OFFICE of INSPECTOR GENERAL
UNITED STATES DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

The Philadelphia Housing Authority Needs To Improve Oversight of Lead-Based Paint In Its Public Housing

Audit Report Number: 2023-CH-1001

March 22, 2023

Office of Audit | Office of Inspector General
U.S. Department of Housing and Urban Development

Date: March 22, 2023

To: Monica Hawkins
Director of Public Housing Hub, 3APH

//signed//
From: Kilah S. White
Assistant Inspector General for Audit, GA

Subject: The Philadelphia Housing Authority, Philadelphia, PA, Needs To Improve Oversight of Lead-Based Paint In Its Public Housing

Attached are the U.S. Department of Housing and Urban Development (HUD), Office of Inspector General's (OIG) final results of our audit of the Philadelphia Housing Authority's oversight of lead-based paint in its public housing.

HUD Handbook 2000.06, REV-4, sets specific timeframes for management decisions on recommended corrective actions. For each recommendation without a management decision, please respond and provide status reports in accordance with the HUD Handbook. Please furnish us copies of any correspondence or directives issued because of the audit.

The Inspector General Act, as amended, requires that OIG post its reports on the OIG website. Accordingly, this report will be posted at https://www.hudoig.gov.

If you have any questions or comments about this report, please do not hesitate to call Kelly Anderson, Audit Director, at (312) 913-8499.

Highlights

The Philadelphia Housing Authority Needs To Improve Oversight of Lead-Based Paint In Its Public Housing | 2023-CH-1001

What We Audited and Why

We audited the Philadelphia Housing Authority's (Authority) management of lead-based paint in its public housing program based on our assessment of the risks of lead-based paint in public housing agencies' (PHA) housing developments. The risk factors included the age of buildings, the number of units, household demographics, reported cases of childhood lead poisoning, and reports of missing lead-based paint inspections in HUD's data. The audit objective was to determine whether the Authority adequately managed lead-based paint and lead-based paint hazards in its public housing units.

What We Found

The Authority did not adequately manage lead-based paint and lead-based paint hazards in its public housing units. Specifically, it did not always perform lead-based paint visual assessments within the required timeframe and mitigate lead-based paint hazards in a timely manner. Further, the Authority needs to improve its processes for maintaining lead-based paint documentation and providing accurate lead-based paint disclosures to tenants. The Authority also did not ensure that its contractors provided lead-based paint inspection and risk assessment reports that met HUD's requirements. These weaknesses occurred because the Authority lacked adequate procedures and controls to appropriately manage its housing units that contained lead-based paint. As a result, households that participated in the Authority's program were at an increased risk of being exposed to lead-based paint hazards, particularly families with children under 6 years of age.

What We Recommend

We recommend that the Director of the Philadelphia Office of Public Housing require the Authority to (1) establish procedures and controls to ensure that lead-based paint visual assessments are performed within the required timeframe; (2) implement procedures and controls to ensure that lead-based paint hazard reduction work is performed within the required timeframe and that all identified hazards are abated or treated with interim controls; (3) maintain lead-based paint documentation for its properties in a manner that it is readily available for review by HUD and the Authority's tenants if requested; (4) perform a search for historical lead-based paint documentation; and (5) implement adequate procedures and controls to ensure that accurate lead disclosures are provided to current and prospective tenants and that contracted inspectors' deliverables comply with applicable requirements.

We also recommend that the Director of the Philadelphia Office of Public Housing work in conjunction with HUD's Office of Lead Hazard Control and Healthy Homes to (1) provide training to the Authority's staff involved with managing lead-based paint and technical assistance to the Authority in developing and implementing new procedures and controls and (2) assess the quality of lead-based paint inspections and risk assessments performed by the Authority's contractors.

Table of Contents

Background and Objective

In the United States, there are approximately a half million children ages 1-5 with blood lead levels above the reference level at which the Centers for Disease Control and Prevention (CDC) recommends that public health actions be initiated. According to the CDC, protecting children from exposure to lead is important to lifelong good health. Lead-based paint and lead-contaminated dust are some of the most hazardous sources of lead for children in the United States, and no safe blood lead level in children has been identified. The effects of lead exposure can cause adverse effects, such as damage to the brain and nervous system, slowed growth and development, and learning and behavioral problems. Even low levels of lead in the blood have been shown to affect intelligence, the ability to pay attention, and academic achievement. The effects of lead exposure cannot be corrected or reversed.

The U.S. Consumer Product Safety Commission issued a ban on lead-containing paint to reduce the risk of lead poisoning in children who may ingest paint chips or peelings. The ban took effect in 1978 and applied to products manufactured on and after February 27, 1978. The United States Congress found that pre-1980 housing stock contained more than 3 million tons of lead in the form of lead-based paint and passed legislation to evaluate lead-based paint hazards in the Nation's housing stock and reduce the threat of childhood lead poisoning in housing owned, assisted, or transferred by the Federal Government.

The Residential Lead Based Paint Hazard Reduction Act of 1992 established the national goal to eliminate lead-based paint hazards in housing as quickly as possible and required HUD to establish or update procedures to eliminate, as far as practicable, the hazards of lead-based paint. In 1999, HUD published the Lead Safe Housing Rule[1] to implement the requirements of the Lead Based Paint Poisoning Prevention Act, as amended, and the Lead Based Paint Hazard Reduction Act of 1992 to eliminate lead-based paint hazards, as far as practicable in certain HUD-assisted properties.

The Lead Safe Housing Rule (LSHR) established specific actions or procedures that public housing agencies (PHA) are required to perform in relation to hazard reduction[2] for lead-based paint and lead-based paint hazards. The LSHR applies to target housing, which is defined as any housing constructed prior to 1978, except housing for the elderly or persons with disabilities (unless a child under 6 years of age resides or is expected to reside in such housing), or any zero-bedroom dwelling.[3] PHAs are required to have lead-based paint inspections to identify the presence of lead-based paint in their housing developments.[4] If lead-based paint is identified, a lead-based paint risk assessment is required[5] to determine whether the lead-based paint presents a hazard.

[1] Lead Disclosure Rule at 24 CFR (Code of Federal Regulations) part 35, subpart A, and Lead Safe Housing Rule at 24 CFR part 35, subparts B through R

[2] Measures designed to reduce or eliminate human exposure to lead-based paint hazards through methods including interim controls or abatement or a combination of the two. "Interim controls" are measures designed to temporarily reduce human exposure or likely exposure to lead-based paint hazards, including but not limited to specialized cleaning, repairs, maintenance, painting, temporary containment, ongoing monitoring, etc. "Lead abatement" is an activity designed to permanently eliminate or remove lead-based paint and lead-based paint hazards.

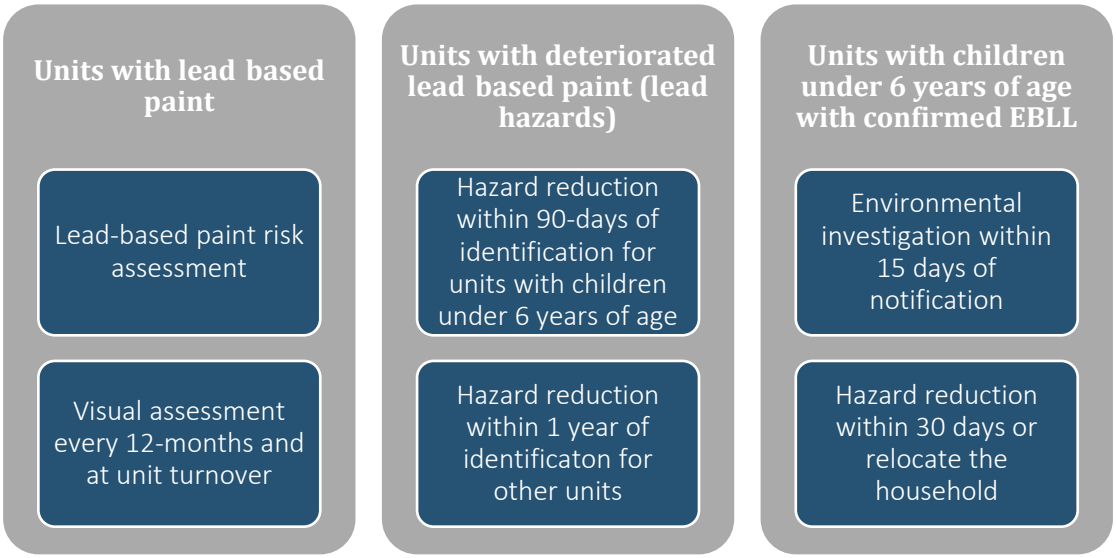
[3] 24 CFR 35.110

[4] 24 CFR 35.1115(a)

[5] 24 CFR 35.1115(b)

PHAs are required to abate lead-based paint hazards or enact interim controls and ongoing maintenance within 90 days for units with a child under 6 years of age or 1-year for other units.[6] Interim controls are measures designed to temporarily reduce human exposure or likely exposure to lead-based paint hazards, including but not limited to specialized cleaning, repairs, maintenance, painting, temporary containment, ongoing monitoring, etc. Public housing units with lead-based paint are required to have visual assessments conducted to identify deteriorated lead-based paint, every 12 months and when the unit turns over, meaning it is vacated and a new tenant moves in.[7] The LSHR also established additional requirements for instances of a child under 6 years of age with an elevated blood lead level[8] (EBLL). These requirements include (1) obtaining an environmental investigation[9] of the unit to identify the source of lead exposure and lead-based paint hazards[10] and (2) addressing any lead-based paint hazards identified by the environmental investigation within 30 days or relocate the household.[11]

Figure 1. Summarizes HUD's requirements for public housing with lead-based paint.



According to HUD's Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, units that have had a lead-based paint inspection that did not identify the presence of lead-based paint are identified as "lead free" and further action is not required. Units that have had a lead-based paint inspection that identified lead-based paint that does not present a hazard and is currently being treated with interim controls and ongoing maintenance are identified as "lead safe."

