

LEAD-BASED PAINT RISK ASSESSMENT REPORT

FOR THE PROPERTY LOCATED AT:

615 W Lasalle Ave
South Bend, IN 46601



Owner/Tenant
VACANT

Prepared For:

Pat Lynch
South Bend Heritage
803 Lincolnway West
South Bend, IN 46616
Phone: 574-289-1066
patlynch@sbheritage.org

Tested and Prepared By:


William C. Center
Certified Lead Risk Assessor #IND000368

Submitted By:

Greentree Environmental
Services, Inc.
P. O. Box 2297
5287 Central Avenue
Portage, IN 46368
Phone: 888-584-5323
greentree@grntree.net



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Re-evaluation Date: 6-12 Months from October 16, 2019

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1.0 PURPOSE

The purpose of the investigation was to determine the existence of lead-based paint hazards at the subject property and to determine the location, type, and severity of existing or potential health hazards associated with exposures to lead.

The following report details the results of the investigation. A summary of this report must be provided to each new lessee (tenant) or purchaser of this property under Federal law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must also be provided to purchasers and made available to tenants. Landlords (lessors) and sellers are also required to distribute an educational pamphlet approved by the U.S. Environmental Protection Agency (EPA), entitled "*Renovate Right*," and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards. For more information regarding your obligations under federal lead-based paint regulations, contact 800-424-LEAD (5323).

EPA Certified Firms using Certified Renovators who have successfully completed the EPA-approved Renovation, Repair and Painting course should remove any lead-based paint hazards identified on this property. Refer to the EPA/State Laws that may have additional requirements, depending on scope of work. For any federally funded project, all personnel disturbing the lead-based paint must be a Certified Renovator.

2.0 CONCLUSIONS

2.1 Report Summary

The building and its paint are in relatively **fair** overall. The risk assessment showed that lead hazards **do exist**.

As lead-based paint hazards were identified, the risk assessor recommends that the homeowner/tenant/client contact their local health department to have all children in the household under the age of 7 and anyone you feel at risk be tested for lead poisoning. It is also recommended that, as soon as possible, the residence be cleaned following the recommendations in the EPA brochure *Renovate Right*. Other recommendations for safe ways to minimize your child's exposure to lead-based paint are also found throughout the report.

2.2 Determination of Lead-based Paint Hazards

Dust wipe sample results summary:

- *Lead dust is assumed to be present around all positive components noted in the following charts.*
- *There are lead dust levels around kitchen floor, bathroom floor, room 3 floor, room 5 window well and room 6 window well (including basement floors and all stairwell stair treads) that exceed HUD guidelines.*

Soil sample results summary:

- *There are no lead soil levels around the dripline of the house that exceed HUD guidelines.*

Lead paint in *deteriorated condition* is listed in the charts below. Either stabilization or abatement is required.

EXTERIOR				
<i>General note: If any exterior inaccessible components are ever removed, all painted surfaces must be assumed positive.</i>				
Room/Location	Component(s)	Square Feet	Quantity	Assumed Positive <i>(check if yes)</i>
Exterior ABCD	Window casing	5	10	
Exterior B	Basement window and components	4		
Exterior ABCD	Windowsill	2	13	
Exterior ABCD	Soffit	500		
Exterior ABCD	Fascia	400		
Exterior ABCD	Frieze board	400		
Exterior A	Porch column	8	2	
Exterior A	Porch beam	12		
Exterior A	Ceiling	20		
Exterior BCD (1 st floor)	Window sash	5	5	
Exterior AB (1 st floor)	Dormer window and casing	3	3	
Exterior B (1 st floor)	Windowsill	4	1	
Exterior BD (1 st floor)	Basement window components	3	4	

INTERIOR				
<i>General note: If any interior inaccessible components (paneling, drop ceiling, wall boards, etc.) are ever removed, all painted surfaces must be assumed positive.</i>				
Room/Location	Component(s)	Square Feet	Quantity	Assumed Positive <i>(check if yes)</i>
Front entry B	Closet bracket	3		
Front entry B	Closet baseboard	5		
Front entry A	Dormer window	2	1	
Room 2 B	Closet baseboard	5		
Room 3 A	Closet baseboards	5	2	
Room 3 B	Window sash	5	3	
Room 3 B	Window components	5	1	
Room 3 B	Window components	10	1	
Room 2 A	Dormer and window components	3	1	

INTERIOR

General note: If any interior inaccessible components (paneling, drop ceiling, wall boards, etc.) are ever removed, all painted surfaces must be assumed positive.

