NYCHA Compliance Department: 7th Assessment of Compliance with Requirements Of Paragraphs 14 and 15 of Exhibit A to the January 31, 2019 Agreement

raphs 14 and 15 of Exhibit A to the January 31, 2019 Agreeme Between NYCHA, HUD, SDNY and the City of New York

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. In contrast, 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 7th 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 July 31, 2022, the Compliance Department conducted a review of NYCHA records and activities for the period between December 16, 2021 through June 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.

Update on Compliance-Related Activities Since Last Paragraph 30(b) Certification (January 31, 2022)

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

- NYCHA lead abatement supervisors were not accurately completing the Occupant Protection Plan for CU6 units (paragraph 14(c)).
- NYCHA must improve its abatement report practices in occupied apartments to reach substantial compliance (paragraph 14(f)).
- NYCHA needed 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 (paragraph 15(e), (f), (h), (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 January 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), (d), and (e): Completion of lead abatement activities pursuant to CFR 40 C.F.R. § 745.227(e)- 4, 5, 8-10.
- 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 two separate areas of Compliance risk that have been reported in prior Certifications. First, as of June 12, 2022, NYCHA has received results for a total of 55,298 apartments across 155 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 June 12, 2022, of the 55,298 apartments, 48,807 are negative under the federal standard and 6,491 are positive in buildings that were identified as being exempt. Additionally, 26,496 apartments in these developments remain untested, or have been tested but have results that are pending.

As of June 12, 2022, LHCD has identified 2,316 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 CU6, as per the TEMPO program.

Second, Compliance has identified that, for over 95% (99,100 out of 104,086) 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. The Compliance Department is currently working on a report that will help identify a subset of higher risk work orders based on a number of fields in the RRP work order in order to assess whether a series of determinations by a renovator may have been done improperly. These work orders and renovators could then be reviewed in greater depth.

The Compliance Department does believe there should be greater supervisory oversight to ensure that NYCHA renovators are correctly following the work order protocols when determining if they are performing RRP work. To that end, the Chief Compliance Officer led a briefing during the Covered Period with paint supervisors working on the TEMPO program to reiterate the importance of answering the question correctly and making appropriate determinations. Material on how to make a proper determination was also included in the RRP Refresher Training, which launched in July 2022. Compliance's ongoing review of this issue found that additional training for renovators and IT enhancements may still be necessary to further improve its already sophisticated work order system for lead. Similarly, Compliance has identified control weaknesses in how the RRP protocols in the work order system are implemented by NYCHA vendors.

General Update on Compliance with Paragraph 8: NYCHA's PACT partners began abatement activities at Harlem River and Williamsburg in March and February 2022. 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 June 30, 2022, 70 units have been abated (approximately 10% of the 693 total units at Harlem River I and Harlem River II, collectively "PACT Harlem River"). At Harlem River, during field inspections in 19 units before June 30, 2022 performed by NYCHA's third-party lead monitor STV, compliance with lead abatement requirements was observed for most compliance tasks, as laid out in detail in this report, and most non-compliant items have either been resolved or improved upon over time. 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 June 30, 2022, 101 units (approximately 6% of the 1,621 total units) have been abated at Williamsburg. STV's initial field inspections at Williamsburg Houses led to concerns regarding administrative control compliance tasks, as laid out in detail in this report. However, over time, compliance has improved significantly at this development.

Based on the field oversight during the Covered Period, there is evidence supporting the PACT Partners' ongoing compliance with the requirements referenced in Paragraph 14. File reviews will be an added component to track compliance in future reports.

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 303 jobs and observed a 97% compliance rate with various requirements. Compliance's documentary monitoring also exhibited a high rate of compliance. 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, d, e, and f.

Despite these improvements, continued field and documentary oversight is necessary to detect non-compliance and ensure staff accountability, especially in abatement work performed in occupied units. Compliance is a continuous process and NYCHA needs to maintain the positive performance. This is very important 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 RRP Rule and 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 and maintaining more consistency in issuing the NOHRs.

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 over the past year, and Compliance and LHC are focusing on this requirement on a

daily basis. Temporary drops in performance over the Covered Period were attributed to supervisory staff absences and data entry issues.

On vendor RRP documentation, in May 2021, NYCHA launched a Vendor Compliance Portal, which requires vendors to upload RRP firm and worker certificates into a centralized database. The Compliance Department found that Property Management is underutilizing this portal. Therefore, Compliance is planning to work with other business units to develop a comprehensive business process for tracking RRP vendor certifications and adherence to RRP 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: c and d. In order to certify to Paragraph 15 a, 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 26 observations to Compliance. 16 of these escalations were related to missing lead-disclosure documents. Two of these observations involved lead abatements. Two of the observations concerned post-RRP clearance. The remaining 10 of the escalations concerned not displaying the RRP safety sign, inadequate containment of work area, inaccurate completion of Occupant Protection Plan, missing EPA notification and a dust wipe technician with an expired certificate. Compliance took the following actions in response to the EHS escalations.

EHS	EH&S Escalation	Description	Action Taken
Inspection #	Report		
	Description		
N/A	Lead Disclosure	EH&S identified seven sites that failed	Compliance and EH&S held a
	Document Re-	an inspection and a re-inspection for	briefing with property staff and
	Inspection	lead disclosure documents in	Neighborhood Administrators
	Failures (7 Sites,	conformance with Compliance's	for all seven sites on March 30,
	Dated March 16,	"Guidance for Lead Disclosure Rule	2022 to provide verbal
	2022)	Documentation" issued in January	guidance and answer questions.
		2022.	
N/A	Lead Disclosure	EH&S identified seven sites that failed	Compliance and EH&S held a
	Document Re-	an inspection and a re-inspection for	briefing with property staff and
	Inspection	lead disclosure documents in	Neighborhood Administrators
	Failures (7 Sites,	conformance with Compliance's	for the three sites that had not
	Dated May 12,	"Guidance for Lead Disclosure Rule	passed a re-inspection on May
	2022)	Documentation" issued in January	26, 2022.
		2022. Four of these sites subsequently	
		passed on a third or fourth visit but 3	
		sites remained in a failed status as of	
		the date of transmission.	
N/A	Lead Disclosure	EH&S identified two sites that failed an	Compliance and EH&S held a
	Document Re-	inspection and a re-inspection for lead	briefing with property staff and
	Inspection	disclosure documents in conformance	Neighborhood Administrators
	Failures (2 Sites,	with Compliance's "Guidance for Lead	for the two sites that had not
	Dated July 14,	Disclosure Rule Documentation" issued	passed a re-inspection on July
	2022)	in January 2022.	27, 2022.
88158369	Signage at Wald	EH&S identified that the RRP Safety	Based on the report, RRP Safety
	Houses	Sign was not posted at the work area.	Sign deficiency was corrected

EHS	EH&S Escalation	Description	Action Taken
Inspection #	Report Description		
			on the spot by NYCHA staff and supervisor was informed. No further recommendation.
87335506	Containment at Lincoln Houses	EH&S identified work area containment issues. The condition was corrected on the spot. Compliance recommended that DMP issue an instructional memo to the painters and the paint supervisor if this is the first instance of noncompliance or, if this is the second instance of non-compliance for these employees, please issue a counseling memo and that LHC work with Lincoln Houses property management to expedite completion of a dust wipe in the affected work areas (the kitchen, the apartment hallway that leads to the kitchen and the bedroom).	DMP shared with staff for follow-up, no instructional memo has been provided, Compliance has followed up. LHC reported that it recleaned the area and all dust wipes passed.
88578021	Containment at Webster Houses	EH&S reported that plasterers performing RRP work did so without adequate containment of the work area (entry to bathroom).	Workers complied with the directive on the spot. No further recommendation.
85278687	Containment at Bronx River Houses	EH&S reported that the vendor, AWL Industries, was performing RRP work without adequate containment of the work area. Workers also had to be told to return to perform cleanup.	NYCHA sent a letter to AWL on April 18, 2022 based on findings from oversight in the subject apartment, alleging breach of contract. AWL responded on April 25, 2022, outlining how it had corrected the alleged breach. NYCHA plans to continue to monitor the vendor.
91849970	Containment and Signage at Red Hook East	EH&S reported that the Lead Safety Sign was not posted at the entrance to the work area by a Plasterer. Deficiency was corrected on the spot by NYCHA staff and supervisor was informed. EH&S also reported inadequate containment related to the window and the bathroom door, which was not immediately corrected on the spot.	Compliance provided the Deputy Director of Skilled Trades with a draft instructional memo. Operations decided to escalate the memo to a counseling memo and it was received and signed by the plasterer on June 27, 2022.
91875813	Containment at Mill Brook Houses	EH&S reported that the Plasterer did not adequately contain the work area. The Plasterer did correct the deficiency on the spot before continuing the work.	Compliance provided the Deputy Director of Skilled Trades with a draft instructional memo. Operations issued the memo and it was received and signed by the plasterer on June 13, 2022. Additional staffing related adjustments were also

