

NYCHA Compliance Department:
6th Assessment of Compliance with Requirements Of
Paragraphs 14 and 15 of Exhibit A to the January 31, 2019 Agreement
Between NYCHA, HUD, SDNY and the City of New York

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 5th report assessing compliance with Paragraphs 14 and 15.

To evaluate NYCHA’s ability to certify to the requirements of Paragraphs 14 and 15 on January 31, 2022, the Compliance Department conducted a review of NYCHA records and activities for the period between June 16, 2020 through December 15, 2021 (“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 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 (July 31, 2021)

On July 31, 2021, NYCHA was unable to certify to compliance with Paragraphs 14 and 15 for the following main reasons.

- 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 was generally not in compliance with the clearance examination requirements due to inadequate worksite controls while waiting for dust wipe results and missed or late clearance examinations (paragraph 15(j)).

On July 31, 2021, NYCHA Compliance did determine that NYCHA had exhibited adequate controls or documentation to demonstrate compliance with the following sub-paragraphs:

- Paragraphs 14 (a), (b), (c), (d), 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.

Since July 31, 2021, NYCHA has continued to take certain actions to correct or attempt to improve its ability to meet the requirements set forth in Paragraphs 14 and 15. However, NYCHA continues to have continued compliance struggles in several areas, including 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 remedial work.

In addition, three new separate areas of compliance risk have been identified during the Covered Period. First, NYCHA has identified 5,964 apartments with positive components in buildings with local and/or federal exemptions from lead-based paint requirements.¹ This finding has required modifications to the Maximo work order system, as well as adding these apartments to the lead compliance program.

Second, Compliance has identified that, for over 97% (45,087 out of 46,476) of work orders potentially subject to RRP requirements, NYCHA renovators are indicating on the work order that they are not performing work that requires RRP protocols. While this does not necessarily mean these work orders are non-compliant, it does mean that 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. Compliance's ongoing review of this issue found that additional training for renovators and IT enhancements are 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.

Third, in December 2021, NYCHA identified that approximately 1,800 residents received inaccurate Notices of Evaluation arising from the biennial risk assessment. This was due to a technological error during the production of the letters. The data collected during the risk assessments was otherwise valid. Of the inaccurate notices, 666 were minor deficiencies concerning a missing date. However, the remainder contained significant errors, including stating that lead dust wipes had passed when they had, in fact, failed, or not identifying peeling paint conditions that were identified during the risk assessment. NYCHA is sending letters to the affected residents explaining the errors and providing the corrected versions of the notices. NYCHA is providing contact information should the residents have any questions and offering to perform a new risk assessment if requested by the resident. NYCHA disclosed this error to both the federal government and the Federal Monitor. As a result of this incident, NYCHA must strengthen its quality assurance procedures before such communications are sent to residents.

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 336 jobs and observed a 100% 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 substantial compliance in the following parts of Paragraph 14: a, b, d, and e.

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 begins its efforts to complete abatement work in units with children under 6 ("CU6") as part of the new TEMPO program, which is described below.

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

¹ As discussed further below, as of January 18, 2022, 370 of the 5,964 apartments that have tested positive are still pending paint chip analysis.

equipment in storerooms. The major issues preventing certification with Paragraph 15 are establishing better controls for vendor RRP documentation, maintaining more consistency in issuing the NOHRs, and improving performance of clearance examinations and post-cleaning work site protections.

In addition, as discussed in more detail under Paragraph 15(a) below, Compliance is investigating how NYCHA's vendors answer the Renovation Repair and Painting ("RRP") enforcement questions in Maximo work orders. Thus far, the ongoing inquiry has shown that vendors do not answer the enforcement question on the paper work ticket, and sometimes verbally inform NYCHA employees that they did not complete RRP work. NYCHA employees do not verify these statements, and sometimes the NYCHA employees who record this information in Maximo are not trained in RRP procedures. This needs to be corrected through more rigorous vendor management and oversight.

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. This is a step in standardizing the process for vendors who may perform RRP work. However, much work remains to be done at NYCHA to improve vendor management within NYCHA Operations, which includes ensuring that vendors adhere to lead protocols.

While EHS observed high rates of compliance with RRP procedures and other lead requirements during the Covered Period, sixteen observations to Compliance. Two of these observations involved lead abatements. Two of the observations concerned post-RRP clearance. The remaining twelve of the escalations concerned missing Lead Disclosure Rule documentation at Property Management Offices. Compliance took the following actions in response to the EHS escalations.

- EHS Inspections 83575157 & 84339038: EHS escalated two matters concerning language contained in the signage posted at abatement jobs. Incident 83575157 involved missing language in one of the posted signs. The Healthy Homes vendor agreed to use the signage recommended by EHS in future jobs. Incident 84339038 involved inadequate language in the lead warning signs and an error in the OPP, which should have stated the subject apartment was vacant at the time of the abatement. The issues were corrected on the jobsite. The abatement supervisor on 84339038 was issued a counseling memorandum regarding the incident on December 13, 2021.
- EHS Inspections 84417677 & 84507561: EHS observed vendor personnel collecting dust wipe samples even though the areas subject to clearance had not passed visual inspection. NYCHA has communicated these deficiencies to the vendor, and will continue to monitor their performance.
- EHS Lead Disclosure Rule Escalations: Given the number of Lead Disclosure Rule issues identified by EHS, and in response to recommendations from HUD, Compliance and Healthy Homes partnered in an effort to standardize Lead Disclosure Rule documentation across the agency. On January 12, 2022, Compliance provided a directive with detailed instructions to senior

management in Public Housing Operations on the documentation that is required in Property Management offices to meet Lead Disclosure Rule requirements. The communication also provides instructions to Property Management staff on how to obtain Lead Disclosure Rule documentation. Compliance and EHS will monitor compliance with this directive going forward.

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.

Updates on Other Significant Lead Matters

The Transition from 1.0 mg/cm² to 0.5 mg/cm²:

On December 1, 2021, the New York City Department of Housing Preservation and Development (HPD) issued a regulation changing the definition of lead-based paint from paint with lead content measured at 1.0 mg/cm² to paint with lead content measured at 0.5 mg/cm² for purposes of New York City's Local Law 1. The federal standard for lead-based paint remains 1.0 mg/cm². This significant change has prompted changes to NYCHA's lead programs, including:

- Presuming that all painted surfaces in apartments and common areas in pre-1978 buildings where a child under 6 lives or visits for 10 or more hours per week are positive until these apartments and common areas have been retested at the new 0.5 mg/cm² standard and, if applicable, receive an exemption from HPD.
- Testing all NYCHA apartments in pre-1978 covered buildings at turnover at the 0.5 mg/cm² standard and abating all components above this standard.
- Proactively XRF testing all apartments where children under 6 live or visit for 10 or more hours per week at the 0.5 standard starting in January 2022.

Compliance issued an agency-wide Compliance Advisory Alert on the standard change in November 2021. NYCHA will continue to update its systems and policies to ensure that this new standard is implemented across its lead programs.

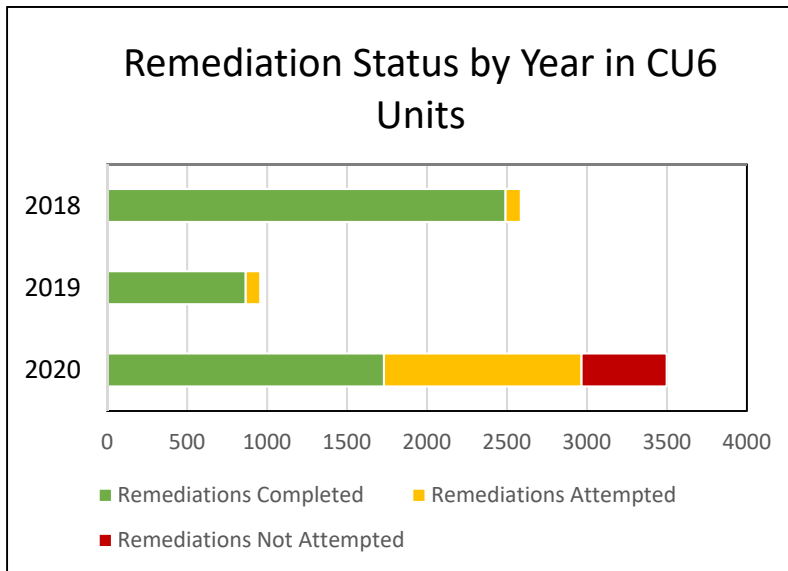
Visual Assessments and Remediations

NYCHA continues to perform visual assessments on an annual basis and will now perform 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 remediations² over the past approximately three years (and attempted to perform remediation for thousands of other work orders) based on these visual assessments, NYCHA continues to have an ongoing backlog of open work orders for remediation arising from the 2018, 2019, 2020, and 2021 visual assessments.

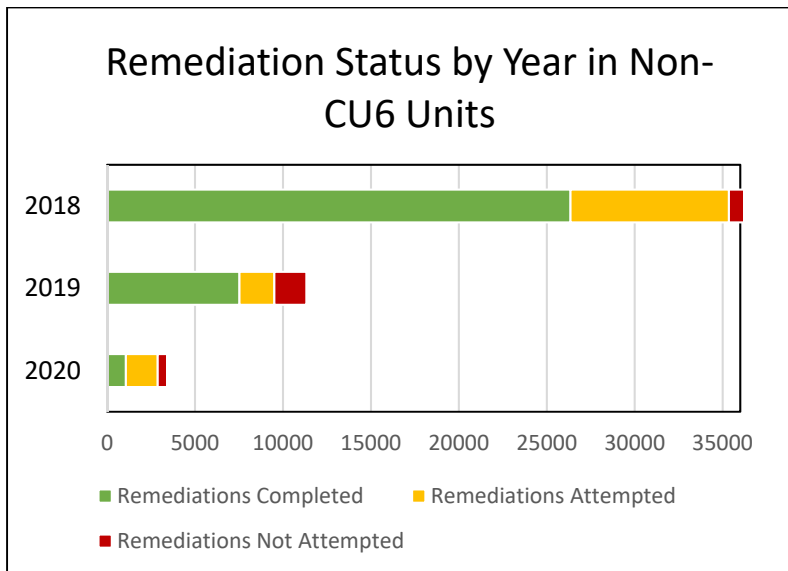
The total number of completed remediation work orders, open remediation work orders, remediations attempted at least once, remediations not attempted, and remediations pending³ as of January 11, 2022 are below for 2018, 2019, and 2020. Data surrounding 2021 remediations and visual assessments is still being validated and will be reported on in to the March 2022 Exceptions Report.

