

Leveraging Lead Hazard Reduction Funds



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YOU Are Uniquely Positioned...

- Impact the health of young, vulnerable children.
- Leverage funds to help you pay for your projects.
- Create more safe, affordable housing in your community.



Let's Dig In!



Let's Dig In!

Sample ID	Cust. Sample ID	Location	Sample Date			
Parameter		Method	Area	Total	Conc.	RL*
416429-001	1-LW	1st FL Kitchen WS	04/29/21			
Lead		EPA 7000B	0.875 ft2	11.7 µg/wipe	13.4 µg/ft2	5.71 µg/ft2
416429-002	2-LW	1st FL Kitchen FL	04/29/21			
Lead		EPA 7000B	1.00 ft2	8.98 µg/wipe	8.98 µg/ft2	5.00 µg/ft2
416429-003	3-LW	1st FL Living Rm WS	04/29/21			
Lead		EPA 7000B	0.583 ft2	58.7 µg/wipe	101 µg/ft2	8.57 µg/ft2
416429-004	4-LW	1st FL Living Rm FL	04/29/21			
Lead		EPA 7000B	1.00 ft2	11.7 µg/wipe	11.7 µg/ft2	5.00 µg/ft2
416429-005	5-LW	1st FL Bathroom FL	04/29/21			
Lead		EPA 7000B	1.00 ft2	<5.00 µg/wipe	<5.00 µg/ft2	5.00 µg/ft2
416429-006	6-LW	1st FL Bathroom Tub	04/29/21			
Lead		EPA 7000B	1.00 ft2	30.2 µg/wipe	30.2 µg/ft2	5.00 µg/ft2
416429-007	7-LW	1st FL Bedroom 2 WS	04/29/21			
Lead		EPA 7000B	1.11 ft2	5.30 µg/wipe	4.77 µg/ft2	4.50 µg/ft2
416429-008	8-LW	1st FL Bedroom 2 FL	04/29/21			
Lead		EPA 7000B	1.00 ft2	<5.00 µg/wipe	<5.00 µg/ft2	5.00 µg/ft2
416429-009	9-LW	2nd FL Master Bedroom WS	04/29/21			
Lead		EPA 7000B	0.667 ft2	<5.00 µg/wipe	<7.50 µg/ft2	7.50 µg/ft2
416429-010	10-LW	2nd FL Master Bedroom FL	04/29/21			
Lead		EPA 7000B	1.00 ft2	<5.00 µg/wipe	<5.00 µg/ft2	5.00 µg/ft2
416429-011	11-LW	Blank	04/29/21			
Lead		EPA 7000B		<5.00 µg/wipe		5.00 µg/wipe

New Lead Dust Hazard Action Levels:

Floors: $\geq 10 \mu\text{g}/\text{ft}^2$

Window Sills: $\geq 100 \mu\text{g}/\text{ft}^2$

6.0 RECOMMENDATIONS

Lead Based Paint Identification

- Refer to HUD separate Lead Survey Report.

Dust and Soil

The dust wipe sampling did identify a dust-lead hazard within the subject complex.

- The Living Room located on the 1st Floor should be cleaned with a Trisodium Phosphate (TSP) solution. According to FEI's Lead-Based Paint Inspection conducted in this residence and reported under separate report, lead-based paint was identified on the French Doors leading from the Living Room to Dining Room/Kitchen. While this door is a likely cause of the lead dust, it was revealed during the questionnaire that the Fireplace Mantel was refinished and the old finish was sanded off and could have been coated with lead-based paint!
- The Bath Tub has most of its enamel coating worn away thus exposing the underlying lead coating. Given that the child likes to lick he should be observed during bath time to preclude him from licking the tub. Of course, the best solution to potential lead exposure from the tub would be to have the tube re-enameled and/or replaced.

Case Study 1



Case Study 2



Lead Paint Hazards - (See Section 3 for sample readings) – Deteriorated lead-based paint (per regulatory definition) was identified in the following locations:

1. Front porch: Rail cap, balusters, rail base, ceiling beam, columns (3), column bases (3) (side A); rail cap, balusters, rail base, ceiling beam (side B); door trim, side lights-left and right (side C); and rail cap, balusters, rail base, ceiling beam (side D).
2. Foyer: Door, door trim, door jamb, side lights-left and right, baseboard (side A); and door trim, columns, column bases, baseboard (side B); and baseboard, radiator (side D).
3. Living room: Window 1, window 2, window 3, window trim, window sill, baseboard (side A), baseboard (side B); door trim, baseboard (side C); and door trim, baseboard (side D).
4. Dining room: Door trim, french doors-left and right, baseboard (side A); window 6, window 6 trim, window 6 sill, window 6 apron, baseboard (side B); window 7, window 7 trim, window 7 apron, baseboard (side C); and door trim, door jamb, baseboard (Side D).
5. Kitchen: Door trim, door jamb (side A); wall, door trim, door jamb, threshold (side C); window 9, window 9 trim, window 9 sill.
6. Pantry: Window 8, window 8 trim (Side C).