EHS Inspection #	EH&S Escalation Report Description	Description	Action Taken
			made to ensure compliance on a going forward basis.
92490852	Containment, Signage, and Certification Gaps at Grant Houses	EH&S identified that the RRP Safety Sign was not posted at the work area, NYCHA staff did not have the EPA cleaning verification card or a RRP certification on hand, and did not properly contain the work area. Staff was cooperative on the spot and EH&S was able to confirm that the worker had completed their RRP training in December 2020.	Compliance provided the Deputy Director of Skilled Trades with a draft instructional memo. Operations issued the memo and it was received and signed by the plasterer on July 12, 2022.
88116827	Occupant Protection Plan	EH&S observed that the occupant protection plans that was posted was not completely properly as the unit status did not reflect that the unit was vacant.	The deficiency was corrected by the abatement supervisor on the spot. No further recommendation
92156952	EPA Notification	EH&S observed that the EPA notice of commencement was not posted and instead a screenshot of the application was posted. The violation could not be corrected on site but EH&S letter verified that a notice of commencement was created and filed properly.	No further recommendation
87953847	Vendor's Dust Wipe Technician Certification	EH&S observed that a dust wipe technician for Genesis, an abatement clearance vendor, had a certification that had expired in December 2021. The employee had a dust wipe sampling technician certification that had not expired, but notified the vendor that this certification is only permitted for RRP related clearance work. Work was stopped on the spot and clearance was re-scheduled for another date.	Compliance required that LHCD send a memo to Genesis to outline regulatory requirements and to require evidence of the worker's proper lead inspector or risk assessor certification. The memo was issued to Genesis and Genesis acknowledged receipt. To date, proper certifications for the employee in question have not been provided so they are not permitted to work at a NYCHA development.

Updates on Other Significant Lead Matters

Common Areas Painting – Lead Safe Work Practices:

During the Covered Period, Compliance, EH&S and DMP all identified gaps in both planning and execution with respect to the painting of common areas across the NYCHA portfolio. This included a lack of communication between DMP and development staff on which sites would be painted as part of the cycle painting initiative and a failure to ensure vendors used to paint common areas use lead safe work

practices. On June 14, 2022, NYCHA's Compliance Department issued an agency-wide Compliance Advisory Alert regarding inconsistent adherence to the NYCHA Standard Procedure 050:20:1, Lead Safe Housing Procedure when preparing to paint common areas.

The Advisory Alert dictates that if Property Management is planning to paint common areas or sees deteriorated paint in a common area that it wishes to paint, Property Management must coordinate with the Department of Paint Administration ("DPA") to determine whether DPA plans to paint the common areas as part of its existing plan; and if DPA is not planning to paint the common areas in the near future, Property Management can paint the common areas as long as it follows a prescribed process outlined below. The process includes (1) making sure the vendor hired has the requisite RRP certificates, (2) draft a simple "RRP Public Space Painting Plan" that details the plan for keeping residents out of the work area based on the described scope of work, (3) providing RRP notices and Right to Know ("RTK") pamphlets to all tenants in buildings and providing them of the dates and times when the work will occur; and (4) coordinating with LHCD to clear the common areas with dust wipes.

NYCHA will continue to update its systems and policies to ensure that this new standard is implemented across its lead programs.

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 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.

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.

During the Covered Period, NYCHA also completed an update to the Lead Safe Housing Procedure (SP 050:20:1). The revised Lead Safe Housing Procedure was uploaded and made effective on July 5, 2022 and includes a number of updates to incorporate the City's new standard for lead-based paint as well as updated NYCHA practices and programs (including the TEMPO program) that were established since the last revision.

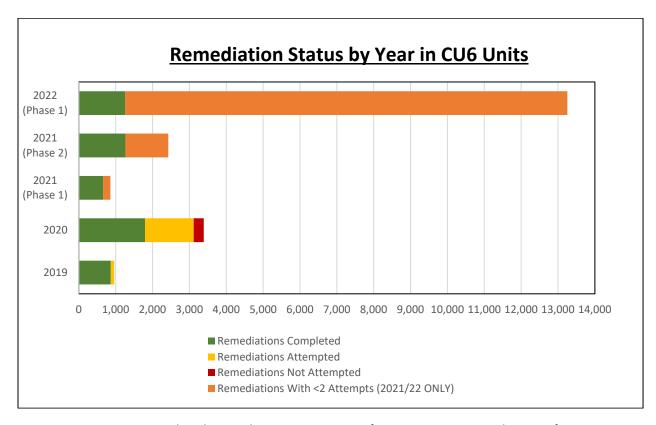
Visual Assessments and Remediations

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 40,000 remediations¹ over the past

¹ As previously disclosed in the January 31, 2022 Certification, NYCHA did not perform clearance examinations for all of these remediations.

approximately four 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.

The total number of completed remediation work orders, open remediation work orders, remediations attempted at least once, remediations not attempted, and remediations pending² as of June 21, 2022 are below for 2019, 2020, 2021, and 2022.



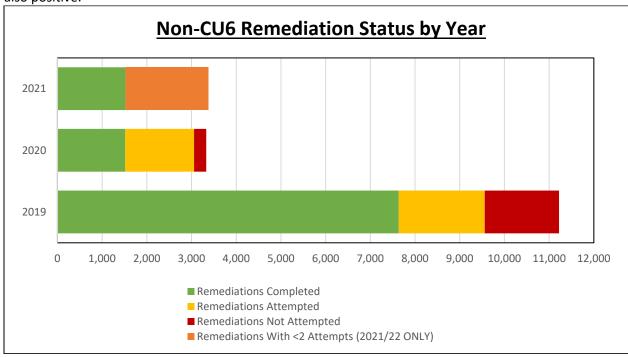
In CU6 units, NYCHA completed or made attempts in 955 of 957 units in 2019 and 3,117 of 3,389 units in 2020.³ The results for phase 1 of 2021 CU6 units are similar: NYCHA completed 665 out of 857 units. For phase 2 of 2021, however, NYCHA completed significantly less remediation in CU6 units: 1,265 out of 2,429.

Phase 1 of 2022 does not have strong results; NYCHA has only completed 1,261 out of 13,255 remediations. 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 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

² For 2019 and 2020, Remediations Pending refers to difference between Remediations Required and the sum of Remediations Completed, Remediations Attempted, and Remediations Not Attempted.

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

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 9,559 of 11,221 in 2019 and 3,056 of 3,328 in 2020. ⁴ For non-CU6 units in 2021, NYCHA completed fewer remediations: 1,522 out of 3,375 units. The 2022 visual assessments for non-CU6 units are timed to begin in Q3 and Q4, along with the Phase 2 2022 visual assessments for CU6 units.

NYCHA continues to have a significant number of deficiencies in its common areas that also must be corrected in order to attain compliance.

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 that was previously managed by the Capital Projects Division and which is funded via the City Capital Action Plan, (3) utilization of recent HUD grants awarded to abate CU6 units and units at Red Hook Houses, and (4) as part of the scope of its Comprehensive Modernization program and other capital projects.

