to require that the OPP be attached to Maximo abatement work orders. See Attachment B. The work orders cannot be closed without this attachment. This enhancement was initially reported in the July 2021 HUD Certification.

During the covered period, IT reported that these controls remain in place and that no further controls were implemented.

[Field Monitoring/QA for 14\(c\):](#)

EHS finalized its inspection work order for abatement projects. The inspection checklist includes the following items:

- Does the Occupant Location on the Occupant Protection Plan match the unit's occupancy status during the abatement i.e., Occupied vs Unoccupied?
- The abatement inspection work order also includes numerous items regarding specific lead safe work practices.

The LOTS reviewed 258 OPPs during abatement oversight inspections. 257 (99.6%) of abatements had completed OPPs. *See Attachment A for more details.*

[File Review for 14\(c\):](#)

The MU conducted a review of work orders in Maximo to determine if the written OPP required by 40 CFR § 745.227(e)(5) was uploaded in the relevant work orders.

For Moveout Units:

The MU reviewed a total of 49 moveout work orders. 49 of 49 had uploaded OPPs, all of which contained a complete OPP. *See Attachment C.*

For Occupied Units:

The MU reviewed a total of 26 occupied work orders, all of which contained an OPP. All 26 cases also contained OPPs with units marked as occupied and were signed by certified supervisors. *See Attachment C.*

[Overall Compliance Assessment for 14\(c\):](#)

- 100% of moveout abatements and 100% of occupied abatements reviewed contained a complete OPP.
- EHS observed 258 abatement work orders and 99.6% had OPPs.

Based on this documentation, there is evidence supporting the conclusion that NYCHA is in substantial compliance with the requirements set forth in 14(c).

Paragraph 14(d): NYCHA shall specify methods of collection and lab analysis in accordance with 40 CFR § 745.227(f).

[Regulatory Requirements for 14\(d\):](#)

40 CFR § 745.227(f) states: "Any paint chip, dust, or soil samples collected pursuant to the work practice standards contained in this section shall be: (1) Collected by persons certified by EPA as an inspector or risk assessor; and (2) Analyzed by a laboratory recognized by EPA pursuant to section 405(b) of TSCA as being capable of performing analyses for lead compounds in paint chip, dust, and soil samples."

[Applicable Written Policies, Procedures, and Contract Specifications for 14\(d\):](#)

Policies and Procedures: The Lead SP contains the following procedures related to Paragraph 14(d):

- Clearance examinations following abatement must be performed by a certified risk assessor or lead inspector. *See* Lead SP, § VII.I.1. If the work is to be performed by a vendor, the LHC Assistant Director must ensure that the vendor submits the documentation meeting this requirement. *Id.*, § VII.I.3.
- Dust wipe samples following abatement must be submitted to an EPA National Lead Laboratory Accreditation Program (“NLLAP”) and New York State Environmental Laboratory Approval Program (“ELAP”) certified testing laboratory. *See* Lead SP, § VII.I.5.a.(1).
- Paint chip sampling, which is performed during lead paint inspections in advance of an abatement, must be performed by a certified risk assessor or lead inspector. *See* Lead SP, § VII.E.2. These samples must be submitted to an EPA NLLAP-recognized and NYS ELAP certified testing laboratory. *See* Lead SP, § VII.E.2.c.(4)(g).

Contract Specifications: During the Covered Period, NYCHA utilized ten vendors to perform dust wipes. The specifications for the contracts are described below and contracts are annexed in Attachment E.

Vendor Name	Agreement to comply with 40 CFR § 745.227 (f)
Accurate Analysis Testing	<i>See</i> Attachment E.06, § I.A , § II.C.1-3, § III.D.1-2.
ATC Group Services	<i>See</i> Attachment E.07, § III.1.A § § III.2.B-D.
Atlas Environmental Lab	<i>See</i> Attachment E.08, § I.A, § § II.C 1-2, § III.D 1-2.
Eastern Analytical Services	<i>See</i> Attachment E.09, § I.A , § II.C.1-3, § III.D.1-2.
EMSL Analytical Inc.	<i>See</i> Attachment E.10, § I.A, § II.C.1-3 § III.D.1-2.
Genesis Environmental Consultants	<i>See</i> Attachment E.11, § I.A, § § II.C 1-2, § III.D 1-2.
Lead By Example Environmental	<i>See</i> Attachment E.13, § III.1.A § § III.2.B-D.
Metro Analytical Laboratories	<i>See</i> Attachment E.14, § II.C.1-3, § III.D.1-2.
The ALC Group	<i>See</i> Attachment E.15, § I.A, § § II.C 1-2, § III.D 1-2.
Warren & Panzer Engineers	<i>See</i> Attachment E.16, § I.A, § § II.C 1-2, § III.D 1-2.

[IT Controls for 14\(d\):](#)

As reported in the July 2021 HUD Certification, in December 2019, NYCHA IT enhanced Maximo to require that the abatement report, which should include the credentials of individuals and laboratories performing sampling/testing, be uploaded to the work order. The work order cannot be closed without these attachments. *See* Attachment B.

During the covered period, IT reported that these controls continued to be in place, and no further controls were implemented.

[QA/Field Monitoring Protocols for 14\(d\):](#)

LOT observed NYCHA and vendor personnel for certifications for dust wipe technician, certified risk assessor, and LBP inspector. Out of 132 NYCHA personnel certifications and 126 vendor personnel certifications for clearance examinations, LOT found all personnel certifications present. See Attachment B.

[File Review for 14\(d\):](#)

The MU conducted a review of work orders in Maximo to determine if documented methodologies specifying certifications of inspectors, risk assessors, and laboratories are contained in each file, as well as copies of relevant EPA certifications in accordance with the Lead SP.

For Moveout Units:

The MU initially reviewed a total of 49 moveout work orders, and had found that 32 (65%) files contained documented methodologies for the collection and lab analysis of dust wipes. See Attachment C.

For Occupied Units:

- The MU initially reviewed a total of 26 occupied work orders and had found that 18 (69%) contained documented methodologies for the collection and lab analysis of dust wipes. See Attachment C.

Subsequent Review of Work Orders:

- The MU subsequently re-reviewed the 75 work orders in late January 2023 and found that 50 (67%) contained documents with methodologies for the collection and lab analysis of dust wipes that were uploaded before the date of the initial review. 18 (24%) of the work orders contained documents with methodologies for the collection and lab analysis of dust wipes that were subsequently uploaded after the date of initial review. Still, 7 (9%) did not have documents with methodologies for the collection and lab analysis of dust wipes attached to the work order.

[Overall Compliance Assessment for 14\(d\):](#)

During the Covered Period, NYCHA demonstrated partial compliance with the requirement set forth in Paragraph 14(d) of the HUD Agreement. Evidence of partial compliance consists of:

- Upon MU's initial review, 65% of moveout abatements and 69% of occupied abatements reviewed contained documented methodologies for collection and lab analysis of dust wipes by certified personnel. Upon further review, another 24% of all the abatement work orders contained the requisite documents uploaded at a later date, but 9% still did not have the required documentation attached to the work order.
- EHS observed 132 NYCHA personnel certifications and 126 vendor personnel certifications for clearance examinations and found 100% compliance rate.

Based on the documentation, there is evidence that NYCHA is in partial compliance with the requirements set forth in paragraph 14(d). However, Compliance does not yet recommend certifying to

paragraph 14(d) until documented dust wipe methodologies for collection and lab analysis of dust wipes by certified personnel are consistently contained in each file in Maximo.

Paragraph 14(e): “NYCHA shall ensure that a clearance examination is performed, and a clearance examination report provided by a lead paint inspector/risk assessor certified and licensed as applicable for the property location, in accordance with 24 CFR § 745.227(e) (8)-(9). The lead paint inspector/risk assessor must be independent of the lead-based paint abatement firm, supervisor, and contractors performing the abatement work.

Regulatory Requirements for 14(e):

40 CFR § 745.227(e)(8) states, in relevant part: The following post-abatement clearance procedures shall be performed only by a certified inspector or risk assessor

“(i) Following an abatement, a visual inspection shall be performed to determine if deteriorated painted surfaces and/or visible amounts of dust, debris or residue are still present. If deteriorated painted surfaces or visible amounts of dust, debris or residue are present, these conditions must be eliminated prior to the continuation of the clearance procedures.

(i) Following the visual inspection and any post-abatement cleanup required by paragraph (e)(8)(i) of this section, clearance sampling for lead in dust shall be conducted. Clearance sampling may be conducted by employing single-surface sampling or composite sampling techniques.

(ii) Dust samples for clearance purposes shall be taken using documented methodologies that incorporate adequate quality control procedures.

(iii) Dust samples for clearance purposes shall be taken a minimum of 1 hour after completion of final post- abatement cleanup activities.

(iv) The following post-abatement clearance activities shall be conducted as appropriate based upon the extent or manner of abatement activities conducted in or to the residential dwelling or child-occupied facility:

(A) After conducting an abatement with containment between abated and unabated areas, one dust sample shall be taken from one interior windowsill and from one window trough (if present) and one dust sample shall be taken from the floors of each of no less than four rooms, hallways, or stairwells within the containment area. In addition, one dust sample shall be taken from the floor outside the containment area. If there are less than four rooms, hallways, or stairwells within the containment area, then all rooms, hallways or stairwells shall be sampled.

(B) After conducting an abatement with no containment, two dust samples shall be taken from each of no less than four rooms, hallways or stairwells in the residential dwelling or child-occupied facility. One dust sample shall be taken from one interior windowsill and window trough (if present) and one dust sample shall be taken from the floor of each room, hallway or stairwell selected. If there are less than four rooms, hallways or stairwells within the residential dwelling or child-occupied facility then all rooms, hallways or stairwells shall be sampled.

(C) [*Exterior abatement provision omitted*]

(v) The rooms, hallways or stairwells selected for sampling shall be selected according to documented methodologies.

(vi) The certified inspector or risk assessor shall compare the residual lead level (as determined by the laboratory analysis) from each single surface dust sample with clearance levels in paragraph (e)(8)(viii) of this section for lead in dust on floors, interior window sills, and window troughs or from each composite dust sample with the applicable clearance levels for lead in dust on floors, interior window sills, and window troughs divided by half the number of subsamples in the composite sample. If the residual lead level in a single surface dust sample equals or exceeds the applicable clearance level or if the residual lead level in a composite dust sample equals or exceeds the applicable clearance level divided by half the number of subsamples in the composite sample, the components represented by the failed sample shall be recleaned and retested.