Room/Location	Component(s)	Square Feet	Quantity	Assumed Positive (check if yes)
Room 4 B	Dormer window and components	3	1	
Bathroom 1 B	Window and components	5	1	
Kitchen C	Door jamb	5	1	
Rear entry A	Door jamb	5	1	
Rear entry B	Door components	12	1	
Rear entry CD	Window and components	6	2	
Rear entry C	Wall (white)	100		
Basement stairs D	Door components	10	1	

Please remember that all identified LBP and LBP hazards should always be properly addressed by professionally certified lead workers.

2.3 Positive XRF Readings

Please note: This data is representative of the positive components determined via X-ray analysis at the time of the risk assessment. For a full determination of lead hazards, please see Section 2.2.

Reading #	Component	Substrate	Side	Condition of Paint	Color	Site	Room	Floor	Result	PbC
6	Porch Column	Wood	A	DETERIORATED	White	615 W Lasalle Ave	Exterior House		Positive	4.4
12	Win. Sill-Stool	Concrete	A	DETERIORATED	Tan	615 W Lasalle Ave	Exterior House		Positive	1.2
14	Bsmt. Wn. Case	Wood	D	DETERIORATED	Brown	615 W Lasalle Ave	Exterior House		Positive	1.5
16	Win. Casing	Wood	B	DETERIORATED	Green	615 W Lasalle Ave	Exterior House		Positive	4.6
17	Win. Casing	Wood	B	DETERIORATED	Brown	615 W Lasalle Ave	Exterior House		Positive	6.5
18	Door Dormer Wn.	Wood	A	DETERIORATED	Green	615 W Lasalle Ave	Exterior House		Positive	5.3
19	Door Dormer Wn. Case	Wood	A	DETERIORATED	Green	615 W Lasalle Ave	Exterior House		Positive	5.1
20	Fascia	Wood	A	DETERIORATED	Tan	615 W Lasalle Ave	Exterior House		Positive	5
21	Frieze Board	Wood	A	DETERIORATED	Tan	615 W Lasalle Ave	Exterior House		Positive	5.2
22	Soffit	Wood	A	DETERIORATED	White	615 W Lasalle Ave	Exterior House		Positive	5
23	Porch Ceiling	Wood	A	DETERIORATED	Green	615 W Lasalle Ave	Exterior House		Positive	5.3
24	Porch Beam	Wood	A	DETERIORATED	Green	615 W Lasalle Ave	Exterior House		Positive	5.1
27	Clos. Bracket	Wood	B	DETERIORATED	White	615 W Lasalle Ave	Entry Front	1st	Positive	13.8
28	Clos. Baseboard	Wood	B	DETERIORATED	White	615 W Lasalle Ave	Entry Front	1st	Positive	9
31	Door Dormer Wn.	Wood	A	DETERIORATED	White	615 W Lasalle Ave	Entry Front	1st	Positive	13.2
38	Door Dormer Wn.	Wood	A	DETERIORATED	White	615 W Lasalle Ave	Room 02	1st	Positive	8.8
40	Clos. Baseboard	Wood	B	DETERIORATED	White	615 W Lasalle Ave	Room 02	1st	Positive	9.7
48	Clos. Baseboard	Wood	A	DETERIORATED	White	615 W Lasalle Ave	Room 03	1st	Positive	11
49	Win. Casing	Wood	B	DETERIORATED	White	615 W Lasalle Ave	Room 03	1st	Positive	12.8
50	Win. Sill-Stool	Wood	B	DETERIORATED	White	615 W Lasalle Ave	Room 03	1st	Positive	9.3
51	Win. Sash	Wood	B	DETERIORATED	White	615 W Lasalle Ave	Room 03	1st	Positive	9.9
54	Door Dormer Wn.	Wood	B	DETERIORATED	White	615 W Lasalle Ave	Room 04	1st	Positive	10.2
57	Win. Casing	Wood	B	DETERIORATED	White	615 W Lasalle Ave	Bathroom	1st	Positive	13.9
58	Win. Sash	Wood	B	DETERIORATED	White	615 W Lasalle Ave	Bathroom	1st	Positive	13.4
63	Door Jamb	Wood	C	DETERIORATED	White	615 W Lasalle Ave	Kitchen	1st	Positive	6.3
64	Door Jamb	Wood	A	DETERIORATED	White	615 W Lasalle Ave	Entry Rear	1st	Positive	7.7
65	Door Jamb	Wood	B	DETERIORATED	White	615 W Lasalle Ave	Entry Rear	1st	Positive	6.9
66	Door Jamb	Wood	B	DETERIORATED	Pink	615 W Lasalle Ave	Entry Rear	1st	Positive	6.1
67	Door Casing	Wood	B	DETERIORATED	Pink	615 W Lasalle Ave	Entry Rear	1st	Positive	6.5
68	Door Casing	Wood	B	DETERIORATED	White	615 W Lasalle Ave	Entry Rear	1st	Positive	6.6
69	Win. Casing	Wood	C	DETERIORATED	White	615 W Lasalle Ave	Entry Rear	1st	Positive	9.7