² As previously disclosed, NYCHA did not perform clearance examinations for all of these remediations.

³ For 2018, 2019, and 2020, Remediations Pending refers to difference between Remediations Required and the sum of Remediations Completed, Remediations Attempted, and Remediations Not Attempted.



In CU6 units, NYCHA completed or made attempts in >99% (2,587 of 2,588) in 2018, 99% (958 of 964) in 2019, and 87% (2,966 of 3,395) in 2020.



As for non-CU6 units, NYCHA completed or made attempts in 96% (35,352 of 37,015) in 2018, 84% (9,510 of 11,328) in 2019, and 84% (2,875 of 3,416) in 2020.

OACM staff indicate that 2018 open remediations may overcount the number of non-CU6 apartments with deficiencies, because some of these apartments may have tested negative through the XRF initiative. OACM will work to refine this number in line with the ongoing testing initiative.

Thus, despite significant effort, the amount of historically deferred work at NYCHA continues to necessitate significant resources to correct paint deficiencies in apartments. In addition, NYCHA continues

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

I. 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 file⁴ reviews of 100 abatements, including 20 abatements in vacant units (“moveouts”) and 80 abatements in occupied units. Reviews took place three times during the covered period, in August, October, and December 2021, as part of ongoing compliance monitoring through the LCAP. The MU selected a random sample of 20 moveout abatement work orders out of a total of 224 work orders that had an “Actual Finish” date between June 16, 2021 and December 15, 2021 (“Covered Period”), and a work order status of “CLOSE” as of December 15, 2021. The MU selected a random sample of 80 out of 248 closed abatements in occupied units, comprising 30 out of 131 (23%) abatements performed by NYCHA LAW staff, 30 out of 94 (32%) abatements completed by vendors, and 20 of 23 (87%) Elevated Blood Lead Level (“EBLL”) abatements closed during the covered period. 1 abatement work order which was effectively canceled was removed from review⁵, bringing the total sample to 79 occupied work orders. The results of this review are set forth in Attachment B.

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

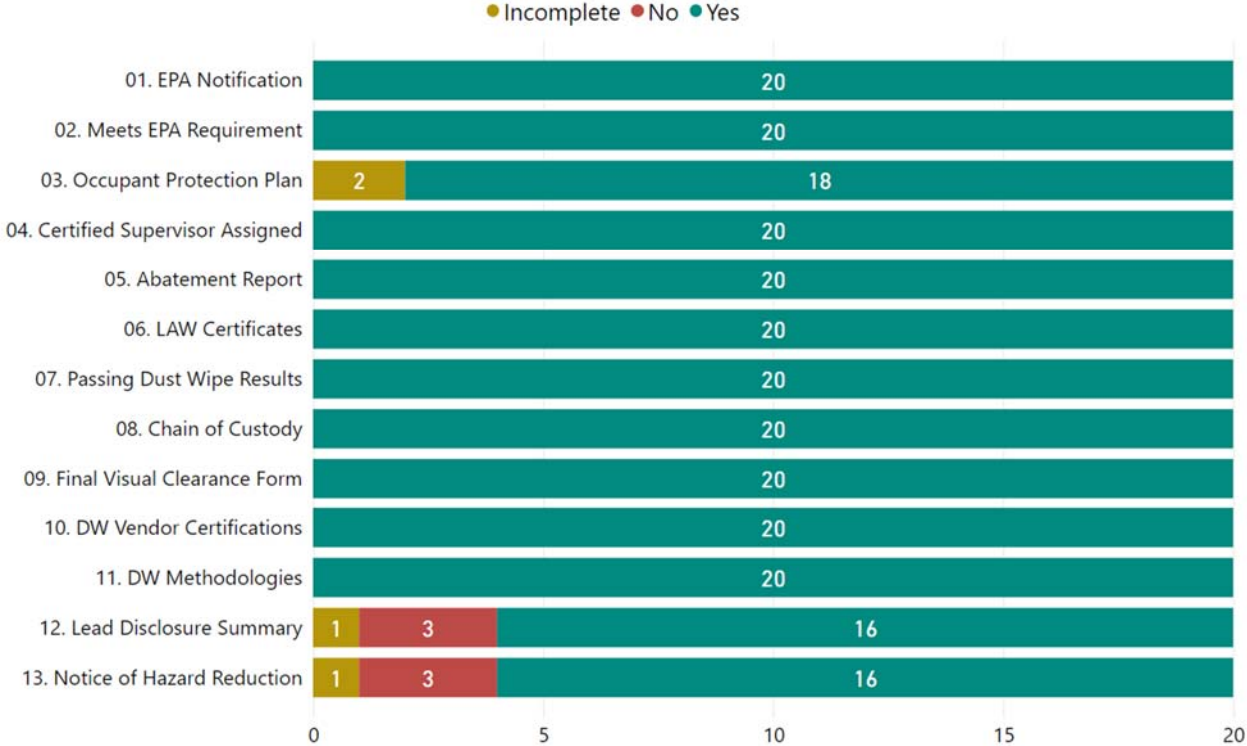
⁴ For the purposes of this review, “files” refers to Maximo work orders associated with a particular abatement.

⁵ WO 67284873 was effectively cancelled because plumbers removed the positive component (lead bend) prior to the arrival of abatement workers due to a leak reported in the component by the resident. The lead bend was removed under WO 72952663, which was flagged in Maximo as RRP and the plumber followed RRP protocols. Dust wipes for the unit were taken and passed and the abatement work order was cancelled.

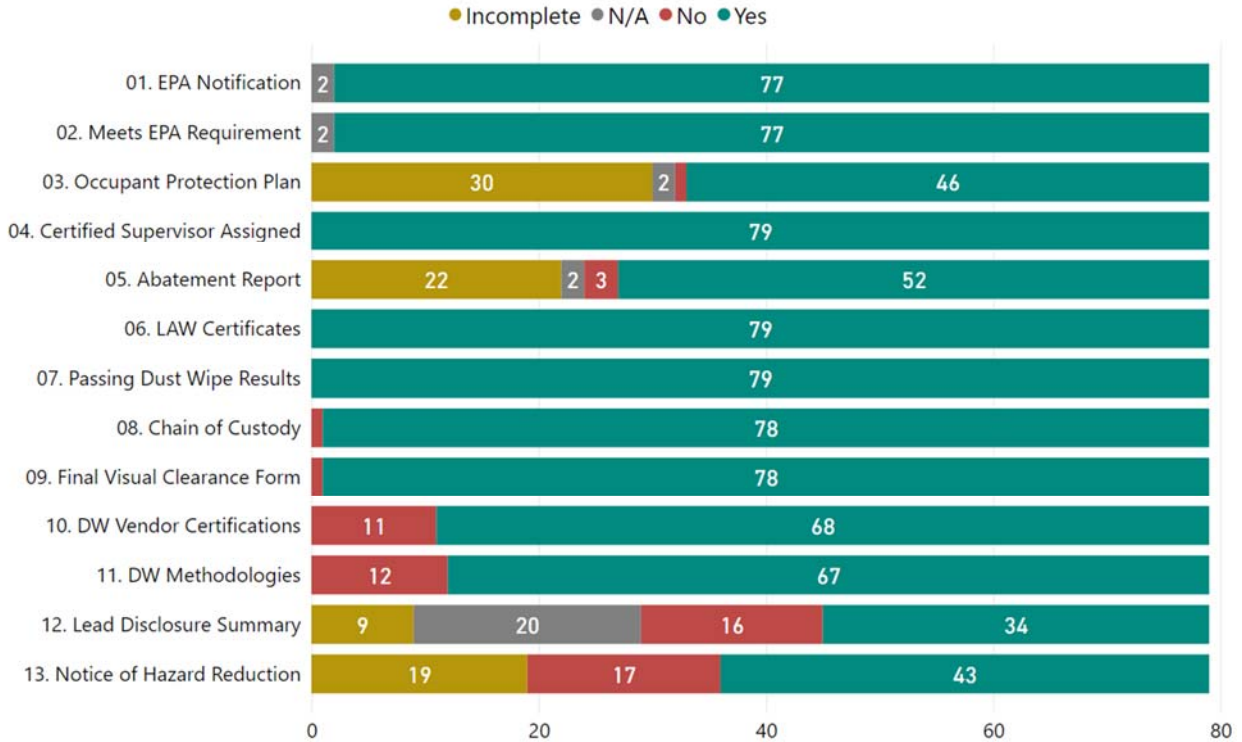
6. LAW Certificates	Certifications on file for each lead abatement worker assigned to abatement	40 C.F.R. § 745.227(e)(1) – (3)	14(a)
7. Passing Dust Wipe Results	Final passing dust wipe results	40 C.F.R. § 745.227(e)(8)	14(e)
8. Chain of Custody	Chain of Custody completed for final passing dust wipe results	40 C.F.R. § 745.227(e)(8).	14(e)
9. Final Visual Clearance Form	Visual Clearance form completed for final passing dust wipe results	40 C.F.R. § 745.227(e)(8).	14(e)
10. DW Vendor Certifications	ELLAP and NLLAP Certifications	40 C.F.R. § 745.227(e)(8)	14(e)
11. DW Methodologies	Specified methods of collection and lab analysis of dust wipes	40 C.F.R. § 745.227(f)	14(d)
12. Lead Disclosure Summary	LHC sends to development for future tenants to sign prior to move-in disclosing abatement of lead hazard	24 CFR Part 35 Subpart A	14(g)
13. Notice of Hazard Reduction	LHC sends to development for future or present tenants detailing components abated in unit	24 CFR § 35.125	14 (g)

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

Summary of File Review for Abatements Performed in Vacant Units



Summary of File Review for Abatement Performed in Occupied Units



As indicated in the figures above, compliance rates for occupied units are lower than those for vacant units. Most notably, errors were found in the occupant protection plan and the abatement report, and there were delays in completing and uploading the lead disclosure summary and notice of hazard reduction. Moveout units also had lower compliance rates regarding these documents, however showed compliance across all indicators. These findings are discussed in detail below.