(vii) The clearance levels for lead in dust are 40 µg/ft² for floors, 250 µg/ft² for interior windowsills, and 400 µg/ft² for window troughs.”⁸

[Applicable Written Policies, Procedures, and Contract Specifications for 14\(e\):](#)

The Lead SP contains the following provisions on the requirements set forth in Paragraph 14(e):

- Requires that the clearance examination be performed by a certified risk assessor or lead paint inspector. *See Lead SP, § VII.I.1.*
- Requires the certified risk assessor or certified lead paint inspector perform a visual inspection and sets forth the protocols if the work area fails the visual inspection. *See Lead SP, § VII.I.4.*
- Sets forth the basic protocols for the certified risk assessor or lead inspector to follow for dust wipe sampling. *See Lead SP, § VII.I.5.* The Lead SP does not provide detailed means and methods on how the risk assessor and lead inspector needs to conduct the dust wipe samples.
- Requires that the clearance be documented in a dust wipe report. *See Lead SP, § VII.I.5.*
- Requires the dust wipe report be uploaded to Maximo. *See Lead SP, § VII.I.6.*

Contract Specifications: During the Covered Period, NYCHA utilized ten vendors to perform clearance examinations. The specifications for the contracts for vendors that perform dust wipe sampling are described below. The relevant parts of the specifications section of each contract are discussed below and found in Attachment E.

Vendor Name	Agreement to comply with 40 CFR § 745.227 (f)
Accurate Analysis Testing	<i>See Attachment E.06, § I.A, §I.C. 1-2.</i>
ATC Group Services	<i>See Attachment E.07, § III.1-2 § IV.1-2.</i>
Atlas Environmental Lab	<i>See Attachment E.08, § I.A, §I.C. 1-2.</i>
Eastern Analytical Services	<i>See Attachment E.09, § I.A, §I.C. 1-2.</i>
EMSL Analytical Inc.	<i>See Attachment E.10, § I.A, §I.C. 1-2.</i>
Genesis Environmental Consultants	<i>See Attachment E.11, § I.A, §I.C. 1-2.</i>

⁸ On June 1, 2021, the city reduced the lead dust standards for floors to 5 µg/ft² for floors and to 40 µg/ft² for window sills. The standard for window wells (troughs) remained at 100 µg/ft².

Vendor Name	Agreement to comply with 40 CFR § 745.227 (f)
Lead By Example Environmental	See Attachment E.13, § III.1-2 § IV.1-2.
Metro Analytical Laboratories	See Attachment E.14, § I.A, §I.C. 1-2.
The ALC Group	See Attachment E.15, § I.A, §I.C. 1-2.
Warren & Panzer Engineers	See Attachment E.16, § I.A, §I.C. 1-2.

[IT Controls for 14\(e\):](#)

As reported in the July 2021 HUD Certification, in December 2019, NYCHA IT implemented enhancements to the abatement work order. The creation of the abatement work order will now auto-generate a dust wipe work order. See Attachment B. As reported in the January 2022 HUD certification, IT created a functionality to enforce Abatement IT Control rules on the Abatement Work orders that are generated from XRF testing results. Users are now able to create Dust Wipe Work Orders and Internal Abatement Inspection Work Orders for units with positive XRF results. The System has also been configured for cancellation of these work orders on obtaining paint chip negative results for the same location. During the January 2022 – June 2022 reporting period, IT implemented a new functionality to follow-up with moveout work orders. Users now have the ability to generate Follow Up Abatement work orders and subsequent Internal Abatement and Dust Wipe work orders using select action on Lead Testing and Move Out work orders. Follow Up Abatement work orders will not be generated automatically.

During the covered period, IT reported that these controls continued to be in place, and no further controls were implemented

[Field Monitoring/QA for 14\(e\):](#)

EHS personnel observed 258 post abatement clearance jobs. 126 were performed by vendor and 132 were performed by NYCHA. All clearance examinations observed were conducted by a certified risk assessor or certified lead paint inspector. NYCHA’s permissions to utilize its own certified personnel to clear an abatement job received DOHMH approval in July 2022, and NYCHA submitted the annual attestation to DOHMH in August 2022.

[File Review for 14\(e\):](#)

The MU conducted a review of work orders in Maximo to determine if a clearance examination was performed, and if a clearance examination report was provided by a licensed lead paint inspector/risk assessor, independent of the contractors performing the abatement work. The MU ensured that the clearance examination report included passing dust wipe results, a chain of custody, a visual clearance form, and certifications for the risk assessor and laboratory.

For Moveout Units:

The MU reviewed 49 moveout abatement work orders and found that 46 (94%) contained passing dust wipe results and the chain of custody and 45 (92%) contained a completed visual clearance

form. Upon the MU's initial review, only 32 (65%) contained certifications for the laboratory and 32 (65%) contained certifications for the risk assessor. See Attachment C.

For Occupied Units:

The MU reviewed 26 occupied abatement work orders and found that all 26 had passing dust wipe clearances and contained the chain of custody. All 26 also contained the visual clearance form and certifications for both the risk assessor and laboratory. See Attachment C.

Subsequent Review of Work Orders:

- The MU subsequently re-reviewed the 75 work orders in late January 2023 and found that 57 (76%) contained documents showing the risk assessor certifications and 58 (77%) contained documents showing the laboratory certification where documents were uploaded before the date of initial review. Another 17 documents showing both risk assessor and laboratory certifications were subsequently attached to the work order after the date of initial review, leading to a compliance rate of 98% for risk assessor certifications and 100% for laboratory certifications. Still, 1 work order did not have documentation showing the risk assessor's certifications.

Overall Compliance Assessment for 14(e):

During the Covered Period, NYCHA demonstrated compliance with the requirement set forth in Paragraph 14(e) of the HUD Agreement. Evidence of compliance consists of:

- 94% of moveout abatements and 100% of occupied abatements reviewed contained passing dust wipe results.
- 92% of moveout abatements contained the chain of custody and visual clearance form; 65% contained certifications for both the vendor and the risk assessor.
- 100% of occupied abatements contained the chain of custody and visual clearance form; 100% contained certifications for both the risk assessor and laboratory.
- 100% of NYCHA employees and 100% vendors performing clearance examinations were certified.

Based on the file review and filed oversight during the Covered Period, NYCHA is in partial compliance with the requirements referenced in Paragraph 14(e). However, the MU has concerns about LHCD's failure to upload vendor and risk assessor certifications for abatements before the abatement work order is closed and immediately upon receipt of the report.

Paragraph 14(f): NYCHA shall ensure that the certified supervisor on each abatement project prepares an abatement report in accordance with 40 CFR § 745.227(e)(10).

Regulatory Requirements for 14(f):

40 CFR § 745.227(e)(10) states as follows: "An abatement report shall be prepared by a certified supervisor or project designer. The abatement report shall include the following information: (i) Start and completion dates of abatement. (ii) The name and address of each certified firm conducting the abatement and the name of each supervisor assigned to the abatement project. (iii) The occupant protection plan prepared pursuant to paragraph (e)(5) of this section. (iv) The name, address, and signature of each certified risk assessor or inspector conducting clearance sampling and the date of clearance testing. (v) The results of clearance testing and all soil analyses (if applicable) and the name of

each recognized laboratory that conducted the analyses. (vi) A detailed written description of the abatement, including abatement methods used, locations of rooms and/or components where abatement occurred, reason for selecting abatement methods for each component, and any suggested monitoring of encapsulants or enclosures.”

[Applicable Written Policies, Procedures, and Contract Specifications for 14\(f\):](#)

Policies and Procedures: The Lead SP sets forth the following procedures related to the requirements set forth in paragraph 14(f):

- Requires that the certified abatement supervisor for each abatement project prepare an abatement report within 30 days of clearance. *See* Lead SP, § VII.I.9. The report must contain all of the items set forth in 24 CFR § 745.227(e)(10). *Id.*
- LHC adopted a template for certified supervisors to use in preparing the report. A copy of this template is annexed as Attachment F.

Contract Specifications: During the Covered Period, NYCHA utilized six vendors to perform abatements. The specifications for the contracts are described below:

Vendor Name	Agreement to comply with 40 CFR § 745.227 (e)(5)
Linear	<i>See</i> Attachment E.00, § 1.1.6
Joseph Environmental	<i>See</i> Attachment E.01, § 1.1.6
AGD	<i>See</i> Attachment E.02, § 1.1.6
Abatement Unlimited	<i>See</i> Attachment E.03 § 1.1.6
Empire Control	<i>See</i> Attachment E.04 § § 1.1.6
New York Environmental Systems	<i>See</i> Attachment E.05 § § 1.1.6

[IT Controls for 14\(f\):](#)

As reported in the July 2021 HUD Certification, in December 2019, NYCHA IT enhanced Maximo to require staff to upload the abatement report to the abatement work order. The work order cannot be closed without this attachment. *See* Exhibit B.

During the covered period, IT reported that these controls continued to be in place, and no further controls were implemented.

[Field Oversight/OA for 14\(f\):](#)

There are no field oversight protocols in place or expected to monitor the creation of this final report.

[File Review for 14\(f\):](#)

The MU conducted a review of work orders in Maximo for an abatement report in accordance with 40 CFR § 745.227(e)(10) and prepared by a certified supervisor.

For Moveout Units:

The MU reviewed 49 moveout abatement work orders and found all 49 files contained the abatement report prepared by a certified supervisor. *See Attachment C.*

For Occupied Units:

The MU reviewed 26 occupied abatement work orders and found that 26 contained the complete abatement report prepared by a certified supervisor. *See Attachment C.*

Overall Compliance Assessment for 14(f):

During the Covered Period, NYCHA demonstrated substantial compliance with the requirement set forth in Paragraph 14(f) of the HUD Agreement. Evidence of compliance consists of:

- 100% of moveout abatements and 100% of occupied abatements reviewed contained an abatement report prepared by a certified supervisor.
- 75 of 75 (100%) files contained correctly completed abatement reports.

Based on this documentation, there is evidence supporting that NYCHA is in substantial compliance with the requirements set forth in 14(f).

Paragraph 14(g): NYCHA shall maintain records in accordance with 40 CFR § 745.227(i) and 24 CFR § 35.125.

Regulatory Requirements for 14(g):

40 CFR § 745.227(i) states “All reports or plans required in this section shall be maintained by the certified firm or individual who prepared the report for no fewer than 3 years. The certified firm or individual also shall provide copies of these reports to the building owner who contracted for its services.”

24 CFR §35.125 states, “The designated party ... shall keep a copy of each notice, evaluation, and clearance or abatement report required by subparts C, D, and F through M of this part for at least three years. Those records applicable to a portion of a residential property for which ongoing lead-based paint maintenance and/or reevaluation activities are required shall be kept and made available for the Department's review, until at least three years after such activities are no longer required.”

