

The Procurement Division of Knox County, Tennessee will receive sealed bids for the provision of **HOME REHABILITATION PROGRAM FOR CAC (with lead hazard)** as specified herein. Bids must be received by **10:00 a.m. on April 25, 2024**. Late bids will be neither considered nor returned.

Deliver Bids to:

**Bid Number 3558
Knox County Procurement Division
Suite 100, 1000 North Central Avenue
Knoxville, Tennessee 37917**

The Bid Envelope must show the Company Name, Bid Number, Bid Name and Bid Opening Date.

ADDITIONAL INFORMATION: Knox County wants requests for additional information routed to Robert Mackey, Buyer, at 865-215-5754. Questions may be emailed to robert.mackey@knoxcounty.org.

AWARD: Contractor must be an approved vendor for the Home Rehabilitation Program prior to any workorders being awarded. For requirement, please use contact information listed above.

BID DELIVERY: Knox County requires bidders, when hand delivering bids, to time and date stamp the envelope before depositing it in the bid box. Knox County will not be responsible for any lost or misdirected mail sent by common carrier, nor will Knox County be responsible for submittals delivered to addresses other than the delivery address specified at the top of this solicitation. The time clock in the Procurement Division shall become the official record of time. Knox County shall not be responsible for technical difficulties experienced by vendors trying to register or submit their bid electronically less than twenty-four (24) hours prior to the bid opening time.

Solicitations must be in a sealed envelope/box prior to entering the Procurement Division office. Procurement Division personnel are not allowed to see the submittal nor assist in placing documents in an envelope/box. Additionally, the Procurement Division is not responsible for providing materials (e.g. envelopes, boxes, tape) for submittals.

CLOSURES: During periods of closure due to unforeseen circumstances in Knox County or closures at the direction of the Knox County Mayor, the Procurement Division will enact the following procedures in regard to solicitations and weather delays:

- If the Mayor closes the Administrative offices prior to the time set for solicitation opening of any business day, all solicitations due that same day will be moved to the next operational business day.
- Other unforeseen circumstances shall be at the sole discretion of the Procurement Director.
- Knox County shall not be liable for any commercial carrier's decision regarding deliveries during any unforeseen circumstances.

COMPLIANCE WITH ALL LAWS: Contractor is assumed to be familiar with and agrees to observe and comply with all federal, state, and local laws, statutes, ordinances, and regulations in any manner affecting the provision of goods and/or services, and all instructions and prohibitive orders issued regarding this work and shall obtain all necessary permits.

INTERPRETATION: No oral interpretation will be made to any bidder regarding the meaning of specifications or the Scope of Work. All questions are to be submitted in writing via email and will be answered in the form of an addendum to the solicitation by the Knox County Procurement Division, if applicable.

IRAN DIVESTMENT ACT: By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to Tennessee Code Annotated § 12-12-106.

NO BOYCOTT OF ISRAEL: Pursuant to Tennessee Code Annotated Title 12, Chapter 4, Part 1, by submission of a response to this solicitation, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint response each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not currently engaged in, and will not for the duration of the contract engage in, a boycott of Israel.

RIGHT TO INSPECT: Knox County reserves the right to make periodic inspections of the manner and means the service is performed or the goods are supplied.

VENDOR REGISTRATION: Prior to the opening of this bid, ***ALL BIDDERS MUST*** be registered with the Procurement Division. Please register on-line at our website at www.knoxcounty.org/procurement and click on "Online Vendor Registration." Vendors must be registered with the Procurement Division **prior** to submitting their bid.

These terms and conditions shall be part of the contract. Knox County reserves the right to negotiate other terms and conditions it deems appropriate and necessary under the circumstances to protect the public-trust. By submitting a bid, vendor agrees to these terms and conditions.



WORK ORDER
KNOX COUNTY HOME REHABILITATION PROGRAM
BID COPY

WORK ORDER ID#: 2022CN0057

Date: 2/16/2024

Knoxville, TN 37849

Year Built: 1975

PROJECT SUPERVISOR: Aaron Cate

CONTRACTOR:

LEAD HAZARDS WERE PRESENT AT THE SUBJECT PROPERTY. INTERIM CONTROLS/ABATEMENT MUST BE PERFORMED BY QUALIFIED PROFESSIONAL AS PER HUD LEAD SAFE HOUSING RULE USING LEAD SAFE WORK PRACTICES. CLEARANCE WILL BE REQUIRED AT PROJECT COMPLETION.

ALL CHANGE ORDERS MUST BE PRE APPROVED BY THE DIRECTOR HOUSING AND ENERGY SERVICES.

GENERAL REQUIREMENTS AND STANDARDS:

The construction shall be accomplished without undue delay and with minimum inconvenience to the owner. All materials and products used shall be new unless otherwise specified, and applied or stilled in accordance with the manufacturer's specification and the Rehabilitation Specifications. Reference in these Specifications to any article, device, products, material, or fixture by name, make or catalogue number shall be interpreted as establishing a standard or quality. The contractor shall furnish all materials, labor, equipment, and services to perform all work in these Specifications by established building and construction practices, proceeding promptly to complete said work in the specified time so stated in the contract documents. The contractor shall obtain all necessary licenses and permits before work commences. *All work shall be carried out pursuant to the currently adopted Federal, State, City of Knoxville, and Knox County Tennessee codes and ordinances as applicable.* Mechanical, plumbing and electric contractors or subcontractors shall be licensed by the State of Tennessee. A copy of this license is to be provided to CAC. At the completion of the designated work, the contractor shall remove all temporary construction equipment, salvage materials, trash, and other debris and dispose of legally, leaving the area for which the contractor is responsible in a neat condition. Cleaning of fixtures, doors, and windows, installed under this work, shall be the responsibility of the installing Contractor.

The Contractor is required to provide the homeowner with all warranties and guarantees. This applies to everything installed on the job which carries a warranty or guaranty, i.e.; windows, faucets, etc. Failure to do so will be considered a breach of contract. Final pay request will not be approved until warranties are provided. The Contractor shall guarantee all workmanship and material for a year period from the *date* of final inspection and one year from the time of completion

LEAD HAZARD CONTROL

MEASURE #1

Item #1 Low Dust:

Specifications: Provide occupants protection and work site preparation in accordance with Table 8.1 of the 2012 HUD Guidelines for Evaluation Control of Lead-Based Paint Hazards in Housing.

Item #2 Clean to Clearance - Entire Home:

Specifications: After completion of all lead hazard reduction activities, wet mist, fold and remove all containment polyethylene sheeting. HEPA vacuum all visible surfaces including walls, floors, ceilings and window troughs from the top down. Detergent scrub all horizontal surfaces in small sections using a 3-bucket system, changing rinse water every 250 SF. Completely rinse with clean water and new equipment. After surfaces are dry, HEPA vacuum all visible surfaces except ceiling.

Item #3 Window Sill:

Specification: Window sill in bedroom 1 is above the testing limits. Window sill 7, 8, 9, 10, 11 were not tested but should assume to contain lead dust since not tested. Window sills are made of marble. Wash entire window area with detergent solution, rinse, allow to dry and HEPA vacuum any paint chips, dust and debris. Clean window glass as well

ITEM	L	M	DESCRIPTION	UNITS	AMT.	UNIT COST	TOTAL
1	X		Labor	EA	1		
1		X	Materials	EA	1		
2	X		Labor	EA	1		
2		X	Materials	EA	1		
3	X		Labor	EA	1		
3		X	Materials	EA	1		
					MEASURE 1 TOTAL		

EMERGENCY REPAIR

Measure #2

Item #1 Roof Replacement:

Specifications: Roof Replacement (20 Square) with asphalt shingles installed according the manufacturer instruction and by local code office.

-THE CONTRACTOR IS REQUIRED TO FURNISH CAC WITH PHOTOS OF THE DEMOLITION RESULTS AND EACH STAGE OF THE ROOF REPLACEMENT WITH THE INVOICE FOR THIS WORK. PROJECT WILL NOT BE ELIGIBLE FOR PAYMENT WITHOUT STEP-BY-STEP PROGRESS PHOTOS.