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

Regulatory Requirements for 14(a):

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

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

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

Written Policies and Procedures: The Lead SP sets (annexed as Attachment C) 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.G.1(j)(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.G.1(j)(1)(b)(ii).*

Contract Specifications: During the Covered Period, NYCHA utilized seven 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	<i>See Attachment D, § 1.1.6; Id, § 1.2.1; Id, § 1.4.5</i>
Joseph Environmental	<i>See Attachment D, § 1.1.6; Id, § 1.2.1; Id, § 1.4.5</i>
ADG	<i>See Attachment D § 1.1.6; Id § 1.2.1; Id § 1.4.7</i>
Abatement Unlimited	<i>See Attachment D, § 1.1.6; Id, § 1.2.1; Id, § 1.4.7</i>
Empire Control	<i>See Attachment D, § 1.1.6; Id, § 1.2.1; Id, § 1.4.8</i>
Sherwani	<i>See Attachment D, § § 1.1.6; Id, § 1.2.1; Id, § 1.4.5</i>
New York Environmental Systems	<i>See Attachment D, § 1.1.6; Id, § 1.2.1; Id, § 1.4.8</i>

IT Controls for 14(a):

As reported in the July 2021 HUD Certification, in December 2019 NYCHA placed controls within Maximo to reinforce the requirement for the lead abatement supervisor to be onsite during the set up and clean-up phases for apartment work orders. The business requirements document (BRD) explaining the scope of this and other abatement-related IT controls is annexed as Attachment 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 336 abatement jobs. A certified supervisor was present for 100% 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 identified on 20 of 20 (100%) moveout work orders. 100% of work orders were indicated to have assigned supervisors with valid certifications, and in 100% of cases, such certifications 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 20 out of 20 (100%) cases. A detailed table documenting this file review is annexed as Attachment B.

For Occupied Units:

The MU found that certified supervisors and lead abatement workers were identified in 79 out of 79 (100%) occupied work orders. 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 100% of occupied abatements reviewed were assigned a Certified Supervisor
- EHS observed 336 abatement jobs, 100% of which had certified supervisors

Based on this documentation, there is evidence supporting NYCHA’s certification that it is in 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 in order 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.G.2(e)
- 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. VII.G.2(g)(a)(i)
- 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 seven vendors to perform abatements. The specifications for the contracts are described below:

Vendor Name	Agreement to comply with 40 CFR § 745.227 (e)(4)(vi)
Linear	<i>See Attachment D, § 1.4.2; Id § 1.5.2; Id 2.4.2; Id § 2.6.3</i>
Joseph Environmental	<i>See Attachment D, § 1.4.2; Id § 1.5.2; Id 2.4.2; Id § 2.6.3</i>
ADG	<i>See Attachment D § 1.42; Id § 1.5.2; Id § 2.4.2, Id § 2.6.3</i>
Abatement Unlimited	<i>See Attachment D § 1.42; Id § 1.5.2; Id § 2.4.2, Id § 2.6.3</i>
Empire Control	<i>See Attachment D § 1.42; Id § 1.5.2; Id § 2.4.2, Id § 2.6.3</i>
Sherwani	<i>See Attachment D, § § 1.4.2; Id § 1.5.2; Id 2.4.2; Id § 2.6.3</i>
New York Environmental Systems	<i>See Attachment D § 1.42; Id § 1.5.2; Id § 2.4.2, Id § 2.6.3</i>

[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 336 inspections and 100% complied with the NOC requirements. *See Attachment A for more details.*

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

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

For Moveout Units:

The MU reviewed a total of 20 moveout work orders completed during the Covered Period. 20 of the 20 (100%) work orders reviewed submitted the EPA notification. In all 20 of 20 (100%) work orders, NYCHA or the abatement vendor notified 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 79 occupied work orders completed during the Covered Period. 77 of the 79 (97%) work orders reviewed submitted the EPA notification. 2 (3%) work orders that did not have the EPA notification were work orders to solely perform cleaning to address lead dust hazards included in a DOHMH Commissioner's Order to Abate ("COTA"), and pursuant to 45 CFR 745, EPA notification was not required. Therefore, 79 of 79 (100%) were in compliance with EPA requirements, either by NYCHA or the abatement vendor notifying the EPA greater than five business days prior to the abatement, were emergency abatements, or were not required. *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:

- 100% of moveout abatements and 100% of occupied abatements notified the EPA in accordance within the required timeframe of greater than five business days, were emergency abatements, or notification was not applicable.
- 100% of the field observations had complete and accurate Notices of Commencement.

Based on this documentation, there is evidence supporting NYCHA's certification that it is in compliance with the 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 (effective September 9, 2020) 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* SP § VII.G.1.e. 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. *Id.*, § VII.G.1.f. The plan must be provided to the resident if the unit is occupied. *Id.*, § VII.G.1.g. It must be posted in common areas. *Id.* § VII.G.2.d(3)

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

Vendor Name	Agreement to comply with 40 CFR § 745.227 (e)(5)
Linear	<i>See</i> Attachment D, § 3.6.1
Joseph Environmental	<i>See</i> Attachment D, § 3.6.1
ADG	<i>See</i> Attachment D, § 3.3.3
Abatement Unlimited	<i>See</i> Attachment D § 3.3.3
Empire Control	<i>See</i> Attachment D § 3.3.3
Sherwani	<i>See</i> Attachment D, § 3.6.1
New York Environmental Systems	<i>See</i> Attachment D § 3.3.3

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.

[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 336 OPPs during abatement oversight inspections. 335 (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 Compliance Department reviewed a total of 20 moveout work orders, 18 (90%) of which contained a complete OPP. In 1 of 2 incomplete instances (50%), the OPP was uploaded but missing information on whether the apartment was vacant or occupied. In the second of 2 instances (50%), the OPP was not signed by the Certified Supervisor. *See Attachment B.*

For Occupied Units:

The Compliance Department reviewed a total of 79 occupied work orders, 46 (58%) of which contained a correctly completed OPP. 30 (38%) were incomplete or contained incorrect information regarding unit occupancy, applicable protections, dates, or signatures, or were signed after the start of the abatement. Of these 30, 29 abatements occurred during the August or September LCAP reviews, and 1 occurred during the December review, showing improvement over time in part due to interim monitoring and a pause in CU6 abatements in September. The 1 OPP incomplete in the December review was missing a certified supervisor signature date and was abated by NYCHA in-house staff.

The OPP was not applicable for 2 out of 79 (3%) work orders because they were lead-dust COTA cleaning work orders. The OPP was not uploaded to Maximo in 1 of 79 (1%) cases, but these forms were uploaded after the review to the work order. *See Attachment B.*

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

- 90% of moveout abatements and 58% of occupied abatements reviewed contained a complete OPP.
- Of the 38% incomplete OPPs in occupied apartments, 1 (3%) occurred after October 1, 2021, showing increased compliance over time during the covered period.
- Lead abatement supervisors and vendors are not consistently completing the OPP correctly for CU6 units, including incorrect or incomplete information regarding unit occupancy, applicable protections, dates, or signatures, or were signed after the start of the abatement. As a result of

findings from this review, LHC informed lead abatement supervisors and vendors regarding the correct procedure to complete an OPP, especially for occupied units.

- EHS observed 336 abatement work orders and 99.7% had OPPs.

Based on the results of file review of occupied abatement work orders, Compliance believes NYCHA has challenges in achieving compliance with 14(c). This issue has been discussed with LHC as a result of interim Lead Compliance Assurance Program reports, and performance has improved during the course of the covered period. NYCHA expects substantial improvement going forward.

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 (effective September 9, 2020) contains the following procedures related to Paragraph 14(d):

- Clearance examinations following abatement must be performed by a certified risk assessor or lead inspector. Lead SP, § VII.H.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.H.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. Lead SP, § VII.H.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. Lead SP, § VII.E.2. These samples must be submitted to an EPA NLLAP-recognized and New York State ELAP certified testing laboratory. *Id.*

Contract Specifications: During the Covered Period, NYCHA utilized nine 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 Analytical Testing	See Attachment D, § I.A , § II.C.1-3, § III.D.1-2
Atlas Environmental Lab	See Attachment D, § I.A, § § II.C 1-2, § III.D 1-2
Eastern Analytical Services	See Attachment D, § I.A , § II.C.1-3, § III.D.1-2.
EMSL Analytical Inc.	See Attachment D, § I.A, § II.C.1-3 § III.D.1-2.

Genesis Environmental Consultants	See Attachment D, § I.A, § § II.C 1-2, § III.D 1-2
Laboratory Testing Services	See Attachment D, § I.A, § II.C.1-3, § III.D.1-2.
Metro Analytical Laboratories	See Attachment D, § II.C.1-3, § III.D.1-2.
The ALC Group	See Attachment D, § I.A, § § II.C 1-2, § III.D 1-2
Warren & Panzer Engineers	See Attachment D, § I.A, § § II.C 1-2, § III.D 1-2

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

As reported in the July 2021 HUD Certification, in December 2019, NYCHA IT enhanced Maximo to require that the abatement report, which should include the credentials of individuals and laboratories performing sampling/testing, be uploaded to the work order. The work order cannot be closed without these attachments. See Attachment 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 168 NYCHA personnel certifications and 195 vendor personnel certifications for clearance examinations, LOT found a 100% compliance rate. 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 20 moveout work orders, and 20 of 20 (100%) files contained documented methodologies for collection and lab analysis of dust wipes. See Attachment B.

For Occupied Units:

- The MU reviewed a total of 79 occupied work orders, of which 67 (85%) contained documented methodologies for collection and lab analysis of dust wipes. 11 out of 12 (92%) abatements that did not contain this information were EBL abatement; LHC had been receiving the documentation but not storing it in Maximo. MU notified LHC of this requirement as a result of monitoring reviews in August and October and found significant improvement during its December review. The one other abatement (8%) missing this documentation was a CU6 abatement performed by NYCHA staff. The documentation has since been uploaded to the work order. See Attachment B.