Applicable Written Policies, Procedures, and Contract Specifications for 14(g):

Policies and Procedures: The Lead SP sets forth the following procedures related to the requirements set forth in paragraph 14(g):

- “A Lead Hazard Control Department assistant director ensures all records related to this Standard Procedure are retained in the Lead Hazard Control Department central office for the life of the building while under NYCHA ownership, plus an additional three years.” *See Lead SP, § VIII.C.*
- Requires issuance of the hazard reduction letter following abatement activities. *See Lead SP, § VII.D.2.*

IT Controls for 14(g):

As reported in the January 2022 HUD Certification, NYCHA does not have IT controls that support this requirement, although as of December 2019, the OPP, the EPA notification, and abatement reports are to be attached to the Maximo work orders.

[Field Monitoring/QA for 14\(g\):](#)

There are no field oversight protocols in place or expected to monitor the creation and storage of the post-abatement NOHR documentation for a particular job.

[File Review for 14\(g\):](#)

The MU has performed a comprehensive review of required reports for abatements performed in NYCHA units since January 31, 2019 and has been performing a digital review of required reports in Maximo starting January 16, 2020. Reports in Maximo are presently retained indefinitely and in accordance with the three-year minimum as specified in 40 CFR § 745.227(i) and 24 CFR §35.125.

The MU performed a file review of the Lead Disclosure Summaries and NOHRs for moveout and occupied units.

The MU initially reviewed all 75 abatement work orders and found that 58 (77%) contained Lead Disclosure Summaries. Upon a subsequent review in late January 2023, the MU found that another 4 work orders had subsequently had Lead Disclosure Summaries attached to the work order, leading to a compliance rate of approximately 83%. LHC believes that, for the remaining 13 work orders the Lead Disclosure Summaries are not required because they are Elevated Blood Lead Level cases but this has not been standard practice in the past.

The MU initially reviewed all 75 abatement work orders and found that 56 (75%) of the 75 work orders contained the NOHR. Upon a subsequent review in late January 2023, the MU found that another 9 work orders had subsequently had NOHRs attached to the work order, leading to a compliance rate of approximately 86%. For the remaining 10 work orders, either the NOHR was not attached or an incorrect version was attached to the work order. *See Attachment C.*

With respect to the Lead Disclosure Summaries and NOHR, the Compliance Department found that NYCHA does not routinely issue letters within 30 days of receiving final lead clearance, as required by the NYCHA Lead SP. Additional reviews indicate that NYCHA frequently uploads the Lead Disclosure Summaries after the 30-day requirement.

Hazard reduction letters have also presented a compliance challenge for NYCHA, especially for occupied units. The initial file review revealed that only 46% of occupied abatements contain an NOHR compared to 89% of moveout abatements. After following up with LHC, it was determined that a hazard reduction letter is being uploaded to each abatement work order and delivered to property management. However, LHC is using a different form than the required NYCHA Form 060.852, Notice of Hazard Reduction Activity. Instead, it is an alternative, manually created version of the NYCHA NOHR. The Lead SP specifically requires NYCHA to upload NYCHA Form 060.852. *See Lead SP, § VII.D.2.* Moving forward, Compliance recommends the use of NYCHA Form 060.852, Notice of Hazard Reduction Activity.

[Overall Compliance Assessment for 14\(g\):](#)

During the Covered Period, NYCHA made demonstrable progress towards compliance with the recordkeeping requirement set forth in Paragraph 14(g) of the HUD Agreement. Evidence of progress towards compliance consists of:

- 94% of moveout abatements and 46% of occupied abatements reviewed contained the Lead Disclosure Summary.

- 89% of moveout abatements and 46% of occupied abatements reviewed contained the NOHR.
- After the subsequent review was conducted across all 75 abatement work orders a compliance rate of 86% was found for the Lead Disclosure Summaries, and a compliance rate of 86% was found for NOHRs. Still, many of these items were uploaded outside the 30-day window.
- LOT performed 291 inspections for the required Lead Disclosure Files, 212 (72.85%) were in compliance.
- Documented establishment of Maximo IT Control to require the OPP, the EPA Notice, and the Abatement Report to be uploaded to the work order.
- LHC demonstrated maintenance of all work orders in Maximo to the Compliance Department (although a small number of work orders were missing required documentation).
- Lead SP including the requirements set forth in Paragraph 14(g).

Compliance does not yet recommend certifying to paragraph 14(g) until the NOHRs and Lead Disclosure Summaries are consistently issued in the required timeframe and using the official, approved form.

VI. Paragraph 15

Paragraph 15(a): Establishing and maintaining sufficient information in NYCHA's renovation and maintenance computer systems to readily identify renovation and maintenance projects involving work to which lead-safe work practices regulations apply in accordance with 24 CFR §§ 35.1330, 35.1350 and 40 CFR §§ 745.85, 745.89.

Regulatory Requirements for 15(a):

NYCHA interprets this requirement as ensuring that its computerized work order system, Maximo, can identify developments in which paint disturbing projects require adherence to lead safe work practices, as those requirements are defined in the above-cited regulations.

Effective December 1, 2021, New York City has a new standard for defining the presence of lead in paint, in accordance with Local Law 66 of 2019. The new standard changed the manner in which NYCHA classifies apartments for purposes of RRP enforcement controls. In general terms, NYCHA now requires RRP enforcement controls for all apartments in pre-1978 buildings where children under 6 live or visit for 10 or more hours per week. RRP enforcement will be in place even if the CU6 unit previously tested negative at the 1.0 mg/cm² standard or is considered exempt under federal or City requirements. For non-CU6 apartments, NYCHA continues to follow the federal RRP guidelines, and utilize the XRF data taken at 1.0 mg/cm², which is integrated into the Maximo work orders.

Additionally, the IT controls previously being used were configured to classify XRF results as lead positive only when components are detected as having 1.0 milligrams of lead per square centimeter or more. In December 2021, a new design was implemented to perform XRF testing and upload XRF results using 0.5 milligrams of lead per square centimeter as the threshold to classify any component as lead positive. Unit level flags were also adjusted to correspond with the City's change in standard.

Written Policies, Procedures, and/or Contract Specifications for 15(a):

Policies and Procedures: The Lead SP sets forth the following procedures related to requirements set forth in paragraph 15(a):

- “Maximo flags locations in which lead-based paint is or may be present and identifies when RRP requirements must be met. If a Maximo work order identifies that RRP is required and there are no results of an XRF test in that apartment available in Maximo, all painted surfaces in an apartment or component must be presumed to be lead-based paint.” See Lead SP, § VII.J.3.a.(1).
- Details the use of three messages or banners (the “RRP flags”) on a work order, depending on the demographic status and testing information associated with the unit. See Lead SP, § VII.J.3.a.(2).

Compliance Advisory Alert: NYCHA published Compliance Advisory Alert #22 titled “Lead-Based Paint Standard Change” on December 1, 2021 (Attachment G), which states that “Starting December 1, 2021, NYCHA staff and vendors must follow RRP for any work that disturbs more than “de minimis” amounts of paint in all apartments with a child under 6 in a pre-1978 building, and in common areas in these buildings... All painted components in these apartments and common areas must be presumed to have lead-based paint until further notice. Work orders in apartments with children under the age of 6 now have the following warning banner on the handheld device:

“CHILD UNDER 6 APARTMENT OR COMMON AREA – YOU MUST FOLLOW RRP RULES WHEN DISTURBING PAINTED SURFACES” (referred to as the “BLUE BANNER”)

[IT Controls for 15\(a\):](#)

Based on prior lead inspection data, Maximo places a “RRP flag” on units that could require RRP work. In February 2020, NYCHA enhanced the “RRP flag” for units that have received an individual XRF inspection through the 2019 XRF Initiative. Once a unit receives a new XRF test and the results are uploaded into Maximo, the “RRP flag” will be moved from the unit level to the component level and made available to NYCHA renovators performing work in the apartment on their handhelds.

The previously existing IT protocols for RRP enforcements were configured to read from XRF inspection results tested at 1.0 milligrams of lead per square centimeter or more. To comply with the local law standard change, effective December 1, 2021, an interim solution was devised to presume any CU6 unit in a development constructed prior to 1978 is positive, irrespective of prior results tested at 1.0 milligrams of lead per square centimeter. A blue banner is now displayed at the top of the screen to warn that renovators should follow RRP procedures irrespective of its XRF testing status. This blue banner notifies the worker that the unit and surrounding area is accessed by a child under 6 years of age and RRP rules must be followed when any paint surface is disturbed. This is displayed even if XRF testing results are negative at 1.0 or XRF testing is yet to be performed, in tandem with cases where XRF results are positive.

Between December 2021 and June 2022, NYCHA added controls to the RRP banner display in Maximo and RRP enforcement to be established taking child under 6 status, construction date, XRF testing results at 1.0 and 0.5 thresholds, abatement status, and exemption status at 1.0 and 0.5 thresholds into account. Note, too, that users can select a full list of all apartments that require RRP using the public query in Maximo entitled “RRP required NYCHA apartments.”

[Field Monitoring/OA for 15\(a\):](#)

Please refer to the EHS report (Attachment A) for a description of RRP-related field monitoring activities during the Covered Period. Additionally, it should be noted that EHS uses Maximo to identify work orders

that might require RRP procedures for their onsite monitoring. EHS conducted onsite monitoring of 547 RRP work orders during the Covered Period. EHS does not solely rely on Maximo to identify vendor work because some vendors use paper work orders to document their work.

In sum, EHS field monitoring exhibits a high rate of compliance when the RRP work order enforcement questions are followed appropriately. However, as discussed above Compliance continues to study patterns among renovators that may indicate whether renovators are intentionally or unintentionally circumventing the RRP work order enforcement questions, creating a risk of non-compliance. These risks can be reduced with improved vendor and staff supervision, IT enhancements to fill gaps, and more consistent training and guidance to staff on RRP work order protocols.

[File Review for 15\(a\):](#)

Potential RRP work orders contain a “flag” in Maximo signifying the presence of presumed or known LBP in the apartment. This “RRP flag” then requires that any paint-disturbing work in the unit requires renovators to follow RRP protocols, including a clearance examination.

The table below shows that, for 96% (65,425 out of 68,439) of work orders closed between June 16, 2022 to December 15, 2022 where renovators must answer the RRP enforcement questions, renovators indicated that they were not performing RRP work. This trend is concerning and requires continued monitoring of whether the workers’ selection of “No” or “No Components Selected” to the RRP enforcement questions is appropriate.

