<u>NYCHA Compliance Department</u>: Assessment of Compliance with Requirements Of Paragraphs 14 and 15 of Exhibit A to the January 31, 2019 Agreement Between NYCHA, HUD, 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"), and the City of New York ("City") entered into a settlement agreement ("HUD Agreement") which sets forth specific requirements for NYCHA to meet to remedy physical conditions in its developments, including with respect to 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 six 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").

To evaluate NYCHA's ability to certify to the requirements of Paragraphs 14 and 15 on January 31, 2020, the Compliance Department conducted a review of NYCHA records and activities for the period between August 1, 2019 through January 15, 2020 ("Covered Period").¹ Additionally, the NYCHA Environmental Health and Safety Department (EHS) issued a report (annexed as Attachment A) documenting field oversight activities during three months of the Covered Period (October to December 2019) that should be read in tandem with this Report.

The Compliance Department used the following criteria to evaluate NYCHA's compliance

• **Existence of Written Policies, Procedures or Contract Specifications**: This criterion evaluates whether NYCHA has established specific written policies, procedures, contract specifications, and/or 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.

¹ The 30(b) certification covers the period from August 1, 2019 to January 31, 2020.

• **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 criterion includes an overall assessment of NYCHA's compliance during the Covered Period with each specific requirement based upon the above-described criteria and any additional information provided by NYCHA staff. This criterion shall also disclose any identified deficiencies with each specific regulatory requirement and, where available, provide action items that NYCHA must conduct in the next six months to address compliance shortfalls.

Each subparagraph under Paragraphs 14 and 15 shall be assessed individually against these criteria.

Update on Compliance-Related Activities Since Last 30(b) Certification (July 31, 2019)

On July 31, 2019, NYCHA was unable to certify to compliance with Paragraphs 14 and 15 for the following main reasons.

- NYCHA lacked policies and procedures on lead abatement;
- NYCHA project files lacked certain required documents such as the lead abatement report;
- NYCHA did not have an adequate field oversight program;
- NYCHA did not have adequate records to document vendor compliance;
- NYCHA did not have adequate protocols to meet clearance examination requirements;
- NYCHA did not have adequate recordkeeping practices; and
- NYCHA did not have records of certain required notifications.

Since July 31, 2019, NYCHA has continued to take certain actions to correct or attempt to mitigate these deficiencies to improve its ability to meet the requirements set forth in Paragraphs 14 and 15. Major actions include the following:

- Lead Training: NYCHA has now provided lead work practices classroom training to 93% of required titles (3,105 staff) and provided hands on training to 92% of the titles (2,878). NYCHA has also trained almost 900 workers on the HUD visual assessment process.
- Adoption of Policies and Procedures: On January 21, 2020, NYCHA adopted SP 050:20:1, its first comprehensive Lead Safe Housing Standard Procedure ("Lead SP"). A copy of the Lead SP is annexed as Attachment B. The Lead SP includes, among other things, a new procedure on lead abatement activities, and incorporated and updated the existing NYCHA standard procedure manual on compliance with the Renovation, Repair, and Painting Rule. The Lead SP was developed by the NYCHA Compliance Department in close coordination with the Lead Hazard Control Department ("LHC"), EHS, Management and Planning ("M&P"), and NYCHA Legal. The Lead SP also was shared with, and incorporated comments from, the Federal Monitor and the United States Department of Housing and Urban Development. As there are still ongoing updates to NYCHA lead protocols, the Lead SP will be further updated and refined by June 30, 2020. The Lead SP is currently posted on the NYCHA Forms and Reference Library (FRL).
- **Commencement of Field Oversight by EHS**: In October 2019, EHS commenced field oversight activities for interim control and RRP projects in units. EHS conducts field oversight through its Lead

Oversight Team ("LOT"). EHS documents its inspections in the Maximo system using handheld devices. EHS performed field oversight inspections at 302 individual jobsites. EHS also developed Maximo inspection work orders for field oversight of abatement and clearance activities. Documented field oversight of abatement began on December 27, 2019.

- Improved Preparation and Recordkeeping of Required Documents: During the Covered Period, the Compliance Department performed monthly documentary compliance reviews of closed abatement work orders and RRP work orders. NYCHA Compliance also monitored the status of documentation for abatement projects still in progress. NYCHA Compliance and LHC also developed new document templates for the Occupant Protection Plan and the Abatement Report.
- **New IT Controls**: NYCHA completed two major IT projects related to Paragraph 14 and 15 requirements:
 - The first project created digital versions of the required pre-renovation acknowledgment form and the RRP Renovator's Checklist. Both digital forms must be completed by the renovator or they will not be able to close the RRP work order.
 - The second project placed new controls and recordkeeping capabilities on abatement work orders. Most importantly, the project mandates that certified lead abatement supervisors now document their labor transactions on abatement work orders. The enhancement also enables digital storage of the EPA CDX notification, the Occupant Protection Plan, and the Abatement Report.
- Ongoing Efforts to Address Compliance with Clearance Examination Requirements: While NYCHA has yet to resolve its compliance with clearance examination requirements, NYCHA did undertake several major efforts during the Covered Period to improve its clearance examination protocols.
 - First, NYCHA constructed a reporting dashboard that enables staff to monitor whether required clearance examinations were conducted for all projects each day. If a clearance examination is not performed, staff can use the dashboard to investigate those projects and dispatch dust wipe technicians if necessary. NYCHA also shares weekly reports with the Federal Monitor on its efforts to collect samples within 24 – 48 hours after final cleaning.
 - Second, NYCHA established a dust wipe dispatcher call center in LHC. Certified renovators must call this dispatcher before cleaning activities to ensure that a technician is routed to their location to conduct the clearance examination.
 - Third, NYCHA mandated that all renovators must perform the EPA cleaning verification after final cleaning activities to ensure that they are leaving a clean work area in accordance with EPA standards. In August, NYCHA Compliance, LHC, and Operations held a series of live webinars with certified renovators to make them aware of this requirement and redistributed cleaning verification cards to the renovators. EHS has been monitoring projects for compliance with the requirement and there has been an overall compliance rate of 92%. See Attachment A.