7. Hallway 1: Door trim to foyer, door jamb to foyer (side A); door trim to dining room, baseboard (side B); door trim to kitchen (side C); and door trim to bathroom, door trim to basement, (side D).
8. Bathroom 1: Baseboard (side A); and window 10, window 10 trim, window 10 sill, window 10 apron (side D).
9. Stairway to second floor: Closet door trim, closet door jamb, balusters-upper (side A); balusters, stringer-outside (side B) stringer-upper (Side C); and stringer, window 21, window 21 trim, window 21 sill (side D).
10. Hallway 2: Door trim to bedroom 1, door jamb to bedroom 1 (side A); door trim to bedroom 2, door jamb to bedroom 2, closet door jamb, door trim to bedroom 3, door jamb to bedroom 3 (side B); door trim to bedroom 4, door jamb to bedroom 4 (side C); door trim to bathroom 2, door jamb to bathroom 2 (side D).
11. Bedroom 1: Window 11, window 12, window trim, baseboard (side A); baseboard (side B); and door trim, closet door jamb, baseboard (side C).
12. Bedroom 2: Window 13, window 14, window sill, baseboard (side A); window 15, window 15 sill, baseboard (side B); closet door trim, closet door jamb, baseboard (side C); and door trim, baseboard (side D)
13. Bedroom 3: Closet door trim, closet door jamb, baseboard (side A); window 16, window 16 trim, window 16 sill, window 16 apron, baseboard (side B); window 17, window 17 trim window 17 sill, baseboard (side C); and door trim, door jamb, baseboard (side D).
14. Bedroom 4: Door trim, baseboard (side A); baseboard (side B), window 18 trim, window 18 apron, baseboard (side C); window 19, window 9 trim, window 19 sill, window 19 apron, baseboard (side D).
15. Bathroom 2: Door trim (side B); window 20, window 20 trim, window 20 sill (side D).
16. Basement stairs: Wall-lower, stringer (side A); door trim, wall, stair beam (side B); wall-lower, stringer (side C); and door trim, door jamb, stair beam (side D).
17. Back porch: Rail cap, balusters, rail base (side B) and column post (corner BC).
18. Exterior: Door trim to basement (side D).

Table 1: Dust Wipe Analytical Results

Sample No.	Sample Location	Component	Sample Size (ft ²)	Analytical Result (µg/ft ²)
1	Foyer	Floor	1.00	23.2
2	Hallway 1	Floor	1.00	17.6
3	Kitchen	Floor	1.00	18.5
4	Kitchen	Window 9 sill	0.767	37.4
5	Dining room	Floor	1.00	12.0
6	Dining room	Window 6 sill	0.778	51.3
7	Bathroom 1	Floor	1.00	9.25
8	Bathroom 1	Window 10 sill	0.791	544
9	Living room	Floor	1.00	31.5
10	Living room	Window 1 sill	0.564	88.8
11	Stair tread	Floor	2.06	14.4
12	Stairs-upper landing	Floor	1.00	8.32
13	Hallway 2	Floor	1.00	12.0
14	Bedroom 3	Floor	1.00	14.8
15	Bedroom 3	Window 17 sill	0.564	90.4
16	Bedroom 1	Floor	1.00	10.2
17	Bedroom 1	Window 12 sill	0.745	69.7
18	Bedroom 2	Floor	1.00	10.2
19	Bedroom 2	Window 15 sill	0.722	294
20	Bathroom 2	Floor	1.00	22.2
21	Bathroom 2	Window 20 sill	0.564	65.7
22	Bedroom 4	Floor	1.00	9.25
23	Bedroom 4	Window 19 sill	0.406	75.3
24	Basement stair landing	Floor	1.00	54.7
25	Basement	Floor	1.00	167
26	Back porch	Porch floor	1.00	39.9
27	Front porch	Porch floor	1.00	379
28	*Closet	Floor	1.00	<5.00

*The sample location "closet floor" as identified on the chain-of-custody is a blind field blank submitted to the analytical laboratory to document quality control.