Reading #	Component	Substrate	Side	Condition of Paint	Color	Site	Room	Floor	Result	PbC
70	Win. Sash	Wood	C	DETERIORATED	White	615 W Lasalle Ave	Entry Rear	1st	Positive	10.4
71	Wall	Plaster	C	DETERIORATED	White	615 W Lasalle Ave	Entry Rear	1st	Positive	2.3
79	Door Casing	Wood	D	DETERIORATED	White	615 W Lasalle Ave	Bsmt. Stair	1st	Positive	7.1
80	Door Jamb	Wood	D	DETERIORATED	White	615 W Lasalle Ave	Bsmt. Stair	1st	Positive	9.2
81	Door Jamb	Wood	D	DETERIORATED	Pink	615 W Lasalle Ave	Bsmt. Stair	1st	Positive	7.5

2.4 Dust Wipe Sample Results

Please note: This data is representative of the dust condition determined via dust wipe sample analysis at the time of the risk assessment. Testing data in **bold red** indicates lead levels at or above the EPA Hazardous Levels of Lead regulations that were published on January 5, 2001 and constitutes a dust-lead hazard in that room. For a full determination of lead hazards, please see Section 2.2.

HUD reporting limits – floors=10 µg/ft², windowsills=100µg/ft², window wells/troughs=100 µg/ft², Porch floors=40 µg/ft²- Effective June 21, 2019

Sample Number	Room Location	Component	Pb Concentration in µg/ft ²	Pass/Fail
1	Kitchen	Floor	76.1 µg/ft²	Fail
2	Bathroom 1	Floor	1297.0 µg/ft²	Fail
3	Room 3	Floor	313.2 µg/ft²	Fail
4	2 nd floor stairs	Floor	<10 µg/ft ²	Pass
5	Basement	Floor	1350.0 µg/ft²	Fail
6	Kitchen	Windowsill	70.4 µg/ft ²	Pass
7	Room 1	Windowsill	74.2 µg/ft ²	Pass
8	Room 2	Windowsill	73.4 µg/ft ²	Pass
9	Room 5	Window wells	554.1µg/ft²	Fail
10	Room 6	Window wells	1384.0 µg/ft²	Fail

Area wiped in square feet - Floors: 144 in², Windowsills: 36 in², Window Wells/Troughs: 36 in²

WARNING: Dust samples were not taken by every window or in every room. All areas not sampled should be assumed to contain lead dust and should be dusted frequently by occupant, particularly around positive components that are in deteriorated condition.

2.5 Soil Sample Results

Please note: This data is representative of the soil content determined via soil sample analysis at the time of the risk assessment. Testing data in **bold red** indicates soil lead levels at or above the EPA Hazardous Levels of Lead regulations that were published on January 5, 2001. For a full determination of lead hazards, please see Section 2.2.

HUD reporting limits - Lead in soil is considered a hazard at 1200 ppm or greater or 400 ppm or greater in children's play areas.

Sample Number	Location	Results in mg/Kg
11	Dripline of home	372.4 mg/Kg

Soil samples were collected from around the dripline/perimeter of the home and/or from various other locations.

2.6 Additional Lead-based Paint Findings

Lead paint in *intact condition* is listed in the charts below. No treatment is required at this time; however, the condition of the positive component(s) should be monitored for signs of deterioration.

Room/Location	Component(s)	Assumed Positive (check if yes)
N/A		

2.7 Recommended Corrective Actions

Lead abatement, interim controls, 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 control (temporary) methods and/or abatement (permanent) methods. It should be noted that all lead hazard control activities have the potential of creating additional hazards or hazards that were not present before. Properly trained and certified persons, as well as properly licensed firms (as mandated) should accomplish all abatement/interim control activities conducted at this residence.