 Fourth, NYCHA conducted a pilot study of installing temporary red rosin paper floor protection following performance of cleaning, cleaning verification, and dust wipes to protect residents of the apartments while awaiting the results on the dust wipes for the laboratory. This method proved successful in most units where it was installed. However, federal stakeholders have not advised that this method alone would be sufficient to meet compliance with HUD worksite exclusion requirements.

It should also be noted that the activities in this Report relate solely to abatement and RRP work performed in units. During the Covered Period, NYCHA began to create a process for performing work to correct deficiencies in building common areas. These protocols are currently undergoing a pilot at Pink Houses and Gowanus Houses. A plan for conducting common area RRP, interim control, and abatement work is set forth in the Draft Action Plan, which was submitted to the Monitor and federal stakeholders in January 2020.

These and other projects are laying the foundation for NYCHA to certify its compliance with Paragraphs 14 and 15. The NYCHA Compliance Department, in partnership with EHS, will continue to monitor its compliance with these requirements each month to assess whether there is verifiable evidence that the controls around these requirements have taken root, and that NYCHA can certify its compliance to these obligations under Paragraph 30(b).

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

A. 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: During the Covered Period, on January 21, 2020, NYCHA issued the Lead SP. The Lead Standard Procedure includes the requirements set forth in 40 CFR § 745.227(e)(2). Lead SP, §§ VII.F.1.h & VII.F.2.h.

Training/Instructions to Staff: In advance of finalizing the Lead SP, the Director of LHC held meetings with NYCHA abatement supervisors on August 23, 2019 and September 26, 2019 to reinforce the importance of following the lead abatement rules and regulations. Sign in sheets and materials distributed at the

meeting are annexed as Attachment C.² The agenda for the September 26 meeting included the following items related to Paragraph 14(a): "Supervisor's presence during all work site preparation;" "Supervisor's Presence During Cleanup;" and "Availability of Supervisor within two hours (telephone number must be available at worksite)."

Contract Specifications: During the Covered Period, NYCHA utilized a vendor to perform abatements. The specifications for the contract (Contract Specification "Exhibit O" is annexed hereto as Attachment D) makes express reference to the requirements set forth in 40 CFR Part 745 and contains the following requirements:

- "All employees of the Consultant and of its subcontractors conducting Lead-Based Paint Abatement activities must be EPA certified Lead Abatement Workers under the direction of a EPA certified Lead Abatement Supervisor." *See* Attachment C, § 1.1.6.
- "Adequate Personnel: a minimum of two (2) workers and one (1) supervisor at each abatement site. A given supervisor may be able to properly supervise more than one abatement site depending on the jobs' relative proximity and size." *Id*, §1.2.1.
- Establishment of a Contract Monitor, with the authority to "stop the Services should the Monitor witness improper work procedures or the lack of *Adequate Personnel* present on an abatement job. Services may restart only upon authorization of the Monitor. If the Services are terminated, the Consultant at its own cost and expense must safeguard the abatement area in a manner that will prevent the possible spread of contamination. *Id.*, §1.4.5 (emphasis added).

IT Controls for 14(a):

In December 2019, NYCHA placed controls within Maximo to reinforce the requirement for the lead abatement supervisor be onsite during the set up and clean-up phases. 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.

Field Monitoring/QA for 14(a):

In October 2019, the NYCHA Compliance and EHS Departments created an Interim Lead Compliance Assurance Program. A component of the LCAP is for EHS to perform field oversight of abatement projects. During the Covered Period, EHS finalized an inspection work order in Maximo to document this field oversight activity. The inspection work order for abatement contains the requirement set forth in 40 CFR

² The materials for the August 23 meeting that consist of chapters of the HUD 2012 Guidelines are not being submitted as the attachment. Copies of Chapter 8 and 12 were distributed.

§ 745.227(e). A copy of the abatement inspection work order is annexed as Attachment "F." EHS conducted only a limited number of field inspections for abatement projects during this reporting period (starting on December 27, 2019) and this data is not included in this report.

File Review for 14(a):

The Compliance Department requested and received lead abatement supervisor certifications from all NYCHA-employed certified supervisors who are recorded as having supervised abatement projects during the Covered Period. A copy of these certifications is available upon request. When a vendor performs the abatement, the vendor provides the certified supervisor as required by NYCHA's contract provisions.

The Compliance Department's Monitoring Unit (MU) reviewed 25 randomly selected lead abatement work orders from June 26th - December 15th, 2019 and confirmed that certified supervisors were identified on 24 of 25 work orders, as indicated in the Labor Information field in Maximo. A detailed table documenting this file review is annexed as Attachment G. For the one work order that did not have a certified supervisor listed in Maximo, LHC reported that there was an error in using the handheld device which caused the supervisor's name to be omitted in Maximo. LHC has since confirmed that this supervisor has been trained in properly using the handheld device.

Overall Description of Compliance for 14(a):

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

- Documented training materials from the Director of Lead Hazard Control to NYCHA Abatement Supervisors on this specific requirement;
- Documented establishment of Interim LCAP including abatement oversight, with Maximo inspection work order that includes this requirement;
- Documented establishment of Maximo IT Control to require Certified Abatement Supervisors to document their site presence on the Abatement work order;
- Contract specifications including this requirement;
- File review indicating the labor hours of Lead Abatement Supervisors on 24 out of 25 work orders (96%).
- Final Lead Standard Procedure Manual including the requirements set forth in Paragraph 14(a).

While NYCHA developed protocols and checklists for EHS to perform field oversight activities, field oversight data is not included in this report. Field oversight activities for abatement commenced on December 27, 2019 and are expected to produce monitoring data in Q1 2020. Until this data is available to review, the Chief Compliance Officer ("CCO") does not recommend certifying to full compliance with the requirements set forth in 14(a). Prior to the next certification, the CCO expects to review a significant quantity of field monitoring data from EHS to confirm that the NYCHA staff and vendor staff are adhering to these written protocols in the field. It is anticipated that this data will be available for review prior to the certification due on July 31, 2020.