[6] 24 CFR 35.1120(a) and 24 CFR 35.1120(b)
[7] 24 CFR 35.1355(a)(2)
[8] HUD defines EBLL as a child under 6 years of age with blood lead levels equal to or greater than 5 micrograms per deciliter of blood (µg/dL).
[9] An environmental investigation is the process of determining the source of lead exposure for a child under age 6 with an EBLL. The environmental investigation is required within 15 days after that notification by a public health department or other medical health care provider that a child of less than 6 years of age living in a dwelling unit has been identified as having an EBLL.
[10] 24 CFR 35.1130(a)
[11] 24 CFR 35.1130(c)

The Lead Disclosure Rule established procedures for notifications or disclosures of the presence of lead-based paint and known lead-based paint hazards in housing.[12]

Public housing was established to provide decent and safe rental housing for eligible low-income families, the elderly, and persons with disabilities. Public housing comes in all sizes and types, from scattered single-family houses to highrise apartments. Nationwide, there are approximately 1 million households residing in public housing developments that are managed by about 3,300 local PHAs. PHAs own and operate the public housing developments[13] in which such residents reside. The PHAs are responsible for managing and operating their housing developments in compliance with all applicable HUD and other Federal regulations.

Philadelphia Housing Authority

The Philadelphia Housing Authority was founded in 1937 and is the fourth largest public housing agency in the Nation.

The Authority operates a public housing program consisting of nearly 13,000 units in approximately 40 developments. It has approximately 5,700 public housing units in 28 developments that are considered target housing for the Lead Safe Housing Rule. The Authority maintained an internal unit status log to track lead-based paint in its public housing units that are target housing. The log included the status of 5,253 units in 28 developments from which we identified a universe of 4,601[14] units for potential review. The Authority classified these units into the following three categories: 2,123 units were identified as "lead free," 2,427 were identified as "lead safe," and 51 units needed hazard reduction.[15]

Our audit objective was to determine whether the Authority adequately managed lead-based paint and lead-based paint hazards in its public housing units.

[12] 24 CFR 35 Subpart A

[13] A public housing development, also known as an asset management project or a project, is a property or collection of properties assisted under Section 9 of the United States Housing Act of 1937. A public housing development may consist of several buildings or properties, containing multiple units. These buildings or properties may be in different physical locations.

[14] See the Scope and Methodology section of this report for more information about how we determined the universe of units for review.

[15] Units that have present lead-based paint hazards and require hazard remediation or the implementation of interim controls.

Results of Audit

THE AUTHORITY DID NOT ADEQUATELY MANAGE LEAD-BASED PAINT IN ITS PUBLIC HOUSING UNITS

The Philadelphia Housing Authority did not adequately manage lead-based paint in its public housing units. Specifically, it did not always (1) perform lead-based paint visual assessments within the required timeframe and (2) mitigate lead-based paint hazards in a timely manner. Further, the Authority needs to improve its processes for maintaining lead-based paint documentation and providing accurate lead-based paint disclosures to tenants. The Authority also did not ensure that its contractors provided lead-based paint inspection and risk assessment reports that met HUD's requirements. These weaknesses occurred because the Authority lacked adequate procedures and controls to ensure that it appropriately managed its housing units that contained lead-based paint. As a result, households that participated in the Authority's program were at an increased risk of being exposed to lead-based paint hazards, particularly families with children under 6 years of age.

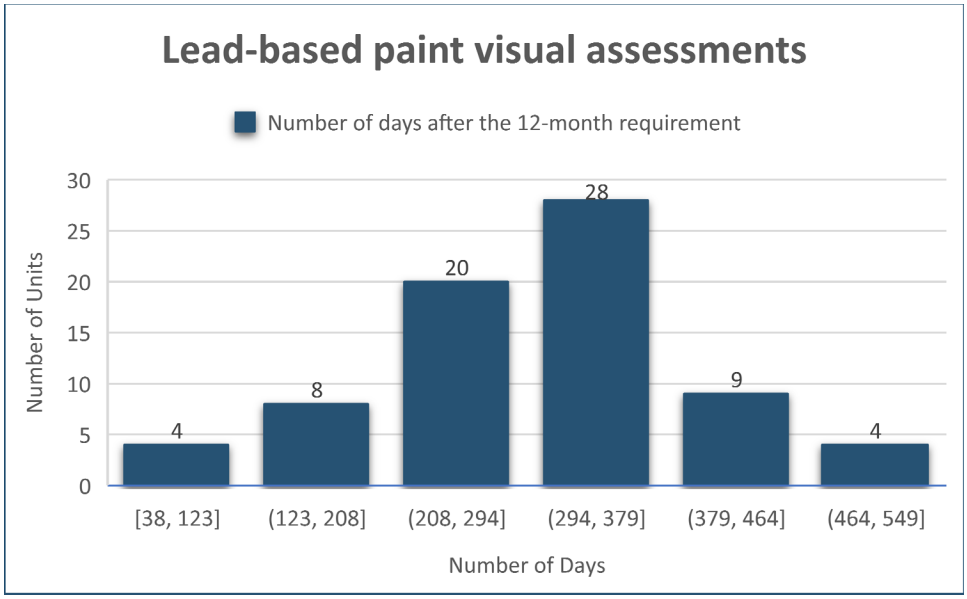
The Authority Did Not Always Perform Lead-Based Paint Visual Assessments Within the Required Timeframe

The Authority did not always ensure that it performed visual assessments for units that contained lead-based paint within the required 12-month timeframe.[16] Of the 2,478 units identified by the Authority as either "lead safe" or needing hazard reduction, we reviewed the records for a sample of 81 units.[17] Of the 81 units, the Authority did not perform visual assessments for 73 (90 percent) in a timely manner. The 73 units consisted of 58 units classified as lead safe and 15 units that required hazard reduction. For these 73 units, the number of days in which the visual assessments were completed ranged from 38 to 549 days after the 12-month requirement.

The table below shows the number of days that the Authority took after the 12-month requirement to perform visual assessments for the 73 units.

[16] Regulations at 24 CFR 35.1355(a)(2), require visual assessments for deteriorated paint, bare soil, and the failure of any hazard reduction measures at unit turnover and at least once every 12 months.

[17] The 66 statistically sampled units that were selected from the 2,427 units categorized by the Authority as lead safe and the 15 nonstatistically sampled units that were selected from the 51 units that required lead hazard reduction. See the Scope and Methodology section of this report.



Based on the results of our statistical sample of 66 of the Authority's 2,427 lead-safe units[18] and projecting those results to the universe,[19] we estimated that at least 1,973 of those units did not have lead-based paint visual assessments performed in the required timeframe; therefore, those units were not inspected in a timely manner. The 15 units that required lead hazard reduction were nonstatistically selected; therefore, we cannot project our results to the universe of 51 units. However, the Authority did not perform timely visual assessments for any of the 15 units that we reviewed.

Visual Assessments of Units Containing Children With Confirmed EBLLs Were Not Performed in a Timely Manner

During our audit period of October 1, 2019, through June 1, 2022, the Authority had 14 children under the age of 6 with confirmed EBLLs. These 14 children were associated with 11 units. Of the 11 units, 3 were considered lead free, and 8 were considered lead safe. The Authority was not required to perform visual assessments of the 3 lead free units since they do not contain lead-based paint. Additionally, the environmental investigations in the 3 lead free units confirmed that there was no lead-based paint in the units.

For seven of the 8 lead safe units, the Authority did not perform the required visual assessments in a timely manner. The Authority exceeded the requirement to perform a visual inspection within the 12-month requirement by 92 to 345 days. Further, in six of the seven units where the Authority did not perform timely visual assessments, a child was confirmed to have an EBLL and the Authority later identified lead-based paint or dust hazards through environmental investigations. The environmental investigations determined that all six units had lead dust hazards, which would not have been identified by a visual assessment and five of the six units had deteriorated lead-based paint, which could have been identified by a visual assessment. For the five units with deteriorated lead-based paint, we found that for

[18] We determined that 58 of our sample of 66 units categorized as lead safe did not have a timely visual assessment.

[19] See the Scope and Methodology section of the report for information regarding our statistical projections.

two of the units, the required visual assessments were overdue at the time of the environmental investigation.

According to the Authority's management, the Authority combines the timing of the lead-based paint visual assessments with the Authority's annual physical inspections of its public housing units. In July 2020, HUD issued a waiver temporarily pausing the requirement for physical condition inspections due to the coronavirus disease (COVID-19) pandemic. Therefore, when the Authority implemented the waiver, it also paused conducting lead-based paint visual assessments. However, HUD had not issued a waiver pausing the requirement that PHAs perform lead-based paint visual assessments during the pandemic.

The Authority also stated that, due to COVID-19, the City of Philadelphia enacted local restrictions[20] which also effected its ability to perform the visual assessments in a timely manner. We found that the COVID-19 pandemic may have resulted in some inspections being performed untimely; however, it was not the only reason for the delayed inspections. For instance, we found that for one of the eight lead safe units, with a confirmed child with an EBLL, the Authority performed the visual assessment late in 2019.

As result of the Authority's late visual assessments, deteriorated painted surfaces may have gone undetected for longer periods; therefore, households that participated in the Authority's program were at an increased risk of being exposed to lead-based paint hazards, particularly families with children under 6 years of age.

The Authority Did Not Always Mitigate Lead-Based Paint Hazards in a Timely Manner

Of the 81 units reviewed that had lead-based paint, we determined that lead-based paint hazards in 19 (23 percent) were not mitigated in a timely manner. This included 12 units that were identified by the Authority as lead safe and 7 that were identified as needing hazard reduction. According to HUD's requirements,[21] once a lead-based paint hazard is identified in a unit, the Authority has 90 days to address the hazard[22] for units with children under the age of 6 and 1 year to address the hazard for other units. For these 19 units, the Authority took between 21 to 122 days after the 90-day timeframe and between 5 to 91 days after the 1-year timeframe to complete the lead-based paint hazard reduction work.

[20] Shutdown orders for nonessential businesses due to COVID-19.

[21] 24 CFR 35.1120(b)(1) and (2) and 24 CFR 35.1330

[22] Lead-based paint hazards must be addressed by either abating the lead-based paint or lead-based paint hazards or performing interim controls.

The Authority's management officials provided the following reasons why the hazard reduction work was delayed for the 19 units.[23] Specifically, the hazard work was delayed for:

- Eight units due to COVID-19 restrictions and associated shutdowns.
- One unit due to contract delays and contract modifications for the work.
- Four units because the Authority had calculated the hazard reduction timeframe based upon when it received and reviewed the inspection and risk assessment report rather than the required date of when the lead-based paint evaluation was performed.[24]
- Six units because the Authority had mistakenly used the wrong timeframe to complete the hazard reduction because its manual tracking spreadsheet did not indicate that a child under 6 years of age resided in the units.