During the Covered Period, a project management firm was retained to assist LHCD in standing up its abatement program. The first phase of LHCD's abatement program requires that LHCD test all units

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".

identified as CU6 as of January 2022 at the 0.5 mg/cm² standard. As the units test positive, NYCHA then offers abatement and if a family agrees to relocate temporarily, the apartment will be abated on an expedited basis, by development. The first phase also includes move-out and other vacant apartments. NYCHA has been expanding its capacity to abate move-out apartments and has been testing hundreds of units each week at the new standard. During the Covered Period, LHCD also completed its expedited abatement of CU6 units at Bronx River Houses. LHCD plans to return to units that tested positive but where residents were unable to relocate on an expedited basis. LHCD is now moving to the next set of developments (Wagner, Jefferson, Red Hook East/West) as part of its first phase CU6 abatement program. In the next certification report that will be provided in January 2023, NYCHA plans to begin reporting on the total number of units abated to date in order to provide a rough estimate relative to the percentages outlined in the Agreement.

Administrative Closure of Dust Wipe Work Orders and/or Missing RRP Documentation

During the Covered Period, Healthy Homes and the Information Technology departments substantially completed a project to administratively close approximately 7,268 corrective maintenance work orders where the only remaining open work was to complete a pending dust wipe and where the work order was generated between January 1, 2018 and June 30, 2020.

In November 2021, this course of action was approved by NYCHA's federal oversight partners because "given their age, clearance no longer makes sense for these jobs i.e., the time in which clearance is useful, as a technical matter, has passed." However, pursuant to the instructions of its federal oversight partners, the work order now has language outlining that it is not in compliance with federal and local lead laws because the work order did not receive a clearance examination or have appropriate documentation annexed to the work order. As an additional follow-up step, Healthy Homes plans to include 20% of the units on this administrative closure list in its next biennial risk assessment to evaluate trends for any paint or dust hazards among these work orders.

I. 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.

<u>Regulatory Requirements for Paragraph 8:</u>

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 first time the large-scale abatement projects at Harlem River Houses and Williamsburg Houses are being detailed in a report accompanying the Paragraph 30(b) certification 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. As mentioned, subsequent

reports will also detail progress towards the benchmarks described in Exhibit A Paragraphs 9 through 13 as various abatement pipelines progress. These paragraphs cover a set of percentage-based benchmarks for abating the portfolio by deadlines on January 31, 2029, January 31, 2034, and January 31, 2039.

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 and Harlem River II consists of 693 total units. As part of the PACT transaction, NYCHA maintained fee ownership of the development and entered into a long-term ninety-nine (99) year ground lease of both the land and the improvements. 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, Air Tech.

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 intends to abate 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 June 30th, 2022, 70 units (approximately 10% of the total units) have been abated at PACT Harlem River. The photographs below depict a sample of the abatement work completed at Building 3.



Abated bedroom wall (Building 3, Apt. 1A)



Entrance Critical Barrier (Building 3, Apt. 1A)

Photo 1 – Abatement taking place at Harlem River

2. Williamsburg Houses

Williamsburg Houses consists of approximately 1,621 apartment units. As part of the PACT transaction, NYCHA maintained fee ownership of the development and entered into a long-term ninety-nine (99) year ground lease of both the land and the improvements with MDG Design and Construction (the "PACT Partner"). 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. 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 June 30, 2022, 101 units (approximately 6% of the total units) have been abated at Williamsburg. The photos below show a sample of the abatement work completed at this development.



Abated plaster wall (Building 2, Apt. 3A)



Abated door frame (Building 2, Apt. 3A)

Photo 2 - Abatement at Williamsburg.

IT Controls and File Review 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 and Real Estate Development 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 January 31, 2024 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.

The Smartsheets were rolled out to the PACT Partners during the Covered Period. 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	Abatement Contractor	Abatement Supervisor
	Date	Name	Name
Abatement Worker	Abatement Method	Components Abated	CU6 Unit (Y/N)
Names			
Tenant Occupied	Resident Relocation	Occupant Protection	Abatement Start Date
During Abatement	Required (Y/N)	Plan Date	
(Y/N)			
Abatement End Date	# of Clearance Samples	# of Clearance Samples	# of Clearance Samples
	Taken	Passed	Failed
Clearance End Date	Resident Notification of	Abatement Final	HPD Exemption Date
	Hazard Reduction Date	Report Received Date	

There are also 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.

Because the Smartsheets were rolled out during the Covered Period, uploads to the Smartsheet were not sufficiently complete to conduct full file reviews. For example, NYCHA is still socializing the abatement report templates it uses within the public housing portfolio with the developers to ensure completeness. The Compliance Department, in future certification reports, will utilize the Smartsheet to select a sample of the documents and conduct a file review. Reporting above on the number of units where abatement is complete as a percentage of the overall project is also based on the number of units with a "Clearance End Date" logged in the Smartsheet for each site. NYCHA's reporting on progress towards completion will continue to rely on these fields in the Smartsheet

Field Monitoring for Paragraph 8:

NYCHA retained the services of STV Inc. to serve as NYCHA's third-party environmental monitoring firm to oversee compliance with lead abatement requirements at selected RAD/PACT sites. STV uses a checklist modeled on NYCHA's Environmental Health & Safety Department checklist that was developed during the Covered Period. Using the checklist, STV's certified professionals conduct periodic inspections in multiple 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.

Field inspections focus on three areas:

- 1. <u>Administrative Requirements:</u> 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. <u>Engineering Controls:</u> 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. <u>Waste Management:</u> 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

Between May 2022 and June 2022, STV conducted 19 inspections at Harlem River Houses. STV believes some tasks were "not applicable" based on the circumstances particular to the stage of the job being inspected, which is why the number observed varies in the table below. This claim, and the criteria for determining why a task is "not applicable," is being evaluated by NYCHA Compliance.

The results of field inspections at Harlem River Houses are detailed in the below table:

Compliance Categories	Compliance Task	# Observed	Compliance Rate (%)
Administrative Controls	Resident Notification Posted	19	100%
Administrative Controls	LBP Contractor's EPA/NYC Notification Posted	19	100%
Administrative Controls	LBP Supervisor's EPA/NYC Certifications Posted	19	100%
Administrative Controls	LBP Worker's EPA/NYC Certifications Posted	19	100%
Administrative Controls	NYCHA Approved Work Plan Posted	19	100%
Administrative Controls	Negative Exposure Assessment Posted	19	89%
Administrative Controls	Daily OSHA Monitoring Posted	19	89%
Administrative Controls	Safety Data Sheets Provided On-site	19	100%
Administrative Controls	Respiratory Protection Program On-site	19	100%
Administrative Controls	Hazard Communication Program On-site	19	100%
Administrative Controls	Logbook On-site with Current Entries	19	100%
Administrative Controls	Equipment Manufacturer's Specification/Cut Sheet	7	100%
Engineering Controls	Decontamination Unit Present & Operational	19	74%
Engineering Controls	Full Decon	19	74%
Engineering Controls	Eye Wash Station	19	100%
Engineering Controls	Worker Personnel Protection Equipment	19	100%
Engineering Controls	Protective Suit	19	100%
Engineering Controls	Respiratory Protection	19	100%
Engineering Controls	Chemical Resistant Gloves & Eye Wear	19	100%
Engineering Controls	Warning Tape & Signs Present	19	100%
Engineering Controls	Lead Work Area Controls Present	16	81%
Engineering Controls	Moveable Objects Cleaned & Removed	19	100%
Engineering Controls	Critical Barriers Established & Maintained	16	81%
Engineering Controls	Containment Established	16	81%
Engineering Controls	Mechanical Ventilation System Present	18	100%
Waste Management	Waste Storage Area Identified/Posted	19	100%

STV's field inspections were generally positive with respect to lead abatement requirements, and most non-compliant items have either been resolved or improved upon over time. Overall, the PACT Partner and the abatement subcontractor have been receptive to STV's recommendations and have taken steps to address all deficiencies. The only identified item that remains unresolved is the installation of decontamination stations. The contractor is working to have this corrected and will install centrally located decontamination for each building area.