B. 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):

- An LHC Assistant Director must notify EPA at least five days prior to the abatement using EPA's CDX online portal. See Lead SP, § VII.F.1(b)(3)(c) and at § VII.F.2(b)(2)(c). If a vendor is performing the abatement, the vendor is responsible for the CDX notification and must send the notice to an LHC project manager. *Id.*
- The notice must be annexed to the abatement work order. *Id.*, § VII.F.b.3(d).
- If there is a change to the scope of the abatement or the anticipated start date, the LHC assistant director or vendor ensures that the proper updated notifications are filed with the EPA. *Id.*, § VII.F.1.d and VII.F.1.g. All updated notifications must be annexed to the work order. *Id.*

Training/Instructions to Staff: In advance of finalizing the Lead SP, the Director of LHC held meetings with NYCHA abatement supervisors on August 23, 2019 and September 26, 2019 to reinforce the importance of following the lead abatement rules and regulations. Sign-in sheets and materials distributed at the meeting are annexed as Attachment C. The agenda for the September 26 meeting included the following items related to Paragraph 14(b): "EPA 5-day notification," and "Notify EPA & DOHMH (if applicable) if any changes to notifications."

Contract Specifications: Exhibit O in the Contract (Attachment D hereto) for abatement services sets forth the following requirements related to Paragraph 14(b):

- "Consultant shall use the EPA CDX system to file notifications. Copies of the notifications are to be emailed to NYCHA." *See* Attachment C, at § 1.4.2.
- Requiring the invoice for each payment request to have annexed "Copy of EPA notification, if applicable." *Id.*, at § 1.5.2.

- Provides NYCHA with authority to monitor contractor, including for ensuring "that Consultant has notified, as required, the EPA, DOH and other applicable Federal, State and Municipal agencies of its intent to perform Lead-Based Paint Abatement work." *Id.*, at 2.4.2.
- "Immediately upon verification of a Task Order scope, Consultant shall complete in full and submit the Notification of Commencement of Lead Abatement form and any applicable variances endorsed by the Project Coordinator for each Task Order, to the EPA and DOHMH when applicable, to notify of the intent to perform lead abatement work. Copies are to be submitted to NYCHA prior to commencement of Services. Services shall commence and be completed within one week as per NYCHA's established start and completion dates on the Task Order or as directed by the Project Coordinator." See Attachment C, § 2.6.3.

IT Controls for 14(b):

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.

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 F. 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 EPA Notice of Commencement (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?

EHS conducted only a limited number of field inspections for abatement projects during this reporting period (starting on December 27, 2019) and this data is not included in this report.

File Review for 14(b):

The MU conducted a file review to determine if the notice required by 40 CFR § 745.227(e)(4)(vii) was present in the relevant project files. The MU reviewed a total of 143 project files completed during the reporting period. Of these 143 files, 100% of project files contained the required EPA original notification. See Attachment G. 124 (87%) notified the EPA at least five or more business days of the scheduled abatement, except in cases of emergency.

Of the abatements that were not in compliance with the five-day timeframe, one was conducted by a vendor and eighteen were conducted by NYCHA. In the December Lead Exceptions report, it was recommended that LHC re-train staff to follow appropriate EPA guidelines. LHC has confirmed they have clarified this requirement to scheduling staff, and during the last monthly review period (November 15 – December 15) followed the EPA timeframe requirement in 100% of cases.

Overall Description of Compliance for 14(b):

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

- Documented Training Materials from Director of LHC to NYCHA abatement supervisors on this specific requirement;
- Establishment of Interim LCAP including abatement oversight, with Maximo inspection work order that includes this requirement;
- Documented establishment of Maximo IT Control to require the EPA notification to be uploaded to the work order;
- Contract specifications including this requirement;
- File review indicating the presence of the notice in 143 out of 143 files (100%), with 124 out of the 143 (87%) notices filed within the proper time period.
- Final Lead SP including the requirements set forth in Paragraph 14(b).

While NYCHA developed protocols and checklists for EHS to perform field oversight activities, field oversight data is not included in this report. Field oversight activities for abatement commenced on December 27, 2019 and are expected to produce monitoring data in Q1 2020. Until this data is available to review, the CCO does not recommend certifying to full compliance with the requirements set forth in 14(b). Prior to the next certification, the CCO expects to review a significant quantity of field monitoring data from EHS to confirm that the NYCHA staff and vendor staff are adhering to these written protocols in the field. It is anticipated that this data will be available for review prior to the certification due on July 31, 2020.

C. 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 January 21, 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. See SP, § VII.F.1.c. & VII.F.2.d. The Lead Standard Procedure includes requirements on what must be included in the OPP. *Id.* The Lead Standard Procedural includes a template Occupant Protection Plan. *See* Lead SP, Appendix G.

• Requires that the Occupant Protection Plan be annexed to the abatement work order. *See* SP, § VII.F.1.c and VII.F.2.d. The plan must be provided to the resident if the unit is occupied. *Id.* It must be posted in common areas. *Id.*

Training/Instructions to Staff: On August 23, 2019, the Director of Lead Hazard Control held a meeting with lead abatement supervisors reminding them of the Occupant Protection Plan requirements and providing the then-current NYCHA template to the supervisors. See Attachment C.

Contract Specifications: The contract specifications require the contractor to adhere to 40 CFR Part 745. *See* Attachment D, at § 2.2.5.

IT Controls for 14(c):

In December 2019, IT enhanced Maximo to require that the Occupant Protection Plan be attached to Maximo abatement work orders. *See* Attachment D. 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.

See Attachment F. EHS conducted only a limited number of field inspections for abatement projects during this reporting period (starting on December 27, 2019) and this data is not included in this report.

File Review for 14(c):

The Compliance Department conducted a file review to determine if the written occupant protection plan required by 40 CFR § 745.227(e)(5) was present in the relevant project files. See Attachment G. The Compliance Department reviewed a total of 143 completed project files. 141 files (99%) contained complete Occupant Protection Plans. Two files this period contained no Occupant Protection Plans.

Overall Compliance Assessment for 14(c):

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

- Documented training material from Director of LHC to NYCHA Abatement Supervisors on this specific requirement;
- Establishment of Interim LCAP including abatement oversight, with Maximo inspection work order that includes this requirement;

- Documented establishment of Maximo IT Control to require the Occupant Protection Plan to be uploaded to the work order;
- File review indicating the presence of the notice in 141 out of 143 files (99%).
- Final Lead SP including the requirements set forth in Paragraph 14(c).