-Roof Demolition and Disposal – Strip all existing roof coverings to wood sheathing and properly dispose of waste and debris in an approved land fill. You must provide a copy of the landfill invoice with your final payment request.

-Repair Roof Sheathing - Inspect the roof sheathing after all covering is removed and replace up to 32 SF of damaged roof sheathing to match existing sheathing in thickness. Notify the Project Supervisor immediately if additional sheathing replacement is needed REQUEST SITE VISIT. PHOTO'S REQUIRED BY CONTRACTOR FOR ANY ADDITIONAL MATERIALS NEEDED. Each roof project to include up to 32 sq. ft of decking replacement if needed. Any raw decking installed to be painted.

-Apply 15# felt underlayment, (or synthetic felt underlayment) and 225# self-sealing, 25-year shingles. Install all roof material as specified by the manufacturer.

-Shingles applied to low sloped roofs (less than 4/12 pitch) must have ice and water shield applied under all the shingles and have no more than 3” shingle tab exposure. Use ice and water shield by TAMPKO and follow manufacturer’s directions to install. NO SHINGLES ARE TO BE APPLIED ON ROOFS WITH LESS THAN 3/12 PITCH WITHOUT PRIOR WRITTEN APPROVAL.

-New, standard aluminum drip edge shall be installed continuous around the roof corners.

-All valleys, flashings, boots and eave drips shall be installed, or replaced, during roof replacement. All valleys shall have ice and water shield installed in the valleys regardless of roof slope. Shingles are applied over the ice and water shield in the valleys.

-All sanitary sewer stacks and electrical masts projecting through the roof shall have new boot flashings. Boots and vents that are installed must fit tight to the roof surface and be set in roof cement such as Black Jack Waterproof Roof Sealant and be nailed on each corner, minimum.

-Where the roof intersects a vertical brick wall or chimney, the joints shall be flashed with aluminum step flashing and counter flashed.

-Where the roof intersects siding, the joint shall be flashed with aluminum step flashing that is tucked under existing siding. Repair of any damage to the existing siding during this operation is the responsibility of the contractor.

-NOTE: Measure to include shingle over ridge vents as needed for the project. When shingle over ridge vent is used the contractor must supply cap shingles to match roof shingle color and texture. RIDGE VENTS ON A DOUBLE WIDE MODULAR HOME MAY NOT BE FEASIBLE DUE TO THE LOW SLOPE ROOF.

-Provide a copy of all manufacturer’s warranties to owner.

ITEM	L	M	DESCRIPTION	UNITS	AMT.	UNIT COST	TOTAL
1	X		Labor	SQ	20		
1		X	Materials	SQ	20		
					MEASURE 2 TOTAL		

Work Order # 2022CN0057

EMERGENCY REPAIR

MEASURE #3

Item #1 Demo Back Deck & Steps: 10' x 20' & 6'-6" off the ground

Specifications: Demo and take to an approved landfill.

Item #2 Pressure Treated Deck:

Install new Back deck to same deminsions as existing 10' x 20' & stairs 3'-6" wide.

Specifications: Install per the manufacturer’s requirements and verify all local code requirements before starting project.

Deck to replace existing deck on the front of the home. 8' x 10'. with steps. All materials to be pressure treated. Contractor is to refer to drawing included, Residential deck handout and picture of existing deck to calculate bid.

Residential Deck Handout: www.knoxcounty.org/codes/pdfs/construction_info/DeckInformation.pdf

ITEM	L	M	DESCRIPTION	UNITS	AMT.	UNIT COST	TOTAL
1	X		Labor	EA	1		
2	X		Labor	EA	1		
2		X	Materials	EA	1		
					MEASURE 3 TOTAL		

EMERGENCY REPAIR

MEASURE #4

Item #1 HVAC Natural Gas System: 3 Ton Split

Home is 1800 sq ft conditioned area

Specifications: All HVAC units shall be installed as specified. Mechanical permits will be required for all HVAC work. All Split Gas Systems to be installed to be 92% efficiency and 15 SEER or greater Straight Air. Packaged units (“Gas Packs”) to be 80% efficiency and 15 SEER or greater. All heating & cooling equipment must be energy star equal and shall be sized according to the latest editions of ACCA Manuals J and S. Specification of any type of heating unit shall be taken to include all connections to existing gas and wiring terminations, connecting to existing ducting and line sets and any safety switches. This work includes all other work to provide a complete, efficient, balanced and operational system THE CONTRACTOR WILL REGISTER & PROVIDE THE HOMEOWNER WITH A 10 YEAR PARTS & LABOR WRITTEN MANUFACTURER’S WARRANTY. To include concentric venting to exterior of home.

1. Any existing line set is to be flushed and pressure tested by the Contractor to ensure that there is no leakage.
2. If installing a package unit, it is to include a four sided shroud. Units that are ducted through an exterior wall must have a four sided shroud covering the ductwork on the exterior of the building. The shroud must be securely fastened, and caulked around the perimeter of the shroud with exterior grade silicone caulk, to both the foundation wall and the air handling unit.
3. All work must meet current code for city or county work being performed.
4. Units may be installed on a level prefabricated pad. If an existing pad fits the new unit, it may be reused provided that it is leveled and not broken or damaged.
5. New digital thermostat is to be provided.

THE CONTRACTOR WILL PROVIDE CAC WITH A COPY OF 10 YEAR PARTS & LABOR WRITTEN MANUFACTURER’S WARRANTY REGISTERED IN CLIENT NAME.

THE CONTRACTOR WILL PROVIDE ONE YEAR SUPPLY OF HVAC FILTERS. MUST PROVIDE AHRI.

ITEM	L	M	DESCRIPTION	UNITS	AMT.	UNIT COST	TOTAL
1	X		Labor	EA	1		
1		X	Materials	EA	1		
				MEASURE 4 TOTAL			

EMERGENCY REPAIR

MEASURE #5

Item #1 Interior Light - Hallway:

Specifications: Interior light replacement will be installed according to manufacturer instruction and by local code office. An interior light, at a minimum, will be 13" with ceiling flush mount with globe and LED bulbs.

Item #2 Light Switch - Hall Bathroom:

Specifications: Replace existing light switch(s). Light switch(s) will be installed according to manufacturer instruction and by local code office. Verify that all circuit functions safely.

ITEM	L	M	DESCRIPTION	UNITS	AMT.	UNIT COST	TOTAL
1	X		Labor	EA	1		
1		X	Materials	EA	1		
2	X		Labor	EA	1		
2		X	Materials	EA	1		
					MEASURE 5 TOTAL		

EMERGENCY REPAIR

MEASURE #6

Item #1 Sheetrock Interior Ceiling Repair - Basement:

Specifications: Remove the damaged ceiling covering down to the framing 20 square feet. Remove water damaged insulation and replace it. Treat mold on remaining surfaces with Puracil Pool Sanitizer (or equal oxidizing solution). Replace 20 SF damaged or missing drywall with new drywall or patch. Tape seams and apply sheetrock compound to blend with surrounding surfaces. Drywall shall be finished so that all joints, cracks, and gaps are taped with paper or fiberglass wall board tape, and shall receive a minimum of three (3) coats joint compound. If repaired dry wall is not behind a tub/shower surround, paint the patched surfaces to match the original color and texture. Where it is not possible to closely match paint colors, the patched wall should be entirely repainted from corner to corner. All drywall applied to non-fire rated walls shall be of ½” thickness. In bathrooms or laundries (or other areas where moisture will be present), drywall shall be MR “Green Board”. All drywall shall be attached by ‘single nail’ or screw applications; adhesives may be used in conjunction with nailing/screwing, but shall not substitute.

Where sheetrock protrudes beyond door and window casings and/or existing base, then vinyl 1/2" channel trim will be used. All outside corners on all sheetrock installations shall have a metal corner bead installed for reinforcement and protection from bumps/scars.

Match to existing as close as possible & paint.