2. Williamsburg Houses

To date, STV conducted 31 field inspections between March 2022 and June 2022. STV believes some tasks were "not applicable" based on the circumstances particular to the stage of the abatement job being inspected, which is why the number of observed jobs varies in the table below. This claim, and the criteria for determining why a task is "not applicable," is being evaluated by NYCHA Compliance with STV. The results are detailed in the below table:

Compliance Categories	Compliance Task	# Observed	Compliance Rate (%)
Administrative Controls	Resident Notification Posted	31	90%
Administrative Controls	LBP Contractor's EPA/NYC Notification Posted	31	90%
Administrative Controls	LBP Supervisor's EPA/NYC Certifications Posted	31	90%
Administrative Controls	LBP Worker's EPA/NYC Certifications Posted	31	90%
Administrative Controls	NYCHA Approved Work Plan Posted	31	90%
Administrative Controls	Negative Exposure Assessment Posted	31	90%
Administrative Controls	Daily OSHA Monitoring Posted	19	84%
Administrative Controls	Safety Data Sheets Provided On-site	31	90%
Administrative Controls	Respiratory Protection Program On-site	31	90%
Administrative Controls	Hazard Communication Program On-site	31	90%
Administrative Controls	Logbook On-site with Current Entries	31	90%
Administrative Controls	Equipment Manufacturer's Specification/Cut Sheet	31	90%
Engineering Controls	Full Decon	31	52%
Engineering Controls	Eye Wash Station	31	100%
Engineering Controls	Protective Suit	31	100%
Engineering Controls	Respiratory Protection	31	100%
Engineering Controls	Chemical Resistant Gloves & Eye Wear	28	89%
Engineering Controls	Warning Tape & Signs Present	31	100%
Engineering Controls	Lead Work Area Controls Present	31	100%
Engineering Controls	Moveable Objects Cleaned & Removed	31	100%
Engineering Controls	Critical Barriers Established & Maintained	15	80%
Engineering Controls	Containment Established	31	90%
Engineering Controls	Mechanical Ventilation System Present	31	90%
Waste Management	Waste Storage Area Identified/Posted	19	84%

STV's initial field inspections at Williamsburg Houses led to concerns regarding administrative requirement compliance and a discussion regarding waste management requirements but over time, compliance has improved significantly at this development. June inspections showed the contractor is fully compliant in all three areas inspected.

Overall Compliance Assessment for Paragraph 8:

During the Covered Period, NYCHA established a series of business processes to begin to track compliance with Paragraph 8, which requires the completion of abatement at Harlem River Houses and Williamsburg Houses by January 31, 2024. This includes the use of Smartsheets to track progress and conduct future file reviews as well as the use of a third-party environmental firm to serve as a field monitor at the sites to ensure compliance.

Based on the field oversight during the Covered Period, there is evidence supporting the PACT Partners' ongoing compliance with the requirements referenced in Paragraph 14. File reviews will be an added component to track compliance in future reports. NYCHA is not yet prepared to certify to compliance with Paragraph 8, in part because progress towards completing abatement by the January 2024 deadline

is ongoing and also because additional periods of oversight will be necessary to determine ongoing compliance with administrative and engineering controls.

In terms of tracking progress towards completion, abatement has commenced at both sites. Between mid-March and the end of June, the PACT Partner at Harlem River Houses has abated and cleared approximately 70 units (10% of the total units). Between late February 2022 to late June 2022, the PACT Partner at Williamsburg Houses has abated and cleared approximately 101 units (6% of the total units).

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

General Statement

Field Monitoring Report: Documentation of the abatement field monitoring performed by EHS that is described in this section is set forth in Attachment A.

Abatement File Review: The Compliance Department Monitoring Unit ("MU") performed file⁵ reviews of 75 abatements, including 55 abatements in vacant units ("moveouts") and 20 abatements in occupied units. Reviews took place three times during the covered period, in February 2022, April 2022, and June 2022 as part of ongoing compliance monitoring. The MU selected a random sample of 55 moveout abatement work orders out of a total of 245 work orders that had an "Actual Finish" date between December 16, 2021, and June 15, 2022 ("Covered Period"), and a work order status of "CLOSE" as of June 15, 2022. The MU selected all 10 closed abatements in units occupied by children under the age of 6, which was comprised of the 3 abatements performed by NYCHA LAW staff and the 7 abatements completed by vendors. Finally, the MU reviewed 10 EBLL abatements closed during the covered period. The results of this review are set forth in Attachment B.

Indicat	or	Description	Regulations	Agreement Section Referenced
1.	EPA Notification	EPA was notified of abatement, and	40 C.F.R. §	14(b)
		original notification is uploaded to Maximo	745.227(e)(4)	
2.	Meets 5-Day EPA	EPA must be notified 5 full business	40 C.F.R. §	14(b)
	Requirement	days prior to the start of abatement	745.227(e)(4)	
3.	Occupant	Completion of the Occupant	40 C.F.R. §	14(c)
	Protection Plan	Protection Plan	745.227(e)(5)	
4.	Certified Supervisor	Certified lead abatement supervisor		14(a)
	Assigned	assigned to abatement with current	40 C.F.R. §	
		certification on file	745.227(e)(1) -	
			(3)	
5.	Abatement Report	Completion of Abatement Report	40 C.F.R. §	14(f)
			745.227(e)(10)	
6.	LAW Certificates	Certifications on file for each lead	40 C.F.R. §	14(a)
		abatement worker assigned to	745.227(e)(1) -	
		abatement	(3)	

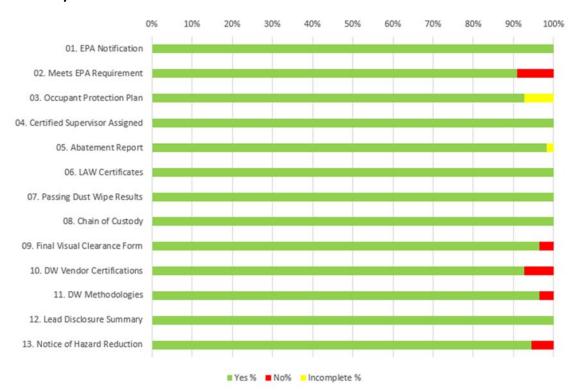
⁵ For the purposes of this review, "files" refers to Maximo work orders associated with a particular abatement.

18

7.	Passing Dust Wipe Results	Final passing dust wipe results	40 C.F.R. 745.227(e)(8)	§	14(e)
0	Chain of Custody	Chain of Custody completed for final	40 C.F.R.	§	14(e)
0.	Chain of Custody	· · ·		3	14(6)
		passing dust wipe results	745.227(e)(8).		
9.	Final Visual	Visual Clearance form completed for	40 C.F.R.	§	14(e)
	Clearance Form	final passing dust wipe results	745.227(e)(8).		
10.	DW Vendor	ELLAP and NLLAP Certifications	40 C.F.R.	§	14(e)
	Certifications		745.227(e)(8)		
11.	DW Methodologies	Specified methods of collection and	40 C.F.R.	§	14(d)
		lab analysis of dust wipes	745.227(f)		
12.	Lead Disclosure	LHC sends to development for future	24 CFR Part	35	14(g)
	Summary	tenants to sign prior to move-in	Subpart A		
		disclosing abatement of lead hazard			
13.	Notice of Hazard	LHC sends to development for future	24 CFR § 35.12	:5	14 (g)
	Reduction	or present tenants detailing			
		components abated in unit			

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 55 Vacant Units



Summary of File Review for Abatements Performed in 20 Occupied Units



The MU reviewed a sample of 55 of 245 total moveouts with an "Actual Finish" date between December 16, 2021, and June 15, 2022 ("Covered Period"), and a work order status of "CLOSE" as of June 15, 2022. The MU also selected 10 of 10 closed abatements in units occupied by children under the age of 6 and 10 of 10 EBLL abatements closed during the covered period. The results of this review are set forth in Attachment B. The MU reviewed all available abatements that were completed in occupied units during the Covered Period.

In both moveout and occupied unit abatements, NYCHA struggled most often with providing Lead Disclosure Summaries and Notices of Hazard Reduction to residents. In fewer occasions, NYCHA struggled to submit EPA notifications in a timeframe that meets the EPA requirement. NYCHA also closed some work orders without final visual clearance forms, dust wipe vendor certifications and dust wipe methodologies in vacant units.

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."