These conditions occurred because the Authority lacked adequate procedures and controls to ensure that it correctly identified the time requirement for hazard reduction work and that the work was completed within that required timeframe. The Authority's staff manually tracked the due dates for units that required hazard reduction on a spreadsheet; however, the Authority did not have an oversight process in place to ensure that the spreadsheet (1) was complete and had up-to-date information to correctly calculate the timeframe for which hazard reduction in its units needed to be done and (2) calculated timeframes for the completion of hazard reduction work based on the date of the inspection and risk assessment evaluation rather than the date of receipt and review. As a result, families, including those with children under 6 years of age, may have been exposed to lead-based paint hazards for longer periods than allowed by HUD's requirements. Based on our review of statistically sampled units, we estimate that at least 257 of the Authority's 2,427 lead safe units contained lead-based paint hazards that were not mitigated in the required timeframe.[25]

The Authority Mitigated Lead-Based Paint Hazards for the Units Containing Children With Confirmed EBLLs in a Timely Manner

For the 14 children with EBLLs, the Authority obtained the required environmental investigations of the associated housing units after being notified by the health department within 15 days. HUD's requirements for units that contain a child with a confirmed EBLL includes obtaining an environmental investigation of the unit to identify the source of lead exposure and lead-based paint hazards and addressing any lead-based paint hazards identified by the environmental investigation within 30 days or relocating the household, as appropriate. The Authority provided documentation showing that it had mitigated lead-based paint and lead-dust hazards identified during the environmental investigations in a timely manner.

[23] See appendix B for a summary of units with late hazard reduction.

[24] According to the Authority's management, had the required timeframes been calculated based on when the Authority received and reviewed the inspection and risk assessment reports, the lead-based paint hazards in three of the four units would have been mitigated within the required timeframe. However, HUD's deadline for addressing lead-based paint hazards is based on the date of the evaluation.

[25] We determined that the Authority did not perform lead-based paint hazard reduction for 12 of our sample of 66 lead safe units in a timely manner.

The Authority Needs to Improve Its Processes for Maintaining Lead-Based Paint Documentation and Providing Accurate Lead-Based Paint Disclosures to Tenants

In 2018, the Authority began an initiative to obtain new lead-based paint inspections and risk assessments for its public housing properties. As part of the audit, we requested lead-based paint inspection reports, risk assessments, visual assessments, and work orders for its properties to assess how the Authority handled lead-based paint in its units. We also requested documentation showing how it managed households with a child under 6 years of age with a confirmed EBLL. The Authority was unable to provide lead-based paint inspection and risk assessment documentation for its public housing developments for periods before the Authority's initiative with the earliest available lead-based paint inspection reports and risk assessments being from 2018 or 2019 depending on the unit.[26] HUD requires that PHAs maintain documentation related to lead-based paint activities for properties for at least 3 years, after such activities are no longer required.[27]

The Authority's management said it was unable to locate the majority of its historical lead-based paint inspection reports and risk assessment documentation due to turnover of its employees that maintained those documents, and because the Authority did not maintain lead-based paint-related documents electronically until 2019. Therefore, we were unable to assess whether the (1) Authority appropriately managed lead-based paint in its properties before its initiative and (2) Authority's households with a child under 6 years of age with an EBLL were properly notified of the presence of lead-based paint or lead-based paint hazards in their housing units.

Further, HUD permits tenants to review lead-based paint records related to the property in which they reside or plan to reside and requires PHAs to make the documents available when requested. However, before 2019, the Authority generally did not have documentation available to enable tenants to understand the risks associated with lead-based paint in their housing units.

Improper Tenant Disclosures

The Authority did not always accurately disclose the presence of lead-based paint or lead-based paint hazards to prospective tenants as required.[28] For 15 of the 66 sample units (nearly 23 percent) that were identified by the Authority as lead safe (i.e., units that have lead-based paint but the paint does not currently present a hazard and is treated with interim controls), the Authority provided prospective tenants lead disclosure forms stating that (1) the Authority had no knowledge of lead-based paint or lead-based paint hazards in the subject properties and (2) there were no lead-based paint records available to provide to the tenants. However, the Authority had received lead-based paint inspection and risk assessment reports identifying lead-based paint in the 15 units before the dates of the disclosure forms.

Based on our review of statistically sampled units, we estimate that the Authority made at least 356 improper lead-based paint disclosures to its tenants residing in the Authority's 2,427 lead safe units. We were unable to assess the accuracy of lead disclosures made to tenants and prospective tenants for most units because the (1) Authority could not locate historical lead-based paint inspection and risk

[26] HUD required public housing units to be inspected for lead-based based by September 15, 2000.

[27] Lead hazard reduction activities are no longer a requirement when the property is determined to be free from lead-based paint.

[28] 24 CFR 35.88

assessment reports and (2) lead disclosures occurred before the date of the Authority's lead-based paint inspection and risk assessment records.

The Authority's management stated that the Authority's property managers had been trained on the disclosure process but did not provide the households with risk assessment report data that was received outside of their tenancy. Further, the Authority's management told us that it was developing and implementing an automated process to ensure that it properly identifies, documents, and discloses lead-based paint. The Authority also stated that it is seeking technical assistance from the local Philadelphia HUD office to ensure that the Authority has an accurate understanding of what should be recorded and reported to applicants and residents and when this reporting should occur.

The Authority Did Not Ensure That Its Contractors Provided Lead-Based Paint Inspections and Risk Assessment Reports That Met HUD's Requirements

The Authority did not ensure that its contractors provided lead-based paint inspection and risk assessment reports that met HUD's or the Environmental Protection Agency's (EPA) requirements.[29] We reviewed lead-based paint inspection and risk assessment reports for 96 of the Authority's units.[30] Of the reports covering the 96 units, we determined that the report for only one of the units contained all of the required elements.[31] The reports for the remaining 95 units[32] were missing 1 or more of the following required elements:

- a current, unexpired risk assessor's certification for 15 units,
- the risk assessor's signature on the report for 46 units,
- the serial number of the X-ray fluorescence analyzer (XRF)[33] device used for 20 units, and
- building construction dates[34] for the inspected properties for 70 units.

In our lead-safe sample of 66 units, the reports for 65 units had deficiencies. Of the 65 reports with deficiencies, 12 units had inspections or risk assessments in which the risk assessor's certification may have expired,[35] the reports for 29 units were missing the risk assessor's signature, the reports for 11 units

[29] 24 CFR 35.1320(a), 40 CFR 745.227(b)(4), 24 CFR 35.1320(b)(1), and 40 CFR 745.227(d)(11)

[30] Sixty-six sampled units identified as lead safe, 15 units identified as lead free, and 15 units identified as needing hazard reduction activities during our audit period.

[31] Based on EPA's requirements at 40 CFR 745.227(b)(4), the inspection report must contain specific elements. See appendix D.

[32] See appendix C for a summary of deficiencies observed for the 95 units.

[33] An XRF device is a tool for determining whether lead is present in paint and measuring the concentration of lead present. Recording the XRF device serial number is part of EPA's requirement to document methodologies and ensuring adequate quality control measures.

[34] Construction dates are used to determine the sample size for multiunit developments with the number of required sampled units changing depending on the age of the units in the development to be tested. The assessor may use different sampling techniques to extrapolate results if it is known that not all buildings in a development were built at the same time or if the development has buildings from different eras and if multiple samples need to be used.

[35] Although HUD does not require inspectors or risk assessors to submit a copy of their license with the inspection or assessment report, some reports contained the documentation. Therefore, we were able to determine that the inspection and assessment reports contained expired certification documentation.

were missing the serial number of the XRF device, and the reports for 48 units were missing the construction date of the properties. Based on the results of our statistical sample of 66 of the Authority's 2,427 lead-safe units and projecting our results to the universe, we estimated that the reports for at least 2,326 units had at least 1 deficiency. Specifically, we estimate that the lead-based paint inspection and risk assessment reports for at least (1) 283 units contained a risk assessor's certification that may have expired, (2) 884 units were missing an assessor's signature, (3) 244 units were missing the serial number of the XRF devices used in conducting the inspection or assessment, and (4) 1,614 units were missing the buildings' construction dates.

The Authority's management acknowledged that the lead-based paint inspection and risk assessment reports were missing the required elements and stated that the Authority needed to strengthen its processes to ensure that the reports meet HUD's requirements going forward. However, according to the Authority's management, the reports with expired certifications, missing signatures, and missing construction dates, did not impact the Authority's management of lead-based paint from a health and safety standpoint because the lead-based paint hazards that were identified in the reports were treated. The Authority's management stated that using XRF data was not a regulated requirement and therefore the lack of serial numbers for the XRF devices should not be cited as an issue. The Authority believed that under governing regulations, it was not required to use XRF testing. However, HUD requires that lead-based paint inspection reports comply with EPA's requirements, which requires the serial number for the XRF device, if used. Therefore, the Authority lacked adequate oversight of its contracted lead inspectors to ensure that lead-based paint and risk assessment reports complied with HUD's requirements. As a result, HUD and the Authority lacked assurance that the inspections and risk assessments reports were sufficient.

Conclusion

The Authority did not adequately manage lead-based paint in its public housing units because it lacked sufficient procedures and controls to ensure that it took appropriate actions to identify lead-based paint hazards and disclose lead-based paint and lead-based paint hazards in its housing units. It also lacked adequate oversight of its contracted lead-based paint inspections and risk assessments. Therefore, the Authority needs to improve its management of lead-based paint and lead-based paint hazards in its housing units to better protect households from the risks associated with lead-based paint. If the Authority does not improve, families, including those with children under 6 years of age, risk being exposed to lead-based paint hazards.

Recommendations

We recommend that the Director of the Philadelphia Office of Public Housing require the Authority to

1A. Establish and implement procedures and controls to ensure that lead-based paint visual assessments are performed within the required timeframe.

1B. Implement adequate procedures and controls to ensure that lead-based paint hazard reduction work is performed within the required timeframe and that all identified hazards are abated or treated with interim controls.