While NYCHA developed protocols and checklists for EHS to perform field oversight activities, field oversight data is not included in this report. Field oversight activities for abatement commenced on December 27, 2019 and are expected to produce monitoring data in Q1 2020. Until this data is available to review, the CCO does not recommend certifying to full compliance with the requirements set forth in 14(c). Prior to the next certification, the CCO expects to review a significant quantity of field monitoring data from EHS to confirm that the NYCHA staff and vendor staff are adhering to these written protocols in the field. It is anticipated that this data will be available for review prior to the certification due on July 31, 2020.

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

<u>Regulatory Requirements for 14(d)</u>:

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 Standard Procedure (effective January 21, 2020) contains the following procedures related to Paragraph 14(d):

- The manual requires that clearance examinations following abatement must be performed by a certified risk assessor or lead inspector. SP, §§ VII.G.1. and VII.G.5. 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.*
- 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.G.5.
- The manual requires that paint chip sampling (which is performed during lead paint inspections in advance of an abatement) be performed by a certified risk assessor or lead inspector. SP, § VII.B.2.c.4.e. These samples must be submitted to an EPA NLLAP-recognized and New York State ELAP certified testing laboratory. *Id.*

IT Controls for 14(d):

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 D.

QA/Field Monitoring Protocols for 14(d):

There are no specific field monitoring protocols in place for this aspect of abatement at the present time but there is a general inspection work order created to oversee clearance activities. See Attachment G.

File Review for 14(d):

The Compliance Department reviewed 143 completed abatement files. Of these, 143 (100%) had completed clearance examination reports. Additionally, the contract specifications contain sufficient specifications on the requirements.

Overall Compliance Assessment for 14(d):

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

- Documented establishment of Maximo IT Control to require the Abatement Report to be uploaded to the work order;
- File review indicating the presence of the final clearance report in 143 out of 143 files (100%).
- Final Lead Standard Procedure Manual including the requirements set forth in Paragraph 14(d).

While NYCHA developed protocols and checklists for EHS to perform field oversight activities, field oversight data is not included in this report. Field oversight activities commenced on December 27, 2019 and are expected to produce monitoring data in Q1 2020. Until this data is available to review, the CCO does not recommend certifying to full compliance with the requirements set forth in 14(d). Prior to the next certification, the CCO expects to review a significant quantity of field monitoring data from EHS to confirm that the NYCHA staff and vendor staff are adhering to these written protocols in the field. It is anticipated that this data will be available for review prior to the certification due on July 31, 2020.

E. 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 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 single surface dust sample equals or exceeds the applicable clearance level divided by half the number of subsamples in the composite sample, the components represented by the failed sample shall be recleaned and retested.

(vii) The clearance levels for lead in dust are 40 μ g/ft2 for floors, 250 μ g/ft2 for interior windowsills, and 400 μ g/ft2 for window troughs."³

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

IT Controls for 14(e):

In December 2019, NYCHA IT implemented enhancements to the abatement work order. The creation of the abatement work order will now auto-generate a dust wipe work order. See Attachment E. Additionally, Maximo now requires staff to upload the abatement report to the abatement work order before the work order can be closed.

Field Monitoring/QA for 14(e):

During the Covered Period, NYCHA did not perform field monitoring to ensure that contracted risk assessor or inspectors are appropriately performing the clearance examination for abatement projects. Per LHC staff, in-house staff review sampling results received from laboratories to confirm if the dust wipe sample passed or failed. NYCHA conducts QA for dust wipes performed by vendors. QA staff at LHC conducted 145 QA inspections of dust wipe clearances and found that 25 failed and required re-cleaning to pass final clearance.

File Review for 14(e):

The Compliance Department reviewed 143 completed abatement files. See Attachment G. Of these, 143 (100%) had clearance examination reports.

³ Lead dust clearance standards in New York City during the Covered Period were as follows: $10 \mu g/ft2$ for floors; $50 \mu g/ft2$ for window sills; and $100 \mu g/ft2$ for window wells (troughs).

Overall Compliance Assessment for 14(e):

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

- Documented establishment of Maximo IT Control to autogenerate dust wipe work orders and require the Abatement Report to be uploaded to the work order;
- File review indicating the presence of the clearance report in 143 out of 143 files (100%).
- Final Lead Standard Procedure Manual including the requirements set forth in Paragraph 14(e).

While NYCHA developed protocols and checklists for EHS to perform field oversight activities, field oversight data is not included in this report. Field oversight activities for abatement commenced on December 27, 2019 and are expected to produce monitoring data in Q1 2020. Until this data is available to review, the CCO does not recommend certifying to full compliance with the requirements set forth in 14(e). Prior to the next certification, the CCO expects to review a significant quantity of field monitoring data from EHS to confirm that the NYCHA staff and vendor staff are adhering to these written protocols in the field. It is anticipated that this data will be available for review prior to the certification due on July 31, 2020.

F. 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).

<u>Regulatory Requirements for 14(f)</u>:

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. SP, § VII.G.10. The report must contain all of the items set forth in 24 CFR § 745.227(e)(10). *Id*.

• LHC adopted a template for certified supervisors to use in preparing the report. A copy of this template is annexed as Attachment H.

Training/Instructions to Staff: On August 23, the Director of LHC held an instructional meeting with lead abatement supervisors to notify them of the requirement to prepare the abatement report. The Director also distributed materials to the supervisors explaining the requirements for the abatement report.

IT Controls for 14(f):

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.

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):

Of the 143 abatement work orders reviewed for the Covered Period, 136 files (95%) contained the complete abatement report. Four were missing due to clearance occurring prior to LHC's implementation of the abatement report procedures. The abatement report form is undergoing revisions to ensure compliance by the abatement vendor.

Overall Compliance Assessment for 14(f):

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

- Documented Training Materials from Director of Lead Hazard Control to NYCHA Abatement Supervisors on this specific requirement;
- Documented establishment of Maximo IT Control to require the Abatement Report to be uploaded to the work order;
- File review indicating the presence of the notice in 135 out of 143 files (95%) contained the abatement report.
- Final Lead Standard Procedure Manual including the requirements set forth in Paragraph 14(f);
- An agency template for the abatement report, which is being revised to reflect improved LHC procedures for creating the abatement report.