Details for the listed lead hazard control options and issues surrounding occupant/worker protection practices can be found in the publication entitled: *Guidelines for the Evaluation and Control of LBP Hazards in Housing* published by HUD, the EPA lead-based paint regulations, and the Occupational Safety and Health Administration (OSHA) regulations found in its Lead in Construction Industry Standard.

Interim controls, as defined by HUD, means a set of measures designed 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 stabilization, paint and varnish stabilization, and tilling and placement of appropriate ground cover over bare soil areas.

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 design life of at least twenty (20) years. These activities include, but are not necessarily limited to: the removal of LBP from substrates and components; the replacement of LBP components; the permanent enclosure of LBP with construction materials; the encapsulation of LBP with approved products; and the removal or permanent covering (concrete or asphalt) of soil-lead hazards.

FOR INTERIOR WINDOW COMPONENTS (EX: SASH, CASING, SILL, TROUGH, TRIM)	
<i>Interim Controls</i>	<i>Abatement</i>
* Conduct paint stabilization * Eliminate friction areas by: * Repairing component to good working	* Replace components with a lead-free building component * Remove all of the paint or coating

<p>condition</p> <ul style="list-style-type: none"> * Planing the sash * Installing window channel guides * Cover window troughs with aluminum coil stock or flashing to make a smooth and cleanable surface * Drill drain holes through bottom of the storm window frame * Clean weep holes * If evidence of child chewing on any of the window components (i.e. window stool/sill): <ul style="list-style-type: none"> * Cover area with vinyl or aluminum * Move a piece of furniture in front of the window making the component inaccessible * Coat with Bitrex paint or block the windowsill 	<ul style="list-style-type: none"> * Encapsulate the component
FOR INTERIOR TRIM (EX: BASEBOARD, CHAIR RAIL, TRIM)	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Encapsulate the component
FOR INTERIOR FLOORS	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Stabilize deteriorated paint on the component using lead safe work practices to repair current paint surface and resurface with lead-free paint or other 	<ul style="list-style-type: none"> * Strip the paint or coating * Cover the floor with a smooth and cleanable surface (ex: tile, sheet vinyl, carpet)
FOR INTERIOR WALLS (EX: WALL, CEILING, CLOSET)	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Cover the component with new siding * Cover deteriorated walls with wallpaper * Install corner guards * Eliminate impact areas with barriers (ex: chair rail, baseboard, corner guard) 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Encapsulate the component * Build an enclosure system with drywall or paneling
FOR INTERIOR DOOR COMPONENTS (EX: DOOR, CASING, JAMB, THRESHOLD, TRIM)	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Wrap the component with vinyl or aluminum * Eliminate friction areas repairing component to good working condition * Protect impact surfaces with barriers or 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Encapsulate the component * Off-site paint removal which consists of

<p>impact resistant materials</p> <ul style="list-style-type: none"> * Plane the door or door jamb * Re-hang the door 	<p>removing paint through chemical or other means at a facility off-site</p>
<p>FOR INTERIOR STAIR COMPONENTS (EX: TREAD, RISER, BASEBOARD, STRINGER, NEWEL POST, BALUSTER, SPINDLES, HANDRAIL)</p>	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Eliminate friction areas by repairing component to good working condition * Protect impact surfaces with barriers or impact-resistant materials * Cover the floor/landing/tread/riser with a durable material (ex: tread cover, carpet) 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Encapsulate the component
<p>FOR INTERIOR MISCELLANEOUS COMPONENTS (EX: REGISTER/VENT COVER, RADIATOR, FIREPLACE COMPONENTS, CABINETS, BOOKCASE COMPONENTS, CLOSET COMPONENTS, BATHTUB, SINK, WALL SHELF)</p>	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Re-glaze bathtub or sink * Put a liner in the tub 	<ul style="list-style-type: none"> * Replace tub or sink * Remove all of the paint or coating * Encapsulate the component * Build an enclosure system
<p>FOR EXTERIOR MAJOR COMPONENTS (EX: SIDING, TRIM, SOFFIT, FASCIA)</p>	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization and repaint 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Enclose the component by covering old siding with new siding and wrapping the trim with vinyl or aluminum
<p>FOR EXTERIOR WINDOW COMPONENTS (EX: SASH, CASING, SILL, TROUGH, TRIM)</p>	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Cover the component with vinyl or aluminum * Eliminate friction area by repairing sash to good working condition * Cover window troughs with aluminum coil stock or flashing to make a smooth and cleanable surface 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Encapsulate the component
<p>FOR EXTERIOR DOOR COMPONENTS (EX: DOOR, CASING, JAMB, THRESHOLD, TRIM)</p>	
<i>Interim Controls</i>	<i>Abatement</i>
<ul style="list-style-type: none"> * Conduct paint stabilization * Cover the component with vinyl or 	<ul style="list-style-type: none"> * Replace components with a lead-free building component