1C. Maintain lead-based paint documentation for its properties in a manner that it is readily available for review by HUD and the Authority's tenants if requested.

1D. Perform a search for historical lead-based paint documentation and if any documents are found, compare the results from the historical documents with the results of the recent testing to identify any potential issues or inconsistencies and maintain all lead-based paint documentation related to the Authority's properties according to HUD's requirements.

1E. Implement adequate procedures and controls to ensure that accurate lead disclosures are provided to current and prospective tenants.

1F. Implement adequate controls to ensure that contracted inspectors' deliverables comply with HUD's and EPA's requirements.

We also recommend that the Director of the Philadelphia Office of Public Housing

1G. Work in conjunction with HUD's Office of Lead Hazard Control and Healthy Homes to provide training to the Authority's staff involved with managing lead-based paint and technical assistance in developing and implementing new procedures and controls.

1H. Work in conjunction with HUD's Office of Lead Hazard Control and Healthy Homes to assess the quality of the lead-based paint inspections and risk assessments performed by the Authority's contractors to determine whether they are sufficient to fulfill HUD's requirements.

Scope and Methodology

We performed our audit work remotely from November 2021 to October 2022. Our audit period was October 1, 2019, to June 1, 2022, to bring our audit results as current as possible.

To accomplish our audit objective, we had discussions with the Authority's and HUD's management officials and staff. In addition, we reviewed:

- 42 U.S.C. (United States Code) 63, 63(a), and 1437d; the Lead Disclosure Rule and Lead Safe Housing Rule at 24 CFR part 35; EPA requirements at 40 CFR part 745; HUD's Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing; HUD's Office of Public and Indian Housing (PIH) notices; information from HUD's EBLL tracker; and information maintained in HUD's Inventory Management System-PIH Information Center (IMS-PIC).
- The Authority's policies and procedures for managing lead-based paint, unit status log, service work orders, lead-based paint inspection and risk assessment reports, lead-based paint maintenance and remediation records, lead-based paint clearance reports, lead-based paint disclosures, unit inspection reports, records related to EBLL cases, and lead-based paint hotline records.

The Authority maintained an internal Excel database to track lead-based paint in its target public housing units, which it refers to as the unit status log. The log included the status for 28 developments and included a total of 5,253 units. The log identified units in 3 categories by lead status: (1) "lead free" with a universe of 2,767 units, (2) "lead safe" with a universe of 2,435 units, and (3) "hazard reduction" with a universe of 51 units. We performed reliability testing on the Authority's unit status log. After, we removed duplicate units, developments that may be exempt[36] from the Lead Safe Housing Rule, and units that would be covered in other sections of our review, there were a total of 4,601 units remaining in the Authority's unit status log. We then divided the unit status log into three categories by lead status: (1) "lead free" with a universe of 2,123 units, (2) "lead safe" with a universe of 2,427 units, and (3) "hazard reduction" with a universe of 51 units. Except for the duplicates, we determined that the data on the Authority's unit status log were reasonably reliable to use as a source for sampling purposes.

The Authority identified 2,123 units as being lead free. We selected a nonstatistical sample of 15 units to assess whether these units were appropriately categorized and managed. Since our sample was nonstatistically selected, we did not project the results to the universe of lead-free units.

The Authority identified 2,427 units as lead safe. Of the 2,427 units, we statistically selected a sample of 66 to assess whether these units were appropriately categorized and managed. Using our sample of units, we projected to the universe of 2,427 lead-safe units.

The Authority identified 51 units that needed to undergo lead-based paint hazard reduction. We selected a nonstatistical sample of 15 units to assess the Authority's management of the lead-based paint hazards.

[36] Units could be exempt from the Lead Safe Housing Rule by not constituting target housing, such as being built after 1978, by being designated for exclusive use by elderly or disabled persons (so long as no child under the age of six resides in the unit), or by being a zero-bedroom unit.

Since our sample was nonstatistically selected, we did not project the results to the universe of 51 units requiring lead-based paint hazard reduction.

During our audit period, the Authority had 14 cases of children under 6 years of age with EBLLs. The 14 children resided in 11 of the Authority's units. We reviewed all 14 cases and the associated units to determine whether the Authority properly handled these cases and managed the associated units in accordance with the Lead Safe Housing Rule. Since we reviewed 100 percent of the cases, projection to the universe was not applicable.

Methodology for Projections

We employed a stratified random sample of 66 units for review among the universe of 2,427 Authority units classified as "lead safe." We used the developments that each housing unit was associated with to design the strata. We grouped some developments to obtain 11 strata. We detail the sample counts per stratum and sampling weights in the sample table below.

Sample design table

Stratum (development ID)	Total count in stratum	Sample count	Probability of selection	Sampling weight
1 - 18	340	9	0.136363636	37.8
19 - 30	216	6	0.090909091	36.0
31 - 49	333	9	0.136363636	37.0
901	259	7	0.106060606	37.0
902	148	4	0.060606061	37.0
903	249	7	0.106060606	35.6
904	170	5	0.075757576	34.0
905	175	5	0.075757576	35.0
906	159	4	0.060606061	39.8
907 - 908	186	5	0.075757576	37.2
909 - 910	192	5	0.075757576	38.4
Total	**2,427**	**66**		

We computed the percentage and number of counts of Authority units classified as "lead safe" reviewed with material deficiencies based on the sampling results, and we extended this result to the population

using the surveyfreq procedure[37] provided by SAS®.[38] We estimated the lower confidence interval using a Gaussian sampling[39] distribution, which is appropriate for error rates in this range. We extended these percentages to the 2,427 records in the universe to get the total universe count of housing units with a material deficiency.

The basic estimation calculations are as follows:

$$Percent_{LCL} = pct - t_{\alpha/2}\, SE_{\%}$$

$$Universe\ Count_{LCL} = N * Percent_{LCL}$$

$Percent_{LCL}$ = percentage of sampling units after deducting a margin of error.

$Universe\ Count_{LCL}$ = total number of sampling units in the universe after deducting a margin of error.

N = total number of sampling units in the sampling frame.

pct = weighted percent of sampling units with the error in the sampling frame.

$SE_{\%}$ = standard error per unit, as applies to projecting proportions.

$t_{\alpha/2}$ = student's - t for projecting a one-sided confidence interval for a sample of this size.

Our findings with mathematical demonstrations are as follows:

Percentage-Count Projection Results: Lead Disclosures

HUD requires public housing agencies to disclose any instances of lead-based paint to prospective tenants. We reviewed the lead disclosures and the Authority's lead-based paint inspection-risk assessment reports and determined that the Authority provided improper lead disclosures to tenants in 15 of the 66 units. The proportion amounts to a weighted average of 22.6 percent. Including a statistical margin of error, we can say with a one-sided confidence interval of 95 percent that at least 14.7 percent of the time, there was a material deficiency for the attribute tested. Extending this percentage to the universe of 2,427 records, at least 356 units of the Authority had a material deficiency for the attribute tested; however, this count could be higher.

Percentage calculation: $22.6\% - (1.673 \times 4.7\%) \approx 14.7\%_{LCL}$

Total records projection: $2{,}427 \times (22.6\% - (1.673 \times 4.7\%)) \approx 356_{LCL}$

[37] The surveyfreq procedure produces one-way to n-way frequency and crosstabulation tables from sample survey data. These tables include estimates of population totals, population proportions, and their standard errors. Confidence limits, coefficients of variation, and design effects are also available. The procedure provides a variety of options to customize the table display.

[38] SAS (previously "Statistical Analysis System") is a statistical software suite developed by SAS Institute for data management, advanced analytics, multivariate analysis, business intelligence, criminal investigation, and predictive analytics.

[39] In statistics, a normal distribution or "Gaussian" distribution is a type of continuous probability distribution for a real-valued random variable.

Percentage-Count Projection Results: Visual Assessments

For units with lead-based paint, HUD requires that visual assessments for deteriorated lead-based paint be conducted at least annually. We reviewed the units' visual assessments and determined that the Authority completed the visual assessments late for 58 of the 66 units. The proportion amounts to a weighted average of 87.8 percent. Including a statistical margin of error, we can say with a one-sided confidence interval of 95 percent that at least 81.3 percent of the time, there was a material deficiency for the attribute tested. Extending this percentage to the universe of 2,427 records, at least 1,973 units of the Authority had a material deficiency for the attribute tested; however, this count could be higher.

Percentage calculation:	$87.8\% - (1.674 \times 3.9\%) \approx 81.3\%_{LCL}$
Total records projection:	$2{,}427 \times (87.8\% - (1.674 \times 3.9\%)) \approx 1{,}973_{LCL}$

Percentage-Count Projection Results: Hazard Reduction

Once a lead-based paint hazard is identified in a unit, the public housing agency has 90 days to correct the hazard for units with children under the age of 6 and 1 year to correct the hazard for units that do not have children under the age of 6. We reviewed the units' lead-based paint inspection-risk assessment documentation to identify lead-based paint hazards that would require hazard reduction. We then reviewed the Authority's work orders and hazard reduction documentation. We assessed whether the Authority completed the hazard reduction and calculated the timeframe between when the hazard was identified and when the hazard reduction was completed. We determined that the Authority did not complete hazard reduction within the required timeframe for 12 of the 66 units. The proportion amounts to a weighted average of 18.0 percent. Including a statistical margin of error, we can say with a one-sided confidence interval of 95 percent that at least 10.6 percent of the time, there was a material deficiency for the attribute tested. Extending this percentage to the universe of 2,427 records, at least 257 units of the Authority had a material deficiency for the attribute tested; however, this count could be higher.

Percentage calculation:	$18.0\% - (1.672 \times 4.4\%) \approx 10.6\%_{LCL}$
Total records projection:	$2{,}427 \times (18.0\% - (1.672 \times 4.4\%)) \approx 257_{LCL}$

Percentage-Count Projection Results: Lead-Based Paint Inspections-Risk Assessments

HUD and EPA require certain information to be included in lead-based paint risk assessment reports. We reviewed the units' most recent lead-based paint inspection-risk assessment reports and determined that inspection-risk assessment reports that the Authority relied on for 65 of the 66 units did not include one or more of the following required elements: (1) a nonexpired risk assessor certification, (2) the risk assessor's signature, (3) the serial number of the XRF device used, and (4) building construction dates. The proportion amounts to a weighted average of 98.4 percent. Including a statistical margin of error, we can say with a one-sided confidence interval of 95 percent that at least 95.8 percent of the time, there was at least one material deficiency for the attributes tested. Extending this percentage to the universe of 2,427 records, at least 2,326 units of the Authority had at least one material deficiency for the attributes tested; however, this count could be higher.