[RRP Selection from June 16, 2022 to December 15, 2022](#)

Year-Month	No Count	% No	Yes Count	% Yes	Total
2022-06 (beginning June 16, 2022)	5,364	94.4%	321	5.6%	5,685
2022-07	10,138	95.6%	469	4.4%	10,607
2022-08	11,626	95.4%	562	4.6%	12,188
2022-09	11,002	94.8%	606	5.2%	11,608
2022-10	11,134	96.3%	423	3.7%	11,557
2022-11	10,769	96.2%	422	3.8%	11,191
2022-12	5,392	96.2%	211	3.8%	5,603
Grand Total	65,425	95.6%	3,014	4.4%	68,439

Importantly, answering “No” to the RRP enforcement question does not necessarily indicate non-compliance and, indeed, can be entirely appropriate in several circumstances. For instance, NYCHA has a growing volume of XRF data showing that apartments are either negative or have a limited number of lead components at 1.0 and 0.5 mg/cm². If a renovator is performing work in a negative apartment

or working on components that do not contain LBP, the renovator is correct to answer “No” to the RRP enforcement question. Additionally, for some work orders, the renovators are not performing work at all or are not performing work that disturbed paint above the de minimis thresholds, such as painting with no surface preparation or drilling small holes to install new cabinets on a wall. In these circumstances, renovators would also be correct to select “No.”

Overall Description of Compliance for 15(a):

NYCHA has established a sophisticated work order system that can identify the lead status of the apartment on a component-by-component basis. The system uses this information to prompt staff with RRP enforcement questions. Maximo was updated in December 2021 to address the City’s change of the standard for LBP.

While the work order system meets the requirements of the certification set forth in Paragraph 15(a), additional training, supervision, and monitoring is needed to ensure that the system users (i.e., NYCHA staff) are properly following the required protocols. Compliance will continue to take steps to ensure that the system is used appropriately and hold staff accountable for deviations from the requirements.

Paragraph 15(b): Ensuring that only properly trained and certified firms and workers are assigned to perform work to which lead-safe work practices apply in accordance with 24 CFR §§ 35.1330, 35.1350 and 40 CFR §§ 745.85, 745.90.

Regulatory Requirements for 15(b):

NYCHA interprets this paragraph, and the regulations cited therein, as requiring that NYCHA have policies, procedures, controls, and practices to only permit RRP-certified staff or vendors to perform paint-disturbing work in lead paint developments.

Written Policies, Procedures, and/or Contract Specifications for 15(b):

Policies and Procedures: The Lead SP sets forth the following procedures related to requirement set forth in paragraph 15(b):

- Regarding vendors, the Lead SP states: “Property maintenance supervisors ensure vendor employees have a physical or electronic copy of their valid RRP certification with them when the vendor is onsite and the information is entered into the log book, follow lead-safe work practices under federal and local law and regulations, and provide the required notifications.” See Lead SP, § XV.A.2.I.(7). Developments using vendors must also provide the vendor with the “Lead Safe Practices Vendor notice.” See Lead SP, § VII.J.2.c.(2) and Appendix E.
- Regarding NYCHA staff, the Lead SP states as follows: “Only Certified Renovators can perform Renovation, Repair, and Painting (RRP) work that requires RRP certification.” See Lead SP, § VII.J.2. The Lead SP further states, “Supervisors are not permitted to assign work that requires a Certified Renovator to employees who are not Certified Renovators. If an employee who is not a Certified Renovator is assigned to complete a work order that has the ACTION REQUIRED message noted above, the employee must tell their immediate supervisor that they are not certified to complete the work order. In Assignment Manager and ESD Dispatching, the Labor List has a field to indicate which employees are Certified Renovators. The RRP certification information is imported from the Human Resources Database daily.” See Lead SP, §§ . VII.J.3.a.2.d through VII.J.3.a.2.e.

IT Controls for 15(b):

As reported in the July 2021 HUD Certification, NYCHA has IT controls that ensure that NYCHA assigns potential RRP work orders in lead paint developments to RRP certified NYCHA staff. During the covered period, IT reported that these controls continued to be in place, and no further controls were implemented. A document describing this IT control is annexed as Attachment B.

At present, Maximo does not identify the vendor or vendor staff assigned to perform RRP work at the lead paint developments. NYCHA instead relies upon either development staff or NYCHA paint supervisors to manually check the qualifications of the vendor and vendor staff at the development.

Field Monitoring/QA for 15(b):

A full description of field monitoring activities for RRP projects is set forth in the EHS Report, annexed as Attachment A. EHS's findings relevant to Paragraph 15(b) was that 835 out of 838 NYCHA workers observed performing RRP work were RRP certified. In other words, for 835 jobs, a least one worker present had a valid Certified Renovator credential.

File Review for 15(b):

The Compliance Department randomly selected approximately 50 work orders each month to verify whether employees and staff were certified. This effort resulted in a review of 306 work orders for work performed during the Covered Period (June 16, 2022 to December 15, 2022). The Compliance Department compared data from closed RRP work orders in Maximo with training results from the Human Resources Department. All 306 work orders were completed by RRP certified NYCHA employees.

As a result of inconsistent use by NYCHA staff, by December 2021, the Compliance Department stopped monitoring the vendor RRP compliance portal that requires vendors performing RRP work to upload both their firm and worker certifications. The Compliance Department is evaluating whether other IT controls embedded directly in the Maximo work order are feasible in order to prevent the assignment of work in RRP flagged units to vendors without a current certification.

Overall Description of Compliance for 15(b):

During the Covered Period, NYCHA made demonstrable progress towards compliance with the requirement set forth in Paragraph 15(b) of the HUD Agreement. Evidence of progress towards compliance consists of:

- The existence of policies and procedures addressing the requirements of Paragraph 15(b);
- The existence of IT controls for work orders performed by NYCHA staff to ensure that only RRP certified workers can be assigned to RRP work orders;
- Strong evidence (99.64% compliance in the field and 100% compliance in file reviews) that these requirements are being followed for NYCHA staff.

Based on the documentation, NYCHA is showing significant progress on compliance with this paragraph but must still further strengthen its controls on vendors prior to certifying compliance.

Paragraph 15(c): Obtaining and Maintaining certification as a certified renovation firm if any of the workers described in this paragraph are NYCHA employees, and the work they do is covered by 40 CFR part 745, subpart E ... in accordance with 40 CFR §§ 745.81, 745.89.

Overall Description of Compliance for 15(c):

NYCHA is a certified RRP firm. Proof of the certification is annexed as Attachment H. Based on this documentation, there is evidence supporting NYCHA's certification that it is in compliance with the requirements set forth in 15(c).

Paragraph 15(d): Ensuring supplies necessary to perform lead-safe work practices in accordance with 24 CFR § 35.1350 and 40 CFR § 785.85 are readily available to trained and certified workers.

Regulatory Requirements for 15(d):

NYCHA interprets this requirement as ensuring that its storerooms have sufficient supplies that can be used by NYCHA staff daily to fulfill the lead safe work practice requirements.

Written Policies, Procedures, and/or Contract Specifications for 15(d):

The Lead SP sets forth the mandatory materials that must be included in the standard RRP kit and available at the developments. See Lead SP, § VII.J.9.

Starting in April 2019, four developments per week had their storerooms inventory converted over from development control to Materials Management Department ("MMD") control. As of December 2020, two separate NYCHA SPs govern storeroom management procedures: (1) NYCHA SP 006:19:1, Operations of Development Storerooms – MMD Locations, for locations under MMD control, and (2) NYCHA SP 040:04:2, Operation of Development Storerooms, for locations under development control.

For storerooms under MMD control, MMD monitors and distributes all maintenance work related materials out of the storeroom, including RRP required supplies. MMD implemented an initiative on April 1, 2019 to improve RRP storeroom supplies management at developments by establishing a visible model display of each item that is required to conduct RRP work. The Storeroom Caretaker at each development is responsible for RRP item monitoring, and reports to the MMD supervisor any issues or items that need replenishment.

As of November 30, 2022, MMD controlled all development storerooms.

IT Controls for 15(d):

During June 16, 2022 through December 15, 2022, an IT enhancement was built and released at 3 testing sites: Washington, Van Dyke, and Woodside. This enhancement allows the Storeroom Caretaker to order

materials at set min/max levels at each site. Auditors and Supervisors have access to make any changes to min/max levels based on reorder point (“ROP”) and overstock data showing usage rates.

[Field Monitoring/QA for 15\(d\):](#)

A full description of field monitoring activities for RRP projects is set forth in the EHS Report, annexed as Attachment A. This section briefly summarizes EHS’s findings relevant to Paragraph 15(d).

- Out of 295 total storeroom inspections for RRP supplies, 7 failed inspections, resulting in a compliance rate of 97.63%.
- EHS LOT inspected 137 storerooms at least once. Some storerooms were re-inspected due to initial failures while others received multiple inspections based on overlapping inspection schedules.
- The most common failure points were missing 6 mil polyethylene sheeting (5 occurrences).
- 7 of the 7 (100%) storerooms that failed were re-inspected and passed. Escalation to the Compliance Department was not required.

[File Review for 15\(d\):](#)

The Compliance Department did not conduct any file review to evaluate compliance with paragraph 15(d).

[Overall Description of Compliance for 15\(d\):](#)

During the Covered Period, NYCHA made demonstrable progress towards compliance with the requirement set forth in Paragraph 15(d) of the HUD Agreement. Evidence of progress towards compliance consists of:

- The existence of policies and procedures addressing the requirements set forth in 15(d);
- Field monitoring data showing an overall rate of 97.63% compliance for RRP storerooms.

Based on this documentation, there is evidence supporting NYCHA’s certification that it is substantially in compliance with the requirements set forth in 15(d).

Paragraph 15(e): Ensuring that firms and workers assigned to perform the renovation or maintenance work to which lead safe work practices apply use the RRP Renovation Checklist and establish and maintain records necessary to demonstrate compliance with the RRP Rule in accordance with 40 CFR § 745.86.