Overall Compliance Assessment for 14(d):

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

- 100% of moveout abatements and 85% of occupied abatements reviewed contained documented methodologies for collection and lab analysis of dust wipes. Upon follow-up, LHC was able to produce documentation for the other 15% of occupied abatements, though it had not originally been stored in Maximo.
- EHS observed 168 NYCHA personnel certifications and 195 vendor personnel certifications for clearance examinations and found a 100% compliance rate.

Based on the documentation, there is evidence supporting NYCHA's certification that it is in compliance with the requirements set forth in 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 window sill 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 window sill 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 $\mu\text{g}/\text{ft}^2$ for floors, 250 $\mu\text{g}/\text{ft}^2$ for interior windowsills, and 400 $\mu\text{g}/\text{ft}^2$ for window troughs.”⁶

**** NYCHA has not utilized the random sampling clearance methodology during this reporting period, so this section intentionally omits 40 CFR 745.227(e)(9).*

[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. Lead SP, § VII.H.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. Lead SP, § VII.H.4.
- Sets forth the basic protocols for the certified risk assessor or lead inspector to follow for dust wipe sampling. Lead SP, § VII.H.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.

⁶ On June 1, 2021, the City reduced the lead dust standards for floors to 5 $\mu\text{g}/\text{ft}^2$ for floors and to 40 $\mu\text{g}/\text{ft}^2$ for window sills. The standard for window wells (troughs) remained at 100 $\mu\text{g}/\text{ft}^2$.

- Requires that the clearance be documented in a dust wipe report. Lead SP, § VII.H.5.
- Requires the dust wipe report be uploaded to Maximo. Lead SP, § VII.H.6.

Contract Specifications: During the Covered Period, NYCHA utilized three vendors to perform clearance examinations: Genesis Environmental Consultants, the ALC Group, and Warren & Panzer Engineers. 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 is discussed below and found in Attachment D.

Vendor Name	Agreement to comply with 24 CFR § 745.227 (e)(8)-(9)
Genesis Environmental Consultants	See Attachment D, § II.A.1-3, § II.D.1-6.
The ALC Group	See Attachment D, § II.A.1-3 § II.D.1-6
Warren & Panzer Engineers	See Attachment D, § II.A.1-3 § II.D.1-6
Accurate Analytical Testing	See Attachment D, § I.A, §I.C. 1-2
Atlas Environmental Lab	See Attachment D, § I.A, §I.C. 1-2
Eastern Analytical Services	See Attachment D, § I.A, §I.C. 1-2
EMSL Analytical	See Attachment D, § I.A, §I.C. 1-2
Laboratory Testing Services	See Attachment D, § I.A, §I.C. 1-2
Metro Analytical Services	See Attachment D, § I.A, §I.C. 1-2

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

As reported in the July 2021 HUD Certification, in December 2019, NYCHA IT implemented enhancements to the abatement work order. The creation of the abatement work order will now auto-generate a dust wipe work order when abatement is performed for moveouts. In contrast, IT implemented new functionality for abatement work orders for proactive abatements, such as those for the TEMPO Abatement Program. To avoid the creation of extraneous dust wipe work orders, the system now allows users in LHCD to create a Dust Wipe Work Order when the work is actually scheduled. Instruction for this new functionality are annexed as Attachment K.

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

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

EHS observed 168 NYCHA employees and 195 vendors completed clearance examinations. Of the 363 dust wipe sample collection jobs observed, 188 were for lead abatement clearance. All clearance examiners had the proper credentials for their job type. EHS noted that all jobs adhered to the 1-hour wait time

between clearance and cleaning activities; and that 188 (100%) clearance examiners conducted the visual inspection phase of the clearance examination.

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

The MU conducted a review of work orders in Maximo to determine if a clearance examination was performed, and 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 20 moveout abatement work orders. Of these, 20 (100%) contained passing dust wipe results, 20 (100%) contained the chain of custody, 20 (100%) contained the visual clearance form, and 20 (100%) contained certifications for both the risk assessor and laboratory. See Attachment B.

For Occupied Units:

The MU reviewed 79 occupied abatement work orders. Of these, 79 (100%) had passing dust wipe clearances, and 78 (99%) contained the chain of custody and the visual clearance form. 68 (86%) contained certifications for both the risk assessor and laboratory. 10 out of 11 (91%) abatements that did not contain certifications were EBLL abatements, and LHC had been receiving the documentation but not storing it in Maximo. MU notified LHC of this requirement as a result of monitoring reviews in August and October 2021 and found significant improvement during its December review. See Attachment B.

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

During the Covered Period, NYCHA demonstrated substantial 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 moveout abatements contained all required documentation for a clearance examination report.
- 99% of occupied abatements the chain of custody and visual clearance form; 86% contained certifications for both the risk assessor and laboratory.
- All 168 employees and 195 vendors performing clearance examinations were certified.
- EHS observed 188 visual inspections and sample collections and 100% were compliant.

Based on the file review and filed oversight during the Covered Period, there is evidence supporting NYCHA's certification that it is in compliance with the requirements referenced in Paragraph 14(e). However, Compliance has concerns about testing vendor Genesis, which failed to follow protocols for visual inspections in two instances. Compliance will also continue to monitor EBLL abatements to ensure this information is properly stored in Maximo.

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

Regulatory Requirements for 14(f):

40 CFR § 745.227(e)(10) states as follows: “An abatement report shall be prepared by a certified supervisor or project designer. The abatement report shall include the following information: (i) Start and completion dates of abatement. (ii) The name and address of each certified firm conducting the abatement and the name of each supervisor assigned to the abatement project. (iii) The occupant protection plan prepared pursuant to paragraph (e)(5) of this section. (iv) The name, address, and signature of each certified risk assessor or inspector conducting clearance sampling and the date of clearance testing. (v) The results of clearance testing and all soil analyses (if applicable) and the name of each recognized laboratory that conducted the analyses. (vi) A detailed written description of the abatement, including abatement methods used, locations of rooms and/or components where abatement occurred, reason for selecting abatement methods for each component, and any suggested monitoring of encapsulants or enclosures.”

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

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

- Requires that the certified abatement supervisor for each abatement project prepare an abatement report within 30 days of clearance. See Lead SP, § VII.H.9. The report must contain all of the items set forth in 40 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 seven 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, § 1.1.6
Joseph Environmental	See Attachment D, § 1.1.6
ADG	See Attachment D, § 1.1.6
Abatement Unlimited	See Attachment D § 1.1.6
Empire Control	See Attachment D § § 1.1.6
Sherwani	See Attachment D, § § 1.1.6
New York Environmental Systems	See Attachment D § § 1.1.6

IT Controls for 14(f):

As reported in the July 2021 HUD Certification, in December 2019, NYCHA IT enhanced Maximo to require staff to upload the abatement report to the abatement work order. The work order cannot be closed without this attachment. See Exhibit 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 20 moveout abatement work orders. Of these, 20 (100%) contained the abatement report prepared by a certified supervisor. *See Attachment B.*

For Occupied Units:

The MU reviewed 79 occupied abatement work orders. Of these, 52 (65%) contained the complete abatement report prepared by a certified supervisor. 22 contained incomplete or inaccurate abatement reports, 19 of which were marked as vacant when the units were occupied, and 3 were missing information such as start and end dates, abatement worker license numbers, and dust wipe information. 3 (4%) abatement work orders did not contain the abatement report in Maximo, and for 2 (3%) the document was not applicable due to being a COTA dust wipe cleaning case. *See Attachment B.*

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

During the Covered Period, NYCHA made progress towards compliance with the requirement set forth in Paragraph 14(f) of the HUD Agreement. Nonetheless, NYCHA must improve its abatement report practices in occupied apartments. Evidence of progress consists of:

- 100% of moveout abatements and 65% of occupied abatements reviewed contained an abatement report prepared by a certified supervisor.
- Lead abatement supervisors and vendors are not consistently completing the vacancy section and “reason for abatement” section of the abatement report correctly. LHC has informed lead abatement supervisors and vendors regarding the correct procedure to complete an abatement report, especially for occupied units. Compliance continues to monitor interim progress.

Based on this documentation, there is evidence supporting that NYCHA is making progress towards 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 (effective September 9, 2020) 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 July 2021 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 can be attached to the Maximo work orders.

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\(g\):](#)

Field monitoring is not conducted for this requirement.

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

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

The MU performed a file review of the Lead Disclosure Summary and the Notice of Hazard Reduction (“NOHR”) for moveout and occupied units. Note that to be in compliance, the NOHR must be uploaded to the work order within 15 days of obtaining final lead clearance per the Lead SP.

For Moveout Units:

Of the 20 reviewed moveout abatement work orders, 16 (80%) contained the NOHR. See Attachment B.

For Occupied Units:

The MU reviewed 79 occupied abatement work orders for the NOHR. Of these, 43 (54%) contained the document, and 36 (46%) were not uploaded to Maximo within 15 days per the Lead SP. In 19 cases (24%), the notice had been issued but not saved in Maximo, and in 17 (22%) cases, the notice was issued after Compliance notified LHC of the missing information. 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:

- 80% of moveout abatements and 54% of occupied abatements reviewed contained the NOHR
- Documented establishment of Maximo IT Controls 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 NOHR, the Compliance Department reviewed a sample of files for purposes of this certification and found that NYCHA does not routinely issue letters within 15 days of receiving final lead clearance, in accordance with the NYCHA Lead SP. Given that the NOHR 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 are consistently issued and Compliance validates that they are also issued in the required timeframe.

I. 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 will change the manner in which NYCHA classifies apartments for purposes of RRP enforcement controls. In general terms, NYCHA will now require 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 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 will continue 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.

NYCHA is still in the process of updating its system to meet these requirements. In December 2021, NYCHA implemented interim modifications, which are described in Attachment H and K. A permanent modification to the RRP enforcement system is in development and scheduled for the February 2022 Maximo build.

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. During the Covered Period, 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. As discussed below, this is featured as a blue banner on certain work orders.

[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.I.3.a.(1).

Quick Reference Guides: NYCHA also published two Quick Reference Guides (“QRG”) related to RRP work and the “RRP flag.” The first, entitled “Lead Safe Work Practices: Renovation, Repair, and Painting Work” (Attachment G) provides a 5-page overview of the RRP process for NYCHA renovators. The second QRG, entitled “Renovation, Repair, and Painting (RRP) Work: Identifying Lead Components,” (Attachment G) provides a two-page overview of the “RRP flag” in Maximo, and provides examples of building components that may appear in the system. Both QRGs are available on the NYCHA Forms and Reference Library (“FRL”).