Item #2 Kilz:

Specifications: Intall Kilz in downstairs closet under stair area where drywall is stained due to the previous water leak from the ceiling. Install on all areas of drywall

ITEM	L	M	DESCRIPTION	UNITS	AMT.	UNIT COST	TOTAL
1	X		Labor	SQFT	20		
1		X	Materials	SQFT	20		
2	X		Labor	EA	1		
2		X	Materials	EA	1		
						MEASURE 6 TOTAL	

EMERGENCY REPAIR

MEASURE #7

Item #1 Smoke Detectors:

Specifications: Smoke detector(s) will be installed according the manufacturer instruction at locations dictated by local code office. The smoke detector(s) at a minimum will be battery operated and wireless-inter-connectable via radio frequency. "Kidde- Model #0919-9999" or equal.

Item #2 Carbon Monoxide Detectors:

Specifications: Carbon monoxide detector(s) will be installed according the manufacturer instruction at locations dictated by local code office. The carbon monoxide detector(s) at a minimum will be battery operated. "Kidde- Model #21029717" or equal.

ITEM	L	M	DESCRIPTION	UNITS	AMT.	UNIT COST	TOTAL
1	X		Labor	EA	6		
1		X	Materials	EA	6		
2	X		Labor	EA	2		
2		X	Materials	EA	2		
				MEASURE 7 TOTAL			

PERMIT(S)
 Contractor to verify required permits with Knox County and State of Tennessee as required. Submit proof of passed inspection(s) to CAC for final payment.

ITEM			DESCRIPTION	UNITS	AMT.	UNIT COST	TOTAL	
			REQUIRED PERMITS	EA	1			
			MEASURE 1 TOTAL					
			MEASURE 2 TOTAL					
			MEASURE 3 TOTAL					
			MEASURE 4 TOTAL					
			MEASURE 5 TOTAL					
			MEASURE 6 TOTAL					
			MEASURE 7 TOTAL					
			TOTAL ALL MEASURES					

Lead-Based Paint Inspection/Risk Assessment Report

FOR PROPERTY OWNED BY AND LOCATED AT:

[REDACTED]
[REDACTED]
Powell, TN 37849
[REDACTED]

Report Date: March 11, 2024



PREPARED BY:

Aaron Cate (License # TNLBP2020-377-76451-7644R)

Knox County Home Rehabilitation Program

P.O. Box 1650

Knoxville, TN 37950

(865) 244-3080

Executive Summary

As a result of the Lead-Based Paint (LBP) Inspection and Risk Assessment conducted on May 31, 2022 & February 16, 2024, it was determined that lead-based surface coatings (paint) was not found however lead hazards were present at the subject property in the form of lead dust as of the date of this report. The analytical results from the Inspection and Risk Assessment efforts identified LBP dust hazards as defined by the EPA and/or HUD standards.

Information and Purpose of Inspection and Risk Assessment

A LBP Inspection and Risk Assessment was conducted at [REDACTED]. On May 31, 2022 & February 16, 2024. The inspection/ risk assessment was conducted for the Knox County Home Rehabilitation Program. The objective of a LBP Inspection/Risk Assessment is to determine the existence, nature, severity, and location of lead-based paint and lead-based paint hazards. The provisions of this report by the Risk Assessor, explain the results of the investigation and options for reducing or eliminating LBP hazards. Based upon conversations with the property owner and/or occupant(s), to the knowledge of this Assessor, there has not been any previous LBP testing within the last year at this property.

As part of the assessment, a visual survey of the property and structure was conducted, dust wipe sampling was performed on a number of interior surfaces, and composite soil samples were collected. In addition, on-site paint testing using an x-ray fluorescence (XRF) lead analyzer (Niton Model # XLP-300A / Serial # 20400) was performed.

Site Information and Field Testing

The property is a single-family split foyer one story home over a walk-in basement. It has 3 bedrooms, living room, dining room, kitchen, den, office and 3 bathrooms. According to Knox County property assessor records, the house was built in 1975. The interior walls are drywall. The exterior is brick front and remainder are vinyl siding with a painted masonry foundation. The exterior lot is partially covered by grass with some bare areas.

Resident Questionnaire and Building Condition Form

The following questionnaires were completed as part of the risk assessment process to help the risk assessor identify particular use patterns and conditions of various building components, which may be associated with potential LBP hazards, such as opening and closing doors and/or windows painted with LBP. The following is a summary of the information obtained during that interview.

Form 5.0 Questionnaire for a Lead Hazard Risk Assessment of an Individual Occupied Dwelling Unit.

(Page 1 of 2)

(To be completed by risk assessor via interview with owner-occupant or, if a rental unit, an adult resident and, for questions 15 & 16, the owner.)

Property address [REDACTED]

Apt. No. _____ Unit is Owner occupied Renter occupied

Year of construction 1975 Prior LBP testing? Yes No

Name of owner interviewed [REDACTED] Owner interview date: 05/21, 2021

Name of resident interviewed (if rental unit) _____ Interview date: 1/1

Name of risk assessor ACQUA CATE

Children and Children's Habits

1. Do any children under age 6 live in the home or visit frequently? Yes No
(If no children under age 6, skip to Question 5.)

2. If yes, how many? _____

3. Please provide the following information about each child under 6 to the extent you can.

	Child 1	Child 2	Child 3	Child 4
(a) Age:	X			
(b) Blood lead level:				
(c) Month/year of blood lead test:				
(d) Location of bedroom:				
(e) Main room where child eats:				
(f) Main room where child plays:				
(g) Main room where toys are stored:				
(h) Main locations where child plays outdoors:				

(If a resident child under age 6 has had an elevated blood lead level, an environmental investigation may be necessary (see Chapter 16 of the HUD Guidelines).)

4. (a) Do any children tend to chew on any painted surfaces, such as interior window sills? Yes No

(b) If yes, where? _____

**Form 5.0 Questionnaire for a Lead Hazard Risk Assessment
of an Individual Occupied Dwelling Unit.**

(Page 2 of 2)

Property address [REDACTED] Apt. No. _____

Other Household Information and Family Use Patterns

5. Do women of child-bearing age live in the home? Yes No
6. If this home is in a building with other dwelling units, what common areas in the building are used by children?

7. (a) Which entrance is used most frequently? Front
(b) What other entrances are used frequently? _____
8. Which windows are opened most frequently? Kitchen
9. (a) Do you use window air conditioners?* Yes No
(b) If yes, where? NO AC in home
**Condensation underneath window air conditioners often causes paint deterioration.*
10. (a) Do you or any other household members garden? Yes No
(b) If yes, where is the garden? _____
11. (a) Are you planning any landscaping activities that will remove grass or ground covering? Yes No
(b) If yes, where? _____
12. (a) Which areas of the home get cleaned regularly? All
(b) Which areas of the home do not get cleaned regularly? _____
13. (a) Are any household members exposed to lead at work? Yes No
(If no, go to question 14.)
(b) If yes, are dirty work clothes brought home? Yes No
(c) If they are brought home, who handles dirty work clothes and where are they placed and cleaned?

14. (a) Do you have pets? Yes No
(b) If yes, do these pets go outdoors? _____

Building Renovations

15. (a) Were any building renovations or repainting done here during the past year? Yes No
(b) If yes, what work was done, and when? _____
(c) Were carpets, furniture and/or family belongings present in the work areas? Yes No
(d) If yes, which items and where were they? _____
(e) Was construction debris stored in the yard? Yes No
(f) If yes, please describe what, where and how was it stored. _____
16. (a) Are you conducting or planning any building renovations? Yes No
(b) If yes, what work will be done, and when? _____

Form 5.1 Building Condition Form for Lead Hazard Risk Assessment.

Property address [REDACTED] Apt. No. _____

Name of property owner [REDACTED]

Name of risk assessor Alva C. G. S. Date of assessment: 05/31/2022

Condition	Yes	No	Comments
Roof missing parts of surfaces (tiles, boards, shakes, etc.)		✓	
Roof has holes or large cracks		✓	
Gutters or downspouts broken		✓	
Chimney masonry cracked, bricks loose or missing, obviously out of plumb		✓	
Exterior or interior walls have obvious large cracks or holes, requiring more than routine pointing (if masonry) or painting		✓	
Exterior siding has missing boards or shingles		✓	
Water stains on interior walls or ceilings	✓		Dissected-plumbing hole
Walls or ceilings deteriorated		✓	
More than "very small" amount of paint in a room deteriorated		✓	
Two or more windows or doors broken, missing, or boarded up		✓	
Porch or steps have major elements broken, missing, or boarded up		✓	
Foundation has major cracks, missing material, structure leans, or visibly unsound		✓	
** Total number	1	11	

* The "very small" amount is the de minimis amount under the HUD Lead Safe Housing Rule (24 CFR 35.1350(d)), or the amount of paint that is not "paint in poor condition" under the EPA lead training and certification ("402") rule (40 CFR 745.223).