[Regulatory Requirements for 15\(e\):](#)

The relevant portion of 40 CFR § 745.86 states as follows:

“Documentation of compliance with the requirements of § 745.85, including documentation that a certified renovator was assigned to the project, that the certified renovator provided on-the-job training for workers used on the project, that the certified renovator performed or directed workers who performed all of the tasks described in § 745.85(a), and that the certified renovator performed the post-

renovation cleaning verification described in § 745.85(b). If the renovation firm was unable to comply with all of the requirements of this rule due to an emergency as defined in § 745.82, the firm must document the nature of the emergency and the provisions of the rule that were not followed. This documentation must include a copy of the certified renovator's training certificate, and a certification by the certified renovator assigned to the project that:

- (i) Training was provided to workers (topics must be identified for each worker).
- (ii) Warning signs were posted at the entrances to the work area.
- (iii) If test kits were used, that the specified brand of kits was used at the specified locations and that the results were as specified.
- (iv) The work area was contained by:
 - (A) Removing or covering all objects in the work area (interiors).
 - (B) Closing and covering all HVAC ducts in the work area (interiors).
 - (C) Closing all windows in the work area (interiors) or closing all windows in and within 20 feet of the work area (exteriors).
 - (D) Closing and sealing all doors in the work area (interiors) or closing and sealing all doors in and within 20 feet of the work area (exteriors).
 - (E) Covering doors in the work area that were being used to allow passage but prevent spread of dust.
 - (F) Covering the floor surface, including installed carpet, with taped-down plastic sheeting or other impermeable material in the work area 6 feet beyond the perimeter of surfaces undergoing renovation or a sufficient distance to contain the dust, whichever is greater (interiors) or covering the ground with plastic sheeting or other disposable impermeable material anchored to the building extending 10 feet beyond the perimeter of surfaces undergoing renovation or a sufficient distance to collect falling paint debris, whichever is greater, unless the property line prevents 10 feet of such ground covering, weighted down by heavy objects (exteriors).
 - (G) Installing (if necessary) vertical containment to prevent migration of dust and debris to adjacent property (exteriors).
- (v) If paint chip samples were collected, that the samples were collected at the specified locations, that the specified NLLAP-recognized laboratory analyzed the samples, and that the results were as specified.
- (vi) Waste was contained on-site, and while being transported off-site.
- (vii) The work area was properly cleaned after the renovation by:
 - (A) Picking up all chips and debris, misting protective sheeting, folding it dirty side inward, and taping it for removal.

- (B) Cleaning the work area surfaces and objects using a HEPA vacuum and/or wet cloths or mops (interiors).
- (viii) The certified renovator performed the post-renovation cleaning verification (the results of which must be briefly described, including the number of wet and dry cloths used).

[Written Policies, Procedures, and/or Contract Specifications for 15\(e\):](#)

The Lead SP sets forth the required procedures for lead safe work practices, and for completing the required renovator’s checklist. See Lead SP, §§ VII.J.1. through VII.J.14. A template renovator’s checklist, NYCHA Form 088.181, Renovation Recordkeeping Check List, is available on the FRL for vendors and staff.

In November 2019, NYCHA created digital versions of the post renovator checklists for use in the handheld and desktop versions of Maximo. Screenshots of the digitized checklists are located in Attachment I, Slides 11 and 12. NYCHA received comments from HUD on the checklist items used for these digitized checklists. This enhancement is further discussed in the IT Controls for 15(e) section below.

[IT Controls for 15\(e\):](#)

As of November 2019, the pre-acknowledgment form and renovator’s checklist were digitized and added into the Maximo work ticket. RRP work orders cannot be closed without completing these forms with required signatures and user-provided information about the renovation. Since vendors do not have handhelds, this control does not apply to their work.

[Field Monitoring/QA for 15\(e\):](#)

A full description of field monitoring activities for RRP projects is set forth in the EHS Report, annexed as Attachment A. With respect to overall compliance with RRP work practices, EHS made the following overall observations based on 547 observations of RRP work orders:

- Among all the RRP work phases the “Worksite Preparation” phase achieved 99.55% compliance rates. 442 “Worksite Preparations” activities were observed.
- 444 “Work Activities” were observed, with a 99.55% compliance rate.
- 59 “Cleanup Activities” were observed, with a 98.31% compliance rate.
- 50 “Cleanup Verification Activities” were observed, with a 100% compliance rate.
- During the reporting period, LOT identified 2 of the 547 RRP jobs that a vendor performed. Of these, one resulted in escalations.

[File Review for 15\(e\):](#)

The Compliance Department assessed 306 work orders (completed between June 16, 2022 and December 15, 2022) for the required attachments and confirmed whether the work orders had the RRP Renovation Checklist. 299 of the work orders had staff that completed the RRP Renovation Checklist. The remaining work orders had partially completed RRP Renovation Checklists. A spreadsheet documenting this file review is annexed as Attachment J.

RRP Checklists June 16, 2022 to December 15, 2022

	June	July	August	September	October	November	December
RRP Checklists Present	6	48	49	48	50	50	48
Partially Completed RRP Checklists	0	2	1	2	0	0	2
Total Work Orders Reviewed	6	50	50	50	50	50	50
Compliance Rate	100%	96%	98%	96%	100%	100%	96%

In 7 cases, MU identified partially completed RRP checklists. In 3 cases, the skilled tradesperson did not confirm whether they contained waste on-site and/or contained waste while it was transported off-site. In the remaining 4 cases the skilled tradesperson did not confirm whether doors in the work area were covered, objects were removed or covered in the work area, floors in the work area were covered, or a HEPA vacuum and/or wet cloths were used to clean work area surfaces.

When Compliance identifies these issues, the skilled tradesperson is given an opportunity to explain the reason for not following RRP procedures and Compliance informs them on how to properly complete the requirements in the future. Compliance asked Skilled Trades supervisors for explanations and received an explanation in 3 of 7 instances. The Skilled Trades Deputy Director for 2 of the 3 employees associated with 3 work orders confirmed speaking with their employee. The reason one employee provided for the incomplete checklist was overlooking the selection of the category. For the 2 remaining work orders, the other employee explained that he overlooked the selection, and the Deputy Director confirmed that the photos were uploaded to Maximo, showing adherence to RRP safety protocols.

Overall Description of Compliance for 15(e):

During the Covered Period, NYCHA made demonstrable progress towards compliance with the requirements set forth in Paragraph 15(e) of the HUD Agreement. Evidence of progress towards compliance consists of:

- The existence of policies and procedures addressing the requirements set forth in 15(e);
- Successful application of IT controls that require workers to complete the Renovator's Checklist before they can close the RRP work order;
- Field monitoring data providing a rate of compliance between 98.31% to 100% for the 4 work phases (worksite preparation, work activities, cleanup activities, cleanup verification);
- File review showing an upward trend of compliance to 98% (compared to 94% in the last certification) for completion of the renovator's checklist.

However, NYCHA currently does not have a system for remotely monitoring/controlling vendors performing RRP work.

Overall, the Compliance Department recommends not certifying to this requirement until field monitoring shows a period of consistent compliance for vendors and NYCHA strengthens policies on vendor record-keeping. With respect to NYCHA's internal staff, there is evidence supporting NYCHA's certification that it is substantially in compliance with the requirements set forth in 15(e).

Paragraph 15(f): Ensuring that residents of units and developments in which renovation or maintenance work to which lead-safe work practices apply will be performed are informed of the work to be performed and the risks involved in accordance with 24 CFR § 35.1345 and 40 CFR §§ 745.84, 745.85.

Regulatory Requirements for 15(f):

The regulations cited in paragraph 15(f) require NYCHA to distribute the U.S. Environmental Protection Agency ("EPA") Renovate Right Pamphlet, and to obtain acknowledgment from an adult occupant of the unit.

Written Policies, Procedures, and/or Contract Specifications for 15(f):

The Lead SP sets forth the required procedure for distributing the required pre-renovation materials and obtaining the acknowledgment form from the resident. See Lead SP, § VII.J.5.

IT Controls for 15(f):

As of November 1, 2019, the pre-renovation acknowledgment form and renovator's checklist were digitized and added into the Maximo work ticket. A screenshot of the pre-renovation checklist as it appears in Maximo is located in Attachment I, Slide 8. RRP work orders cannot be closed without completing these forms with required signatures and user-provided information about the renovation. Since vendors do not have handhelds, this control does not apply to their work. During the covered period, IT reported that these controls continued to be in place, and no further controls were implemented.

Field Monitoring/QA for 15(f):

A full description of field monitoring activities for RRP projects is set forth in the EHS Report, annexed as Attachment A. EHS made the following observations about the Lead Safe Certified Guide to Renovate Right:

- To assess compliance with this requirement, LOT asked residents if they had received this guide for 546 work orders.
- 533 residents confirmed they received the information, resulting in a 97.62% compliance rate.

File Review for 15(f):

The MU assessed 306 work orders (completed between June 16, 2022 and December 15, 2022) for the required attachments and confirmed if the pre-renovation acknowledgement form was offered to the resident. 99% (302 out of 306) of the work orders indicated in the pre-renovation acknowledgment form that the pamphlet was offered to the resident. In the 4 remaining instances, the work order had a

comment that the resident, “declined”, “Covid”, or “N/A”. See the table below for details regarding completion of the renovator’s checklist and Attachment J for complete a list of the individual work orders:

[Pre-Renovation Acknowledgement Form June 16, 2022 and December 15, 2022](#)

	June	July	August	September	October	November	December
Acknowledge Form Present	6	50	50	50	48	48	50
Acknowledgment Form Incomplete	0	0	0	0	2	2	0
Total Work Orders Reviewed	6	50	50	50	50	50	50
Compliance Rate	100%	100%	100%	100%	96%	96%	100%

[Overall Description of Compliance for 15\(f\):](#)

During the Covered Period, NYCHA made demonstrable progress towards compliance with the requirements set forth in Paragraph 15(f) of the HUD Agreement. Evidence of progress towards compliance consists of:

- The existence of policies and procedures addressing the requirements set forth in 15(f);
- Successful application of IT controls that require workers to complete the pre-renovation acknowledgment form before they can close an RRP work order;
- 97.62% (533 of 546) of residents confirmed they had received the Renovate Right Pamphlet;
- File review showing a rate of compliance of 98% across the Covered Period.

Despite this progress, NYCHA is still developing a more cohesive policy on monitoring vendor performance and ensuring that residents receive the pre-acknowledgment forms when vendors complete work in their apartments.

Overall, the Compliance Department recommends not certifying to this requirement until field monitoring shows a period of consistent compliance for vendors and NYCHA strengthens policies on vendor record-keeping. With respect to NYCHA’s internal staff, there is evidence supporting NYCHA’s certification that it is substantially in compliance with the requirements set forth in 15(f).

[Paragraph 15\(g\): Retaining records demonstrating compliance with the regulations set forth at 24 CFR § 35.125 and 40 CFR § 745.84.](#)

[Regulatory Requirements for 15\(g\):](#)

Paragraph 15(g) requires compliance with 24 CFR § 35.125, which, among other things, sets forth the requirements for issuing notices of evaluation (“NOE”) following lead testing, inspections, and risk assessments, and notices of hazard reduction (“NOHR”), which must occur upon the completion or

abatement or interim controls. 40 CFR § 745.84 sets forth the work notification requirements for RRP projects in residences and common areas. Compliance with section 40 CFR § 745.84 is also referenced in Paragraph 15(f) and this section shall focus on compliance with 24 CFR § 35.125.