<p>aluminum</p> <ul style="list-style-type: none"> * Eliminate friction areas by repairing door to good working condition * Plane the door or door jamb * Re-hang the door * Clean up all visible paint chips and debris at the conclusion of each workday 	<ul style="list-style-type: none"> * Remove all of the paint or coating * Encapsulate the component * Off-site paint removal which consists of removing paint through chemical or other means at a facility off-site
<p>FOR EXTERIOR PORCH COMPONENTS (EX: CEILING, FLOOR, TRIM, SUPPORT COLUMN, RAIL BALUSTER/SPINDLE, SOFFIT/FASCIA, LATTICE, TREAD, RISER, BASEBOARD, STRINGER, NEWEL POST, HANDRAIL)</p>	
<p><i>Interim Controls</i></p>	<p><i>Abatement</i></p>
<ul style="list-style-type: none"> * Conduct paint stabilization * Cover the component with new siding * Eliminate friction areas by repairing component to good working condition * Protect impact surfaces with barriers or impact-resistant materials * Plane the door or door jamb * Re-hang the door * Cover the porch floor and/or steps with a smooth and cleanable surface 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Encapsulate the component * Build an enclosure system * Off-site paint removal which consists of removing paint through chemical or other means at a facility off-site
<p>FOR EXTERIOR MISCELLANEOUS COMPONENTS (EX: GUTTER SYSTEM, DOWNSPOUT, OVERHEAD GARAGE DOOR COMPONENT, DECK)</p>	
<p><i>Interim Controls</i></p>	<p><i>Abatement</i></p>
<ul style="list-style-type: none"> * Conduct paint stabilization * Cover the component with new siding * Eliminate friction areas by repairing component to good working condition * Protect impact surfaces with barriers or impact-resistant materials * Clean out the gutter system * Restore gutters and downspouts to good working condition * Extend downspout away from the house (at least 5 feet) * Add a splash block under gutter to move water away from the house * Cover the porch floor and/or steps with a smooth and cleanable surface (ex: tile) * Clean up all visible paint chips and debris at the conclusion of each workday 	<ul style="list-style-type: none"> * Replace components with a lead-free building component * Remove all of the paint or coating * Encapsulate the garage door * Replace gutters and/or downspouts
<p>FOR EXTERIOR BARE SOIL AREAS (EX: DRIPLINE OF HOME, PLAY AREAS, GARDEN)</p>	
<p><i>Interim Controls</i></p>	<p><i>Abatement</i></p>
<ul style="list-style-type: none"> * Do not use identified area of lead-contaminated bare soil for growing vegetables 	<ul style="list-style-type: none"> * Permanently cover bare, lead-contaminated soil with concrete, asphalt or other permanent

or feeding animals * Move any play areas * Move pets to an area where there is no bare or contaminated soil * Use temporary covering such as grass, gravel or mulch (HUD guidelines suggest 6 inches minimum) * Put a fence around the area with the high soil levels to keep children and pets out * Limit traffic on the bare soil by planting bushes and ground cover	materials * If used around the house, be sure to slope the covering away from the foundation * Remove top 2 inches to 6 inches of the contaminated topsoil in those areas specified by the risk assessor and replace with non-contaminated topsoil (<400 micrograms/gram) or another type of ground cover (ex: grass, wood chips) * Do not use any of this soil in another part of the yard
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The following are general lead hazard control and lead safe work practices guidelines set in place to protect the occupants and the workers involved in treating the affected areas:

LEAD HAZARD CONTROL PRACTICES ACCEPTED BY HUD

- ✓ Use wet methods or limited dry scraping and sanding. Mist surfaces before scraping and sanding. Continue to mist while working. Dry scraping or sanding of very small areas (for example, around light switches or outlets) may be done if flat surfaces below these areas are covered with protective sheeting. These methods should be avoided on areas larger than 10% of component, 2 square feet per room, or 20 square feet on exterior surfaces, and workers must have adequate respiratory protection.
- ✓ Mist before drilling and cutting to reduce dust creation and keep dust from becoming airborne and spreading beyond the work area. Due to it being dangerous to use water with electrical tools consider the use of foam (such as shaving cream) when cutting or drilling to reduce dust generation.
- ✓ Controlled sanding or grinding with HEPA vacuum attachment is required. Because some dust may still blow out around the perimeter, workers near the machine should wear half-mask respirators rated by NIOSH as N100, P100 or R100 (or HEPA) at a minimum. Also, the work area must be completely isolated if the machine is used inside. Because these tools can create high levels of dust and require additional precautions, it is advisable to receive further training, if not already received, before using this method.
- ✓ Chemical stripping are acceptable as long as the area is adequately ventilated. Chemical strippers can be dangerous and should be used with great caution. Types of strippers range from citrus-based (safer) to more dangerous caustic strippers. Use of chemical strippers may trigger additional training, notification, and record keeping requirements under the OSHA Hazard Communication Standard. Follow the manufacturer’s directions when using any chemical stripper.
- ✓ The use of a heat gun set below 1100° F may be used with caution. It is recommended for small areas only, such as the edge of a door, the top of a window stool, or the friction surface of a window jamb.
- ✓ Scoring paint before separating components helps prevent paint from chipping when a paint seal is broken.
- ✓ Prying and pulling apart components and pulling nails instead of pounding create less dust and fewer paint chips. Vise grips may be useful when pulling nails.

- ✓ Removal of paint using contained pressure washing and/or contained abrasive blasting within a protective enclosure to prevent the spread of paint chips, dust, and debris may be done. This method requires additional precautions and should only be used by certified lead abatement workers.

LEAD HAZARD CONTROL PRACTICES PROHIBITED BY EPA AND HUD

- ✓ *Open flame burning or torching.* Open torches, infrared scorches, electric irons, and heat guns operating above 1,100° F all may cause the release of lead fumes, which can poison workers. The fallout from the volatilized lead can also be very difficult to clean up. Heat guns operating below 1,100° F are acceptable, although they are recommended only for small areas.
- ✓ *Power sanding, grinding or planing without HEPA vacuum attachments.*
- ✓ *Abrasive blasting or sandblasting without HEPA exhaust equipment.*
- ✓ *Uncontained hydroblasting or high-pressure washing.* Power washing often leaves leaded paint chips and dust on soil and exterior pathways. Hydroblasting should not be used unless all runoff will be contained and filtered.
- ✓ *Dry scraping/sanding* (except for one square foot of an electrical outlet). Extensive use of dry scraping or sanding generates a significant amount of leaded dust, which is hard to contain. Surfaces should be wetted prior to scraping/sanding so that the dispersal of dust is limited. Of course, some areas, such as surfaces near electrical circuits, should not be wetted.
- ✓ *Methylene chloride paint strippers.* Methylene chloride can cause liver and kidney damage and carbon monoxide poisoning, and it is suspected to cause cancer. Air-purifying respirators with organic vapor cartridges do not provide adequate protection. (If respirators are required, they must be of the supplied-air or self-contained variety.) If chemical paint removers will be used, they should not contain methylene chloride and should preferably be used off-site.

WASTE MANAGEMENT

- ✓ All residential waste may go to a Class D or construction landfill in the State of Indiana. Refer to your state requirements if property is located outside of Indiana.

WORKER PROTECTION

- ✓ Job-appropriate respirator with fit testing
- ✓ Eye protection
- ✓ Clothing protection (Tyvek or other disposable suits)
- ✓ Gloves
- ✓ Shoe covers
- ✓ Disposable hats

OCCUPANT PROTECTION

- ✓ Clean up, HEPA vacuum, wet wash daily before leaving job particularly by windows and other hazard areas, including walkways.
- ✓ Occupants vacate unit when the only bath, kitchen, or sleep area are affected on interim controls, and the work and clean up cannot be completed in eight-hour shifts.
- ✓ Cover belongings with 6 mil plastic and seal with tape.
- ✓ Always seal off work areas and cover work areas with 6 mil plastic and seal off ductwork during work, particularly HVAC return covers.
- ✓ Abatement requires a written occupant protection plan, state notification, state worker and supervisor licenses.