Percentage calculation:	$98.4\% - (1.669 \times 1.5\%) \approx 95.8\%_{LCL}$
Total records projection:	$2{,}427 \times (98.4\% - (1.669 \times 1.5\%)) \approx 2{,}326_{LCL}$

Nonexpired Risk Assessor Certification

We reviewed the units' most recent lead-based paint inspection-risk assessment reports and determined that a nonexpired risk assessor certification was not included for 12 of the 66 units. The proportion amounts to a weighted average of 18.4 percent. Including a statistical margin of error, we can say with a one-sided confidence interval of 95 percent that at least 11.7 percent of the time, there was a material deficiency for the attribute tested. Extending this percentage to the universe of 2,427 records, at least 283 units of the Authority had a material deficiency for the attribute tested; however, this count could be higher.

Percentage calculation:	$18.4\% - (1.673 \times 4.0\%) \approx 11.7\%_{LCL}$
Total records projection:	$2{,}427 \times (18.4\% - (1.673 \times 4.0\%)) \approx 283_{LCL}$

Risk Assessor's Signature

We reviewed the units' most recent lead-based paint inspection-risk assessment reports and determined that a risk assessor's signature was not included for 29 of the 66 units. The proportion amounts to a weighted average of 43.8 percent. Including a statistical margin of error, we can say with a one-sided confidence interval of 95 percent that at least 36.4 percent of the time, there was a material deficiency for the attribute tested. Extending this percentage to the universe of 2,427 records, at least 884 units of the Authority had a material deficiency for the attribute tested; however, this count could be higher.

Percentage calculation:	$43.8\% - (1.674 \times 4.4\%) \approx 36.4\%_{LCL}$
Total records projection:	$2{,}427 \times (43.8\% - (1.674 \times 4.4\%)) \approx 884_{LCL}$

Serial Number of the XRF Device

We reviewed the units' most recent lead-based paint inspection-risk assessment reports and determined that the serial number of the XRF device was not included for 11 of the 66 units. The proportion amounts to a weighted average of 16.8 percent. Including a statistical margin of error, we can say with a one-sided confidence interval of 95 percent that at least 10.0 percent of the time, there was a material deficiency for the attribute tested. Extending this percentage to the universe of 2,427 records, at least 244 units of the Authority had a material deficiency for the attribute tested; however, this count could be higher.

Percentage calculation:	$16.8\% - (1.672 \times 4.0\%) \approx 10.0\%_{LCL}$
Total records projection:	$2{,}427 \times (16.8\% - (1.672 \times 4.0\%)) \approx 244_{LCL}$

Building Construction Date

We reviewed the units' most recent lead-based paint inspection-risk assessment reports and determined that the building's construction date was not included for 48 of the 66 units. The proportion amounts to a weighted average of 72.9 percent. Including a statistical margin of error, we can say with a one-sided confidence interval of 95 percent that at least 66.5 percent of the time, there was a material deficiency for the attribute tested. Extending this percentage to the universe of 2,427 records, at least 1,614 units of the PHA had a material deficiency for the attribute tested; however, this count could be higher.

Percentage calculation:	$72.9\% - (1.672 \times 3.8\%) \approx 66.5\%_{LCL}$
Total records projection:	$2{,}427 \times (72.9\% - (1.672 \times 3.8\%)) \approx 1{,}614_{LCL}$

We conducted the audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective(s). We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Appendixes

Appendix A – Auditee Comments And OIG's Evaluation

Ref to OIG Evaluation – Auditee Comments

Comment 1 >

Comment 2 >

PHA
PHILADELPHIA HOUSING AUTHORITY
OPENING DOORS TO OPPORTUNITIES

2013 RIDGE AVE
PHILADELPHIA, PA 19121
215.684.4000
PHA.PHILA.GOV

February 27, 2023

Kelly Anderson, Audit Director
Rental Assistance and Safe and Affordable Housing Audit Division
Office of Inspector General
U.S. Department of Housing and Urban Development (HUD)
451 7th St, SW, Washington, DC, 20410

Re: OIG's review of the Philadelphia Housing Authority's Management of Lead Based Paint in Public Housing

Dear Ms. Anderson,

The Philadelphia Housing Authority (PHA) in in receipt of your report in the above-referenced matter, which was carefully reviewed. We therefore submit this letter in response to your findings and recommendations.

As we have shared with you throughout your review, addressing lead-based paint hazards has been and will continue to be a high priority for PHA. As such, PHA has invested heavily in our efforts to ensure full compliance with the U.S. Department of Housing and Urban Development's (HUD) regulations. Since 2018-19, PHA has put in place a robust system of internal controls to address lead-based paint management, PHA is proud of the work it has done to address lead-based paint in its public housing stock, and, will continue to put forth best efforts to follow required regulations around lead-based paint in Public Housing.

While significant progress has been made in addressing lead-based paint hazards throughout our portfolio, I would be remiss if I did not address the enormous challenges that continue to confront PHA, which are directly or indirectly related to the lead-based paint issue, which is admittedly, not unique to PHA. These issues include; PHA's aging public housing portfolio, with more than **60%** of the housing stock now over 70 years old; over **$1.5 billion** in unmet capital needs at PHA sites[1]; and unstable federal funding for public housing, which continues to be disconnected from the actual need. Effectively addressing lead-based paint in public housing requires PHA to confront the unmet capital needs, which demands more capital investments than currently provided by the federal, state, and local government. Nonetheless, PHA will soon announce a comprehensive asset repositioning strategy, that when implemented

[1] This figure greatly understates the true cost of long-term preservation of public housing, which is closer to over **$3.45 billion** after factoring in those developments that are obsolete and require full redevelopment and associated soft costs.

Ref to OIG Evaluation – Auditee Comments

will more thoroughly address lead-based paint and other capital needs of its public housing stock. Our specific feedback to your report is as follows:

The Authority Did Not Always Perform Lead-Based Paint Visual Assessments Within the Required Timeframe

For efficiency in tracking and execution, as outlined in PHA's HUD approved *Ongoing Lead Based Paint Maintenance Program Standard Operating* Procedure, PHA's routine Visual Assessments (VA) are included in PHA's annual HUD required UPCS inspection process; UPCS inspections occur annually. PHA uses trained Inspectors to conduct UPCS inspections and visual assessments as required. Prior to 2019, visual assessments were conducted once a year as defined in the referenced procedure.

Importantly, in 2020, PHA's ability to fully comply with the lead-based paint requirements was severely impacted by the COVID-19 pandemic as a result of the mandatory health emergency closures ordered by the City and state, resulting in a shut-down where PHA was unable to physically conduct inspections For the majority of the inspections reviewed, VAs were conducted every 12 months through 2019, during the same month every year, exceptions where units were vacant during a particular year. Due to the pandemic and offices being closed, in 2020 the schedules were taken off track. There was shift in the 2021 schedule, a direct result of adjustments due to the changes experienced during the pandemic.

Comment 3 >

This observation primarily focuses on inspection schedule changes that were a direct result of the COVID-19 pandemic, and PHA submits that there was no way to prepare for what transpired during the 2020 calendar year. It is not unreasonable, we believe, to expect physical inspections to be impacted as the world confronts a global pandemic that shifted many priorities. PHA, to the best of its ability, continued to provide services to its residents while also maintaining the health and safety of our employees. Furthermore, it is unreasonable to expect an inspection to occur on the same date every year; a both impossible and an unrealistic threshold to be measured against, especially considering COVID-19 when many local governments, like the City of Philadelphia, imposed stay-at-home orders. In instances prior to 2020 where the inspection was completed within the same month the following year, PHA was cited for it not being completed on the same exact date, even if that date fell on a weekend.

Comment 4 >

Although lead-paint related requirements were not specifically included in the HUD COVID-19 waivers, it stands to reason that the same argument applies for both. That is, HUD determined that the threat to health and safety posed by COVID-19 was greater than the potential threat posed by forgoing non-emergent maintenance inspections, which is what the VA is ultimately. To assert a causal link between a visual observation of paint and a clinical EBLL diagnosis is tenuous at best, because one cannot presume that deteriorated paint is a lead hazard; doing so further discredits PHA's many efforts around the management of EBLL cases. Furthermore, is unfair to suggest that EBLL cases could have been prevented if VA's were conducted on the same date every year.

Comment 5 >

Specific to the three lead safe units noted for "visual assessments late in one or more years from 2018 through January 2020," for all three units, there was one additional inspection

Comment 6 >

Page 2

Ref to OIG Evaluation – Auditee Comments

Comment 6 >

Comment 7 >

Comment 8 >

Comment 9 >

Comment 10 >

Comment 11 >

noted as late prior to 2020, and all 3 were conducted within the same month as the VA performed in the year prior.

The Authority Did Not Always Mitigate Lead-Based Paint Hazards in a Timely Manner

Of the 19 units, PHA determined that:

1. Delayed due to COVID-19: 8 units
   - The completion of hazard reduction activities for these units were delayed due to the COVID-19 shut down. PHA suspended inspections and hazard reduction activities from March 17, 2020 through May 10, 2020 as the city was shut down and it was impossible to enter units in person. Hazard reduction activities resumed on May 11, 2020. None of these units had children under 6 residing within them.

2. Delayed due to hazardous soil disposal requirements: 1 unit
   - The lead hazard reduction was completed in more than 90 days as a result of contract delays; contract adjustments needed to ensure compliance with hazardous soil disposal requirements slowed the abatement process. Additionally, PHA received the Lead Inspection/Risk Assessment Report 7 days after the date noted on the report.

3. Date of Report Discrepancy: 4 units
   - It is physically impossible to complete lead hazard reduction work without the required report detailing what the hazards are. PHA utilized the date of receipt of the Lead Inspection/Risk Assessment Report to calculate the date the hazard reduction was required to be completed as PHA cannot act until receipt of the report from the vendor. The Report Date identified by HUD is the date listed on the report, which does not always match the date the report was provided to PHA. The vendors utilized DropBox to provide the reports in batches of 70-100 and would communicate to PHA when the reports were available. Vendors have since been instructed to ensure the date of the report matches the date submitted to PHA. Additionally, reports are now provided to PHA individually via email.