At present, NYCHA appears substantially in compliance with the abatement report requirement set forth in paragraph 14(f).

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

Regulatory Requirements for 14(g):

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

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

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

Policies and Procedures: The Lead SP (effective January 21, 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. Lead SP, § VIII.C.
- The Manual also requires issuance of the hazard reduction letter following abatement activities. See Lead SP, § VII.G.8.

IT Controls for 14(g):

NYCHA does not have IT controls that support this requirement, although as of December 2019, occupant protection plans, the EPA notification and abatement reports can be attached to the Maximo work orders.

Field Monitoring/QA for 14(g):

Per LHC, before NYCHA deems a file complete, it requires that Lead Hazard Control staff review the file's contents and ensure that it contains the documentation for a completed file before it is sent to the central storage facility in Long Island City.

File Review for 14(g):

For purposes of this assessment, the Compliance Department requested 143 completed files. Lead Hazard Control was able to provide files for all work orders requested although, as indicated above, certain project files were missing key documents or non-compliant in required timeframes.

The Compliance Department did not perform sufficient file review to evaluate hazard reduction notices in this Covered Period.

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:

- Documented establishment of Maximo IT Control to require the Occupant Protection Plan, EPA Notice, and Abatement Report to be uploaded to the work order;
- LHC was able to produce all files to the Compliance Department (although a small number of files were missing required documentation).
- Final Lead Standard Procedure Manual including the requirements set forth in Paragraph 14(g).

With respect to hazard reduction letters, the Compliance Department reviewed a small sample of files for purposes of this certification. Given that the hazard reduction letter process has presented a compliance challenge for NYCHA in the context of interim controls and RRP work, the Compliance Department must do a more detailed review of this requirement in the next sixth month period. Until this review occurs, the CCO recommends to not yet certifying to paragraph 14(g).

II. Paragraph 15

A. 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.

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

Policies and Procedures: The Lead SP⁴ 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, all painted surfaces must be presumed to be lead-based paint." See Lead SP, § VII.H.2.a.

⁴ Prior to the effective date of the Lead SP (January 21, 2020), NYCHA Standard Procedure Manual SP: 040:18 Lead Safe for Renovation, Repair, and Painting (December 2018) contained the policies and procedures related to RRP. The new Lead SP incorporated SP:040:18 and added new sections on the EPA cleaning verification process and the dust wipe call dispatcher function. The references in this report will be to the new Lead SP.

IT Controls for 15(a):

Based on prior lead inspection data, Maximo places a "flag" on units that could require RRP work. A document setting forth this IT enhancement is annexed as Attachment I.

Field Monitoring/QA for 15(a):

Please refer to the report entitled EHS, "Renovation, Repair, and Painting Report," October – December 2019 for a description of RRP-related field monitoring activities during the Covered Period, annexed as Attachment A. (hereinafter referred to as the "EHS Report"). Additionally, it should be noted that EHS uses Maximo to select RRP projects for onsite monitoring. EHS conducted onsite monitoring at 300 projects during the Covered Period.

File Review for 15(a):

The Compliance Department did not conduct file review for 15(a) during the Covered Period. The file review conducted in advance of the July 31, 2019 certification confirmed that this IT control is functioning as intended.

Overall Description of Compliance for 15(a):

Based on the existence of written standard procedures, the existence of IT controls, and the existence of a field monitoring program for RRP, NYCHA has established a system that can ensure compliance with the requirements referenced in Paragraph 15(a).

B. 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, §§ VII.H.2.g.1. Developments using vendors must also provide the vendor with the "Lead Safe Practices Vendor notice." Lead SP, §§ VII.H.2.g.1 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.H.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.H.2.c.

IT Controls for 15(b):

NYCHA has IT controls that ensure that NYCHA assigns potential RRP work orders in Lead Paint Developments to RRP certified NYCHA staff. A document describing this IT control is annexed as Attachment I.

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

Field Monitoring/QA for 15(b):

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

- All 510 NYCHA workers observed performing RRP work were RRP certified. 25 of the 510 RRP certified employees observed were unable to produce a copy of the certificate for inspection. However, of those 25 staff without certification on hand, all completed RRP Classroom training before performing the RRP work. Additionally, all but 1 job had at least 1 worker with their certificate ready for inspection.
- Out of the 17 vendors observed performing RRP work, 16 had their certificates ready for inspection. 16 jobs had at least 1 worker with their certificate ready for inspection.

File Review for 15(b):

The Compliance Department randomly selected at least 100 work orders each month to verify if employees and staff were certified. The reviewed work orders included 938 work orders completed by 751 employees between July 25, 2019 and January 16, 2020. The Compliance Department compared data from closed RRP work orders on Maximo with training results from HR, or requested vendor certificates from the development. Of the 938 work orders completed by NYCHA employees, 937 (99%) were RRP certified.

The Compliance Department also randomly selected 9 RRP vendor work orders to evaluate whether the firm certification was on file with procurement and readily available for review. Compliance was able to identify 9 out of the 9 vendor certificates. This supporting information is available upon request.

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 from field monitoring activities that these requirements are being followed in the field by both staff and vendors;
- Strong evidence from file review activities that these requirements are being followed for staff and good evidence that these requirements are being followed for vendors.

The main area of concern that remains is that the controls for vendor-performed RRP work orders are significantly weaker than the very robust controls that exist for NYCHA-performed work orders. For vendor-performed work orders, NYCHA does not have IT controls that prevent non-certified vendors and vendor staff from performing RRP work. This process for verifying vendor and worker RRP certifications remains a manual process that is spread across three different departments (Procurement, Property Management, and Management & Planning). While field observations and file review indicate that vendors are generally complying with this requirement, the lack of sufficient IT controls on work order assignment creates risk that non-certified vendor or vendor staff could be assigned to an RRP work order.

Proposed Action 13 in the Draft Lead Action Plan addresses this issue as it will require vendors to provide a list of certified staff (and a copy of their certifications). NYCHA will then upload these staff rosters into a centralized location available to Property Management, Management & Planning, EHS, and Compliance. Vendors will be required to update these rosters monthly if there are changes to their staffing. While this is still not as robust as the controls for work orders performed by NYCHA staff, it will improve the ability to track worker certifications in a centralized location.