** If the "Yes" column has any checks, the dwelling is usually considered not to be in good condition for the purposes of a risk assessment, and conducting a lead hazard screen is not advisable. However, specific conditions and extenuating circumstances should be considered before determining the final condition of the dwelling and the appropriateness of a lead hazard screen. If the "Yes" column has any checks, and a lead hazard screen is to be performed, describe, below, the extenuating circumstances that justify conducting a lead hazard screen.

Notes (including other conditions of concern):

Paint Condition

The EPA and HUD have provided a specific definition for the term “deteriorated paint”. Deteriorated paint is defined as “any interior or exterior paint or other coating that is peeling, chipping, chalking, or that is otherwise damaged or separated from the substrate.” This definition is most typically associated with surface conditions only. Usage of this term in describing conditions other than those associated with surface coatings are not known to be defined by EPA or HUD.

Paint Sampling and Testing

LBP testing conforming to the HUD 2012 Guidelines was accomplished at this property on all surfaces. No paint chips were taken. A total of 124 tests (assays) were taken at a number of specified surfaces on both the interior and exterior of the dwelling using an x-ray fluorescence analyzer. Lead concentrations that meet or exceed the HUD published levels identified as being potentially dangerous were not found during this inspection.

Interior Dust Sampling

A total of 11 single surface dust wipes were collected in an effort to help determine the levels of lead-containing dust on the interior window sills and interior floor surfaces. These dust samples were collected from areas most likely to be lead-contaminated if lead-in-dust is present. These samples were collected in accordance with the requirements of ASTM Standard E-1728, Standard Practice for Field Collection of Settled Dust Samples Using Wipe Sampling Methods for Lead Determination by Atomic Spectrometry Techniques. While the EPA, HUD, and the State of Tennessee define the levels of leaded dust to be considered hazardous, HUD's Office of Lead Hazard Control & Healthy Homes has reduced the threshold and defined the following as action levels for leaded dust in dwellings: Two wipe samples taken are found to be over the limits for window sills.

- Floors $\geq 10 \mu\text{g}/\text{sf}$
- Window Sills $\geq 100 \mu\text{g}/\text{sf}$



Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer Address Knoxville-Knox County CAC (4379)
PO Box 51650
Knoxville, TN 37950

Order #: 551567

Matrix Wipe
Received 02/20/24
Analyzed 02/21/24
Reported 02/21/24

Project Location Number
Knox County Home Rehab
[Redacted]
2022CN0057

Sample ID	Cust. Sample ID	Location	Sample Date	Area	Total	Conc.	RL*
Parameter		Method					
551567-001	1	Bedroom 3 Floor	02/16/24				
Lead		EPA 7000B		1.00 ft2	<5.00 µg/wipe	<5.00 µg/ft2	5.00 µg/ft2
551567-002	2	Den Floor Entrance	02/16/24				
Lead		EPA 7000B		1.00 ft2	<5.00 µg/wipe	<5.00 µg/ft2	5.00 µg/ft2
551567-003	3	Dining Floor	02/16/24				
Lead		EPA 7000B		1.00 ft2	<5.00 µg/wipe	<5.00 µg/ft2	5.00 µg/ft2
551567-004	4	Kitchen Floor	02/16/24				
Lead		EPA 7000B		1.00 ft2	<5.00 µg/wipe	<5.00 µg/ft2	5.00 µg/ft2
551567-005	5	Foyer Floor	02/16/24				
Lead		EPA 7000B		1.00 ft2	<5.00 µg/wipe	<5.00 µg/ft2	5.00 µg/ft2
551567-006	6	Bed 1 Sill	02/16/24				
Lead		EPA 7000B		0.250 ft2	25.2 µg/wipe	101 µg/ft2	20.0 µg/ft2
551567-007	7	Kitchen Sill	02/16/24				
Lead		EPA 7000B		0.250 ft2	<5.00 µg/wipe	<20.0 µg/ft2	20.0 µg/ft2
551567-008	8	Office Sill	02/16/24				
Lead		EPA 7000B		0.250 ft2	<5.00 µg/wipe	<20.0 µg/ft2	20.0 µg/ft2
551567-009	9	Bed 2 Sill	02/16/24				
Lead		EPA 7000B		0.250 ft2	11.2 µg/wipe	45.0 µg/ft2	20.0 µg/ft2
551567-010	10	Liv Room Sill	02/16/24				
Lead		EPA 7000B		0.250 ft2	<5.00 µg/wipe	<20.0 µg/ft2	20.0 µg/ft2
551567-011	11	Den Sill	02/16/24				
Lead		EPA 7000B		0.250 ft2	<5.00 µg/wipe	<20.0 µg/ft2	20.0 µg/ft2

Minimum Total Reporting Limit: 5.0 µg/wipe. All internal QC parameters were met. Unusual sample conditions, if any, are described. Do not reproduce this report except in full. Concentration and *Reporting Limit (RL) based on areas provided by client. Values are reported to three significant figures. The test results apply to the sample as received. AIHA LAP, LLC accredited for Lead (Lab ID 100527).



Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer Address Knoxville-Knox County CAC (4379)
PO Box 51650
Knoxville, TN 37950

Order #: 551567

Matrix Wipe
Received 02/20/24
Analyzed 02/21/24
Reported 02/21/24

Project Knox County Home Rehab
Location [REDACTED]
Number 2022CN0057

Sample ID	Cust. Sample ID	Location	Sample Date	Total	Conc.	RL*
Parameter		Method	Area			

Analyst AI
551567-02/21/24 03:11 PM

Reviewed By **Ben Wood**
Laboratory Director

EPA Lead Clearance as of 2/1/24

Location	Level	Unit
Floors	< 10.0	µg/ft2
Interior Window Sills	< 100	µg/ft2
Window Troughs	< 400	µg/ft2

HUD Lead Clearance as of 2/1/24

Location	Level	Unit
Interior Floors	< 10.0	µg/ft2
Porch Floors	< 40.0	µg/ft2
Interior Window Sills	< 100	µg/ft2
Window Troughs	< 100	µg/ft2

Minimum Total Reporting Limit: 5.0 µg/wipe. All internal QC parameters were met. Unusual sample conditions, if any, are described. Do not reproduce this report except in full. Concentration and *Reporting Limit (RL) based on areas provided by client. Values are reported to three significant figures. The test results apply to the sample as received. AIHA LAP, LLC accredited for Lead (Lab ID 100527).



SCHNEIDER LABORATORIES GLOBAL, INC.
 2512 West Cary Street, Richmond, Virginia 23220-5117
 804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475
 www.slabinc.com e-mail: info@slabinc.com

WOL
 S 11
551567
 V:\551\551567
 kfinnmore 2/20/2024 9:23:02 AM
 Federal Express 271062657311
 Phone # **865-244-3030**
 Fax # **865-244-3030**
 E-mail **aaron.cate@cachousing.org**

Submitting Co. **Knox County CAC** Lab Use-WO # **4379** Acct #
 P.O. BOX 1631
KNOXVILLE, TN 37901
 Project Name: **Knox County Home Rehabilitation Program** Special Instructions [include requests for special reporting or data packages]
 Project Location: [redacted] Please email results to **aaron.cate@cachousing.org**
 Project Number: **2022 CN0057** in addition to **stephanie.courtney@cachousing.org**
 PO Number: State Of Collection **TENNESSEE**

Turn Around Time: 2 hours* Same day* 1 business day* 2 business days* 3 business days* 5 business days* Full TCLP (10d) Weekend*
 * not available for all tests
 Schedule rush organics, multi-metals & weekend tests in advance.