     Utilizing the date of receipt of the report, 3 of the 4 units had hazard reduction completed within the required time frame. One of these units had children under 6 residing within it. For that unit, the hazard reduction was completed in 93 days (due in 90 days); completion of hazard reduction was delayed due to tenant refusal of service. PHA provided proof of the date of report receipt.

4. PHA did not identify as a minor unit: 6 units
   - All of these units had children under 6 residing within them. PHA was utilizing a manual tracking spreadsheet and these identified units were marked as "No" for minors. PHA is working to implement an automated tracking mechanism within our Customer Relations Management system which will automatically calculate the hazard reduction completion date based on family composition and date report was received by PHA.

Page 3

Ref to OIG Evaluation – Auditee Comments

Comment 12 >

Comment 13 >

Comment 14 >

Comment 15 >

Comment 16 >

Comment 17 >

The Authority Did Not Always Maintain Adequate Lead-Based Paint Documentation or Provide Accurate Lead-Based Paint Disclosures to Tenants

PHA undertook a thorough review of archived lead-based paint documents and was unable to retrieve certain lead reports from prior years. Further, beginning in 2017 and in preparation for HUD's final rule on EBLLs, PHA engaged several EPA certified environmental companies to perform combination Risk Assessment/Lead Inspections, to confirm the lead-paint status for all PHA's target housing units, and where appropriate, based on the findings, performed interim controls and abatement of all identified lead hazards. PHA also implemented changes to its internal tracking systems to record and retrieve lead-based information and reports in real time.

Additionally, PHA provided signed lead disclosure forms for the units in question, indicating that the required HUD pamphlet was received. PHA also provided information around the notice sent to all households regarding our lead hotline and encouraging tenants to report specific lead related issues within their units to our Maintenance team. PHA's Property Managers were also trained in the lead-based paint disclosure process. Notwithstanding this, however, PHA has since developed and implemented an automated process to ensure all lead disclosure forms are generated by the system with any identified lead-based paint, lead-based paint hazards, and/or lead-based paint records available disclosed in the appropriate sections on a unit-by-unit basis. On December 1, 2022, training was provided to the Property Managers on the new automated process. As of the date of said training, Lead Disclosures now are set to generate with lead-based paint locations, hazards, records, and reports listed. The lead-based paint information will be updated by PHA's Maintenance Department within the Service Order at the time of Re-Evaluation Risk Assessment and Remediation/Abatement.

Importantly, PHA notes that in compliance with the EPA's Renovation, Repair and Painting Rule, PHA performed clearance testing on all target units before each new lease up, assuring that these units were Lead Safe prior to move-in. PHA has performed this clearance testing for several years prior to 2019, and the associated records were maintained, this clearance testing under RRP is tantamount to a lead safe designation prior to move in of tenants within PHA's housing program.

The Authority Did Not Ensure That Its Contractors Provided Lead Based Paint Inspections and Risk Assessment Reports that Met HUD's Requirements

For the non-expired risk assessor certification, risk assessor's signature and building construction dates missing, PHA has notified the vendor and will take a closer look to ensure that this information is present and current moving forward. Importantly, PHA notes that the identified missing information does not have an impact on PHA's compliance with lead management from a health and safety perspective, because, the risk assessments were in fact completed and the hazards were in fact addressed.

For the serial number of the XRF device used, XRF testing was not required of PHA under the governing regulations but was undertaken to reduce future costs of RRP work. Use of XRF data is not a regulated requirement and therefore lack of serial numbers of XRF devices

Page 4

Ref to OIG Evaluation – Auditee Comments

Comment 17 >

used should not be cited as noncompliance. Any XRF data found in current Risk Assessments is due to voluntary XRF that PHA performed. Yes, HUD expects that lead inspections conform to EPA standards, but this should only be evaluated if lead inspections are required by HUD for purposes of lead prevention, which they aren't - they were used to guide routine maintenance and renovation.

Last, PHA's management and staff would like to thank your office for its attention to this matter as well as your review and recommendations. Please feel free to contact PHA at janea.jordon@pha.phila.gov or 215-684-4283 with any additional questions that you may have.

Sincerely,

Janea Jordon
SEVP Office of Public Safety, Audit & Compliance

CC:
Kelvin Jeremiah, President & CEO, PHA
Larry Redican, General Counsel, PHA

Page | 5

OIG Evaluation of Auditee Comments

Comment 1 — We acknowledge the Authority's efforts and the progress that it has made to address lead-based paint in its public housing. However, as detailed in this report, we found that improvements are still needed.

Comment 2 — We acknowledge the challenges that the Authority faces in managing its housing stock, which includes addressing lead-based paint. The Authority should work with HUD to ensure that its strategy sufficiently addresses the issues identified in this audit report.

Comment 3 — We acknowledge that the COVID-19 pandemic presented challenges. However, HUD did not waive the requirement for lead-based paint visual assessments. We also acknowledge that an inspection may not occur on the same date every year but may occur within the month due. Therefore, we modified the audit report to identify the number of days, after the 12-month requirement, that the visual assessments were late. We did not begin our count of the number of days late until the beginning of the following month. This reduced the number of days in which the Authority's visual assessments were late for the 73 units to 38 to 549 days.

Comment 4 — We respectively disagree with the Authority's statements that (1) although the lead-based paint requirements were not included in the HUD COVID-19 waivers, it stands to reason that the same argument applies to both requirements and (2) HUD determined that the threat to health and safety posed by COVID-19 was greater than the potential threat posed by forgoing non-emergent maintenance inspections, which is what the visual assessment is. The lead-based visual assessment is more than a non-emergent maintenance inspection. Its purpose is to identify deteriorated lead-based paint and other lead-based paint hazards that may ultimately impact the health and safety of tenants or lead to cases of childhood lead poisoning. Also, the visual assessment initiates the hazard reduction process.

Comment 5 — The Authority stated that to assert a causal link between a visual observation of paint and a clinical EBLL diagnosis is tenuous at best, because one cannot presume that deteriorated paint is a lead hazard.

We disagree. According to the CDC, lead-based paint and lead-contaminated dust are some of the most hazardous sources of lead for children in the United States. If lead-based paint deteriorates, lead from paint can threaten the health of occupants, especially children under 6 years old. Further, HUD's regulations at 24 CFR 35.110 define a lead-based paint hazard as any condition that causes exposure to lead from dust-lead hazards; soil-lead hazards; or lead-based paint that is deteriorated or present in chewable surfaces, friction surfaces, or impact surfaces and that would result in adverse human health effects. Therefore, deteriorated paint is a lead hazard.

The Authority also stated that it is unfair to suggest that EBLL cases could have been prevented if visual assessments were conducted on the same date every year.

Our draft report did not suggest that the Authority's EBLL cases could have been prevented if visual assessments were conducted on the same date every year. The report stated that for five of the Authority's EBLL cases, the units were found to have deteriorated lead-based paint, which could have been identified by a visual assessment. An untimely visual assessment can result in delays in implementing lead hazard reduction, and result in children being exposed to lead-based paint hazards for longer periods of time. A lead-based paint visual assessment remains a valuable tool in identifying lead-based paint hazards and initiating the hazard reduction process.

Comment 6 As detailed in comment 3, we modified the report to account for a late visual assessment after 12 months. Therefore, we agree that the visual assessment for only one unit was late before 2020. However, the visual assessment for that unit was not conducted within the same month as the prior year. We revised the audit report to state that we found that for one of the eight lead safe units, with a confirmed child with an EBLL, the Authority performed the visual assessment late in 2019.

Comment 7 We calculated the date identified in appendix B, based on the report date listed by the contractor. According to HUD's requirements, interim controls of dwelling units in which any child who is less than 6 years of age resides and common areas servicing those dwelling units must be completed within 90 days of the evaluation. Interim controls in dwelling units not occupied by families with one or more children of less than 6 years of age, common areas servicing those units, and the remaining portions of the residential property must be completed no later than 12 months after completion of the evaluation.

Comment 8 HUD requires that lead hazard reduction work be completed within 90 days of the date of the evaluation for units with children under the age of 6 and 1 year for other units. To be conservative, HUD OIG used the lead inspection/risk assessment report dates listed on the reports by the contractors, which at times were different from the actual date of the evaluation. Further, the Authority's documentation of the date that it received the report was a computer screen print of the file.

Comment 9 We commend the Authority for taking steps to improve its processes. The Authority should further ensure that it bases the deadline for hazard remediation work on the date of the evaluation in accordance with HUD's requirements.

Comment 10 We disagree with the Authority's use of the date of receipt of the report to determine the timeframe to complete hazard reduction. HUD's requirements are based on the dates of the evaluations, not the dates of when the reports were received.

Comment 11 We commend the Authority for implementing an automated tracking mechanism which will automatically calculate the hazard reduction completion date based on family composition and date that report was received by the Authority. The Authority should consult with HUD to ensure that its controls are sufficient. Additionally, the Authority should further ensure that it bases the deadline for hazard remediation work on the date of the evaluation in accordance with HUD's requirements.

Comment 12 We acknowledge that the Authority provided lead disclosure forms and the required HUD pamphlet to the tenants; however, the lead disclosure forms did not disclose the presence of known lead-based paint and lead-based paint hazards. The Authority also did not disclose that it had lead-based paint records. The Authority provided information regarding the notice sent to tenants of its lead hotline; however, that information does not relieve or replace the requirements of HUD's Lead Disclosure Rule.

Comment 13 We commend the Authority for actively taking steps to improve its program. The Authority should work with HUD to ensure that the processes it has developed and implemented sufficiently addresses audit report recommendation 1E.

Comment 14 Although ensuring the lead safety status of units, as required by Federal regulations, is important, it does not relieve or replace the separate requirements of the HUD's Lead Disclosure Rule.

Comment 15 We commend the Authority for taking action to ensure compliance with HUD's requirements and improve its quality control process. The Authority should work with HUD to resolve audit report recommendation 1F.

Comment 16 As stated in the audit report, HUD requires that the lead-based paint inspection and risk assessment reports conform with EPA's requirement regarding specific elements that must be included in the reports. The Authority should work with HUD to resolve audit report recommendation 1F.