C. 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 J.

D. 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.

<u>Regulatory Requirements for 15(d)</u>:

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.H.8

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 the 155 storerooms inspected for required RRP supplies, 119 were in compliance (77%). Non-compliance indicates that one or more supplies was missing from the storeroom.
- Most of the inspections failed due to missing supply kits, which happened in nine (9) inspections. Other inspections found gloves, utility knifes, water mister/spray bottles, and duct tape missing.
- During the monitoring period (October to December), there was an upward trend in compliance. In December, EHS inspected 75 storerooms (the highest number during the monitoring period) and found 80% of the storerooms to be in compliance.

File Review for 15(d):

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

Overall Description of Compliance for 15(d):

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

- The existence of policies and procedures addressing the requirements set forth in 15(d);
- Field monitoring data showing an overall rate of 77% compliance, with an upward compliance trend during the monitoring period.

Despite this progress, there were storerooms identified by EHS that did not have all required supplies. It should be noted that, in 2020, the management of RRP storeroom supplies is being centralized which should lead to greater consistency in this compliance requirement.

Overall, the Compliance Department recommends not certifying to this requirement until field monitoring shows a period of consistent compliance.

E. 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). Covering doors in the work area that were being used to allow passage but prevent spread of dust
 - (E) 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).

(F) 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.H.7 through VII.H.12. The template Renovator's Checklists (for vendors and staff) are also annexed to the Lead SP.

In November 2019, NYCHA created digital versions of the post renovator checklists for use in the handheld and desktop versions of Maximo. 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. The BRD for this enhancement is available on request.

Additionally, during the Covered Period, NYCHA updated the Renovator's checklist to add checklist items related to the EPA cleaning verification requirement. The checklist was also revised to allow renovators to more accurately indicate whether or not they observed waste being transported offsite.

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:

- EHS surpassed the quarterly target of observing 120 RRP jobs by 152%, observing 302 RRP Jobs;
- Worksite Preparation and Work Activities phase achieved the highest compliance rates 225
 Worksite Preparation were observed, averaging a 95% compliance rate;
- 270 Work activities were observed, averaging an 88% compliance rate;
- 251 Cleanup activities were observed, averaging an 88% compliance rate
- 248 Cleanup Verification activities were observed, averaging 88% compliance rate
- EHS observed all four (4) phases for 172 jobs, of which 142 were 100% in compliance.
- 994 work phases were observed, averaging a 92% compliance rate

File Review for 15(e):

The Compliance Department assessed 939 work orders (completed between July 25, 2019 and January 16, 2020) for the required attachments and confirmed if the employees were certified RRP renovators. 86% (808 out of 939) of the work orders had the RRP Renovation Checklist. The new digitized checklists apply to work orders created starting in November 2019. The Compliance Department saw improvement during the reporting period as illustrated below:

Renovator Checklists July 25, 2019 to January 16, 2020										
	July	August	Sept.	Oct.	Nov.	Dec.	Jan 2020			
RRP Checklists Present	25	183	186	222	35	91	66			
RRP Checklists Missing	9	35	54	31	2	0	0			
Total	34	218	240	253	37	91	66			
Rate	74%	84%	78%	88%	95%	100%	100%			

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);
- Creation of new 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 92% across all four work phases;

• File review showing an upward trend of compliance to 100% for completion of the renovator's checklist.

Despite this progress, NYCHA still needs to develop a more cohesive policy on collecting and storing required RRP documentation from vendors. The collection and storage of this information currently is not centralized. The enhancements to Maximo provide NYCHA an opportunity to create a more cohesive policy on this issue to prevent non-compliance.

Overall, the Compliance Department recommends not certifying to this requirement until field monitoring shows a period of consistent compliance and NYCHA resolves the lack of cohesive policies on vendor record-keeping.

F. 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 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, at VIII.H.4.

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. 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(f):

EHS does not include this requirement in their onsite monitoring.

File Review for 15(f):

The Monitoring Unit assessed 939 work orders (completed between July 25, 2019 and January 16, 2020) for the required attachments and confirmed if the pre-renovation acknowledgement form was attached to the work order. 88% (828 out of 942) of the work orders had the pre-renovation acknowledgment form. The remainder of pre-acknowledgement forms were not uploaded into Maximo. The Compliance Department saw improvement during the reporting period as illustrated below:

Pre-Renovation Acknowledgement Forms from July 25, 2019 to January 16, 2020										
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. 2020			
Pre- renovation acknowledg ment forms Present	25	190	194	229	33	91	66			
Pre- renovation acknowledge ment forms Missing	9	28	46	24	4	0	0			
Total	34	218	240	253	37	91	66			
Compliance Rate	74%	87%	81%	91%	89%	100%	100%			

Overall Description of Compliance for 15(f):

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

- The existence of policies and procedures addressing the requirements set forth in 15(f);
- Creation of new IT controls that require workers to complete the pre-renovation acknowledgment form before they can close an RRP work order;
- File review showing an upward trend of compliance to 100% for completion of the renovator's checklist.

Despite this progress, NYCHA still needs to develop a more cohesive policy on collecting and storing required RRP documentation from vendors. The collection and storage of this information currently is not centralized. The enhancements to Maximo provide NYCHA an opportunity to create a more cohesive policy on this issue to prevent non-compliance.

Overall, the Compliance Department recommends not certifying to this requirement until file monitoring shows a period of consistent compliance and NYCHA resolves the lack of cohesive policies on vendor record-keeping.

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

<u>Regulatory Requirements for 15(g)</u>:

This section focuses on 24 CFR § 35.125, as the requirements of 40 CFR § 745.84 are discussed in paragraph 15(f). 24 CFR § 35.125 states as follows:

(a) Notice of evaluation or presumption. When evaluation is undertaken and lead-based paint or lead-based paint hazards are found to be present, or if a presumption is made that lead-based paint or lead-based paint hazards are present in accordance with the options described in § 35.120, the designated party shall provide a notice to occupants within 15 calendar days of the date when the designated party receives the report or makes the presumption. A visual assessment alone is not considered an evaluation for the purposes of this part. If only a visual assessment alone is required by this part, and no evaluation is performed, a notice of evaluation or presumption is not required.