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 will 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. A training document explaining this IT enhancement is annexed as Attachment I.

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 placed 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.

Before the commencement of work, Maximo asks the user “Are you performing RRP work that would disturb the components listed below?” See Attachment I, Slides 4 through 6. The work order then lists the individual positive components by Room/Side/Component/Substrate. See Attachment I, Slide 4. If a specific component is positive for an entire room, the work order will state Room/All/Component/Substrate. See Attachment J, Slide 4. The renovator must then select any positive components that they may disturb in their work. See Attachment I, Slide 6. If the renovator is not disturbing any of the positive components, they must select “None from List.” See Attachment I, Slide 14. After the renovator makes their selection, they are prompted with the following certification: “I certify that the above-information is true and complete.” See Attachment I, Slides 6 and 14.

If the renovator selects positive components, the work will be performed under RRP work requirements, and the work order requires completion of the pre-renovator acknowledge form, adherence to lead safe work practices, the post renovation checklist, and a clearance examination. See Attachment I, Slides 7 through 12. If the renovator is not disturbing positive components, the work order is performed under standard work rules.

The component-level “RRP flag” is only activated after the unit is XRF tested and the XRF results are loaded into Maximo. See Attachment I, Slides 2, 3, and 22. Until that happens, the “RRP flag” remains at the unit level, meaning that any work order disturbing painted surfaces must be performed under RRP Rules. In addition, the NYCHA determined to retain the unit-level “RRP flag” for six high risk developments, so that all paint disturbing work must follow RRP work rules. The six developments are East River, Harlem River I, Harlem River II, Williamsburg, Gravesend, and Manhattanville. See Attachment I, Slide 18. In addition, for units that tested negative through the 2019 XRF initiative, the work order will remove the “RRP flag” and replace it with the following notification “Apartment XRF Results are Negative.” See Attachment I, Slide 19.

The IT protocols for RRP enforcements that were in place 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 would be displayed even if XRF testing results are negative or XRF testing is yet to be performed, in tandem with cases where XRF results are positive.

Also as a part of an interim solution, a special selectable item was added to the unit specific lead positive component list, which can be selected by the user when working in a unit having child under 6 years of age residing in it, thus acknowledging that the list of lead positive components selected are tested at a higher threshold than what has been set as standard by the New York City.

In November 2021, NYCHA added controls within Maximo to reinforce the performance of RRP procedures in apartments and common areas in buildings constructed prior to 1978 with children under 6. These controls were effective December 1, 2021, when Maximo instructed all NYCHA staff and vendors to follow RRP procedures by way of a blue banner on handhelds and desktop Maximo for all work orders in apartments with known children under the age of 6 stating “CHILD UNDER 6 APARTMENT OR COMMON AREA – YOU MUST FOLLOW RRP RULES WHEN DISTURBING PAINTED SURFACES”. CCA #22 is annexed as Attachment H. The new guidelines require: The business requirements document (“BRD”) which explains the scope of these new protocols is annexed as Attachment K. The following are some key enhancements to Maximo:

- Work order will display a blue banner for all open and new corrective maintenance work orders created.
- Work order will not display the label “Apartment: XRF Results are Negative” if the blue banner is present.
- For cases where there are no RRP enforcement, user is expected to create a dust wipe from iWM hand held, if blue banner is displayed in the screen, and manually complete EPA pre and post checklist using IWM hand held Camera and attachment folders.
- Vendors and staff to follow RRP procedures when performing 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 to be presumed to have lead-based paint until further notice.

[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 557 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 addition to EHS’s oversight of RRP work practices, in June 2021, Compliance began conducting site visits to specifically evaluate how NYCHA staff and vendors answer and interpret the RRP work order enforcement questions contained in the Maximo work orders. These site visits were projected to take place over the course of six months and lasted through December 2021. Compliance decided that these visits were necessary after conducting an inquiry on whether NYCHA renovators are properly answering the RRP enforcement questions. A more detailed explanation of this review is below in the “File Review for 15(a)” section below.

In the site visits that Compliance have conducted to date, Compliance staff has identified several control weaknesses that must be addressed through IT enhancements and additional staff training and supervision. These concerns are as follows:

- **Ensuring Staff Performing RRP Work Have Their Handhelds with Them While Performing the Work:** In November 2021, NYCHA held three separate technical assistance meetings (referred to as “huddles”) with the painters who did not have their handheld devices on them during RRP visits. These huddles were organized via Microsoft Teams, and used as a refresher course where the painters and their supervisors attended. Compliance spoke about the functions of the handheld device and the importance of keeping the device on one’s person while at work. Following the presentation, the painters were emailed a copy of the presentation to reference when needed.

- **Ensuring Vendor Staff Have All Necessary Information Contained in the Maximo Work Order Before Performing Jobs that May Require RRP:** NYCHA vendors performing RRP work do not have handheld devices and thus are not able to enter the information electronically. However, a paper work order containing the same information can be provided to the vendor by visiting management offices at the NYCHA development the vendor is visiting that day. Upon request, the management office will print out paper work orders to supply to the vendor. During its monitoring, Compliance did not observe any deficient practices with regard to the vendors obtaining their work orders.

- **Need for Additional Training on RRP Enforcement Questions:** Pursuant to the Initial Lead Action Plan, Compliance is currently developing an annual training for certified renovators. Part of this training will include a refresher on the RRP enforcement protocols. Continued formal training, as well as guidance from supervisors, is necessary to ensure that the RRP enforcement questions are consistently answered by NYCHA staff. However, a review of 2 work orders (work order numbers 83953132 and 83915485) at Castle Hill performed during this covered period showed that some renovators are selecting “no” but are following RRP procedures during the job. Despite these painters following RRP procedures while conducting the work, they reported that RRP work was not required. Therefore, the RRP enforcement protocols will not autogenerate the dust wipe work orders and the pre-renovation acknowledgement and EPA Post Renovation checklists were not completed.

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. The “RRP banner” reads: “ACTION REQUIRED: RRP-certified staff/vendor must be used and Lead Safe Work Practices must be followed.” This “RRP flag” then requires

that any paint-disturbing work in the unit requires renovators to follow RRP protocols, including a clearance examination.

When a renovator performs work in a unit with the RRP enforcement flag, the Maximo work order asks the renovator to answer questions about the work they are performing. For units where post-2019 XRF inspections have been performed, the Maximo work order identifies which specific components are positive for lead-based paint. The certified renovator then must use their handheld device to select any positive components that their work affects or indicate that their work will not affect any of the components. The renovator must certify that they are making the proper selection. If the renovator selects positive components, the work must follow all RRP requirements, including RRP documentation and lead clearance examinations. If the renovator is not affecting any of the components, the renovator will follow normal work practices. If a unit has not yet been XRF tested, the “RRP banner” will remain at the unit level until the unit is XRF tested, meaning that all work orders that disturb paint must follow RRP rules. In the apartments that have not received XRF testing, the RRP enforcement question asks, “Are you performing RRP work?” which requires a “yes” or “no” answer. Compliance has reported several times that renovators are not accurately responding to this question. An example of this concern is discussed below.

As indicated in the “Field Monitoring/QA for 15(a)” section above, Compliance is conducting an ongoing inquiry of whether NYCHA renovators are properly answering the RRP enforcement questions. If renovators do not properly answer these questions, there is a high risk that they will not follow RRP protocols during their work including the required pre- and post-renovation checklist, and the performance of clearance examinations.

The table below shows that, for 97% (45,087 out of 46,476) of work orders closed between June 16, 2021 to December 15, 2021 where renovators must answer the RRP enforcement questions, renovators indicated that they were not performing RRP work. This trend is concerning and requires continued monitoring of whether the workers’ selection of “No” or “No Components Selected” to the RRP enforcement questions is appropriate.

RRP Selection from June 16, 2021 to December 15, 2021

	No Count	%	Yes Count	%	Total
2021-06 (beginning June 16, 2021)					
Bronx	40	81.6%	9	18.4%	49
Brooklyn	107	91.5%	10	8.5%	117
Manhattan	85	82.5%	18	17.5%	103
Queens	11	57.9%	8	42.1%	19
Staten Island	2	100%	0	0%	2
2021-07					
Bronx	1767	95.6%	82	4.4%	1849
Brooklyn	2125	96.8%	71	3.2%	2196
Manhattan	2177	97.2%	62	2.8%	2239
Queens	1017	96.2%	40	3.8%	1057
Staten Island	233	99.6%	1	0.4%	234

	No Count	%	Yes Count	%	Total
2021-08					
Bronx	2057	97.2%	59	2.8%	2116
Brooklyn	2288	96.2%	91	3.8%	2379
Manhattan	2499	97.4%	67	2.6%	2566
Queens	486	89.5%	40	7.4%	543
Staten Island	0	0%	0	0%	0
2021-09					
Bronx	2107	98.1%	40	1.9%	2147
Brooklyn	2375	97.7%	57	2.3%	2432
Manhattan	2498	97.9%	54	2.1%	2552
Queens	1020	97.7%	24	2.3%	1044
Staten Island	321	97.3%	9	2.7%	330
2021-10					
Bronx	2209	98.1%	42	1.9%	2251
Brooklyn	2692	96.5%	97	3.5%	2789
Manhattan	2756	98.1%	54	1.9%	2810
Queens	1092	98.4%	18	1.6%	1110
Staten Island	422	97.7%	10	2.3%	432
2021-11					
Bronx	2114	96.8%	70	3.2%	2184
Brooklyn	1933	93.6%	133	6.4%	2066
Manhattan	2623	98.6%	38	1.4%	2661
Queens	1062	99.3%	8	0.7%	1070
Staten Island	377	95.7%	17	4.3%	394
2021-12 (ending December 15, 2021)					
Bronx	951	95.1%	49	4.9%	1000
Brooklyn	978	93.2%	71	6.8%	1049
Manhattan	1157	98.3%	20	1.7%	1177
Queens	577	98.6%	8	1.4%	585
Staten Island	158	97.5%	4	2.5%	162
Grand Total	45,087	97.0%	1,389	3.0%	46,476

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. Currently, based on testing performed at the 1.0 standard, over 45,900 apartments have tested negative and over 15,900 have two or fewer lead components. 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 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.”