Comment 17 We respectfully disagree with the Authority's comments that XRF data is not a regulated requirement. The use of XRF data is regulated and EPA requires that if an XRF device is used, the serial number must be documented in the report for both inspections and risk assessments. Further, as stated in the audit report, recording the XRF device serial number is part of EPA's requirement to document methodologies and ensuring adequate quality control measures.

Appendix B – Summary of Late Hazard Reduction

Unit	90-day requirement	365-day requirement	Total days to complete hazard reduction	Days after requirement	The Authority's explanation for delay
1	X		212	122	Did not identify the child under 6 in unit
2		X	456	91	Delayed due to COVID-19
3	X		162	72	Did not identify the child under 6 in unit
4	X		162	72	Did not identify the child under 6 in unit
5		X	434	69	Delayed due to COVID-19
6		X	425	60	Delayed due to COVID-19
7		X	416	51	Delayed due to COVID-19
8		X	407	42	Delayed due to COVID-19
9		X	406	41	Delayed due to COVID-19
10		X	400	35	Delayed due to COVID-19
11	X		119	29	Contract modifications
12	X		117	27	Did not identify the child under 6 in unit
13		X	390	25	Calculated timeframe based on date report received
14		X	388	23	Delayed due to COVID-19
15	X		112	22	Calculated timeframe based on date report received
16	X		111	21	Did not identify the child under 6 in unit
17	X		111	21	Did not identify the child under 6 in unit
18		X	372	7	Calculated timeframe based on date report received
19		X	370	5	Calculated timeframe based on date report received

Appendix C – Summary of Our Review of Lead-Based Paint Inspection and Risk Assessment Reports

Sample number[40]	Expired assessor certification	Missing assessor's signature	Missing serial number of XRF device used	Missing construction dates	Complied with requirements? Y-N	
1		X	X	X		N
2		X	X			N
3	X			X		N
4		X				N
5				X		N
6				X		N
7				X		N
8	X			X		N
9				X		N
10	X			X		N
11				X		N
12				X		N
13		X	X			N
14		X				N
15		X		X		N
Lead free total	3	6	3	11	0	15
16				X		N
17		X	X	X		N
18		X				N
19				X		N
20		X		X		N
21		X	X	X		N
22		X	X	X		N
23		X	X	X		N
24		X	X	X		N
25		X	X	X		N

[40] Sample numbers 1-15 include the 15 units that were categorized as lead free. Sample numbers 16-30 include the 15 units that were categorized as requiring lead hazard reduction. Sample numbers 31-96 include the 66 units that were categorized as lead safe.

Sample number[40]	Expired assessor certification	Missing assessor's signature	Missing serial number of XRF device used	Missing construction dates	Complied with requirements? Y-N	
26		X				N
27				X		N
28				X		N
29		X				N
30		X				N
Lead hazard reduction totals	0	11	6	11	0	15
31		X				N
32		X				N
33		X				N
34		X				N
35		X				N
36		X				N
37		X				N
38				X		N
39				X		N
40				X		N
41		X	X	X		N
42		X				N
43		X				N
44				X		N
45		X				N
46		X	X	X		N
47		X				N
48		X				N
49		X				N
50		X				N
51				X		N
52		X	X	X		N
53		X	X	X		N
54				X		N

Sample number[40]	Expired assessor certification	Missing assessor's signature	Missing serial number of XRF device used	Missing construction dates	Complied with requirements? Y-N	
55				X		N
56				X		N
57				X		N
58				X		N
59				X		N
60		X				N
61				X		N
62		X	X	X		N
63	X			X		N
64	X			X		N
65	X			X		N
66				X		N
67				X		N
68	X			X		N
69	X			X		N
70	X			X		N
71					Y	
72	X			X		N
73	X			X		N
74				X		N
75				X		N
76				X		N
77				X		N
78			X	X		N
79			X	X		N
80		X		X		N
81		X		X		N
82				X		N
83				X		N
84	X			X		N
85	X			X		N
86	X			X		N

Sample number[40]	Expired assessor certification	Missing assessor's signature	Missing serial number of XRF device used	Missing construction dates	Complied with requirements? Y-N	
87				X		N
88		X				N
89		X				N
90	X	X		X		N
91				X		N
92		X	X	X		N
93		X	X	X		N
94		X	X	X		N
95				X		N
96		X	X	X		N
Lead safe total	12	29	11	48	1	65
Totals	**15**	**46**	**20**	**70**	**1**	**95**

Appendix D – Federal Requirements

The United States Code at 42 U.S.C. 1437d(f)(1) states that each contract for contributions for a public housing agency must require that the agency maintain its public housing in a condition that complies with standards, which meet or exceed the housing quality standards established under paragraph (2).

The United States Code at 42 U.S.C. 1437d(f)(2) states that the HUD Secretary must establish housing quality standards under this paragraph, which ensure that public housing dwelling units are safe and habitable. Such standards should include requirements relating to habitability, including maintenance, health and sanitation factors, condition, and construction of dwellings.

HUD regulations at 24 CFR 35.88(a)(2) states that the lessor must disclose to the lessee the presence of any known lead-based paint or lead-based paint hazards in the target housing being leased. The lessor must also disclose any additional information available concerning the known lead-based paint or lead-based paint hazards, such as the basis for the determination that lead-based paint or lead-based paint hazards exist, the location of the lead-based paint or lead-based paint hazards, and the condition of the painted surfaces.

HUD regulations at 24 CFR 35.88(a)(3) states that the lessor must disclose the existence of any available records or reports pertaining to lead-based paint and/or lead-based paint hazards. The lessor must disclose any additional information available concerning the known lead-based paint and/or lead-based paint hazards, such as the basis for the determination that lead-based paint and/or lead-based paint hazards exist, the location of the lead-based paint and/or lead-based paint hazards, and the condition of the painted surfaces.

HUD regulations at 24 CFR 35.88(a)(4) state that the lessor must provide the lessee with any records or reports available to the lessor pertaining to lead-based paint or lead-based paint hazards in the target housing being leased. This requirement includes records and reports regarding common areas. This requirement also includes records and reports regarding other residential dwellings in multifamily target housing, provided that such information is part of an evaluation or reduction of lead-based paint or lead-based paint hazards in the target housing as a whole.

HUD regulations at 24 CFR 35.92(b) state that each contract to lease target housing must include, as an attachment or within the contract, the following elements:

(2) A statement by the lessor disclosing the presence of known lead-based paint or lead-based paint hazards in the target housing being leased or indicating no knowledge of the presence of lead-based paint or lead-based paint hazards. The lessor must also disclose any additional information available concerning the known lead-based paint or lead-based paint hazards, such as the basis for the determination that lead-based paint or lead-based paint hazards exist in the housing, the location of the lead-based paint or lead-based paint hazards, and the condition of the painted surfaces.

(3) A list of any records or reports available to the lessor pertaining to lead-based paint or lead-based paint hazards in the housing that have been provided to the lessee. If no such records or reports are available, the lessor must so indicate.

HUD's regulations at 24 CFR 35.110 define abatement as any set of measures designed to permanently eliminate lead-based paint or lead-based paint hazards. (See the definition of "permanent.") Abatement includes the removal of lead-based paint and dust-lead hazards, the permanent enclosure or encapsulation of lead-based paint, the replacement of components or fixtures painted with lead-based paint, and the removal or permanent covering of soil-lead hazards.

HUD's regulations at 24 CFR 35.110 define interim controls as a set of measures designed to temporarily reduce human exposure or likely exposure to lead-based paint hazards. Interim controls include but are not limited to repairs, painting, temporary containment, specialized cleaning, clearance, ongoing lead-based paint maintenance activities, and the establishment and operation of management and resident education programs.

HUD's regulations at 24 CFR 35.110 define a lead-based paint hazard as any condition that causes exposure to lead from dust-lead hazards; soil-lead hazards; or lead-based paint that is deteriorated or present in chewable surfaces, friction surfaces, or impact surfaces and that would result in adverse human health effects.

HUD's regulations at 24 CFR 35.110 define target housing as any housing constructed prior to 1978, except housing for the elderly or persons with disabilities (unless a child of less than 6 years of age resides or is expected to reside in such housing for the elderly or persons with disabilities) or any zero-bedroom dwelling.

HUD's regulations at 24 CFR 35.115(a) state that subparts B through R of this part do not apply to the following: (1) a residential property for which construction was completed on or after January 1, 1978, or in the case of jurisdictions that banned the sale or residential use of lead-containing paint before 1978, an earlier date as HUD may designate; (2) a zero-bedroom dwelling unit, including a single-room-occupancy dwelling unit; (3) housing for the elderly or a residential property designated exclusively for persons with disabilities, except this exemption should not apply if a child less than 6 years of age resides or is expected to reside in the dwelling unit (see definitions of "housing for the elderly" and "expected to reside" in 24 CFR 35.110); and (4) residential property found not to have lead-based paint by a lead-based paint inspection conducted in accordance with section 35.1320(a). Results of additional test(s) by a certified lead-based paint inspector may be used to confirm or refute a previous finding.

HUD's regulations at 24 CFR 35.175 state that the designated party, as specified in subparts C, D, and F through M of this part, should 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 3 years. Those records applicable to a portion of a residential property, for which ongoing lead-based paint maintenance, reevaluation activities, or both are required, must be kept and made available for HUD's review until at least 3 years after such activities are no longer required.

HUD's regulations at 24 CFR 35.1100 state that the purpose of subpart L is to establish procedures to eliminate, as far as practicable, lead-based paint hazards in residential property assisted under the U.S. Housing Act of 1937 (42 U.S.C. 1437 et seq.) but not including housing assisted under Section 8 of the 1937 Act.

HUD's regulations at 24 CFR 35.1115(a) state that a lead-based paint inspection must be conducted in all public housing unless a lead-based paint inspection that meets the conditions of subsection 35.165(a) has

already been completed. If a lead-based paint inspection was conducted by a lead-based paint inspector who was not certified, the public housing agency should review the quality of the inspection, in accordance with quality control procedures established by HUD, to determine whether the lead-based paint inspection has been properly performed and the results are reliable. Lead-based paint inspection of all housing to which this subpart applies must be completed not later than September 15, 2000.