Written Policies, Procedures, and/or Contract Specifications for 15(g):

Policies and Procedures: The Lead SP contains policies and procedures on the NOE and the NOHR.

- For policies and procedures for the NOE, *see* Lead SP, § VII.D.1.c. (NOE following XRF inspection); *Id.*, § VII.D.1.d. (NOE for biennial re-evaluations); *see also* NYCHA Form 060.851, Notice of Evaluation.
- For policies and procedures for the NOHR, *see* Lead SP, § VII.D.2.b.(1) (NOHR following hazard reduction activities performed in an apartment); Lead SP, § VII.D.2.b.(2) (NOHR following hazard reduction activities performed in a common area or exterior); *see also* NYCHA Form 060.852, Notice of Hazard Reduction Activity.

Contract Specifications: The contract specifications for the NYCHA XRF initiative require vendors performing the XRF testing to perform the following:

- (a) Each dwelling unit that is found to contain lead-based paint is to receive a “Notice.”
- (b) The Notice shall be in a single page format that is approved by NYCHA.
- (c) The Notice is to be received by the resident within 15 calendar days of knowledge that lead-based paint is present.
- (d) Notices are to be mailed directly to the Resident’s address.

IT Controls for 15(g):

IT has developed a system to automate the sending of the NOHR through Siebel. This automated process generates a hard copy NOHR after a passing clearance examination. The letter is then mailed to the resident. An electronic version of the letter (in 4 languages) is also stored in the resident’s MyNYCHA App file. The process auto-generates letters for “non-exception cases,” meaning that all necessary criteria for the work order matches in Maximo and no manual review is necessary to resolve discrepancies.⁹ If a case does not meet these criteria, the process auto-generates a list of “exception” cases, which LHC must review, resolve discrepancies, and if necessary, manually generate the NOHR.¹⁰

⁹ **Non-Exception (auto) NOHR:** Hazard Reduction Notice that is automatically generated by Siebel and mailed out by General Services Department, if any 1 of the following categories is satisfied:

- Dust wipes taken matched exactly to the dust wipes that were planned
- Dust wipes planned at apartment level but were taken at the room level
- Dust wipes taken were more than dust wipes planned but contained all dust wipes that were planned

¹⁰ **Exception (manual) NOHR:** Hazard Reduction Notice that is manually generated by the LHC Dust Wipe Unit and mailed out, if any 1 of the following categories is satisfied, indicating further investigation is needed:

- Dust wipes taken were less than dust wipes planned
- Dust wipes taken were more than dust wipes planned but did not include all dust wipes planned

[Field Monitoring/QA for 15\(g\):](#)

No field monitoring for the paragraph.

[File Review for 15\(g\):](#)

Notices of Evaluation:

The Compliance Department reviewed XRF inspection work orders in Maximo completed between June 16, 2022 and December 15, 2022. Based on data as of January 12, 2023, of 14,537 completed XRF inspections, 11,199 work orders contained the required NOE in Maximo. According to LHC, of the 3,338 work orders which did not have a required NOE, 1,915 were provided by the vendor to LHC, and LHC is still conducting QA for these work orders. The work orders must clear QA before the NOE can be approved for upload to Maximo. LHC reports for the remaining 1,423 work orders missing the required NOE in Maximo, the vendor has not submitted the NOE to LHC for review yet.

Notices of Hazard Reduction – Non-Exception Cases:

Between June 16, 2022 and December 15, 2022, the IT data reflected 3,394 “Non-Exception” cases (meaning the NOHRs were automatically generated through the Siebel system). The MU selected a sample of 50 of these cases and found that all 50 of these cases contained a copy of the NOHR attached in Siebel.

Notices of Hazard Reduction – Exception Cases:

For “Exception” cases (where the NOHR must be manually generated by LHC), the Compliance Department obtained a list of RRP work orders that were closed and passed dust wipe clearance between June 16, 2022 and December 15, 2022. The list contained 971 exception work orders, and the Compliance Department randomly selected a sample of 39 work orders for review.

The Compliance Department requested evidence of email delivery from LHC to the developments with the NOHR attached in the email to the development. Upon review on January 13, 2023, the Compliance Department found that 37 work orders sampled had the respective emails and NOHR uploaded in Maximo, and 2 work orders did not have the respective emails and NOHR uploaded in Maximo. This is an increase in performance from the July 31, 2022 certification when only 23% of exception related work orders had emails and NOHRs uploaded in Maximo.

However, the delay between the clearance inspection date and the date of notice on the NOHR for “exception” cases appears to be an issue that has not improved since it was first reported in the January 31, 2021 certification. The review in Maximo revealed that of the 37 exception case emails and NOHRs uploaded in Maximo, LHC did not send any of the emails or respective NOHRs to the development staff until between 12 and 405 days after the clearance inspection date.

LHC explains that for the 2 work orders which did not have the respective emails and NOHR uploaded in Maximo, LHC determined the previous employee responsible for the task of generating manual NOHRs for the month of July 2022 did not complete all of the NOHRs for that month as expected. The 2 work orders had clearance dates in July 2022. LHC reports they have since made changes to their staffing to complete this task more reliably. LHC also modified the NOHR process to have additional oversight by a supervisor to check and confirm whether this task has been done each month.

LHC is aware of these findings and is working to make improvements in the future. Of note, there was a 72% increase in compliance from the July 31, 2022 Certification to this Certification.

Overall Description of Compliance for 15(g):

NYCHA launched the automated IT process for generating the NOHR through Siebel on November 18, 2020. For the Covered Period, the Compliance review of the sample selection of 50 non-exception work orders exhibited a positive result for 100% of the notices. For manually generated and e-mailed NOHRs, the Compliance review of the sample selection of 39 exception work orders exhibit a positive result for 95% of the notices based on having the respective emails and NOHR uploaded in Maximo. However, when verifying for whether the NOHR was emailed to the development within the required 15 days, the Compliance review indicates a positive result for only 3% of the notices.

While NYCHA has established practices in place for the NOE, NYCHA cannot certify to the requirements set forth in 15(g) until it improves its overall compliance with the NOHR process.

In addition, there is still not a process for notifying residents in writing following a failed dust wipe clearance. Instead, upon a failed clearance, residents are notified by telephone or email about the need for the development to reschedule a re-cleaning of the work area and a second clearance examination. Now that an automated system is in place for NOHRs, NYCHA needs to work on a method to auto-generate written notice to the resident following a failed clearance examination.

Compliance, IT and LHC will continue to work together to improve the processes for the exception (manual) cases and failed dust wipe clearances.

Paragraph 15(h): Containing or causing to be contained any work area to which lead safe work practices will apply by isolating the work area and waste generated so that no dust or debris leaves the work area in accordance with 24 CFR § 35.1345 and 40 CFR § 745.85(a).

Regulatory Requirements for 15(h):

24 CFR § 35.1345(b)(1) states as follows: “The worksite shall be prepared to prevent the release of leaded dust and contain lead-based paint chips and other debris from hazard reduction activities within the worksite until they can be safely removed. Practices that minimize the spread of leaded dust, paint chips, soil and debris shall be used during worksite preparation.”

40 CFR § 745.85(a)(2) states as follows: “Containing the work area. Before beginning the renovation, the firm must isolate the work area so that no dust or debris leaves the work area while the renovation is being performed. In addition, the firm must maintain the integrity of the containment by ensuring that any plastic or other impermeable materials are not torn or displaced and taking any other steps necessary to ensure that no dust or debris leaves the work area while the renovation is being performed. The firm must also ensure that containment is installed in such a manner that it does not interfere with occupant and worker egress in an emergency.”

Written Policies, Procedures, and/or Contract Specifications for 15(h):

The Lead SP sets forth the containment and worksite isolation requirements. See Lead SP, §§ VII.J.10. through VII.J.12.

[IT Controls for 15\(h\):](#)

The RRP Containment requirements referenced in this paragraph are addressed in the renovator's checklist. As of November 1, 2019, the pre-acknowledgment form and renovator's checklist were digitized and added into the Maximo work ticket. RRP work orders cannot be closed without completing these forms with required signatures and user-provided information about the renovation. Since vendors do not have handhelds, this control does not apply to their work.

[Field Monitoring/OA for 15\(h\):](#)

A full description of field monitoring activities for RRP projects is set forth in the EHS Report, annexed as Attachment A. With respect to overall compliance with RRP work practices, EHS made the following overall observations:

- Out of 442 EHS observations of worksite preparation activities, 99.55% were found to be in compliance.

[File Review for 15\(h\):](#)

The results of the file review are discussed in the Description of Compliance with paragraph 15(e), which identifies the work orders where the RRP checklist was completed.

[Overall Description of Compliance for 15\(h\):](#)

During the Covered Period, NYCHA made demonstrable progress towards compliance with the requirement set forth in Paragraph 15(h) of the HUD Agreement. Evidence of progress towards compliance consists of:

- The existence of policies and procedures addressing the requirements set forth in 15(h);
- Successful application of IT controls that require workers to complete the Renovator's Checklist before they can close the RRP work order;
- Field monitoring data providing observed compliance rates of 99.55% for worksite preparation activities and 99.55% for work activities;
- File review showing a trend of compliance to 98% for completion of the renovator's checklist.

Despite this progress, NYCHA still needs to develop a more cohesive policy for monitoring vendor work and collecting required RRP documentation from vendors. EHS reported that it continues to experience difficulties in identifying RRP vendor jobs. EHS observed 2 vendor RRP job during the covered period. During the next 6 month reporting period, LOT will utilize the Micro-Purchase Team's mailbox to identify the locations where vendors are performing RRP work.

Overall, the Compliance Department recommends not certifying to this requirement until NYCHA strengthens policies on vendor record-keeping and monitoring. With respect to NYCHA's internal staff, there is evidence supporting NYCHA's certification that it is substantially in compliance with the requirements set forth in 15(h).

[Paragraph 15\(i\): Containing, collecting, and transporting waste from the renovation in accordance with 40 CFR § 745.85\(a\)\(4\).](#)

[Regulatory Requirements for 15\(i\):](#)

40 CFR § 745.85(a)(4) states as follows: “(i) Waste from renovation activities must be contained to prevent releases of dust and debris before the waste is removed from the work area for storage or disposal. If a chute is used to remove waste from the work area, it must be covered. (ii) At the conclusion of each work day and at the conclusion of the renovation, waste that has been collected from renovation activities must be stored under containment, in an enclosure, or behind a barrier that prevents release of dust and debris out of the work area and prevents access to dust and debris. (iii) When the firm transports waste from renovation activities, the firm must contain the waste to prevent release of dust and debris.”