Matrix / Sample Type (Select ONE)
 All samples on form should be of SAME matrix type. Use additional forms as needed.
 Air Solid Aqueous Waste Bulk Wastewater Hi-Vol Filter (PM10) Water, Drinking Hi-Vol Filter (TSP) Compliance Oil Wipe Paint Wipe, Composite Sludge Soil

Tests / Analytes (Select ALL that Apply)
Asbestos Air / Fiber Counts
 PCM (NIOSH 7400) TEM (AHERA) TEM (EPA Level II)
Miscellaneous Tests
 Total Dust (NIOSH 0500) Resp. Dust (NIOSH 0600) Silica - FTIR (NIOSH 7602) Silica - XRD (NIOSH 7500)
Asbestos Bulk / Asb ID
 PLM (EPA 600/R-93/116) PLM (EPA Point Count) PLM (Qualitative only) NYELAP 198.11.4/6 CAELAP (EPA Interim) TEM (Chatfield)
FOR ASBESTOS AIR:
 TYPE OF RESPIRATOR _____ USED: _____

Metals-Total Conc.
 Lead RCRA Metals
Metals-Extract
 TCLP / Lead TCLP / RCRA Metals TCLP / Full (w/ organics)
Others

Sample #	Date Sampled	Time Sampled	Sample Identification (e.g. Employee, SSN, Bldg, Material)	Wiped Area (ft ²)	Type ¹ A,B,P,E	Time ²		Flow Rate ³		Total ⁴ Air Vol
						Start	Stop	Start	Stop	
1	2/16/24	9:00 AM	Bedroom 3 Floor	1ft ²	A					
2	2/16/24	9:10 AM	Pen Floor Entrance	1ft ²	A					
3	2/16/24	9:20 AM	Dining Floor	1ft ²	A					
4	2/16/24	9:30 AM	Kitchen Floor	1ft ²	A					
5	2/16/24	9:40 AM	Foyer Floor	1ft ²	A					
6	2/16/24	9:50 AM	Bed #1 S:ll	.250ft ²	A					
7	2/16/24	10:00 AM	Kitchen S:ll	.250ft ²	A					
8	2/16/24	10:10 AM	Office S:ll	.250ft ²	A					
9	2/16/24	10:20 AM	Bed #2 S:ll	.250ft ²	A					
10	2/16/24	10:30 AM	Liv Room S:ll	.250ft ²	A					
11	2/16/24	10:40 AM	Den S:ll	.250ft ²	A					

¹Type: A=area B=blank P=personal E=excursion ²Beginning/End of Sample Period ³Pump Calibration in Liters/Minute ⁴Volume in Liters [time in min * flow in L/min]

Sampled by: **Nathaniel Gardner** Relinquished to lab by: **Nathaniel Gardner**
 NAME: **Nathaniel Gardner** NAME: **Nathaniel Gardner**
 SIGNATURE: *Nathaniel Gardner* SIGNATURE: *Nathaniel Gardner*
 DATE/TIME: **2/16/24 11:15 AM** DATE/TIME: **2/16/24 11:15 AM**

FX UPS USM HD DB
 WB: _____

Sample return requested Ambient temp Ice °C pH Cl R S X Chain-of-Custody documentation continued internally within lab. Terms and conditions page 2.

Soil Sampling

Two (2) composite soil samples were collected at this unit in accordance with the requirements of ASTM Standard E-1727, Standard Practice for Field Collection of Soil Samples for Lead Determination by Atomic Spectrometry Techniques. A composite sample is a sample containing soil from a stated number of locations mixed together to for a composite sample.

EPA has defined the following as hazardous levels for leaded soil:

- Play areas used by children under the age of 6 ≥ 400 $\mu\text{g/g}$, or 400 ppm
- Other areas $\geq 1,200$ $\mu\text{g/g}$, or 1,200 ppm

Laboratory Information

Dust and soil samples were analyzed by Schneider Laboratories Global Inc. located at 2512 West Cary Street, Richmond, VA 23220, (804) 353-6778. Schneider Labs has fulfilled the requirements of the AIHA Lab Accreditation Program (AIHA-LAP) LLC accreditation to the ISO/IEC 17025:2005 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in Industrial Hygiene, Environmental Lead and Environmental Microbiology.



Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: Knoxville-Knox County CAC (4378)
Address: PO Box 51650
Knoxville, TN 37950

Order #: 475789

Attn:
Project: Knoxville Home Rehab Program
Location: [REDACTED]
Number: 2022CN0057

Matrix: Soil
Received: 06/02/22
Analyzed: 06/02/22
Reported: 06/02/22

PO Number:

Sample ID	Cust. Sample ID	Location	Sample Date	Weight		Conc.	RL*
				Total µg	% / Wt.		
475789-012	1	Side A	05/31/22	1030 mg			
Lead		EPA 7000B		11.1 µg	0.00109 %	10.9 mg/kg	9.75 mg/kg
475789-013	2	Side B	05/31/22	1060 mg			
Lead		EPA 7000B		<10.0 µg	<0.000945 %	<9.45 mg/kg	9.44 mg/kg

Analyst: DM
475789-06/02/22 04:49 PM

Kelley Muncy

Reviewed By: **Kelley Muncy**
Manager

EPA Lead in Residential Soil

Location	Level	Unit
Play Areas	400	mg/kg
Baro Soil Average	1300	mg/kg

Minimum reporting limit: 10.0 µg. EPA does not distinguish between lead-contaminated soil and soil/lead hazards. All internal QC parameters were met. Unusual sample conditions, if any, are described. Do not reproduce this report except in full. Values are reported to three significant figures. PPM = mg/kg | PPB = µg/kg. The test results apply to the sample as received. A/HA-LAP, LLC accredited for Lead (Lab ID: 100527).



SCHNEIDER LABORATORIES GLOBAL, INC.

2512 West Cary Street, Richmond, Virginia 23220-5117
 804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475
 www.slabinc.com e-mail: info@slabinc.com

WO Label:

Submitting Co. Knox County CAC	Lab Use- WO #	Phone # Fax # & E-mail	865-244-3030 865-244-3030 aaron.cate@cachousing.org
P.O. BOX 1831	Acct #		
KNOXVILLE, TN 37901		4379	

Project Name: **Knox County Home Rehabilitation Program** *Special Instructions (include requests for special reporting or data packages)*
 Project Location: XXXXXXXXXX Please email results to **aaron.cate@cachousing.org**
 Project Number: **2092CM0657** in addition to **stephanie.courtney@cachousing.org**
 PO Number: _____ State Of Collection: **TENNESSEE**

Turn Around Time	Matrix / Sample Type (Select ONE)	Tests / Analytes (Select ALL that Apply)		
<input type="checkbox"/> 2 hours* <input type="checkbox"/> Same day* <input checked="" type="checkbox"/> 1 business day* <input type="checkbox"/> 2 business day* <input type="checkbox"/> 3 business days* <input type="checkbox"/> 5 business days* <input type="checkbox"/> Full TCLP (10d) <input type="checkbox"/> Weekend* <small>* not available for all tests Schedule rush organics, multi-metals & weekend tests in advance.</small>	<small>All samples on form should be of SAME matrix type. Use additional forms as needed.</small> <input type="checkbox"/> Air <input type="checkbox"/> Solid <input type="checkbox"/> Aqueous <input type="checkbox"/> Waste <input type="checkbox"/> Bulk <input type="checkbox"/> Wastewater <input type="checkbox"/> Hi-Vol Filter (PM10) <input type="checkbox"/> Water, Drinking <input type="checkbox"/> Hi-Vol Filter (TSP) <input type="checkbox"/> Compliance <input type="checkbox"/> Oil <input type="checkbox"/> Wipe <input type="checkbox"/> Paint <input type="checkbox"/> Wipe, Composite <input type="checkbox"/> Sludge <input type="checkbox"/> _____ <input checked="" type="checkbox"/> Soil <input type="checkbox"/> _____	Asbestos Air / Fiber Counts <input type="checkbox"/> PCM (NIOSH 7400) <input type="checkbox"/> TEM (AHERA) <input type="checkbox"/> TEM (EPA Level II) <input type="checkbox"/> _____ Miscellaneous Tests <input type="checkbox"/> Total Dust (NIOSH 0500) <input type="checkbox"/> Resp. Dust (NIOSH 0600) <input type="checkbox"/> Silica - FTIR (NIOSH 7802) <input type="checkbox"/> Silica - XRD (NIOSH 7500)	Asbestos Bulk / Asb ID <input type="checkbox"/> PLM (EPA 800/R-93/116) <input type="checkbox"/> PLM (EPA Point Count) <input type="checkbox"/> PLM (Qualitative only) <input type="checkbox"/> NYELAP 193.1/4/6 <input type="checkbox"/> CAELAP (EPA Interim) <input type="checkbox"/> TEM (Chatfield)	Metals-Total Conc. <input checked="" type="checkbox"/> Lead <input type="checkbox"/> RCRA Metals <input type="checkbox"/> _____ <input type="checkbox"/> _____ Metals-Extract <input type="checkbox"/> TCLP / Lead <input type="checkbox"/> TCLP / RCRA Metals <input type="checkbox"/> TCLP / Full (w/ organics) Others <input type="checkbox"/> _____