- (1) The notice of the evaluation shall include: (i) A summary of the nature, dates, scope, and results of the evaluation; (ii) A contact name, address and telephone number for more information, and to obtain access to the actual evaluation report; and (iii) The date of the notice.
- (2) The notice of presumption shall include: (i) The nature and scope of the presumption; (ii) A contact name, address and telephone number for more information; and (iii) The date of the notice.

(b) Notice of hazard reduction activity. When hazard reduction activities are undertaken, each designated party shall:

(1) Provide a notice to occupants not more than 15 calendar days after the hazard reduction activities (including paint stabilization) have been completed. Notice of hazard reduction shall include, but not be limited to:

(i) A summary of the nature, dates, scope, and results (including clearance) of the hazard reduction activities;

(ii) A contact name, address, and telephone number for more information;

(iii) Available information on the location of any remaining lead-based paint in the rooms, spaces, or areas where hazard reduction activities were conducted, on a surface-by-surface basis; and

(iv) The date of the notice.

- (2) Update the notice, based on reevaluation of the residential property and as any additional hazard reduction work is conducted. Provision of a notice of hazard reduction is not required if a clearance examination is not required.
- (c) Availability of notices of evaluation, presumption, and hazard reduction activities.

- (1) The notices of evaluation, presumption, and hazard reduction shall be of a size and type that is easily read by occupants.
- (2) To the extent practicable, each notice shall be made available, upon request, in a format accessible to persons with disabilities (e.g., Braille, large type, computer disk, audio tape).
- (3) Each notice shall be provided in the occupants' primary language or in the language of the occupants' contract or lease.
- (4) The designated party shall provide each notice to the occupants by:

(i) Posting and maintaining it in centrally located common areas and distributing it to any dwelling unit if necessary because the head of household is a person with a known disability; or

(ii) Distributing it to each occupied dwelling unit affected by the evaluation, presumption, or hazard reduction activity or serviced by common areas in which an evaluation, presumption or hazard reduction has taken place.

(iii) However, for the protection of the privacy of the child and the child's family or guardians, no notice of environmental investigation shall be posted to any centrally located common area.

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

Policies and Procedures: The Lead SP contains policies and procedures on the Notice of Evaluation. See Lead SP, VII.D.2.d. (notice of evaluation following XRF inspection); Lead SP VII, VII.E.7 (notice of evaluation for biennial re-evaluations); *see also* NYCHA Form 060.851, Notice of Evaluation. NYCHA has a template Notice of Hazard Reduction but does not provide clear policies and procedures on sending this required form. The Lead SP will be revised to reflect this process.

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." The XRF contract is available on request.

IT Controls for 15(g):

IT has developed a system to automate the sending of hazard reduction letters through Siebel. While the IT programming has been completed, this project is still in the testing phase to ensure that the hazard reduction letters accurately pull the necessary data from Maximo.

Field Monitoring/QA for 15(g):

With respect to the Notices of Evaluation arising from the NYCHA XRF initiative, the vendor is responsible for sending the Notices of Evaluation following completion of the XRF inspections. LHC reviews these notices, and they are uploaded to the Maximo work order.

File Review for 15(g):

The Compliance Department ran a report of XRF inspection work orders in Maximo completed between April 1, 2019 and December 31, 2019. Of 17,532 completed XRF inspections were, seven work orders did not contain the Notice of Evaluation in Maximo. However, all seven were able to be provided by LHC when requested. Upon further Maximo review, LHC stated that the seven work orders were closed prematurely at the development level, preventing the vendor from uploading the form.

With respect to the Notice of Hazard Reduction, the notice is generated manually by LHC upon dust wipe clearance of work orders flagged as RRP and emailed to the developments, which then hand deliveres them to the residents. The Compliance Department requested from IT a list of RRP work orders that were closed and passed dust wipe clearance between July 1, 2019 and Jan 1, 2020. Of 524 work orders, a sample of 39 work orders were randomly selected for review. The Compliance Department requested evidence of delivery from LHC to the developments by means of email with Notice of Hazard Reduction attached to the development. Of the 39 work orders sampled, LHC was able to supply email verification for 19 of the 40 work orders. Of these, only 3 of these notices were uploaded into Maximo.

Of the remaining 20 files missing notices of hazard reduction, there were a variety of reasons for the missing notifications:

- 14 were missing or not sent;
- 3 of the sampled work orders were created in error by the development;
- 1 of the sampled work orders was for a basement, so no dust wipe was needed;
- 1 "no results" work order should not have been closed by the development;
- 1 resident refused access to the sample technician and no samples were taken.

Overall Description of Compliance for 15(g):

While NYCHA has established practices in place for the Notice of Evaluation, NYCHA continues to have issues with respect to the Notices of Hazard Reduction. NYCHA will take the following actions to address this ongoing shortfall:

- The Compliance Department will incorporate the Notice of Hazard Reduction process into the Lead SP. This was an oversight that needs to be corrected. The goal is to complete this process by February 28, 2020 and re-post the Manual on the FRL.
- NYCHA will launch the automated IT process for generating the letters through Siebel by March 31, 2020. This project is set forth in the draft Lead Action Plan.
- In in the interim, the Compliance Department and the Director of LHC shall schedule a meeting with LHC staff responsible for the preparation and storage of the Notice of Hazard Reduction to ensure that they have a reliable process for preparing, issuing, and storing these notices. This meeting will be scheduled and documented by February 15, 2020.

NYCHA cannot certify to the requirements set forth in 15(g) until it significantly improves its overall compliance with the Notice of Hazard Reduction process. Improvement is expected on March 31, 2020, when the automated hazard reduction notice begins being sent to residents through the Siebel system. The manual process and manual recordkeeping is not an effective means to comply with this requirement.

H. 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.H.9 through VII.H.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 225 EHS observations of worksite preparation activities, 95% were found to be in compliance.
- Out of 270 EHS observations of work activities, 88% 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);
- Creation of new 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 95% for worksite preparation activities and 88% for work activities;
- File review showing an upward trend of compliance to 100% for completion of the renovator's checklist.