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

Written Policies and Procedures: The Lead SP (annexed as Attachment C) 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).
 - 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 D) are described below:

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

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 E. 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 303 abatement jobs. A certified supervisor was present for 302 of these jobs. 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 55 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 55 out of 55 cases. A detailed table documenting this file review is annexed as Attachment B.

For Occupied Units:

All 20 of the reviewed work orders included assigned supervisors and LAWs with valid certifications. In 19 of 20 cases, such certifications were uploaded to the Maximo work order. In the one case, a certified supervisor was consistently listed on related documents including the OPP and abatement report. However, a copy of the certified supervisor's certificate was not uploaded to Maximo. A detailed table documenting this file review is annexed as Attachment B.

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 95% of occupied abatements reviewed were assigned a Certified Supervisor.
- EHS observed 303 abatement jobs, 302 of which had certified supervisors.

Based on this documentation, there is evidence supporting that NYCHA in 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 requirement 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)
- 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. *Id.*
- The EPA notice is printed and attached to the work order. *Id.*
- 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.
- 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. *Id.*

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	See Attachment D.00, § 1.4.2; Id § 1.5.2; Id 2.4.2; Id § 2.6.3.
Joseph Environmental	See Attachment D.01, § 1.4.2; Id § 1.5.2; Id 2.4.2; Id § 2.6.3.
ADG	See Attachment D.02 § 1.42; Id § 1.5.2; Id § 2.4.2, Id § 2.6.3.
Abatement Unlimited	See Attachment D.03 § 1.42; Id § 1.5.2; Id § 2.4.2, Id § 2.6.3.
Empire Control	See Attachment D.04 § 1.42; Id § 1.5.2; Id § 2.4.2, Id § 2.6.3.
New York Environmental Systems	See Attachment D.05 § 1.42; Id § 1.5.2; Id § 2.4.2, Id § 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 E.

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 303 inspections and 99% complied with the NOC requirements. *See* Attachment A for more details.

<u>File Review for 14(b)</u>:

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 55 moveout work orders completed during the Covered Period and found that all 55 of these work orders included the EPA notification. However, in 5 work orders, NYCHA or the abatement vendor did not notify the EPA at least five or more business days ahead of the scheduled abatement or were emergency cases. *See* Attachment B.

For Occupied Units:

The MU reviewed a total of 20 occupied work orders completed during the Covered Period and found that 20 included the EPA notification. For 1 work order, NYCHA or the abatement firm did not notify the EPA at least five or more business days ahead of the abatement, but that is because it was an emergency case. As a result, all 20 worker orders had EPA notifications that were timely and compliant. See Attachment B.

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:

- 91% of moveout abatements and 95% of occupied abatements reviewed contained EPA notifications sent prior to commencement.
- 99% of the field observations had complete and accurate Notices of Commencement.

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. 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.G.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 D.00, § 3.6.1.
Joseph Environmental	See Attachment D.01, § 3.6.1.
ADG	See Attachment D.02, § 3.3.3.
Abatement Unlimited	See Attachment D.03 § 3.3.3.
Empire Control	See Attachment D.04 § 3.3.3.
New York Environmental	See Attachment D.05 § 3.3.3.
Systems	

IT Controls for 14(c):

As reported in the July 2021 HUD Certification, in December 2019, IT enhanced Maximo to require that the OPP be attached to Maximo abatement work orders. *See* Attachment E. The work orders cannot be closed without this attachment.

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 303 OPPs during abatement oversight inspections. 302 (99.7%) 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 55 moveout work orders. 55 of 55 had uploaded OPPs, 51 of which contained a complete OPP. All 4 incomplete OPPs did not indicate if window work was needed. Different individuals provided these incomplete OPPs. *See* Attachment B.

For Occupied Units:

The MU reviewed a total of 20 occupied work orders, all of which contained an OPP. All 20 cases contained OPPs with units marked as occupied and were signed by certified supervisors. *See* Attachment B.

Overall Compliance Assessment for 14(c):

- 93% of moveout abatements and 100% of occupied abatements reviewed contained a complete OPP.
- Of all 75 cases reviewed, 4 were incomplete.
- EHS observed 303 abatement work orders and 99.7% 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.1.5.
- 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 New York State ELAP certified testing laboratory. See Lead SP, § VII.E.2.

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

Vendor Name	Agreement to comply with 40 CFR § 745.227 (f)
Accurate Analysis	See Attachment D.06, § I.A , § II.C.1-3, § III.D.1-2.
Testing	
ATC Group Services	See Attachment D.07, § III.1.A § § III.2.B-D.
Atlas Environmental	See Attachment D.08, § I.A, § § II.C 1-2, § III.D 1-2.
Lab	
Eastern Analytical	See Attachment D.09, § I.A , § II.C.1-3, § III.D.1-2.
Services	
EMSL Analytical Inc.	See Attachment D.10, § I.A, § II.C.1-3 § III.D.1-2.
Genesis	See Attachment D.11, § I.A, § § II.C 1-2, § III.D 1-2.
Environmental	
Consultants	
Laboratory Testing	See Attachment D.12, § I.A ,§ II.C.1-3, § III.D.1-2.
Services	
Lead By Example	See Attachment D.13, § III.1.A § § III.2.B-D.
Environmental	
Metro Analytical	See Attachment D.14, § II.C.1-3, § III.D.1-2.
Laboratories	
The ALC Group	See Attachment D.15, § I.A, § § II.C 1-2, § III.D 1-2.

Warren & Panzer	See Attachment D.16, § I.A, § § II.C 1-2, § III.D 1-2.
Engineers	

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 E.

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 lead based paint inspector. Out of 146 NYCHA personnel certifications and 117 vendor personnel certifications for clearance examinations, LOT found 1 vendor personnel certification missing. *See* Attachment A.

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 reviewed a total of 55 moveout work orders, and 53 files contained documented methodologies for collection and lab analysis of dust wipes. Of the 2 cases identified without dust wipe methodologies, both did not contain dust wipe vendor certifications or risk assessor certifications. *See* Attachment B.

For Occupied Units:

• The MU reviewed a total of 20 occupied work orders and all 20 contained documented methodologies for collection and lab analysis of dust wipes. See Attachment B.

Overall Compliance Assessment for 14(d):

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

- 96% of moveout abatements and 100% of occupied abatements reviewed contained documented methodologies for collection and lab analysis of dust wipes by certified personnel.
- All 73 files containing dust wipe methodologies were identified to have valid vendor and risk assessor certifications.
- EHS observed 146 NYCHA personnel certifications and 117 vendor personnel certifications for clearance examinations and found a 99.6% compliance rate.

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

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 μ g/ft2 for floors, 250 μ g/ft2 for interior windowsills, and 400 μ g/ft2 for window troughs."

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 eleven 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 D.

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

 $^{^6}$ On June 1, 2021, the city reduced the lead dust standards for floors to 5 μ g/ft² for floors and to 40 μ g/ft² for window sills. The standard for window wells (troughs) remained at 100 μ g/ft².

Vendor Name	Agreement to comply with 40 CFR § 745.227 (f)
Genesis	See Attachment D.11, § I.A, §I.C. 1-2.
Environmental	
Consultants	
Laboratory Testing	See Attachment D,12, § I.A, §I.C. 1-2.
Services	
Lead By Example	See Attachment D.13, § III.1-2 § IV.1-2.
Environmental	
Metro Analytical	See Attachment D.14, § I.A, §I.C. 1-2.
Laboratories	
The ALC Group	See Attachment D.15, § I.A, §I.C. 1-2.
Warren & Panzer	See Attachment D.16, § I.A, §I.C. 1-2.
Engineers	

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 E. 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.

Field Monitoring/QA for 14(e):

EHS personnel observed, 102 post abatement clearance jobs (48 were vendor jobs and all vendors were certified risk assessors; 54 were NYCHA certified personnel), with 0 deficiencies noted. NYCHA's permissions to utilize its own certified personnel to clear an abatement job is pending DOHMH approval.

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 55 moveout abatement work order and found that all 55 contained passing dust wipe results and the chain of custody. 53 contained the visual clearance form,51 contained

certifications for the laboratory and 50 contained the certifications for the risk assessor. *See* Attachment B.