However, to ensure NYCHA renovators and vendors are following RRP protocols, the Compliance Department monitors work orders where employees answer “No” to the RRP enforcement questions to ensure that the renovator’s answer was correct. Additionally, the Compliance Department:

1. Issues Compliance Advisory Alerts regarding the RRP work order enforcement questions and ensures that the RRP Refresher training required by the Initial Lead Action Plan has clear instructions on the RRP work order enforcement question protocols.
2. Reviews issues identified in field monitoring/work order reviews with supervisory staff with recommendations for staff accountability if necessary.
3. As discussed below, reviews 20 work orders per month where vendor was the assigned craft on a work order but where the work order indicates a “No” answer to the RRP enforcement questions. NYCHA Operations employees must then gather information for Compliance’s review.

As reported in LCAPs 12 and 13, Compliance reviewed a list of 81 work orders completed during the covered period with the following characteristics: the work order was closed, the problem code was needs painting, RRP was required, someone had answered the RRP question “no”, the craft was vendor, and the owner group was the development, which means the development or borough manages this contract. Compliance had concerns about 47 (58%) of these work orders. Compliance requested that Property Management leadership provide the name of the vendor who completed the work, a picture of the vendor log book, a picture of the vendor work ticket and an explanation of why their staff answered “no” to the RRP question. The results are summarized below:

- Operations explained that NYCHA staff, on behalf of the vendor, had answered “no” to the RRP question for 37 work orders. Operations did not respond to Compliance’s inquiries for 10 work orders. Secretaries, Caretaker Js, Supervisor of Caretakers or clerical associates answered the question for 8 of these work orders, even though they are not RRP certified.
- In 12 of the 37 responses, NYCHA staff interpreted that the vendor’s lack of an answer of the question meant RRP work was not required.
- For 6 work orders, Property Management reported that the vendor verbally reported that RRP work was not required but did not answer the question in writing on the work order ticket.
- For 21 of these work orders, Property Management did not provide copies of the logbook or the vendor work order ticket.
- 11 of 13 vendors have submitted certifications in the RRP vendor portal. Compliance will follow up with the 2 vendors that have not submitted their certifications.

Overall, Compliance recommends that Property Management staff require that vendors complete the *entire* work order ticket and ensure that only RRP certified staff enter this information into Maximo. Property Management should also require that all vendors sign into the vendor logbooks.

[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 the Covered Period 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." Lead SP, § XV.A.12.g. Developments using vendors must also provide the vendor with the "Lead Safe Practices Vendor notice." Lead SP, § VII.I.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." Lead SP, § VII.I.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." Lead SP, §§ VII.I.3.a.2.d. through VII.I.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/OA for 15(b):

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(b).

- 847 out of 847 (100%) NYCHA workers observed performing RRP work were RRP certified.
- Out of the 577 RRP jobs, a least one worker present had a valid Certified Renovator credential.

File Review for 15(b):

The Compliance Department randomly selected at least 50 work orders each month to verify if employees and staff were certified which resulted in a review of 299 work orders for work performed during the Covered Period (June 16, 2021 to December 15, 2021) ⁷. The Compliance Department compared data from closed RRP work orders in Maximo with training results from the Human Resources Department or requested vendor certificates from the development. Of the 299 work orders completed by NYCHA employees, 299 (100%) had RRP certified renovators assigned to them.⁸

The Compliance Department also surveyed randomly selected developments and the Procurement Department to determine if the RRP vendors that NYCHA uses have their RRP certifications listed in the RRP Vendor Support Portal built by Compliance (see below). Compliance was able to identify 14 out of 14 (100%) randomly selected vendor certificates.

Compliance expanded its vendor RRP compliance portal that requires vendors performing RRP work to upload both their firm and worker certifications. NYCHA intends to use this portal to improve its oversight of vendor RRP compliance. To improve the portal, Compliance contacted 479 vendors that were identified by Procurement, Operations, and Capital as potentially performing RRP work. As of November 2021, 239 (50%) of these vendors are represented in the RRP Vendor Certification Portal. The remaining vendors were either determined to be inactive NYCHA vendors or vendors that do not perform RRP work. In addition, 9 vendors were removed from the list because those vendors were the subject of an investigation led by the Department of Investigation, which was later publicized during the Covered Period. Compliance has concluded all follow up with this set of vendors but continues to add vendors and certifications to the Portal as new vendors are made known to Compliance and periodically updates data and information.

While this control, as it is currently designed, is not nearly as robust as the controls for work orders performed by NYCHA staff, it has provided the basic ability to uniformly collect worker and vendor certifications in a centralized location.

⁷ 3 additional work orders (62092401, 84210619, and 62108390) were reviewed during this period because the status date in Maximo was within the covered period, despite the work being performed prior to June 16, 2021.

⁸ Prior to March 2021, Compliance checked RRP certification for all workers identified on the work order actuals. After March 2021, Compliance limited the check to the certification of the renovator who completed the RRP checklist.

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 (100% compliance) from file review activities that these requirements are being followed for staff and good evidence (100% compliance) that these requirements are being followed for vendors.
- Existence of the RRP public web-based portal to track RRP certification for vendor companies and their employees.

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 L. 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.I.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 January 11, 2022, MMD controls all but 10 of NYCHA's storerooms⁹. Of those 10, at least 6 developments (60%) are among the developments that have lead-based paint in apartments. The other four developments had local and/or federal exemptions based on random sampling or were built after 1978. The MMD Director does not have an approximate start date for MMD to begin managing these 10 storerooms. 8 of 10 (80%) storerooms not managed by MMD were inspected by EHS during the Covered Period. Union Consolidated and 1010 178th St (Murphy Houses) were not inspected during this time and they are also not under MMD control.

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

There are currently no IT controls for the requirements set forth in 15(d).

[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 201 total storeroom inspections for RRP supplies, 11 failed inspections. Therefore, the compliance rate was 94.5%.
- Out of the 108 storerooms inspected for required RRP supplies, 98 were in compliance (90.7%). 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 a missing utility knife (5 occurrences) and missing 6 mil polyethylene sheeting (4 occurrences).
- 9 of the 10 (90%) storerooms that failed were re-inspected and passed, therefore escalation to the Compliance Department was not required. The remaining storeroom will be re-inspected during the next reporting period and the results will be reported in the next report.

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

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

⁹ Union Consolidated (scheduled for completion 1/31/22), Bronx River (scheduled to begin on 1/31/22), Claremont, Fort Independence, Gun Hill, High Bridge, 1010 178th St (Murphy Houses), Parkside, Pelham Parkway, Webster/Morrisania

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 94.5% compliance for RRP storerooms.

Based on this documentation, there is evidence supporting NYCHA's certification that it substantially is 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. Lead SP, §§ VII.I.1. through VII.I.14. The template Renovator's Checklists (for vendors and staff) are also available on the Forms and Reference Library.

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 H, 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 557 observations of RRP work orders:

- Among all the RRP work phases the “Worksite Preparation” phase achieved 100% compliance rates. 363 “Worksite Preparations” activities were observed.
- 418 “Work Activities” were observed, with a 100% compliance rate.
- 110 “Cleanup Activities” were observed, with a 100% compliance rate. The compliance rate improved to 100 % for “Cleanup Activities” (compared to 98.7% in the last).
- 116 “Cleanup Verification Activities” were observed, with a 100% compliance rate.
- During the reporting period LOT only observed one RRP job that was performed by a vendor. EHS continues to experience difficulties in identifying RRP vendor jobs through Maximo as the scheduling information is not accurate or the work orders may not be created in Maximo in advance of the work.

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

The Compliance Department assessed 299 work orders (completed between June 16, 2021 and December 15, 2021) for the required attachments and confirmed whether the work orders had the RRP Renovation Checklist. 92% (275 out of 299) of the work orders had 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 June 16, 2021 to December 15, 2021

	June	July	August	September	October	November	December
RRP Checklists Present	1	44	48	42	48	51	41
Partially Completed RRP Checklists	0	6	2	8	3	0	5
Total Work Orders Reviewed	1	50	50	50	51	51	46
Compliance Rate	100%	88%	96%	84%	94%	100%	89%

In 24 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. These were checklists that were only partially completed. 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 12 of 24 instances. For 6 of 12 (50%) of the inquiries, responses from Skilled Trade supervisors stated that the skilled tradesperson forgot to check the box or unchecked the box accidentally. For the other 6 of 12 (50%) supervisors reported that the trades staff sometimes found the instructions about the checklist confusing or the skilled tradesperson knew how to complete the checklist, but they claimed their handhelds were not properly functioning.

[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 an average rate of compliance of 100% across all 4 work phases;
- File review showing a downward trend of compliance to 92% (compared to 96% in last certification) for completion of the renovator's checklist.

The RRP Vendor Portal is operational and can be used to verify a vendor firm's RRP certificate as well as that firm's individual employee RRP certificates. However, Compliance is not aware of a systemic process for collecting RRP checklists from vendors and recording that information in Maximo or other centralized location.

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.

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.I.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 557 work orders.
- All residents confirmed they were in receipt of the information, resulting in a 100% compliance rate.

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

The MU assessed 299 work orders (completed between June 16, 2021 and December 15, 2021)¹⁰ for the required attachments and confirmed if the pre-renovation acknowledgement form was offered to the resident. 98% (292 out of 299) of the work orders indicated the pre-renovation acknowledgment form was offered to the resident. In the 7 remaining instances, the work order had a comment that the tenant was “unavailable for signature”. 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 June 16, 2021 to December 15, 2021

	June	July	August	September	October	November	December
Acknowledge Form Present	1	49	50	50	48	51	43
Acknowledgment Form Incomplete	0	1	0	0	3	0	3
Total Work Orders Reviewed	1	50	50	50	51	51	46
Compliance Rate	100%	98%	100%	100%	94%	100%	93%

¹⁰ 3 additional work orders (62092401, 84210619, and 62108390) were reviewed during this period because the status date in Maximo was within the covered period, despite the work being performed prior to June 16, 2021.

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;
- 100% (557 of 557) of residents confirmed they had received the Renovate Right Guide;
- File review showing an average rate of compliance of 98%.