New Lead Dust Hazard Action Levels:

Floors: $\geq 10 \mu\text{g}/\text{ft}^2$

Window Sills: $\geq 100 \mu\text{g}/\text{ft}^2$



Photo 5: View of yard (side D) with loose paint chips observed on bare soil.



Photo 6: View front porch ceiling beam (side A) with deteriorated lead-based paint (LBP).



Photo 7: Front porch column post and column base (corner AD) with identified deteriorated LBP.



Photo 8: Front porch rail cap and balusters with identified deteriorated LBP.



Photo 13: Window 3, trim and sill in living room (side A) with identified deteriorated LBP.



Photo 14: French doors and door trim in dining room (side A) with identified deteriorated LBP.



Photo 15: Window 6, window trim and window sill (side B) in dining room with identified deteriorated LBP.



Photo 16: Window 7 and window trim in dining room (side C) with identified deteriorated LBP.

Case Study 2

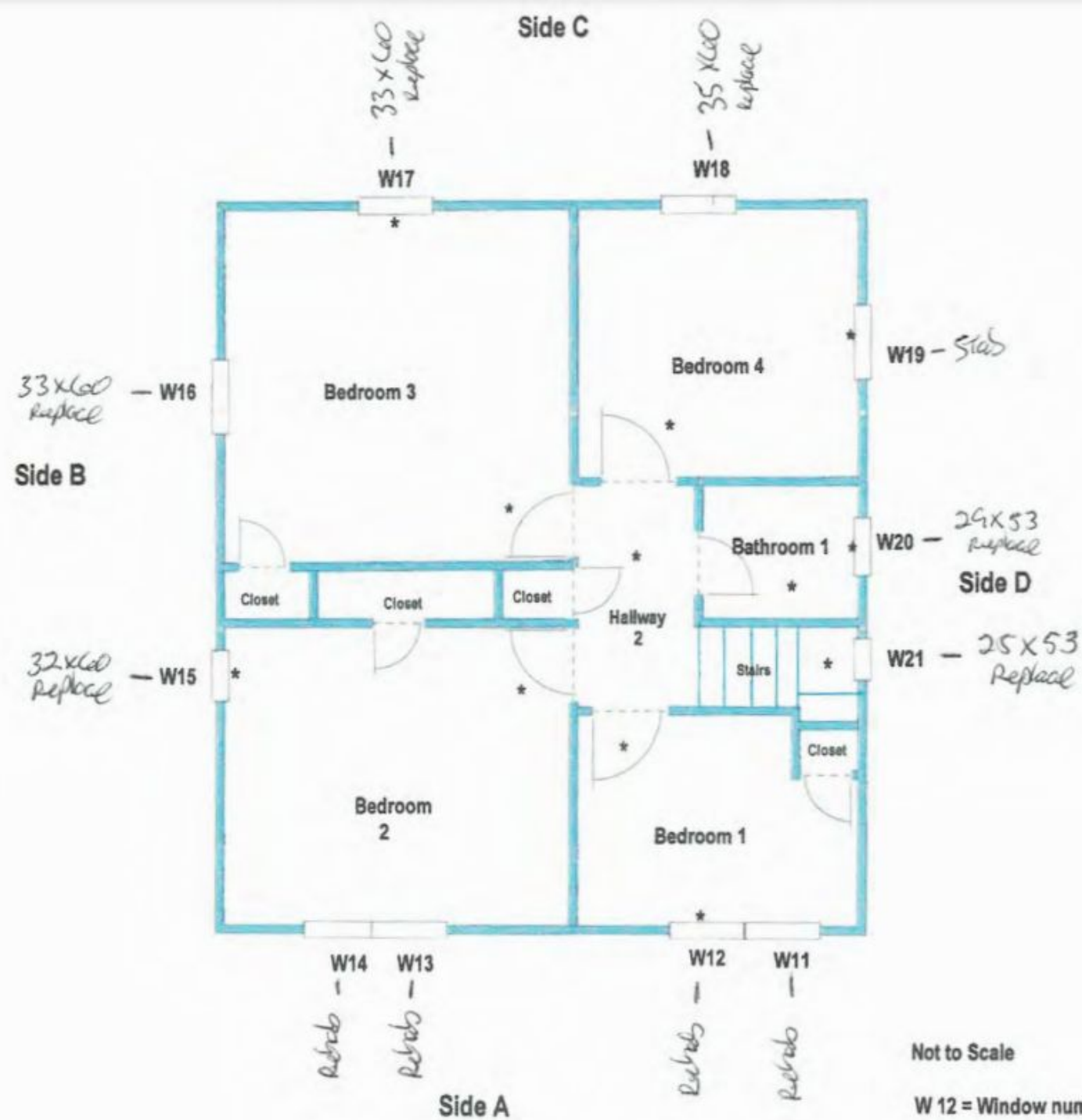
Location: 14 - Bedroom 1

Approx. Wall SF: 0

Ceiling/Floor SF: 0

	Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade:	9	Environmental Rehab				
55	PB1	STABILIZE BASEBOARDS Treat all baseboard trim as follows: After establishing any required ground containment with polyethylene sheeting, wet scrape all defective paint areas, and HEPA vacuum all paint chips, dust and debris. Prime and top coat trim with two coats latex paint to match existing.	30.00	LF		325
56	PB20	STRIP CLOSET JAMB, STABILIZE DOOR TRIM Treat closet door jamb/trim as follows INSIDE AND OUT: After establishing any required floor containment with polyethylene sheeting, mist defective paint area with water to the point of saturation. Strip paint from all friction surfaces of jamb that rub or abrade in the normal operation of the door with an approved chemical stripper (no methylene chloride) or approved heat gun (maximum 1100°F) or other method allowed under HUD Regulation 24 CFR Part 35 Sec. 35.1330. For all other areas of trim (nonfriction surfaces), wet scrape all loose paint with a draw scraper. HEPA vacuum all visible chips. Spot prime, caulk seams and top coat with two coats premium acrylic latex to match existing.	1.00	EA		325