[Written Policies, Procedures, and/or Contract Specifications for 15\(i\):](#)

The Lead SP sets forth the protocols for managing waste for RRP projects. See Lead SP, §§ VII.H.1.j. and VII.J.12.

[IT Controls for 15\(i\):](#)

The waste control requirements referenced in this paragraph are included in the renovator’s checklist. As of November 1, 2019, the renovator’s checklist was digitized and added into the Maximo work ticket. RRP work orders cannot be closed without completing this form with required signatures and user-provided information about the renovation. Since vendors do not have handhelds, this control does not apply to their work.

[Field Monitoring/QA for 15\(i\):](#)

A full description of field monitoring activities for RRP projects is set forth in the EHS Report, annexed as Attachment A. With respect to overall compliance with RRP work practices, EHS made the following overall observations:

- EHS conducted 59 Cleanup work phase observations and found an overall compliance rate of 98.31%.

[File Review for 15\(i\):](#)

The results of the file review are discussed in the Description of Compliance with paragraph 15(e), which indicates which work orders had the RRP checklist.

[Overall Description of Compliance for 15\(i\):](#)

During the Covered Period, NYCHA made demonstrable progress towards compliance with the requirement set forth in Paragraph 15(i) of the HUD Agreement. Evidence of progress towards compliance consists of:

- The existence of policies and procedures addressing the requirements set forth in 15(i);
- Application of IT controls that require workers to complete the Renovator’s Checklist before they can close the RRP work order;
- Field monitoring data providing an observed compliance rate of 98.31% for cleanup activities;

- File review showing a trend of compliance of 98% for completion of the renovator’s checklist.

Despite this progress, NYCHA still needs to develop a more cohesive policy for monitoring vendor work and collecting required RRP documentation from vendors. EHS observed 2 vendors during its field monitoring.

Overall, the Compliance Department recommends not certifying to this requirement until NYCHA strengthens policies on vendor record-keeping and monitoring. With respect to NYCHA’s internal staff, there is evidence supporting NYCHA’s certification that it is substantially in compliance with the requirements set forth in 15(i).

Paragraph 15(j): Performing cleanup of any work area to which lead safe work practices apply until no debris or residue remains in accordance with 24 CFR § 35.1345, 35.1335 and 40 CFR § 745.85(a) and (b) and conducting and passing a clearance examination in accordance with 24 CFR § 35.1340 (including any follow-up as required by that section’s subsection (e) after clearance failure(s)), as provided by 40 CFR § 745.85(c).

[Regulatory Requirements for 15\(j\):](#)

The above regulations set forth the mandated cleaning requirements and clearance examination requirements. Due to the number and length of these requirements, they are not reproduced in this section.

[Written Policies, Procedures, and/or Contract Specifications for 15\(j\):](#)

Policies and Procedures: The Lead SP sets forth the protocol for cleaning, cleaning verification, and clearance examinations. See Lead SP, §§ VII.H.1.j, and VII.I.1. through VII.I.10. Over a period of about six months, from June 15 to December 15, 2021, NYCHA integrated 2 significant new protocols into its clearance examination process. First, before cleaning activities begin, NYCHA requires the renovator to call into a newly established centralized dispatcher to request a dust wipe technician to be routed to the worksite. The purpose of this new dispatcher function is to improve communications between field staff and LHC. Second, NYCHA requires certified renovators to perform the EPA cleaning verification after final cleaning.

[IT Controls for 15\(j\):](#)

With respect to clearance examinations, the creation of an RRP or visual assessment (interim control) work order automatically generates a work order for a clearance examination.

In addition, the requirements referenced in this paragraph are included in the RRP checklist. As of November 1, 2019, the RRP checklist was digitized and added into the Maximo work ticket. RRP work orders cannot be closed without completing this form with required signatures and user-provided information about the renovation. Since vendors do not have handhelds, this control does not apply to their work.

[Field Monitoring/QA for 15\(j\):](#)

A full description of field monitoring activities for RRP projects is set forth in the EHS Report, annexed as Attachment A. With respect to cleaning activities, EHS makes the following overall observations:

- 258 dust wipe sample collection jobs observed, 158 were for RRP clearance and 100 were for lead abatement clearance.
- Of the 158 RRP clearance jobs observed, no deficiencies were observed, reporting a total compliance rate of 100%. *See Attachment A.*
- EHS reviewed 258 clearance examinations, covering both abatement and RRP projects. EHS noted that all clearance examiners had proper credentials for their job type; that all jobs adhered to the 1-hour wait time between clearance and cleaning activities; that all clearance examiners conducted the visual inspection phase of the clearance examination; and that the clearance examiners adhered to dust wipe sample collection protocols 100% of the time.

[File Review for 15\(j\):](#)

Compliance, NYCHA IT, and LHC have developed a series of dashboards and reports to evaluate overall compliance with clearance examination requirements for interim controls and other RRP work orders. This section provides an overview of these dashboards and the trends that they are currently showing for the reporting period (June 16, 2022 to December 15, 2022). It should be noted that NYCHA still needs to perform additional validation of the data from the dashboards, however, the below tables represent the best available information at this time. Compliance examines the following indicators to better understand the current compliance rate for clearance examinations:

- **Timing of Initial Clearance Examination:** Compliance evaluates whether NYCHA is performing or attempting to perform the clearance examination within 24 hours, 48 hours, or after 48 hours of final labor transaction on the Corrective Maintenance work order. Compliance also assesses whether the clearance was performed before the end of each weekly reporting cycle.
- **Pass/Fail/Pending Status of Dust Wipe Batches:** Compliance examines the trends exhibited each month for the number of dust wipe batches that (i) have passed (ii) have passed after the initial dust wipe failed; (iii) remain in fail status; (iv) have failed based on a visual clearance; and (v) have results pending at the laboratory. Compliance also evaluates the levels of failed dust wipe samples to distinguish between minor exceedances and more significant exceedances.
- **Re-Cleaning and Re-Clearance:** Compliance examines the timing of recleaning following a failed clearance examination.

Timing of Initial Clearance Examinations and Overall Performance (June 16, 2022 - December 15, 2022)

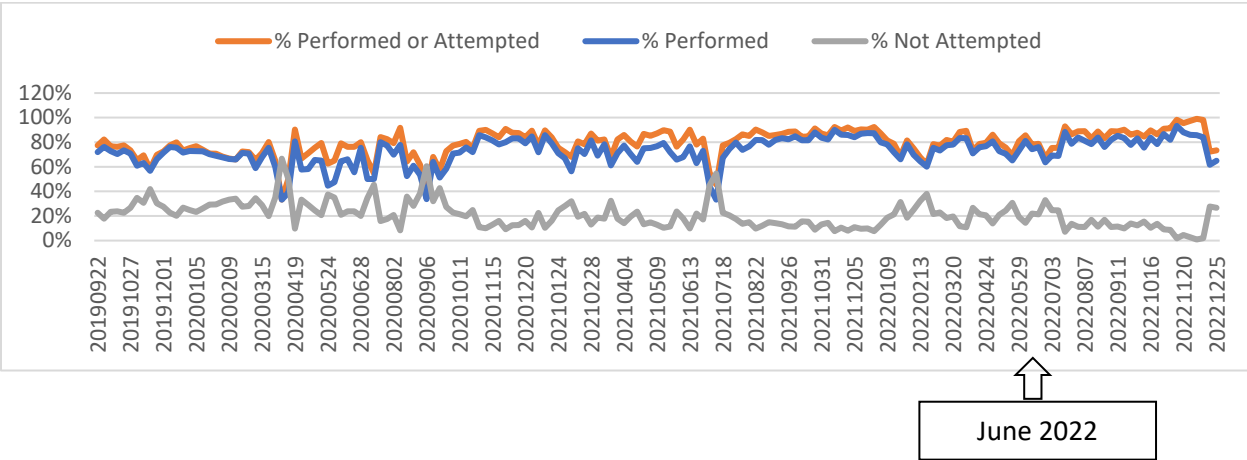
Month	Total # of CM Work Orders	Total # of DW Performed in Reporting Week	Dust Wipes Performed in 24 Hours	Dust Wipes Performed in 48 Hours	Dust Wipe Batch Currently in Passed Status	DW 2 Attempts in 48 Hours for Dust Wipe Not Performed
June	523	375	309	20	412	3
July	883	657	542	32	674	8
August	964	786	624	84	748	9
September	896	729	595	38	729	16
October	807	652	459	78	666	15

Month	Total # of CM Work Orders	Total # of DW Performed in Reporting Week	Dust Wipes Performed in 24 Hours	Dust Wipes Performed in 48 Hours	Dust Wipe Batch Currently in Passed Status	DW 2 Attempts in 48 Hours for Dust Wipe Not Performed
November	761	675	405	73	632	6
December	413	350	208	41	335	0
Total	5,247	4,224	3,142	366	4,196	57

Analysis: During the reporting period, NYCHA completed 4,224 of 5,247 (80.5%) of clearance examinations within the weekly reporting cycle used to examine clearance examinations. NYCHA completed 3,142 of 4,224 (74.4%) of these clearance examinations within 24 hours of the last labor transaction on the Corrective Maintenance work order. NYCHA completed 3,508 of 4,224 (83%) of these clearance examinations within 48 hours of the last labor transaction on the Corrective Maintenance work order.

NYCHA maintained its prior improvements in clearance performance time from the previous reporting period. NYCHA attributes its increased performance to the strong coordination between Lead Hazard Control and the Department of Management and Planning, which oversees the interim control work.