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.

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

Regulatory Requirements for 15(g):

Paragraph 15(g) requires compliance with 24 CFR § 35.125, which, among other things, sets forth the requirements for issuing notices of evaluation (“NOE”) following lead testing, inspections, and risk assessments, and notices of hazard reduction (“NOHR”), which must occur upon the completion or abatement or interim controls. 40 CFR § 745.84 sets forth the work notification requirements for RRP projects in residences and common areas. Compliance with section 40 CFR § 745.84 is also referenced in Paragraph 15(f) and this section shall focus on compliance with 24 CFR § 35.125.

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

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

IT has developed a system to automate the sending of NOHR through Siebel. This automated process generates a hard copy NOHR after a passing clearance examination. The letter is then mailed to the resident. An electronic version of the letter (in 4 languages) is also stored in the resident's MyNYCHA App file. The process auto-generates letters for "non-exception cases," meaning that all necessary criteria for the work order match in Maximo and no manual review is necessary to resolve discrepancies.¹¹ If a case does not meet this criteria, the process auto-generates a list of "exception" cases, which LHC must review, resolve discrepancies, and if necessary, manually generate the NOHR.¹²

On January 11, 2021, IT and the General Services Department reported that the presence of the NOHR in Siebel reliably demonstrates that the letter was physically printed and mailed out to the resident within 1-2 business days of its creation and submission into Siebel.

Field Monitoring/QA for 15(g):

No field monitoring for the paragraph.

File Review for 15(g):

Notices of Evaluation:

The Compliance Department reviewed XRF inspection work orders in Maximo completed between June 16, 2021 and December 15, 2021. Of 3,255 completed XRF inspections, 3,253 work orders (99.9%) contained the required NOE in Maximo. The MU notified LHC of the 2 work orders missing the required NOE in Maximo, and LHC has since uploaded the NOE to their respective work orders.

Notices of Hazard Reduction – Non-Exception Cases:

Between June 16, 2021 and December 15, 2021, the IT data reflected 2,719 "Non-Exception" cases (the NOHR were generated through the automated system). The MU selected a sample of 50 of these cases and found that all 50 (100%) of these cases contained a copy of the NOHR attached in Siebel.

¹¹ **Non-Exception (auto) NOHR:** Hazard Reduction Notice that is automatically generated by Siebel and mailed out by the GSD, 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

¹² **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

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 June 16, 2020 and December 15, 2021. The list contained 298 exception work orders, and the Compliance Department randomly selected a sample of 39 work orders for review (13%).

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 20 work orders sampled (51%) had the respective emails and NOHR uploaded in Maximo, and 19 work orders (49%) did not have the respective emails and NOHR uploaded in Maximo. This is a decline in performance from the July 31, 2021 certification when all 39 (100%) work orders had respective emails and NOHR uploaded in Maximo.

The delay between the clearance inspection date and the date of notice on the NOHR for “exception” cases appears to be an issue but has improved since the July 31, 2021 certification. The review in Maximo revealed that of the 20 respective emails and NOHR uploaded in Maximo, 12 of the 19 emails (63%) indicated that LHC did not send the email and respective NOHR to the development staff until between 17 and 30 days after the clearance inspection date. 7 of the 19 emails (37%) indicated that LHC did not send the email and respective notice until between 32 and 49 days after the clearance inspection date.

LHC explains that initial technological errors with the Automated Delivery System for NOHR caused the delays or missing NOHR notification emails. After determining that notices were not immediately sent out, LHC started monitoring and manually emailing the notices to developments. On January 7, 2022, LHC reported a 6-week backlog of emails that they will manually email and expect to send notices within the 15-day regulatory deadline.

The Compliance Department finds LHC did not have notices for 19 of the 39 work orders sampled. 20 of the 39 work orders had the notices, but LHC did not distribute within the 15-day regulatory deadline for any of the 20 work orders.

LHC is aware of these findings and is working to make improvements in the future.

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 75 non-exception work orders exhibited a positive result for 100% 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 NOHR, 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.I.10. through VII.I.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 363 EHS observations of worksite preparation activities, 100% 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 100% for worksite preparation activities and 100% for work activities;
- File review showing a trend of compliance to 92% 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 only observed one 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.

[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.G.1.j.7. and VII.I.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 examination, 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 110 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 to 92% 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 did not observe any 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.

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

Regulatory Requirements for 15(j):

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

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

Policies and Procedures: The Lead SP sets forth the protocol for cleaning, cleaning verification, and clearance examinations. See Lead SP, §§ VII.G.1.k., VII.H.1. through VII.H.10, VII.I.6., and VII.I.12. During the Covered Period, 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 362 dust wipe sample collection jobs observed, 175 were for RRP clearance and 188 were for lead abatement clearance¹³. EHS significantly increased the number of RRP clearance examinations observed during this reporting period in comparison to the previous 6-month reporting period by 143 inspections. This increase was a direct result of the targeted effort by EHS to ensure NYCHA's compliance with the New York City Department of Health and Mental Hygiene's ("DOHMH") modification of application of certain health code provisions.

EHS reviewed 362 clearance examinations, covering both abatement and RRP projects. EHS noted that all clearance examiners had proper credentials for their job type; that all jobs adhered to the 1-hour wait time between clearance and cleaning activities; and that all clearance examiners conducted the visual inspection phase of the clearance examination; and that the clearance examiners adhered to dust wipe sample collection protocols 100% of the time. See Attachment A.

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

Compliance, NYCHA IT, and Lead 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

¹³ 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.

time. Compliance examines the following indicators to better understand the current compliance rate for clearance examinations:

- **Timing of Initial Clearance Examination:** Compliance evaluates whether NYCHA is performing or attempting to perform the clearance examination within 24 hours, 48 hours, or after 48 hours of final labor transaction on the Corrective Maintenance work order. Compliance also assesses whether the clearance was performed before the end of each weekly reporting cycle.
- **Pass/Fail/Pending Status of Dust Wipe Batches:** Compliance examines the trends exhibited each month for the number of dust wipe batches that (i) have passed (ii) have passed after the initial dust wipe failed; (iii) remain in fail status; (iv) have failed based on a visual clearance; and (v) have results pending at the laboratory. Compliance also evaluates the levels of failed dust wipe samples to distinguish between minor exceedance to more significant exceedances.
- **Re-Cleaning and Re-Clearance:** Compliance examines the timing of recleaning following a failed clearance examination. The CCO is copied on correspondence from LHC to the individual developments when the development does not respond to LHC’s request for a recleaning following a clearance failure.
- **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

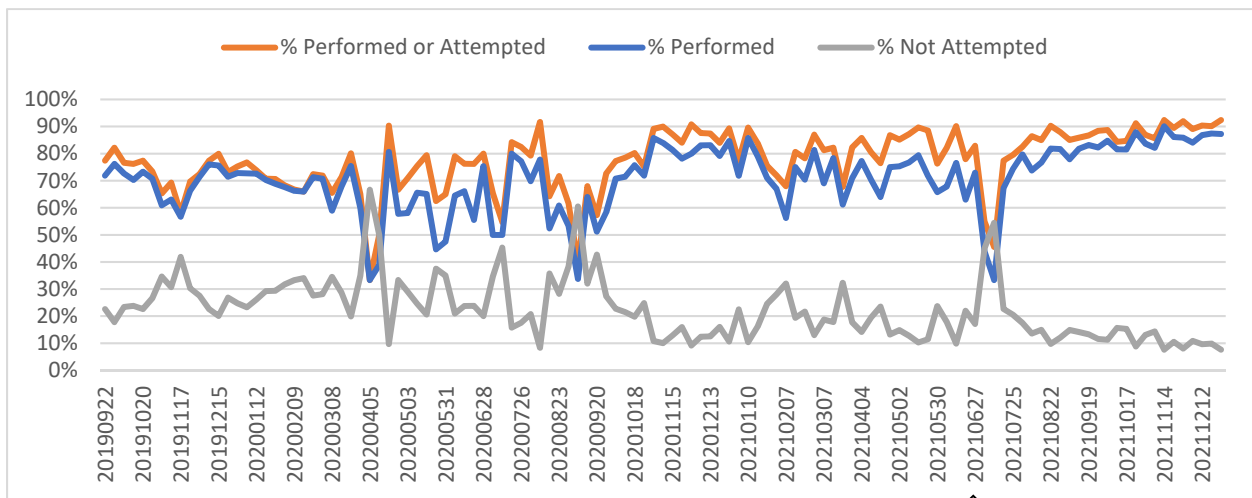
Month	Total # of CM Work Orders	Total # of DW Performed in Reporting Week	Dust Wipes Performed in 24 Hours	Dust Wipes Performed in 48 Hours	Dust Wipe Batch Currently in Passed Status	DW 2 Attempts in 48 Hours for Dust Wipe Not Performed
July	744	500	393	45	568	4
August	942	739	604	61	765	10
September	604	500	381	53	466	3
October	738	614	506	50	598	2
November	807	697	588	34	639	4
December	914	787	651	67	704	8
Total	4749	3837	3123	310	3740	31

Analysis: During the reporting period, NYCHA completed the 3837 of 4749 (80.8%) of clearance examinations within the weekly reporting cycle used to examine clearance examinations. NYCHA

completed 3123 of 3837 (81.4%) of these clearance examinations within 24 hours of the last labor transaction on the Corrective Maintenance work order. NYCHA completed 3433 of 3837 (89.4%) of these clearance examinations within 48 hours of the last labor transaction on the Corrective Maintenance work order.

NYCHA maintained its prior improvements in clearance performance time from the previous reporting period. NYCHA exceeded an 80% weekly completion rate in September thru December. NYCHA attributes its increased performance to the strong coordination between Lead Hazard Control and the Department of Management and Planning, which oversees the interim control work.