Sample #	Date Sampled	Time Sampled	Sample Identification (e.g. Employee, SSN, Bldg, Material)	Wiped Area (ft ²)	Type ¹ A, B, P, E	Time ²		Flow Rate ³		Total ⁴ Air Vol
						Start	Stop	Start	Stop	
1	05-31-22	11:15 AM	Side A							
2	05-31-22	11:25 AM	Side B							

¹Type: A=area B=blank P=personal E=excursion ²Beginning/End of Sample Period ³Pump Calibration in Liters/Minute ⁴Volume in Liters (time in min * flow in L/min)

Sampled by NAME <u>Aaron Cate</u> SIGNATURE <u>[Signature]</u> DATE/TIME <u>05-31-22 11:30 AM</u>	Relinquished to lab by NAME <u>Aaron Cate</u> SIGNATURE <u>[Signature]</u> DATE/TIME <u>05-31-22 12:30 PM</u>	<input checked="" type="checkbox"/> FX <input type="checkbox"/> UPS <input type="checkbox"/> USM <input type="checkbox"/> HD <input type="checkbox"/> DB WB: _____
------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Sample return requested Ambient temp lbs °C pH Cl R S X

Lead Hazards Identified

“Lead Hazard” is any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, or leaded paint that is present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse health effects.

“Deteriorated Paint” is dried paint that is showing signs of chipping, cracking, flaking, peeling, or otherwise damaged or separating from the substrate that it was applied to.

“Friction Surfaces” are areas where two surfaces are subject to abrasion and may be associated with elevated lead dust levels such as window sill and troughs.

“Impact Surfaces” are areas with damaged paint due to other building components striking them thus damaging the paint. The damaged paint releases from the substrate it was intended to protect, and may be found in areas such as doors.

“Chewable Surfaces” are areas easily accessed by small children with evidence of teeth marks.

Lead-Based Paint in “Intact” condition is not considered a hazard.

Special Cleaning Preceding Lead Hazard Control Activities

Before any lead hazard control activities begin, the structure and site must be inspected and pre-cleaned following HUD specified cleaning protocols, as detailed in the 2012 HUD Guidelines for the Evaluation and Control of LBP Hazards in Housing (Chapter 14), published by the U.S. Department of Housing and Urban Development. Some of the required steps include removing large debris and paint chips followed by the HEPA vacuuming all horizontal surfaces (floors, windowsills, troughs, etc.).

Existing Lead-Based Paint Hazards

The XRF results from some of the deteriorated paint that was tested showed that LBP hazards do not exist, as defined in the Residential LBP Hazard Reduction Act of 1992 (Title X) and as defined by the Environmental Protection Agency (EPA) regulation published in the January 5, 2001 Federal Register. The XRF results indicate that lead levels above EPA and/or HUD criteria do not exist.

Lead Hazard Control Options

Lead-safe work practices and worker/occupant protection practices complying with current EPA, HUD, and OSHA standards will be necessary to safely complete all work involving the disturbance of LBP coated surfaces and components. In addition, any work considered Lead Hazard Control will enlist the use of interim controls and/or abatement methods. It should be noted all lead hazard control activities have the potential of creating additional hazards, or even creating hazards that were not present before. All persons and/or firms performing lead hazard control activities must have received proper training in the lead abatement worker and/or lead abatement supervisor disciplines. Details for the lead hazard control options and occupant/worker protection practices can be found in: Guidelines for the Evaluation and Control of LBP Hazards in Housing (2012 Edition, Chapters 8 & 9) published by HUD, as well as in the Occupational Safety and Health Administration (OSHA) regulations found in 29 CFR, Part 1926.62, known as the “OSHA Lead Exposure in Construction Industry Standard”.

Interim Controls – as defined by HUD, means a set of measures designated to temporarily reduce human exposure to LBP hazards and/or lead containing materials. These activities include, but are not limited to: component and/or substrate repairs, paint and varnish repairs, the removal of leaded dust hazards, renovation, remodeling, maintenance, temporary containment, placement of seed, sod, or other forms of vegetation over bare soil areas, the placement of at least six inches of an appropriate mulch material over an impervious material laid on top of bare soil areas, the tilling of bare soil areas, extensive and specialized cleaning and ongoing LBP maintenance activities.

Abatement – as defined by HUD, means any set of measures designed to permanently eliminate LBP and/or LBP hazards. The product manufacturer and/or contractor must warrant abatement methods to last a minimum of twenty (20) years, or these methods must have a designed life span of at least twenty (20) years. These activities include, but are not limited to: the removal of LBP from substrates and components, the replacement of components of fixtures with lead containing materials and/or lead containing paint, the permanent enclosure of LBP with construction materials, the encapsulation of LBP with approved products, the removal or permanent covering (concrete or asphalt) of soil-lead hazards and extensive and specialized cleaning activities.

Untested Suspected/Potential Lead Hazards

The following areas/items were not tested during the inspection process and have the possibility of being coated with lead-based paint that is deteriorated and currently presenting a lead hazard. If lead hazard control work takes place, lead-safe work practices will need to be implemented during the project to ensure that lead hazards are not created.

LOCATION	COMPONENT	COMMENT	COLOR

Lead Hazard Control Options

HAZARD #	LEAD HAZARD DESCRIPTION	LEAD HAZARD CONTROL MEASURE	ESTIMATED COST
1	Low Dust	<u>Low Dust</u> Provide occupants protection and work site preparation in accordance with Table 8.1 of the 2012 HUD Guidelines for Evaluation Control of Lead-Based Paint Hazards in Housing.	\$1000
2	Clean to Clearance	<u>CLEAN TO CLEARANCE</u> After completion of all lead hazard reduction activities, wet mist, fold and remove all containment polyethylene sheeting. HEPA vacuum all visible surfaces including walls, floors, ceilings and window troughs from the top down. Detergent scrub all horizontal surfaces in small sections using a 3-bucket system, changing rinse water every 250 SF. Completely rinse with clean water and new equipment. After surfaces are dry, HEPA vacuum all visible surfaces except ceiling.	\$1200
3	Lead Dust	<u>Lead Dust</u> Window sill in bedroom 1 are above the testing limits. Window sill 7, 8, 9, 10, 11 were not tested. Window sills are made of marble. Wash entire window area with detergent solution, rinse, allow to dry and HEPA vacuum any paint chips, dust and debris. Clean window glass as well.	\$500

Ongoing Monitoring

Ongoing monitoring is necessary in all dwellings in which LBP is known or presumed to be present. At these dwellings, the very real potential exists for LBP hazards to develop. Hazards can be developed by means such as, but not limited to: the failure of lead hazard control measures; previously intact LBP becoming deteriorated; dangerous levels of lead-in-dust re-accumulating through friction, impact, and deterioration of paint; or, through the introduction of contaminated exterior dust and soil into the interior of the dwelling. Ongoing monitoring typically includes two different activities: re-evaluation and annual visual assessments. A re-evaluation is a risk assessment that includes limited soil and dust

sampling and a visual evaluation of paint films and any existing lead hazard controls. Re-evaluations are supplemented with visual assessments by the client, which should be conducted at least once a year, when the client or its management agent (if the unit is rented) receives complaints from residents about deteriorated paint or other potential lead hazards, when the residence (if a rental unit) has occupant turnover/vacancy, or when significant damage occurs that could affect the integrity of lead hazard control treatments (e.g., fire, flood, vandalism). The visual assessment should cover the entire dwelling unit, exterior painted surfaces, and ground cover. Visual assessments should confirm that all paint with known or suspected LBP is not deteriorating, that the lead hazard control methods have not failed, and that structural problems do not threaten the integrity of any remaining known, presumed or suspected LBP.