Dust wipe trends performed or attempted by end of the weekly reporting cycle

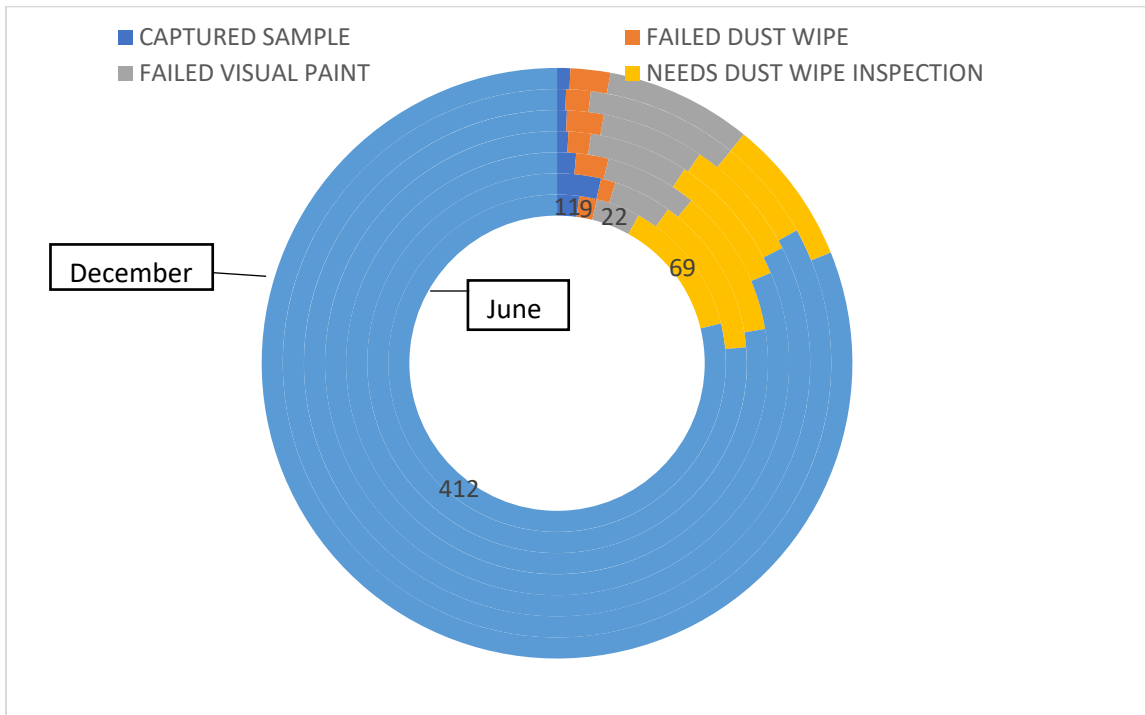


Analysis: Throughout the reporting period, LHC had consistently high performance both in terms of samples collected and attempted beginning in June thru mid-December 2022, typically reaching at least 80%.

Passed/Failed/Pending/Unperformed Statuses at the End of the Sixth Month Reporting Cycle: Compliance conducted a review of the current status of all clearance examinations from June 16, 2022 through December 15, 2022 (as of 1/4/2022). This analysis shows whether the clearance examination passed, remains in a failed status (and requires re-clearance), is still pending with the laboratory, or remains unperformed at this time. Note, the below visualization does not include the “fail history,” i.e.,

clearance examinations that initially failed but were re-tested and have now passed. Those clearance examinations are included in the “passed category.”

Each ring represents a calendar month, with June 2022 as the inner most ring and December 2022 as the outer most ring. The term “capture sample” means that the sample has been collected and is likely pending with the laboratory.



	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
CAPTURED SAMPLE	11	33	14	7	5	4	3	77
FAILED DUST WIPE	9	11	24	14	19	11	9	97
FAILED VISUAL PAINT	22	44	68	62	53	68	33	350
NEEDS DUST WIPE INSPECTION	69	121	110	84	64	46	33	527
PASSED	412	674	748	729	666	632	335	4,196
REOPEN								0
TOTAL	523	883	964	896	807	761	413	5,247

Analysis (as of January 4, 2022):

- 80.0% of the clearance examinations performed over the reporting period are in “pass” status (vs. 76.9% in prior period). This improvement is notable, given that NYCHA uses New York City’s clearance standards, which are more stringent than the federal standards;
- 10.0% have not had clearances examinations yet (vs. 14.8% in prior period);

- 1.5% have been collected and are pending lab analysis (vs. 1.7% in prior period);
- 1.8% remain in fail status (vs. 2.1% in prior period); and
- 6.7% failed the visual phase of the clearance examination (vs. 4.5% in prior period).

While NYCHA mostly improved its performance over the course of the six month reporting period, there are still some compliance shortfalls that NYCHA needs to address, as 20% of dust wipe clearance examinations are not in passed status.

First, the number that are in fail status at the end of the reporting period is about 2%. Many of these failed samples are several months old. This shows that NYCHA still has work to do in improving the re-cleaning and re-clearance process. While Compliance and LHC did build dashboards and trackers to monitor development responsiveness on re-cleaning needs, some lead clearance projects still remain in fail status for months.

Second, the number of samples that have been collected but not received results from the laboratory is too high. It is possible that some of these pending samples relate to recent re-clearance examinations after a failure. However, LHC still needs to establish more reliable, standard turnaround times with laboratories and dust wipe vendors.

Third, the number of unperformed clearance examination remains above 10% (representing a decrease of 4% from the previous reporting period). It should be noted that this table does not account for attempts, which is critical to evaluate NYCHA’s efforts. It should also be noted that there have been continuing internal discussions on whether the clearance dashboards may overreport the number of unperformed samples. If the issue relates to access, NYCHA should explore developing right of entry policies for lead clearance once the pandemic subsides.

Lead Dust Levels of Individual Failed Samples by Surface Area

The below analysis accounts for recent changes in June 2021 in New York City’s lead dust standards and is instructive to evaluate NYCHA’s performance under Paragraph 15(j). NYCHA will continue to report on these findings.

The current New York City and federal dust wipe thresholds are different for floors, window sills and window wells. NYCHA applies the New York City standards because they are more stringent than the federal standards. The below chart shows the difference between the two standards:

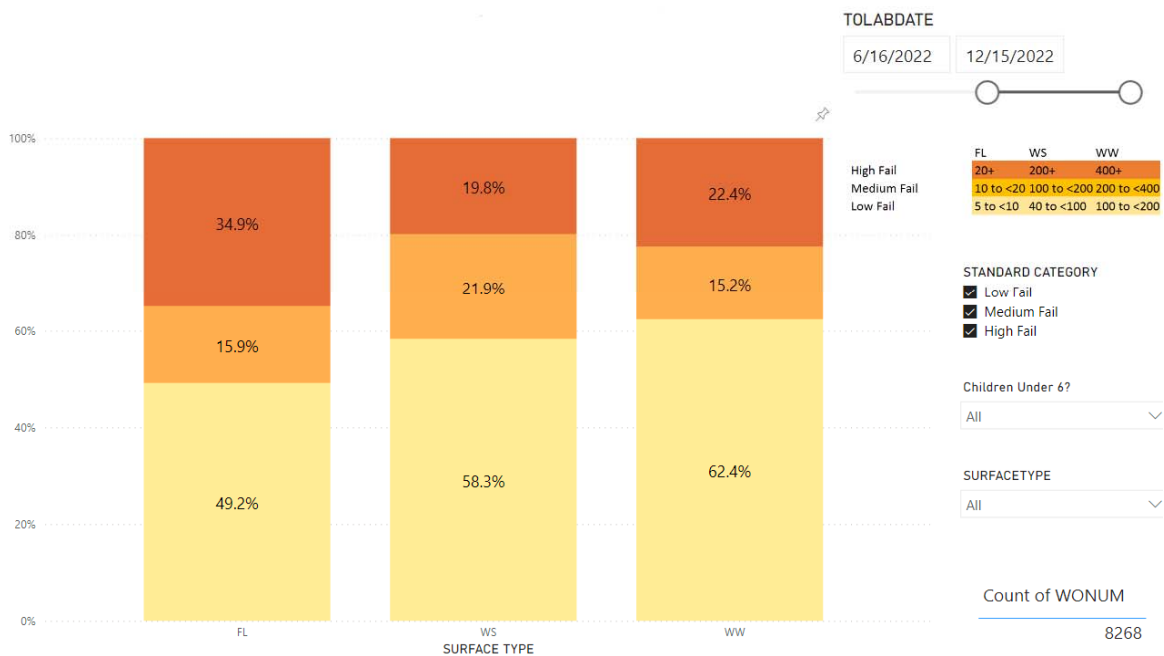
Surface	Federal	NYC (which NYCHA uses)
Floor	10 µg/ft ²	5 µg/ft ²
Window Sill	100 µg/ft ²	40 µg/ft ²
Window Well	400 µg/ft ²	100 µg/ft ²

The chart and dashboard below show the lead levels of individual failed samples within pre-defined ranges, broken down by a range of low, medium, or high fail categories from June 16, 2022 through December 15, 2022. This analysis has been updated to match New York City’s revised lead dust standards

in June 2021. In addition, regardless of the category, any failed sample requires re-cleaning and re-clearance.

NYCHA’s dashboards currently uses the following ranges (in $\mu\text{g}/\text{ft}^2$):

Result	Floor	Window Sill	Window Well
Pass	<5	<40	<100
Low Fail	5 to <10	40 to <100	100 to <200
Medium Fail	10 to <20	100 to <200	200 to <400
High Fail	20+	200+	400+



Analysis: The above-chart shows that many failed samples for all three surface areas is in the lower fail range. The (i) Low Fail samples for window sills that fall between 40-100 $\mu\text{g}/\text{ft}^2$ (accounting for 58.3% of the failed window sill samples), (ii) Low Fail samples for floors that fall between 5-10 $\mu\text{g}/\text{ft}^2$ (accounting for 49.2% of the failed floor samples), and (iii) Low and Medium Fail samples for window wells that fall between 100-400 $\mu\text{g}/\text{ft}^2$ (accounting for 77.6% of the failed window well samples) would all be below the current EPA standards. Thus, the stricter NYC standards are driving the majority of fails.

However, it is important to note that during the Covered Period, Compliance has observed a significant increase in the percentage of “high fail” dust wipes across all categories. For floors, the percentage of high fail dust wipes increased from 20.9% in the July certification report to 34.9% in this certification report. For window sills the percentage of high fail dust wipes increased from 12.2 in the July certification report to 19.8% in this certification report. For window wells, the percentage of high fail dust wipes increased from 11.9% in the July certification report to 22.4% in this certification report. This represents a significant

risk, and Compliance plans to increase its efforts to reinforce the importance of following cleaning protocols among staff that are consistently failing at high rates.

[Overall Description of Compliance for 15\(j\):](#)

With respect to clearance, during the Covered Period, NYCHA made progress towards compliance with the requirement set forth in Paragraph 15(j) of the HUD Agreement. Evidence of progress towards compliance consists of:

- The existence of policies and procedures;
- The improvement of IT controls and reporting on clearance examinations;
- Field monitoring observed high rate of compliance with cleaning verification and clearance protocols;
- Improving metrics with respect to collection and clearance performance.

However, a review of the Maximo data still shows that NYCHA needs to improve the timing of initial clearance examinations and the performance of re-clearance examinations. NYCHA also needs to reduce the number of projects without clearance examinations and improve the lab turnaround time. NYCHA has also not instituted worksite protections after cleaning but pending final clearance results, which is a very significant aspect of the clearance requirements. NYCHA also still faces implementation challenges in operationalizing same day clearance or temporary relocation efforts.

NYCHA cannot certify to compliance with this paragraph until these shortfalls are addressed.