HUD's regulations at 24 CFR 35.1115 (b) state that if a lead-based paint inspection has found the presence of lead-based paint, or if no lead-based paint inspection has been conducted, the PHA shall conduct a risk assessment according to the following schedule, unless a risk assessment that meets the conditions of §35.165(b) has already been completed.

HUD's regulations at 24 CFR 35.1120(a) state that each public housing agency must, in accordance with section 35.1325, abate all lead-based paint and lead-based paint hazards identified in the evaluations conducted under 24 CFR 35.1115. The public housing agency should abate lead-based paint and lead-based paint hazards in accordance with 24 CFR 35.1325 during physical improvements conducted under modernization.

HUD's regulations at 24 CFR 35.1120(b) state that in all housing for which abatement of all lead-based paint and lead-based paint hazards required in paragraph (a) of this section has not yet occurred, each public housing agency must conduct interim controls, in accordance with 24 CFR 35.1330, of the lead-based paint hazards identified in the most recent risk assessment. (1) Interim controls of dwelling units in which any child who is less than 6 years of age resides and common areas servicing those dwelling units must be completed within 90 days of the evaluation under 24 CFR 35.1330. If a unit becomes newly occupied by a family with a child of less than 6 years of age or such child moves into a unit, interim controls must be completed within 90 days after the new occupancy or move-in if they have not already been completed. (2) Interim controls in dwelling units not occupied by families with one or more children of less than 6 years of age, common areas servicing those units, and the remaining portions of the residential property must be completed no later than 12 months after completion of the evaluation conducted under 24 CFR 35.1115.

HUD's regulations at 24 CFR 35.1120(c) state that the public housing agency must incorporate ongoing lead-based paint maintenance and reevaluation activities into regular building operations in accordance with section 35.1355.

HUD's regulations at 24 CFR 35.1135 state that a public housing agency may use financial assistance received under the modernization program for the notice, evaluation, and reduction of lead-based paint hazards.

HUD's regulations at 24 CFR 35.1300 state that the purpose of subpart R is to provide standards and methods for evaluation and hazard reduction activities required in subparts B, C, D, and F through M of this part.

HUD's regulations at 24 CFR 35.1310 state that further guidance information regarding evaluation and hazard reduction activities described in this subpart is found in the following: (a) The HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.

HUD's regulations at 24 CFR 35.1320(a) state that lead-based paint inspections must be performed in accordance with methods and standards established either by a State or tribal program authorized by EPA under 40 CFR 745.324 or by EPA at 40 CFR 745.227(b) and (h).

EPA's regulations at 40 CFR 745.227(b)(1) state that an inspection must be conducted only by a person certified by EPA as an inspector or risk assessor and, if conducted, must be conducted according to the procedures in this paragraph.

EPA's regulations at 40 CFR 745.227(b)(4) state that the certified inspector or risk assessor must prepare an inspection report, which must include the following information: (i) date of each inspection; (ii) address of building; (iii) date of construction; (iv) apartment numbers (if applicable); (v) name, address, and telephone number of the owner or owners of each residential dwelling or child-occupied facility; (vi) name, signature, and certification number of each certified inspector or risk assessor conducting testing; (vii) name, address, and telephone number of the certified firm employing each inspector or risk assessor, if applicable; (viii) each testing method and device or sampling procedure employed for paint analysis, including quality control data and, if used, the serial number of any XRF device; (ix) specific locations of each painted component tested for the presence of lead-based paint; and (x) the results of the inspection expressed in terms appropriate to the sampling method used.

HUD's regulations at 24 CFR 35.1320(b)(1) state that risk assessments and lead-hazard screens must be performed in accordance with methods and standards established either by a State or tribal program authorized by EPA or by EPA at 40 CFR 745.227(c), (d), and (h) and paragraph (b)(2) of this section.

EPA's regulations at 40 CFR 745.227(d)(1) state that a risk assessment must be conducted only by a person certified by EPA as a risk assessor and, if conducted, must be conducted according to the procedures in this paragraph.

EPA's regulations at 40 CFR 745.227(d)(11) state that the certified risk assessor must prepare a risk assessment report, which must include the following information: (i) date of assessment; (ii) address of each building; (iii) date of construction of buildings; (iv) apartment number (if applicable); (v) name, address, and telephone number of each owner of each building; (vi) name, signature, and certification of the certified risk assessor conducting the assessment; (vii) name, address, and telephone number of the certified firm employing each certified risk assessor, if applicable; (viii) name, address, and telephone number of each recognized laboratory conducting analysis of collected samples; (ix) results of the visual inspection; (x) testing method and sampling procedure for paint analysis employed; (xi) specific locations of each painted component tested for the presence of lead; (xii) all data collected from onsite testing, including quality control data and if used, the serial number of any XRF device; (xiii) all results of laboratory analysis on collected paint, soil, and dust samples; (xiv) any other sampling results; (xv) any background information collected under paragraph (d)(3) of this section; (xvi) to the extent that they are used as part of the lead-based paint hazard determination, the results of any previous inspections or analyses for the presence of lead-based paint or other assessments of lead-based paint-related hazards; (xvii) a description of the location, type, and severity of identified lead-based paint hazards and any other potential lead hazards; and (xviii) a description of interim controls or abatement options for each identified lead-based paint hazard and a suggested prioritization for addressing each hazard. If the use of an encapsulant or enclosure is recommended, the report must recommend a maintenance and monitoring schedule for the encapsulant or enclosure.

HUD's regulations at 24 CFR 35.1330 state that interim controls of lead-based paint hazards include paint stabilization of deteriorated paint, treatments for friction and impact surfaces where levels of lead dust are above the levels specified in 24 CFR 35.1320, dust control, and lead-contaminated soil control. Paragraph (a)(1) states that only those interim control methods identified as acceptable methods in a current risk assessment report should be used to control identified hazards.

HUD's regulations at 24 CFR 35.1325 state that abatement should be performed in accordance with methods and standards established either by a State or Indian tribe under a program authorized by EPA or by EPA at 40 CFR 745.227(e) and should be completed by achieving clearance in accordance with section 35.1340. If encapsulation or enclosure is used as a method of abatement, ongoing lead-based paint maintenance activities must be performed as required by the applicable subpart of this part in accordance with section 35.1355.

HUD's regulations at 24 CFR 35.1340(c) state that when clearance is required, the designated party should ensure that a clearance report is prepared that provides documentation of the hazard reduction or maintenance activity as well as the clearance examination. When abatement is performed, the report should be an abatement report in accordance with 40 CFR 745.227(e)(10).

HUD's regulations at 24 CFR 35.1355 provide that (a) maintenance activities must be conducted in accordance with paragraph (a)(2)(6) of this section, except as provided in paragraph (a)(1) of this section.

1. Maintenance activities need not be conducted in accordance with this section if a lead-based paint inspection indicates that no lead-based paint is present in the dwelling units, in common areas, and on exterior surfaces or a clearance report prepared in accordance with section 35.1340(a) indicates that all lead-based paint has been removed.

2. A visual assessment for deteriorated paint, bare soil, and the failure of any hazard reduction measures must be performed at unit turnover and every 12 months.

HUD's regulations at 24 CFR 35.1320(b)(1) state that risk assessments and lead-hazard screens must be performed in accordance with methods and standards established either by a State or tribal program authorized by EPA or by EPA at 40 CFR 745.227(c), (d), and (h) and paragraph (b)(2) of this section.

HUD's Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, chapter 6, section IV, subpart C.3, provides that the owner or manager should keep the following forms or reports to facilitate and document the lead-safe maintenance program:

- Reports of visual assessments.
- A log of the dates of visual assessments.
- An inventory of lead-based paint testing results or presumption of lead-based paint or hazards.
- An inventory of lead hazard controls, if any.
- Lead-safe maintenance work orders, if used.
- Reports of clearance examinations.

HUD's Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, chapter 11, section II, subpart N, provides that lead hazard evaluation, lead hazard control, and maintenance and

monitoring activities associated with interim controls must be documented. Several specific documents are of particular importance.

- Risk assessment or inspection or testing reports. These documents record the findings of any risk assessment or inspection, including any inspection or testing of painted surfaces and the collection and analysis of samples for determination of the lead content in dust, soil, or water. A risk assessment that finds no lead-based paint hazards would also justify issuance of a report.
- Lead hazard control plan. This document explains the schedule of hazard control actions in multifamily housing.
- Notices to occupants. This includes copies of notices to occupants of the results of hazard evaluations (risk assessments, lead-based paint inspections, or paint testing) and the results of lead hazard reduction activities, including clearance.
- Description of work done. For future reference, such as to help them implement the lead hazard control plan effectively, owners should have on file a written description of the nature and locations of the work, its starting and ending dates, who performed it, and any specific suggestions for monitoring. Owners or their property managers who performed or whose employees performed renovation work covered by EPA's Lead Renovation, Repair and Painting Rule (RRP) must keep all records necessary to demonstrate compliance with that rule for at least 3 years after the end of the renovation (40 CFR 745.86). If the renovation work was performed by an outside firm, the owner or property manager should arrange to have ongoing access to those records. If the outside firm is planning to dispose of the records at or after the end of the 3-year period, the owner or property manager should arrange to obtain the records for further use in implementing the lead-hazard control plan.
- Clearance examination reports. These documents record the basis for clearance of the property so that it is ready for occupancy. If the housing (or the renovation) is not federally assisted, the renovation firm's client (typically, the property owner or manager) must be provided a copy of the dust sampling report within 30 days of the completion of the renovation. If the housing (or the renovation) is federally assisted, the property owner or manager must send the report to the affected occupants within 15 days. Cleaning verification is different from clearance, but both require documentation.
- Reevaluation reports. These reports indicate whether the hazard control measures are still in satisfactory condition and whether the dwelling is still in a lead-safe condition. If problems are identified, they prompt corrective action.
- Maintenance and monitoring log. This log records the results of the property owner's or property manager's monitoring visits. Any repairs made because of these visits or notices of defects from occupants should also be recorded.
- Other applicable records. Retain records of worker training in lead-safe work practices; any personal air monitoring, if performed; and correspondence with State and local government agencies on matters such as childhood lead poisoning cases, regulatory compliance (for example, HUD Lead Safe Housing Rule, EPA's RRP rule, Occupational Safety and Health Administration's Lead in Construction standard, EPA-State-tribal waste, and lead regulations), or other related matters.