The visual assessment do not replace the need for professional re-evaluations by a certified risk assessor. The re-evaluations should include:

1. A review of prior reports to determine where lead-based paint and lead-based paint hazards have been found, what controls were done, and when these findings and controls took place;
2. A visual assessment to identify deteriorated paint, failures of previous hazard controls, visible dust and debris, and bare soil;
3. Environmental testing for lead in dust, newly deteriorated, and newly bare soil; and
4. A report describing the findings of the re-evaluation, including the location of any lead-based paint hazards, the location of any failures of previous hazard controls, and, as needed, acceptable options for the control of hazards, the repair of previous controls, and modification of monitoring and maintenance practices.

Hazard control options and associated cost estimates for the areas or components identified with LBP or lead hazards are also discussed later in this report in an effort to aid in the interpretation of the listed findings a glossary of terms and a list of publications and resources addressing lead hazards and their health effects are included at the end of this report.

The first re-evaluation should be conducted no later than one year after completion of the lead hazard controls, or, if specific controls or treatments are not conducted, two years from the beginning of ongoing lead-based paint monitoring and maintenance activities. Subsequent reevaluations should be conducted at intervals of two years, plus or minus 60 days.

Disclosure Regulations

A copy of this complete report must be made available to new lessees (tenants) and/or must be provided to purchasers of this property under Federal law before they become obligated under any future lease or sales contract transactions (Section 1018 of Title X – found in 24 CFR Part 35 and 40 CFR Part 745), until the demolition of this property. Landlords and/or sellers are also required to distribute an educational pamphlet developed by the EPA entitled “Protect Your Family From Lead in Your Home” and include standard warning language in their lease or sales contracts to ensure that parents have the information they need to protect their children from LBP hazards.

Conditions & Limitations

Staff of Knox County and/or Knoxville-Knox County C.A.C. has performed the tasks listed above requested by the client in a thorough and professional manner consistent with commonly accepted standard industry practices, using state of the art practices and best available known technology, as of the date of the assessment. Knox County and/or Knoxville-Knox County C.A.C. cannot guarantee and does not warrant that this assessment has identified all adverse environmental factors and/or conditions affecting the subject property of the date of the assessment. Knox County and/or Knoxville-Knox County C.A.C. cannot and will not warrant that the assessment that was requested by the client will satisfy the dictates of, or provide a legal defense in connection with, any environmental laws or regulations. It is the responsibility of the client to know and abide by all applicable laws, regulations, and standards including EPA's Renovation, Repair, and Painting regulation.

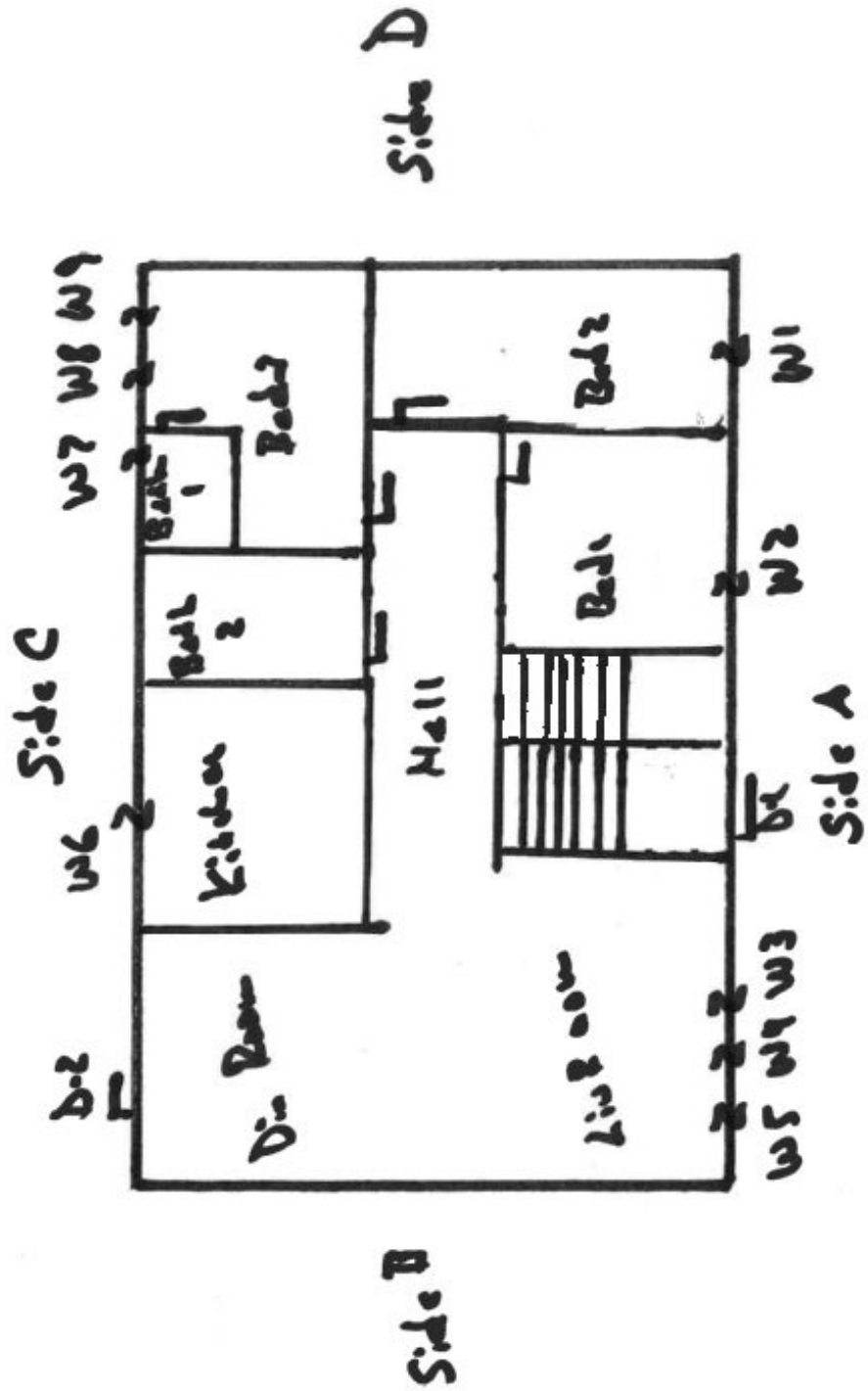
The results reported and conclusions reached by Knox County and/or Knoxville-Knox County C.A.C. are solely for the benefit of the client. The results and options in this report, based solely upon the conditions found on the property as of the date of the assessment, will be valid only as of the date of the assessment. Knox County and/or Knoxville-Knox County C.A.C. assumes no obligation to advise the client of any changes in any real or potential lead hazards at this residence that may or may not be later brought to our attention.