57	PB35	STABILIZE CLOSET BASEBOARDS Treat closet baseboards as follows: After establishing any required floor containment with polyethylene sheeting, mist defective paint area with water to the point of saturation. Wet scrape all loose paint with a draw scraper. HEPA vacuum all visible chips. Spot prime and top coat with two coats premium acrylic latex to match existing.	6.00	LF		80

Case Study 2



Location:18 - Windows

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Case Study 2

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				
	<p>Treat ALL WINDOWS EXTERIOR/INTERIOR 1-3 AND 11-14 as follows:</p> <p>After establishing required floor/ground containment with polyethylene sheeting, repair window(s) as follows: Remove interior window stops and discard. Remove UPPER AND LOWER sash and carry to a fully contained lead work room or area. (on-site or off site). Strip paint from all surface areas of lower sash that come into contact with the window jamb, stops and sill through the normal operation of window and from window slides (jamb) with an approved chemical stripper (no methylene chloride) or approved heatgun (maximum 1100°F) or other method allowed under HUD Regulation 24 CFR Part 35 Sec. 35.1330. Similarly strip any surfaces of upper sash that may experience friction with lower sash during operation. Wet scrape loose paint from remaining areas of upper and lower sash (non-friction surfaces) and all window trim (INSIDE AND OUT). Remove all loose glazing from window (INSIDE AND OUT) and re-glaze as needed. HEPA vacuum any paint chips, dust and debris from window and sashes before reinstalling. Prime all sides of upper and lower sashes and remaining parts of window inside and out. Seal upper sash to jamb with latex caulk. Reinstall lower sash with NEW SASH CORDS AND WINDOW STOPS shaping sash to reduce friction with jambs if sash still does not move freely in slides. Paint entire window inside and out with two coats latex paint. Install new sash lock. Paint window to match existing.</p>				