For Occupied Units:

The MU reviewed 20 occupied abatement work orders and found that all 20 had passing dust wipe clearances and contained the chain of custody. 20 contained the visual clearance form and 20 contained certifications for both the risk assessor and laboratory. See Attachment B.

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:

- 100% of moveout abatements and 100% of occupied abatements reviewed contained passing dust wipe results.
- 100% of occupied abatements contained the chain of custody and visual clearance form; 100% contained certifications for both the risk assessor and laboratory.
- 96% of moveout abatements contained the chain of custody and visual clearance form; 91% contained certifications for both the vendor and the risk assessor.
- 100% of employees and 99.6% vendors performing clearance examinations were certified.
- Of the 102 Lead Abatement clearance jobs observed by EH&S, 0 jobs had deficiencies, reporting 100& compliance.

Based on the file review and filed oversight during the Covered Period, NYCHA is in compliance with the requirements referenced in Paragraph 14(e). The MU has concerns about testing vendors' failure to upload vendor and risk assessor certifications.

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."

<u>Applicable Written Policies, Procedures, and Contract Specifications for 14(f)</u>:

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	See Attachment D.00, § 1.1.6
Joseph Environmental	See Attachment D.01, § 1.1.6
ADG	See Attachment D.02, § 1.1.6
Abatement Unlimited	See Attachment D.03 § 1.1.6
Empire Control	See Attachment D.04 § § 1.1.6
New York Environmental	See Attachment D.05 § § 1.1.6
Systems	

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 E.

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

Field Oversight/QA 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 55 moveout abatement work orders and found all 55 files contained the abatement report prepared by a certified supervisor. In 1 of 55 files reviewed, the abatement report was uploaded without a cover sheet which identifies the location and type of abatement. See Attachment B.

For Occupied Units:

The MU reviewed 20 occupied abatement work orders and found that 20 contained the complete abatement report prepared by a certified supervisor. *See* Attachment B.

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.
- 74 of 75 (98%) files contained correctly completed abatement reports, with one instance identified as missing a cover page marking the location and type of abatement.

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."

For purposes of this review, the MU will review current files to ensure that they contain the necessary documentation to meet the record-keeping requirements, and that protocols are in place to store the records going forward. The MU has not, and does not intend to, conduct a retroactive review of files created before the January 31, 2019 HUD Agreement for compliance with record-keeping requirements.

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 care to be attached to the Maximo work orders.

Field Monitoring/QA for 14(q):

There are no field oversight protocols in place or expected to monitor the creation and storage of post-abatement Notice of Hazard Reduction documentation for a particular job. File Review for 14(q):

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 Summary and the NOHR for moveout and occupied units.

The MU reviewed 75 abatement work orders and found that 70 contained the Lead Disclosure Summary. 69 of the 75 work orders contained the NOHR.

The MU reviewed 20 occupied abatement work orders for Lead Disclosure Summaries and found that 15 contained the Lead Disclosure Summary at the time of review. 17 of the 20 occupied abatement work orders contained the Notice of Hazard Reduction. *See* Attachment B.

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:

- 100% of moveout abatements and 75% of occupied abatements reviewed contained the Lead Disclosure Summary.
- 95% of moveout abatements and 85% of occupied abatements reviewed contained the NOHR.
- LOT performed 554 inspections for the required Lead Disclosure Files, 444 (80.1%) 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).

With respect to the Lead Disclosure Summaries and NOHR, the Compliance Department reviewed a sample of files for purposes of this certification and found that NYCHA does not routinely issue letters within 30 days of receiving final lead clearance, in accordance with the NYCHA Lead SP. Given that the hazard reduction letter process has presented a compliance challenge for NYCHA in the context of interim controls in occupied units, Compliance does not yet recommend certifying to paragraph 14(g) until the NOHRs and Lead Disclosure Summaries are consistently issued in the required timeframe.

III. 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. This is further described below.

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, as described below.

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

Policies and Procedures: The Lead SP states as follows: "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). The Lead SP also 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.

Compliance Advisory Alert: NYCHA published Compliance Advisory Alert #22 titled "Lead-Based Paint Standard Change" on December 1, 2021 (Attachment H), 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. Note, too, that users can select a full list of all apartments that require RRP using the public query in Maximo entitle "RRP required NYCHA apartments."

Field Monitoring/QA 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 725 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, the site visits conducted by Compliance (as well as the information discussed in the "File Review for 15(a)" section below) indicate there are still ways to intentionally or unintentionally circumvent the RRP work order enforcement questions, creating a risk of non-compliance. As explained above, 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 lead-based paint 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 95% (99,100 out of 104,086) of work orders closed between December 16, 2021 to June 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 December 16, 2021 to June 15, 2022

Row Labels	No Count	% No	Yes Count	% Yes	Total
2021-12 (beginning December 16,					
2021)	4835	90.7%	497	9.3%	5332
2022-01	10,211	94.9%	547	5.1%	10,758
2022-02	10,773	93.9%	698	6.1%	11,471
2022-03	19,083	96.1%	783	3.9%	19,866
2022-04	22,665	95.3%	1,108	4.7%	23,773
2022-05	21,670	96.1%	886	3.9%	22,556
2022-06	9,863	95.5%	467	4.5%	10,330
Grand Total	99,100	95.2%	4,986	4.8%	104,086

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. If a renovator is performing work in a negative apartment or working on components that do not contain lead-based paint, 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 and even components within the apartment. The system uses this information to prompt staff with RRP enforcement questions. Maximo was updated during in December 2021 to address the City's change of the standard for lead-based paint.

While the work order system meets the requirements of the certification set forth in 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. Based on the status of the changes in Maximo and lack of controls for vendors performing RRP work, Compliance believes NYCHA has challenges in achieving compliance with 15(a).

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):

Regarding vendors, the Lead SP states as follows, "Property maintenance supervisors ensure vendor employees: (1) Are Certified Renovators. (2) Have their RRP certificates on file at the development. (3) Follow lead-safe work practices under federal and local law and regulations. (4) Provide the required notifications." See Lead SP, § XV.A.2.L.7.g. 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 J.

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 1,062 out of 1,063 NYCHA workers observed performing RRP work were RRP certified. In other words, for 1,062 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 295 work orders for work performed during the Covered Period (December 16, 2021 to June 15, 2022). The Compliance Department compared data from closed RRP work orders in Maximo with training results from the Human Resources Department. All 295 work orders were completed by RRP certified NYCHA employees.

As a result of inconsistent use by NYCHA staff, the Compliance Department temporarily stopped monitoring the vendor RRP compliance portal that requires vendors performing RRP work to upload both their firm and work certifications for this covered period. The Compliance Department is currently developing a new process to improve the monitoring of the portal.

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 (99.91% 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 M. 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 MMD supervisor any issues or items that need replenishment.

As of June 15, 2022, MMD controls all but 6 of NYCHA's storerooms.⁷ The MMD Director provided approximate start dates for MMD to begin managing these 6 storerooms. 5 of 6 (83%) storerooms not managed by MMD were inspected by EHS during the Covered Period. Union Consolidated and 1010 East 178th Street (Murphy Houses) were not inspected during the Covered Period and they are also not under MMD control.

IT Controls for 15(d):

An IT enhancement has been built and will be released at 3 testing sites, including Drew Hamilton, Grant, and Washington/Lexington, on August 25, 2022. 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.

⁷ Claremont (scheduled for completion 7/1/2022), Gun Hill (scheduled to begin on 6/27/2022), Fort Independence (scheduled to begin on 7/25/2022), High Bridge (scheduled to begin on 8/22/2022), Parkside (scheduled to begin on 9/26/2022), 1010 178th St (Murphy Houses) (scheduled to begin on 10/24/2022).

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 shall briefly summarize EHS's findings relevant to Paragraph 15(d).

- Out of 563 total storeroom inspections for RRP supplies, 20 failed inspections. Therefore, the compliance rate was 96.45%.
- Out of the 142 unique storerooms inspected for required RRP supplies, 125 were in compliance (88%). Non-compliance indicates that 1 or more supplies was missing from the storeroom. Some storerooms were visited more than once because the EHS LOT was conducting a field inspection of scheduled RRP work.
- The most common failure points were missing 6 mil polyethylene sheeting (12 occurrences) and missing duct tape (7 occurrences).
- 13 of the 13 (100%) storerooms that failed were re-inspected and passed, therefore 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 96.45% 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. The template Renovator's Checklists (for vendors and staff) are also available on the FRL.