Aaron Cate
Risk Assessor Signature

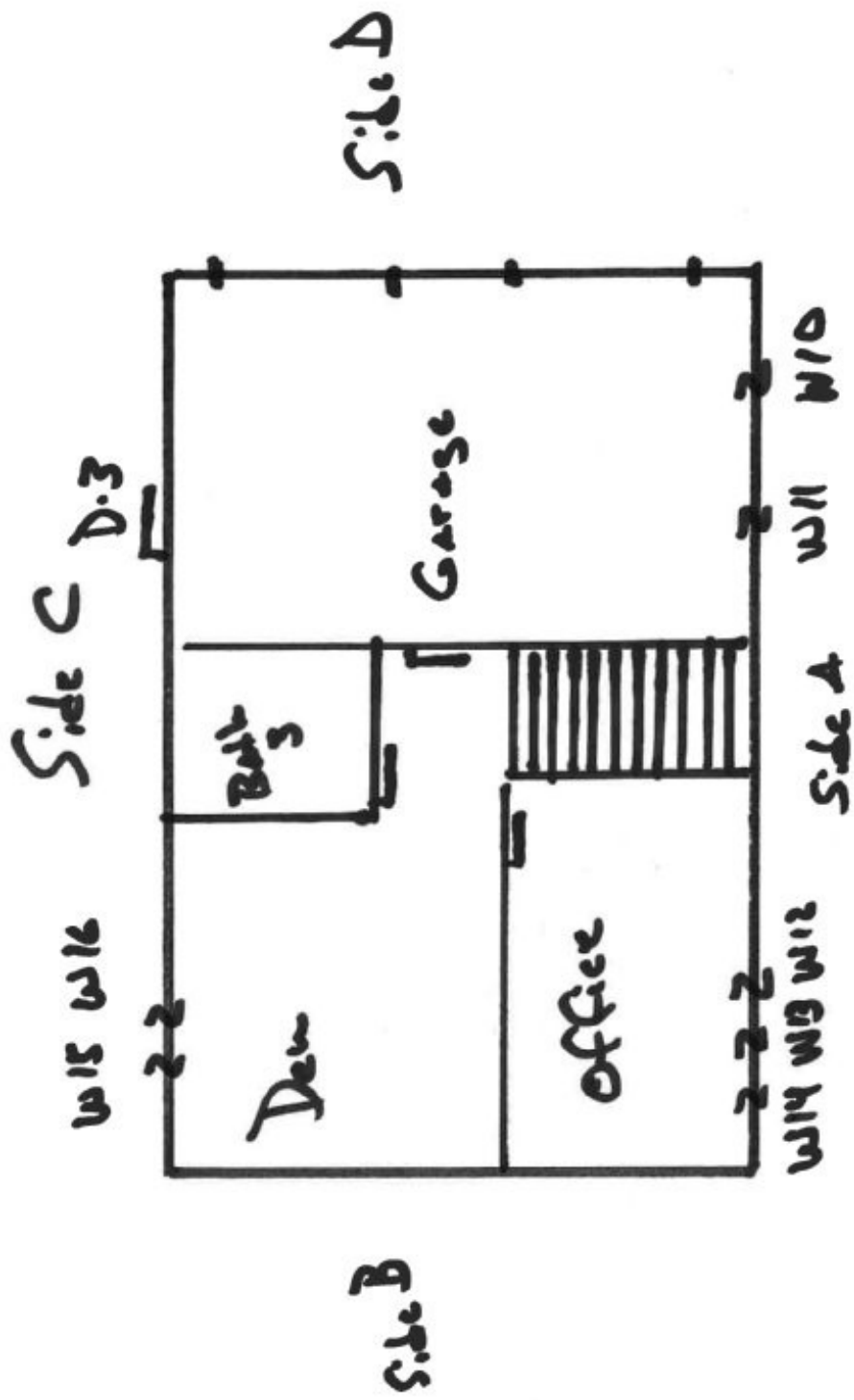
03-11-2024
Date

202206057

Level 2



Level 1 2022 CND0057





EXTERIOR SIDE A



EXTERIOR SIDE B



EXTERIOR SIDE C



EXTERIOR SIDE D



LIVING ROOM



KITCHEN



BEDROOM 1



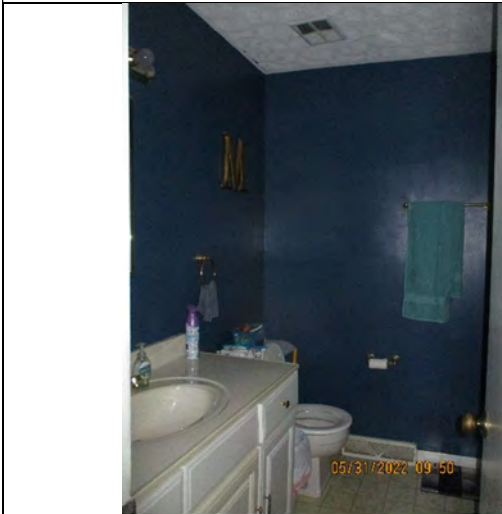
BEDROOM 2



BEDROOM 3



BATHROOM 1



BATHROOM 2



BATHROOM 3



DEN



DINING ROOM



FOYER



GARAGE



HALLWAY



OFFICE

THE STATE OF TENNESSEE



By virtue of the certification requirements in Rule Chapter 1200-01-18
Knoxville - Knox Co. CAC, Housing & Energy Services

P.O. Box 51650
Knoxville, TN 37958

Is hereby certified as a lead-based paint activity firm:

Certificate Number	Effective	Expires
FTN-2007-1947-6758R	6/30/2018	6/29/2021

Under the Seal of the State of Tennessee

This 03 day of October 2018

Department of Environment and Conservation

FIRM LICENSE



INSPECTOR CERTIFICATION



RISK ASSESSOR CERTIFICATION

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Solid Waste Management - Toxic Substances Program
William E. Sandgrove Tennessee Tower
312 Ross L. Parks Avenue, 14th Floor
Nashville, TN 37243

Annual Renewal Registration
Inspector

May 09, 2022

Aaron L. Cate
10417 Slomp Rd
Kodak TN 37764

Your annual registration renewal has been received and processed. Provided your current certifications are still in effect, you are certified to continue Lead based paint activities in the State of Tennessee.

Certification Number	Original Expiration Date	Renewal Reg and Tx	Final Effective Date	Expiration Date
2022AR0200-377-1986E	Inspector	4/27/2022	4/27/2023	4/27/2023

Should additional information be required, please contact us at: 1-855-771-1742.

Jackie Manuel - Lead Hazard Program Official

5/9/2022
Date:

STATE LICENSE

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Solid Waste Management - Toxic Substances Program
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 14th Floor
Nashville, TN 37243

Annual Renewal Registration
Inspector:

May 09, 2022

Aaron L. Cate
10417 Stamp Rd.
Kodak, TN 37664

Your annual registration renewal has been received and processed. Providing your current certifications are still in effect, you are certified to continue Lead-based paint activities in the State of Tennessee.

Your current annual registration information: Annual Reg 2nd Yr

Certification Number	Discipline	Field Effective Date	Expiration Date
TNEL02010-377-79561	Inspector	4/27/2022	4/27/2024

Should additional information be required, please contact us at 1-888-771-LEAD.

Jackie Manuel - Lead Hazard Program Official

5/4/2022
Date

STATE LICENSE



LABORATORY CREDENTIAL

Nikon XLP 300, 9242004, ed. 1

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004 EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Nikon LLC
Tested Model: XLP 300
Source: ⁹⁹Ca

Note: This PCS is also applicable to the equivalent model variations indicated below for the Lead-in-Paint K-L variable reading time mode, in the XLI and XLP series:

XLI 300A, XLI 301A, XLI 302A and XLI 303A
XLP 300A, XLP 301A, XLP 302A and XLP 303A
XLI 700A, XLI 701A, XLI 702A and XLI 703A
XLP 700A, XLP 701A, XLP 702A, and XLP 703A

Note: The XLI and XLP versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K-L variable reading time mode.

XRF CALIBRATION CHECK LIMITS

0.8 to 1.2 mg/cm² (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film). If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K-L variable reading time mode, substrate correction is not needed for: Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K-L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm ²)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

1 of 3

XRF DEVICE PCS - PAGE 1

Nikon XLP 300, 9242004, ed. 1

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the HUD evaluation using approved building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument was installed in November 2003 with 40 mCi initial strength, and the others were installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K-L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K-L variable time mode readings. Conduct XRF retesting at the ten testing combinations selected for retesting. Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.845. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten retest XRF results.

Find the absolute difference of the two averages.

2 of 3

XRF DEVICE PCS - PAGE 2