67	PB33	SELECT SIDE AND REAR WINDOWS -- REPLACEMENT & TRIM STABILIZATION FOR WINDOWS 6,7,8,9,10,15,16,17,18,20,21 (see attached diagram for locations and approximate dimensions): After establishing required floor/ground containment with polyethylene sheeting, remove window stops and sashes and replace with Legacy Simulated Divided Light, double hung, low-e, insulated glass windows with screens. All sashes to match existing grid patterns. Windows must be custom sized to match existing openings. New sash be inserted into existing casing (frame). If original casing cannot be rehabilitated, casing be will replaced in-kind matching existing dimensions. Replacement window unit must match or closely mirror existing casing reveal. Material Allowance: \$375 per window. For all remaining original exterior and interior window trim (including sills, stools, aprons,etc.) mist defective paint with water to the point of saturation. Wet scrape all defective paint areas. HEPA vacuum all paint chips, dust and debris. Prime and top coat trim with two coats latex paint to match existing colors. If trim is deteriorated and needs to be replaced, new trim should match existing size/profile. 25 LF allowance for trim replacement.	11.00	EA	_____	<u>4675</u>
		Windows for eight to twelve (8 to 12) weeks out to get windows				
68	PB6	STABILIZE DORMER WINDOW TRIM (EXTERIOR ONLY) Treat DORMER EXTERIOR window trim as follows: Mist deteriorated paint with water to the point of saturation. Clean and de-gloss with lead specific detergent wash as needed and HEPA vacuum any paint chips, dust and debris. Prime and caulk with a 25 year siliconized acrylic latex and top coat with two coats latex paint to match existing. 25 LF allowance for trim replacement to match existing.	2.00	EA	_____	<u>500</u>

Case Study 2: Healthy Homes Assessment

Healthy Homes Risk Category Key

1 – Damp and Mold Growth	9 – Uncombusted Fuel Gas	16 – Food Safety	23 – Electrical Hazards
2 – Excess Cold	10 – VOCs	17 – Personal Hygiene, Sanitation and Drainage	24 – Fire
3 – Excess Heat	11 – Crowding and Space		25 – Flames, Hot Surfaces, etc.
4 – Asbestos and MMF	12 – Entry by Intruders	18 – Water Supply	26 – Collision & Entrapment
5 – Biocides	13 – Lighting	19 – Falls in Bath	27 – Explosions
6 – Carbon Monoxide	14 – Noise	20 – Falls on Level	28 – Position/Operability of Amenities
7 – Lead	15 – Domestic Hygiene, Pests, and Refuse	21 – Falls on Stairs	
8 – Radiation		22 – Falling b/w Levels	29 – Structural Collapse

Interior Deficiencies - hazards observed in the unit's interior included the following:

#	Location	Deficiency or Potential Source	HHA #	Hazard	Priority	Photo #
1	Bathroom 1 st floor	Broken door	17	Durability	Low	5
2	Bathroom 1 st floor	Broken commode seat	17	Durability	Med	6
3	Bathroom 1 st floor	Still water in sink	17,15	Drainage, Potential for pest	Low	7

4	1 st floor hallway	Deteriorated/mold ceiling	1	Durability, Potential moisture leak	Med	8
5	Kitchen	Mold in sink cabinets	1	Durability, moisture leak	Med	9,10
6	Kitchen	Deteriorated/moldy ceiling	29,1	Durability, moisture leak	High	11,12,13

Case Study 2: Healthy Homes Assessment

CONCLUSIONS & RECOMMENDATIONS

Based on the assessment, the home has a few exterior issues caused by standard aging and possible lack of maintenance, and potential moisture infiltration. The interior of the home has deteriorated ceilings and generally is free of clutter. The most pressing hazards related to minimizing the risk for excessive cold, moisture, pest as well as structure falls in the home.

Recommendations to *Occupants* to address occupancy practices, hygiene, and maintenance in order to improve overall health and safety outcomes:

1. Monitor condition of main roof. If signs of leaks remerge, consult a professional.
2. Monitor rear bedroom light fixture. If condition worsens, consult a professional.
3. Monitor clutter under exterior rear stairs. It is a slip and fall hazard.

We recommend the Healthy Homes Supplemental funds be used to address the following deficiencies (priority levels are noted in the deficiency charts above):

1. Cap off and enclose old electrical box.
2. Repair rear porch floor decking.
3. Install new bathroom door.
4. Install new commode seat.
5. Repair 1st floor bathroom sink.
6. Repair hallway ceiling.
7. Replace lower kitchen cabinets/sink.
8. Install new kitchen ceiling.
9. Repair 2nd floor deteriorated tub caulking.
10. Repair 2nd floor sink.
11. Repair rear bedroom ceiling.

CDBG or IPR: You've done a lot already

- You've found your client, determined their eligibility, and done your ERR
- More coordination to consider – Lead Inspection/Risk Assessment, Combining Scopes, Coordination with Abatement Contractor (but it's worth it!)
- More paperwork (but we pay you for it!)

ARS + LHR: a natural pairing

- No client application to manage
- No temporary relocation
- Know you don't have to walk away from a house, since there's extra \$!
- Market your Lead-Safe home to an LMI family



Thank you!

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