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 725 observations of RRP work orders:

- Among all the RRP work phases the "Worksite Preparation" phase achieved 98.98% compliance rates. 488 "Worksite Preparations" activities were observed.
- 521 "Work Activities" were observed, with a 99.23% compliance rate.
- 92 "Cleanup Activities" were observed, with a 100% compliance rate.
- 84 "Cleanup Verification Activities" were observed, with a 100% compliance rate.
- During the reporting period LOT observed 10 RRP jobs that were performed by a vendor. Of these, two resulted in escalations.

File Review for 15(e):

The Compliance Department assessed 295 work orders (completed between December 16, 2021 and June 15, 2022) for the required attachments and confirmed whether the work orders had the RRP Renovation Checklist. 277 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 N.

RRP Checklists December 16, 2021 to June 15, 2022

	December ⁸	January	February	March	April	May	June
RRP Checklists	N/A	49	43	49	46	47	43
Present							
Partially	N/A	1	8	1	4	3	1
Completed RRP							
Checklists							
Total Work	N/A	50	51	50	50	50	44
Orders Reviewed							
Compliance Rate	N/A	98%	84%	98%	92%	94%	98%

In 18 cases, MU observed that the skilled tradesperson did not confirm that they contained waste on-site and/or contained waste while it was transported off-site. 17 of these were checklists that were only partially completed, and 1 checklist was left blank. 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 6 of 18 instances. In 4 cases, Skilled Trades supervisors explained that the skilled tradesperson forgot to check the box or unchecked the box accidently. For the other 2 instances, supervisors reported that the trades staff followed protocols but were met with poor housekeeping conditions in the units. Property management staff referred these 2 units to the Family Services Department.

Overall Description of Compliance for 15(e):

During the Covered Period, NYCHA made demonstrable progress towards compliance with the requirement 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 98.98% to 100% for the 4 work phases (worksite preparation, work activities, cleanup activities, cleanup verification);
- File review showing an upward trend of compliance to 94% (compared to 92% 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.

⁸ N/A notes that no RRP Renovation Checklist were reviewed for the cover period.

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 716 work orders.
- 715 residents confirmed they were in receipt of the information, resulting in a 99.86% compliance rate.

File Review for 15(f):

The MU assessed 295 work orders (completed between December 16, 2021 and June 15, 2022) for the required attachments and confirmed if the pre-renovation acknowledgement form was offered to the resident. 100% of the work orders indicated the pre-renovation acknowledgment form was offered to the

resident. See the table below for details regarding completion of the renovator's checklist and Attachment N for complete a list of the individual work orders:

Pre-Renovation Acknowledgement Form December 16, 2021 and June 15, 2022

	December ⁹	January	February	March	April	May	June
Acknowledge Form Present	N/A	50	51	50	50	50	44
Acknowledgment Form Incomplete	N/A	0	0	0	0	0	0
Total Work Orders Reviewed	N/A	50	51	50	50	50	44
Compliance Rate	N/A%	100%	100%	100%	100%	100%	100%

Overall Description of Compliance for 15(f):

During the Covered Period, NYCHA made demonstrable progress towards compliance with the requirement 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;
- 99% (715 of 716) of residents confirmed they had received the Renovate Right Pamphlet;
- File review showing a rate of compliance of 100% 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):

⁹ N/A notes that no RRP Renovation Checklist were reviewed for the cover period.

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. See Lead SP, § VII.D.1.c. (NOE following XRF inspection); Lead SP, § 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(q):

IT has developed a system to automate the sending of the NOHR through Siebel. This automated process generates a hard copy NOHR after a <u>passing</u> 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.¹⁰ 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.¹¹

¹⁰ **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

¹¹ **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

The NOHR for non-exception cases following RRP, paint stabilization or abatement had the language based on 1.0 threshold value. In December 2021, NYCHA implemented a 0.5 threshold and NYCHA amended the language on the NOHR.

The NOHRs based on old 1.0 threshold inspections or based on development level disclosures will include the following description above the list of lead positive components:

"The following areas are still known to have lead-based paint, based on tests performed prior to December 1, 2021"

While the NOHRs based on new 0.5 threshold inspections will include the following description:

"The following areas are still known to have lead-based paint"

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 December 16, 2021 and June 15, 2022. Of 1,231 completed XRF inspections, 1,230 work orders contained the required NOE in Maximo. The MU notified LHC of the 1 work order missing the required NOE in Maximo, and LHC has since uploaded the NOE to the work order.

Notices of Hazard Reduction – Non-Exception Cases:

Between December 16, 2021 and June 15, 2022, the IT data reflected 4,156 "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 (the NOHR were manually generated by LHC), the Compliance Department obtained a list of RRP work orders that were closed and passed dust wipe clearance between December 16, 2021 and June 15, 2022. The list contained 584 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, the Compliance Department found that 9 work orders sampled had the respective emails and NOHR uploaded in Maximo, and 30 work orders did not have the respective emails and NOHR uploaded in Maximo. This is a decline in performance from the January 31, 2022 certification when 20 (51%) work orders had respective emails and NOHRs uploaded in Maximo. As of July 11, 2022, all 30 missing emails and NOHR are now uploaded in Maximo.

The delay between the clearance inspection date and the date of notice on the NOHR for "exception" cases appears to have improved slightly but continues to be an issue since the January 31, 2022 certification. The review in Maximo revealed that of the 9 respective emails and NOHRs uploaded in Maximo, 7 of the emails indicated that LHC did not send the email and respective NOHR to the development staff until between 20 and 36 days after the clearance inspection date.

LHC explains that ongoing technological errors with the Automated Delivery System for NOHRs has cause delays or missing NOHR notification emails. After determining that notices were not immediately sent out, LHC started monitoring and manually emailing NOHRs to developments. After the January certification, LHC completed a project to close a 6-week backlog of emails manually but LHC remains behind schedule on an ongoing basis. LHC stated that they plan to bring more staff onboard to help manually send NOHRs within the fifteen day timeframe. Still, exception numbers in the spring were high and IT has struggled to build a system that can reliably auto-generate NOHRs.

LHC is aware of these findings and is working to make improvements in the future. Of note, there was a 28% decrease in compliance from the January 31 Certification to this Certification for sending NOHRs in the required timeframe.

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. However, for manually generated and e-mailed NOHRs, the Compliance review of the sample selection of 39 exception work orders exhibit a positive result for only 28% 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/QA 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 488 EHS observations of worksite preparation activities, 98.98% 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 average compliance rates of 98.98% for worksite preparation activities and 99.23% for work activities;
- File review showing a trend of compliance to 94% for completion of the renovator's checklist.

Despite this progress, NYCHA still needs to develop a more cohesive policy 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 10 vendor RRP job during the covered period. It appears that these jobs are not being properly scheduled and documented in Maximo.

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.7. . 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.

As a part of interim solution discussed above in 15(a), on December 1, 2021 a feature was provided in hand held systems enabling users to create a work order for clearance examinations, in cases where it was not created as per existing automations in systems.

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 176 Cleanup work phase observations, overall compliance rate of 100%.

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 average compliance rate of 100% for cleanup activities;
- File review showing a trend of compliance of 94% for completion of the renovator's checklist.

Despite this progress, NYCHA still needs to develop a more cohesive policy monitoring vendor work and collecting required RRP documentation from vendors. EHS observed 10 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(h).

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(i):

Policies and Procedures: The Lead SP sets forth the protocol for cleaning, cleaning verification, and clearance examinations. See Lead SP, §§ VII.H.1.j, VII.I.1... through VII.I.10, VII.I.6., and VII.I.12. During the previous Covered Period (June 15-December 15, 2021), NYCHA integrated 2 significant new protocols into its clearance examination process. First, NYCHA now requires certified renovators to perform the EPA cleaning verification after final cleaning. Second, 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.