- ✓ For rental and rehabilitation assistance properties, a hazard communication policy is recommended.

CLEARANCE TESTING

- ✓ Visual examination with no visible paint chips around interior or exterior of house.
- ✓ Wipe sampling with no visible dust on clearance examination and dust levels must be below the acceptable levels set by EPA in order to pass clearance.
- ✓ Soil testing applies to soils with lead levels above 5,000 ppm.

PRIORITY ATTENTION FOR IMMEDIATE HAZARDS

- ✓ **Lead dust is assumed to be present around all positive components in deteriorated condition. It is important to keep these areas clean.**
- ✓ **Dust levels exceed state & federal guidelines:**
 - **Kitchen floor**
 - **Bathroom 1 floor**
 - **Room 3 floor**
 - **Basement floor**
 - **Room 5 window area**
 - **Room 6 window area**
- ✓ **Soil levels do not exceed HUD guidelines and do not require interim/abatement controls.**

*****If the detached garage will be disturbed, the Renovation, Repair and Painting rules apply to the components that were determined to be lead hazards. Also, the garage will be included in the clearance process.*****

NOTICE TO ALL OCCUPANTS AND HOMEOWNERS:

Not all surfaces in the dwelling were tested for lead. If any remodeling is done, painted surfaces should be analyzed before remodeling begins. If the test result of the component reads negative, this does not mean that lead-based paint is not present in that component. It simply means that the component is under the HUD action level of 1.0 $\mu\text{g}/\text{cm}^2$; therefore, consult a lead professional before disturbing any painted surface. In addition, if your home is enrolled in a property rehabilitation project, you must contact the project office to determine which areas of your home will be involved in the rehab. Some areas listed on this report may be exempt from that project, particularly outbuildings (i.e. detached garage, barn, shed, etc.) or areas listed as being in "intact" condition.

NOTICE TO ALL CONTRACTORS:

Indiana state laws require that you have a lead abatement contractor's license if you conduct an abatement of lead-based paint. Abatement occurs when the project you conduct is designed to permanently eliminate lead-based paint hazards. Abatement is defined as component replacement, paint removal, encapsulation, or enclosure. See the EPA rules and guidelines on the requirements. If you fail to comply with these, you may be subject to fines of \$25,000 per day per violation and criminal penalties or a Class D Felony and a minimum fine of \$5,000 per day per violation.

If interim control procedures are used instead of abatement procedures in eliminating lead-based paint hazards, a Certified Renovator that has successfully completed an EPA approved 8-hour course on Renovation, Repair and Painting should be employed to complete the lead hazard

task(s). If you fail to comply with these rules, you may be subject to civil penalties of up to \$37,500 per day per violation.

3.0 SITE DESCRIPTION

3.1 Narrative

The residence is a single-family, two-story house with basement constructed in 1900. It has a painted brick foundation. The exterior of the residence has brick siding with wood soffit and trim. The doors are metal. The windows are wood and vinyl. The owner/tenant of this property is VACANT.

3.2 Building Condition Form

The following is a general representation of the property at the time of the inspection. While efforts were made to provide accurate data, this information should not be considered absolute, and it should be understood that errors may exist. It is supplied only to give an idea of the condition of the home.

Condition	Yes	No	Unknown
Improper use of extension cords		✓	
Gutters and downspouts present and in good shape		✓	
Smoke detector present			✓
Cockroaches or evidence of cockroaches present		✓	
Rodents or evidence of rodents present		✓	
Someone smoking in the unit during inspection		✓	
Handrails present on all areas with more than three steps	✓		
Mold present	✓		
Screens present in at least one window in each room	✓		
Outlet covers present	✓	✓	
Furnace covers present		✓	
Breaker box cover present	✓		
Bathroom has a window that opens or a ventilation fan	✓		
	Good	Average	Poor
Cleanliness of house			✓

4.0 BACKGROUND INFORMATION AND EDUCATIONAL INFORMATION

4.1 Health Effects of Lead Exposure

Lead is a soft metal, naturally occurring in the Earth's crust. It has been determined, however, that lead has no useful purpose in the human body and acts as a toxin. It takes the place of essential minerals such as calcium, potassium, and iron, which are vital to the construction and repair of bones, organs and blood. Lead exposures have become a major health concern, especially in young children under the age of six.