Despite this progress, NYCHA still needs to develop a more cohesive policy on collecting and storing required RRP documentation from vendors. The collection and storage of this information currently is not centralized. The enhancements to Maximo provide NYCHA an opportunity to create a more cohesive policy on this issue to prevent non-compliance.

Overall, the Compliance Department recommends not certifying to this requirement until field monitoring shows a period of consistent compliance and NYCHA resolves the lack of cohesive policies on vendor record-keeping.

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

Regulatory Requirements for 15(i):

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

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

The Lead SP sets forth the protocols for managing waste for RRP projects. See Lead SP, §§ VII.H.10 and VII.H.11.

IT Controls for 15(i):

The waste control requirements referenced in this paragraph are included in the renovator's checklist. As of November 1, 2019, the renovator's checklist was digitized and added into the Maximo work ticket. RRP work orders cannot be closed without completing this form with required signatures and user-provided

information about the renovation. Since vendors do not have handhelds, this control does not apply to their work.

Field Monitoring/QA for 15(i):

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

• Cleanup Activity phase showed significant improvement from October to December, the compliance rate was 64% for October, 100% for November and 99% for December, with an overall compliance rate of 93%.

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. The Compliance Department further notes that for 7 digital checklists, it observed that renovators had not checked the "contained waste onsite" item. This checklist item may be confusing to staff and should be addressed in the Quick Reference Guide for RRP activities, which will be developed as part of the Lead Action Plan. With the new digital checklist, the Compliance Department will have the ability to more readily check for such issues.

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);
- Creation of new 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 95% for worksite preparation activities and 88% for work activities;
- File review showing an upward trend of compliance to 100% for completion of the renovator's checklist.

Despite this progress, NYCHA still needs to develop a more cohesive policy on collecting and storing required RRP documentation from vendors. The collection and storage of this information currently is not centralized. The enhancements to Maximo provide NYCHA an opportunity to create a more cohesive policy on this issue to prevent non-compliance.

Overall, the Compliance Department recommends not certifying to this requirement until field monitoring shows a period of consistent compliance and NYCHA resolves the lack of cohesive policies on vendor record-keeping.

J. 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 the number and length of these requirements, they are not reproduced in this section.

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

Policies and Procedures: The Lead SP sets forth the protocol for cleaning, cleaning verification, and clearance examinations. See Lead SP, §§ VII.H.11 through VII.H.12. During the Covered Period, NYCHA integrated two 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.

Training/Instruction to Staff: In August and September 2019, the Compliance Department, LHC, and Operations jointly held a series of live webinars to notify all certified staff about the new protocols. The Compliance Department also issued an interim protocol on these requirements, which was available on the FRL prior to publication of the Lead SP.

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.

Lastly, during the Covered Period, IT created a daily dashboard which is used by Compliance, LHC, and Operations to track RRP and interim control projects across NYCHA. The dashboard allows these departments to track the collection of samples each day to ensure that they samples are collected within the 24/48 performance target after final cleaning at a project. The dashboard also enable staff to individually investigate any work orders where it appears a dust wipe was not attempted or performed.

This process allow staff to distinguish each day between projects actually requiring a dust wipe from projects where a dust wipe was actually not needed (e.g., work order was cancelled or erroneously created), or was, in fact, performed, but not properly entered into the Maximo.

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:

- EHS conducted 251 cleaning work phase observations, finding an overall compliance rate of 93%.
- EHS conducted 248 cleaning verification work phase observations, finding an overall compliance rate of 92%.

EHS has developed an inspection work order in Maximo for clearance examinations, but no observations were made during the Covered Period. Oversight of the clearance examination process is expected to begin in Q1 2020.

File Review for 15(j):

The results of file review related to cleaning and the cleaning verification process is set forth above under Paragraph 15(e) as these activities are documented on the RRP checklist.

Additionally, the results of the clearance examination dashboard are provided to the Monitor each week, and then again in the Monthly Exceptions Report prepared by Compliance and EHS. In the period of September to December, the overall rate of sample collection within the 24/48 performance target is 70% (3416 out of 4901), with most samples collected in the 24-hour performance target. As further explained in the Exceptions Reports and weekly reports to the Monitor, the 70% figure is a raw percentage that does not take into account work orders where a dust wipe was attempt or performed but not properly entered into the system, or work orders where a dust wipe was not necessary because the work order was cancelled or consolidated with another work order.

Overall Description of Compliance for 15(j):

With respect to final cleaning, 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 on cleaning addressing the requirements set forth in 15(i);
- Creation of new 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 93% in compliance for final cleaning activities and 92% in compliance with the cleaning verification process;
- File review showing an upward trend of compliance to 100% for completion of the renovator's checklist.

With respect to the clearance requirements in Paragraph 15(i), NYCHA made incremental progress to addressing this compliance shortfall. This progress is shown by the following:

- Creation of a daily dashboard tracking the performance of clearance examinations against a 24/48 target window, which shows an overall rate of success of at least 70% for sample collection within the target window over a three-month period;
- Transparency in reporting to the Monitor on the rate of clearance examination on a weekly basis;
- Performance of a pilot project in 80 units at three developments (Glenwood, Eastchester, and Astoria) to attempt to resolve issues regarding worksite protection protocols. Results of the pilot were made available to the federal stakeholders and the Monitor.

While NYCHA had made progress, NYCHA needs to take the following steps in the next covered period to further address this compliance shortfall:

- By February 28, NYCHA will enhance its daily clearance dashboard by adding a dashboard that will track the number of samples pending at laboratories, the number of samples that have passed, the number of samples that have failed, and, if the samples have failed, the number of units that have been recleaning and re-sampled. Similar to the current dashboard, the new dashboard will establish performance targets to ensure that any issues are tracked and managed on a daily basis so that appropriate follow-up actions can be taken;
- In January 2019, NYCHA submitted a draft lead action plan to the Monitor and the federal stakeholders. The draft action plan includes enhancements to the worksite protection protocol, including voluntary relocation options for child under 6 unit while clearance results are pending. NYCHA awaits feedback from the federal stakeholders on this enhanced proposal.