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:

• Of the 263 dust wipe sample collection jobs observed, 161 were for RRP clearance and 102 were for lead abatement clearance. 12 Of the 161 RRP clearance observed, one (1) job had two deficiencies observed, one (1) for procedural violation and one (1) for Visual Inspection, reporting a total compliance rate of 99.38%. See Attachment A.

File Review for 15(j):

Compliance, NYCHA IT, and LHCD 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 shall provide an overview of these dashboards and the trends that they are currently showing for the reporting period. 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 the 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 exceedance to more significant exceedances.
- ➤ **Re-Cleaning and Re-Clearance**: Compliance examines the timing of recleaning following a failed clearance examination.
- > Skilled Trade and Development Staff Performance on RRP Cleaning: Compliance examines which trades/staff are associated with dust wipe failures and evaluates whether particular trades or employees require re-training on RRP protocols. These proactive efforts began in 2021.

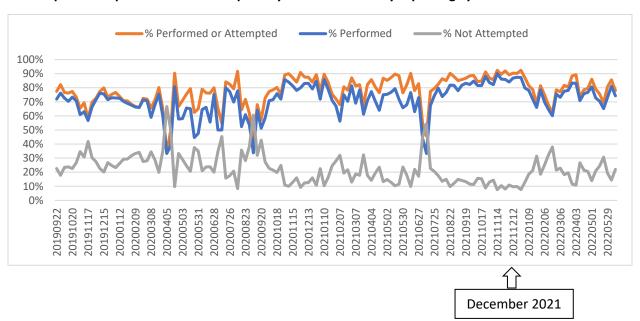
Timing of Initial Clearance Examinations and Overall Performance (from December 16, 2021 - June 15, 2022)

 $^{^{12}}$ The number of observations for dust wipe sample collection is 1 less than the total number of clearance exams observed for RRP (175) and lead abatement clearance (188). EHS stopped 1 sample collection from proceeding due to the area not passing the visual inspection.

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
December	374	320	260	27	316	1
January	702	517	427	38	560	7
February	1,062	720	589	54	810	6
March	1,202	941	790	74	979	11
April	1,028	786	611	72	789	4
May	1,150	831	666	69	852	10
June	636	495	400	32	426	7
Total	6,154	4,610	3,743	366	4,732	46

Analysis: During the reporting period, NYCHA completed 4,610 of 6,154 (75%) of clearance examinations within the weekly reporting cycle used to examine clearance examinations. NYCHA completed 3,743 of 4,610 (81%) of these clearance examinations within 24 hours of the last labor transaction on the Corrective Maintenance work order. NYCHA completed 4,109 of 4,610 (89%) of these clearance examinations within 48 hours of the last labor transaction on the Corrective Maintenance work order.

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

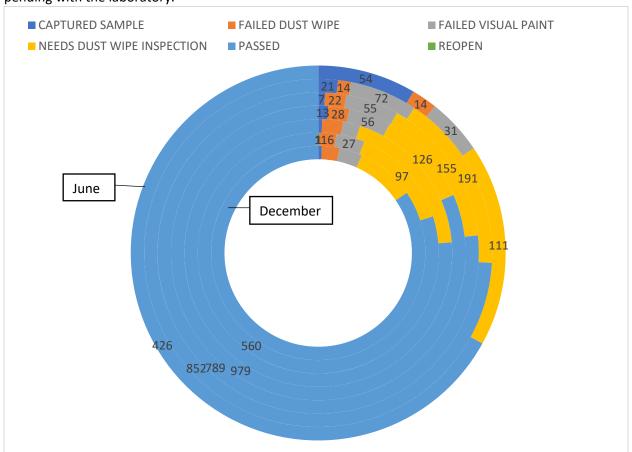


Analysis: In the beginning of the reporting period, LHC had consistently high performance both in terms of samples collected and attempted beginning in August 2021. This was following a sharp dip for both in July 2021. However, starting at the end of January 2022, LHC's percentage of dust wipes performed or attempted experienced volatility through the rest of the period. LHC believes the volatility was due to four factors: (1) the data was impacted by a major increase in the volume of dust wipes due to NYCHA's public

space painting initiative, (2) LHC had to work with IT to resolve data issues with Maximo, (3) the creation of the Department for Paint Administration led to the need to revise the clearance process, and (4) vehicle shortages.

Passed/Failed/Pending/Unperformed Statuses at the End of the Sixth Month Reporting Cycle: Compliance conducted a review of the <u>current</u> status of all clearance examinations from December 16, 2021 through June 15, 2022 (as of 6/27/2022). 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 December 2021 as the inner most ring and June 2022 as the outer most ring. The term "capture sample" means that the sample has been collected and is likely pending with the laboratory.



	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	TOTAL
CAPTURED SAMPLE	2	1	5	13	7	21	54	103
FAILED DUST WIPE	10	16	27	28	22	14	14	131
FAILED VISUAL								
PAINT	13	27	22	56	55	72	31	276

NEEDS DUST WIPE INSPECTION	33	97	198	126	155	191	111	911
PASSED	316	560	810	979	789	852	426	4732
REOPEN		1						1
TOTAL	374	702	1062	1202	1028	1150	636	6154

Analysis (as of June 27, 2022):

- > 76.9% of the clearance examinations performed over the reporting period are in "pass" status (vs. 78.7% 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;
- ➤ 14.8% have not had clearances examinations yet (vs. 10.8% in prior period);
- ➤ 1.7% have been collected and are pending lab analysis (vs. 1.1% in prior period);
- 2.1% remain in fail status (vs. 5.6% in prior period); and
- ➤ 4.5% failed the visual phase of the clearance examination (vs. 3.7% 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 23.1% 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 over 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, as this table shows the current statuses. However, LHC still needs to establish more reliable, standard turnaround times with laboratories and dust wipe vendors.

Third, the number of unperformed clearance examinations increased 4% since the prior reporting period, and is over 14% for the current 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.

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.

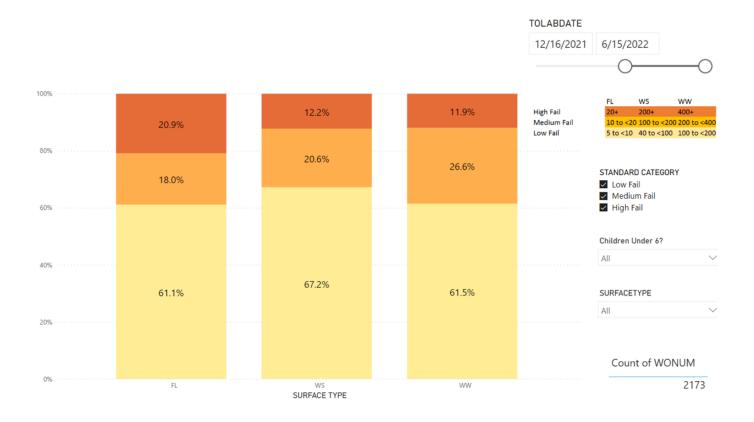
The current New York City and federal dust wipe thresholds are different for floors, window sills and window wells. NYCHA applies the New York City standards because they are more stringent than the federal standards. The below chart shows the difference between the two standards:

Surface	Federal	NYC (which NYCHA uses)
Floor	10 μg/ft2	5 μg/ft2
Window Sill	100 μg/ft2	40 μg/ft2
Window Well	400 μg/ft2	100 μg/ft2

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 December 16, 2021 through June 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 μ g/ft2):

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 chart above shows that many failed samples for all three surface areas is in the lower fail range. The Low fail samples for windowsills (falling between 40-100 μ g/ft²) account for 67.2% of the failed samples even though these samples would actually pass the current EPA standard of 100 μ g/ft². Similarly, the low and medium fail samples for window wells (falling between 100-200 μ g/ft² and 200-400 μ g/ft²

respectively) account for 88.1% of the failed samples even though these samples would actually pass the current EPA standard of 400 $\mu g/ft^2$. Thus, the stricter NYC standards are driving the majority of the fails for windowsills and window wells.

In late fall of 2020, Compliance developed a new dashboard to track trades and staff members that performed the RRP work prior to dust wipe fails. Compliance has used this dashboard to proactively identify the trades, developments, and staff members that have the highest fail rates and schedule follow-up meetings with supervisory staff and trainings in hopes of improving cleaning protocols.