Trends from 7/05/2021 to 12/31/2021 (showing performed or attempted by end of the weekly reporting cycle)



↑
July 2021

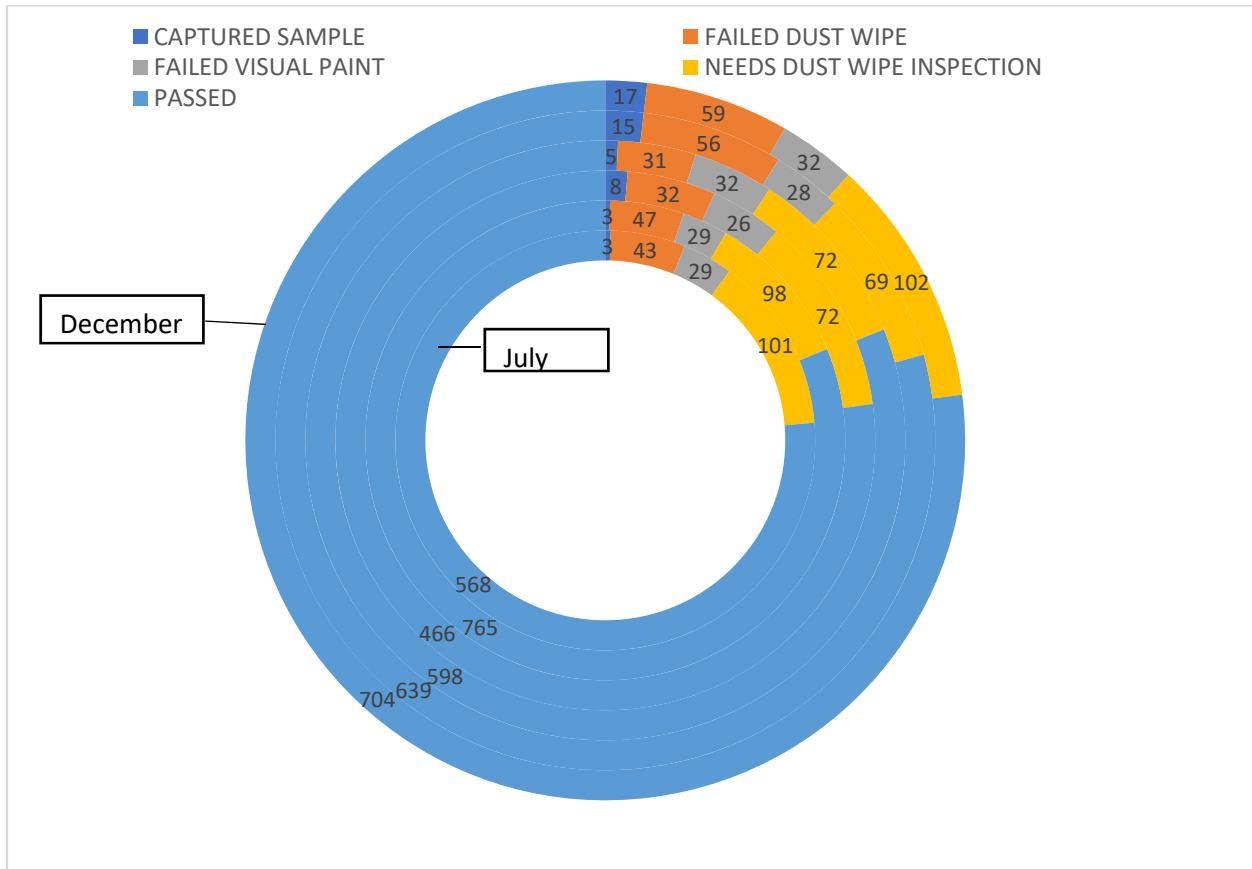
Analysis: In the beginning of the reporting period, LHC’s performance dipped significantly both in terms of samples collected and attempted in the 2 weeks coinciding with the July 4th holiday weeks. However, in the following weeks LHC’s percentage of dust wipes performed or attempted rebounded sharply to maintain a consistently higher performance.

LHC attributes the volatility to (a) supervisory staff on the dust wipe team being out of the office and (b) an influx of TEMPO-related clearances that were misidentified as abatement work orders. It is noteworthy that the TEMPO Group was just starting up and the process for managing and inputting the data associated with their work was still being put in place. This contributed heavily to the dip in the Lead Clearance numbers seen at that time.

Passed/Failed/Pending/Unperformed Statuses at the End of the Sixth Month Reporting Cycle: Compliance conducted a review of the current status of all clearance examinations from July through December 2021 (as of 1/4/2022). This analysis shows whether the clearance examination passed, remains in a failed status (and requires re-clearance), is still pending with the laboratory, or remains unperformed at this time. Note, the below visualization does not include the “fail history,” i.e., clearance examinations

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

Each ring represents a calendar month, with January 2021 as the inner most ring and June 2021 as the outer most ring. The term “capture sample” means that the sample has been collected and is likely pending with the laboratory.



	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
CAPTURED SAMPLE	3	3	8	5	15	17	51
FAILED DUST WIPE	43	47	32	31	56	59	268
FAILED VISUAL PAINT	29	29	26	32	28	32	176
NEEDS DUST WIPE INSPECTION	101	98	72	72	69	102	514
PASSED	568	765	466	598	639	704	3740
TOTAL	744	942	604	738	807	914	4749

Analysis (as of January 4, 2022):

- 78.7% of the clearance examinations performed over the reporting period are in “pass” status (vs. 67.1% in prior period). This improvement is notable, given that NYCHA uses New York City’s clearance standards, which are more stringent than the federal standards;

- 10.8% have not had clearances examinations yet (vs. 13.2% in prior period);
- 1.1% have been collected and are pending lab analysis (vs. 7.6% in prior period);
- 5.6% remain in fail status (vs. 8.7% in prior period); and
- 3.7% failed the visual phase of the clearance examination (vs. 3.5% in prior period).

While NYCHA mostly improved its performance over the course of the sixth month reporting period, there are still some compliance shortfalls that NYCHA needs to address, as 21.2% 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 5%. 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 examination decreased 3% since the prior reporting period, but it still remains over 10% for the current period, which is still too high. It should be noted that this table does not account for attempts, which is critical to evaluate NYCHA’s efforts. It should also be noted that there have been continuing internal discussions on whether the clearance dashboards may overreport the number of unperformed samples. If the issue relates to access to perform the sample, Compliance recommends that LHC develop a customized communication to resident’s that do not allow access for dust wipe examinations so the residents can understand the importance of the examination. Additionally, NYCHA should explore developing right of entry policies for lead clearance once the pandemic subsides.

Lead Dust Levels of Individual Failed Samples by Surface Area

The below analysis does not yet account for changes in New York City’s lead dust standards but is nevertheless instructive to evaluate NYCHA’s performance under Paragraph 15(j). NYCHA will be making updates to this reporting in the next month to account for changes in New York City’s lead dust standards and will continue to report on these findings.

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

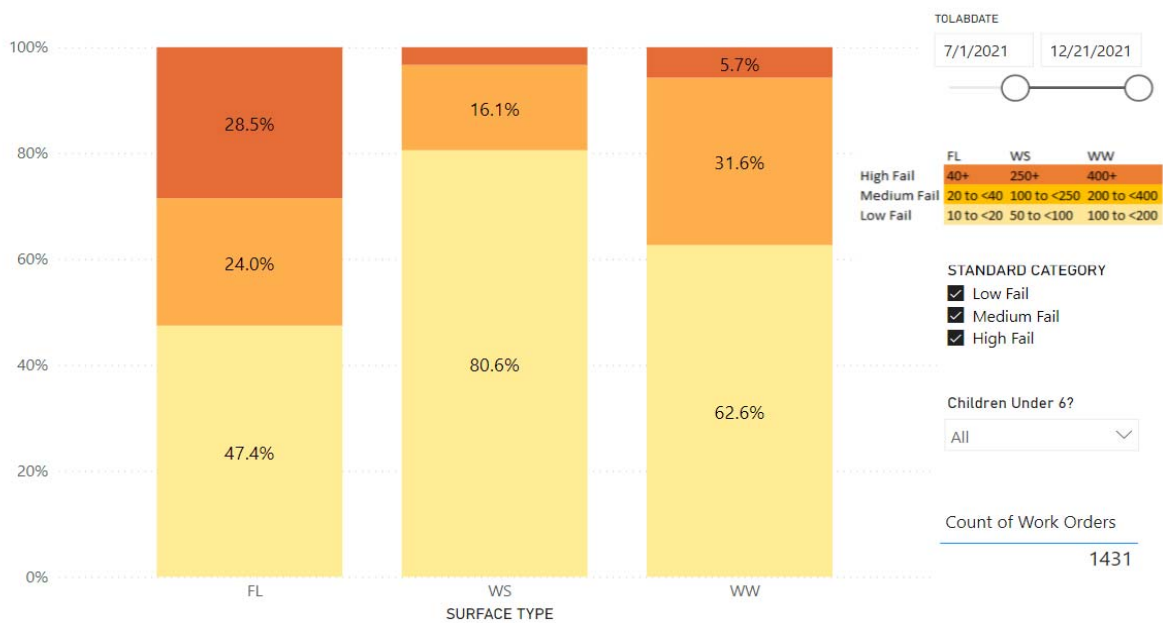
Surface	Federal	NYC (which NYCHA uses)
Floor	10 µg/ft ²	5 µg/ft ²
Window Sill	100 µg/ft ²	40 µg/ft ²
Window Well	400 µg/ft ²	100 µg/ft ²

The chart and dashboard below shows the lead levels of individual failed samples within pre-defined ranges, broken down by a range of low, medium, or high fail categories from July 1, 2021 through

December 21, 2021. It should be noted that NYCHA created the ranges for these categories as an evaluative tool and the ranges do not yet match New York City’s revised lead dust standards. This analysis will be updated in the coming months to better match New York City’s revised lead dust standards. In addition, regardless of the category, any failed sample requires re-cleaning and re-clearance.

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

Result	Floor	Window Sill	Window Well
Pass	<10	<50	<100
Low Fail	10 to <20	50 to <100	100 to <200
Medium Fail	20 to <40	100 to <250	200 to <400
High Fail	40+	250+	400+



Analysis: The above-chart shows that many failed samples for all three surface areas is in the lower fail range. The Low Fail samples for window sills (accounting for 80.6% of the failed samples) would be below the current EPA standard of $100 \mu\text{g}/\text{ft}^2$. Similarly, for window wells the Low Fail and Medium Fail samples (totaling 94.2% of the failed samples) would be below the current federal standard of $400 \mu\text{g}/\text{ft}^2$.

Thus, the stricter NYC standards are driving the majority of the fails for window sills 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.