Children, due to their smaller body mass and higher metabolism, are affected by lead exposures much more severely than adults. They ingest lead through daily hand-to-mouth activities and may develop severe attention deficit disorders, irreversible brain injury, learning disabilities and aggressive behaviors. The symptoms of lead poisoning often mimic other afflictions such as flu, colic or general malaise. It is important to have young children's blood tested for lead burden.

4.2 Sources of Lead Poisoning

Since lead is ingested by routine daily activities such as eating, playing and working, it is important to understand the sources of lead exposures. The most common places to find lead in household settings are interior and exterior paint, and contaminated dust or soil. Lead-based paint is most hazardous when it is chipping, peeling, cracking, or chalking; or applied to friction surfaces of components such as doors, windows, and floors. The abrasive action of painted surfaces rubbing together causes lead-containing paints to be ground into a fine dust. Lead dust can also be created from decaying vinyl mini blinds. Lead dust then settles on furniture, play area floors, and children's toys, where children are exposed during regular activities.

Several other sources of lead in the home include lead dust brought into the home from occupational exposures, water pipes, fixtures, and joints; decorative china, "leaded" crystal, fishing lures and sinkers, firearms ammunition, wine bottles and cosmetics. Some hobbies may also contribute to lead contamination within the home. Exposures to all sources of lead should be minimized or eliminated.

4.3 Methods to Reduce Exposure to Lead Hazards

The simplest and often most effective way to reduce lead exposures is through regular washing of hands, toys, and horizontal surfaces in the home with a liquid hand soap or dish soap and water. It is highly recommended that disposable cleaning materials be used to wash surfaces, so as not to re-contaminate them with a used mop or cloth.

Other ways of reducing lead hazards within the home include taking shoes off before entering living areas, letting water run prior to drinking or cooking, covering exposed soil with plant materials, and vacuuming with a High Efficiency Particulate Air (HEPA) filtered vacuum.

For more information regarding lead poisoning and prevention, contact your local health department or the National Lead Information Center (800-424-LEAD (5323)). Contact the Indiana State Department of Health (866-433-0746) for information regarding lead hazard remediation or selection of qualified lead professionals.

5.0 RE-EVALUATION AND MONITORING SCHEDULE

All painted components require periodic re-evaluation and monitoring. Re-evaluation typically is scheduled on an annual basis, but more frequent re-evaluations may be required depending on site conditions. All painted surfaces must remain in good/intact condition. Painted surfaces that are peeling, cracking, blistering or causing dust from friction or impact must be corrected immediately to prevent hazardous exposure to possible lead-based paint sources. All repairs must follow HUD Guidelines for the interim control and abatement of lead-based paint hazards. The normal re-evaluation schedule for the interim control measures used in this property is twelve months. **The dwelling should be re-evaluated between six to twelve months from the date of this Assessment.**

6.0 ADDITIONAL RESOURCES

For further information regarding lead-based paint hazards and poisoning prevention, consult the following resources:

CONTACTS

Greentree Environmental Services, Inc.888-584-LEAD (5323)
National Lead Information Center:800-424-LEAD (5323)
U.S. Department of Housing and Urban Development:888-532-3547 (LEADLIST)
State of Indiana - Lead and Healthy Homes:866-433-0746
State of Illinois - Department of Public Health:217-782-4977

PUBLICATIONS

“Lead in Your Home: A Parent’s Reference Guide” U.S. Environmental Protection Agency
“Renovate Right” U.S. Environmental Protection Agency
“Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work”
U.S. Department of Housing and Urban Development

WEB SITES:

- Greentree Environmental Services, Inc. www.callgreentree.com
- Indiana State Dept. of Health, Lead and Healthy Homes www.isdh.in.gov
- HUD – Office of Healthy Homes and Lead Hazard Control www.hud.gov/offices/lead
- EPA www.epa.gov/lead
- National Safety Council www.nsc.org/issues/lead

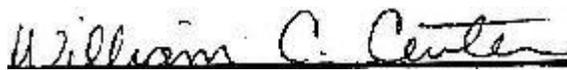
7.0 CERTIFICATION

All inspectors utilized by Greentree Environmental Services, Inc. have EPA/State licensure, and are licensed lead risk assessors who have completed and passed the HUD Lead-based Paint Visual Assessment Training Course. All technicians utilized by Greentree Environmental Services, Inc. have also been trained in the use, calibration, and maintenance of the Heuresis XRF equipment they currently use, along with necessary principles of radiation safety.

"The Federal Residential Lead-based Paint Hazard Reduction Act, 42 USC 4852d, requires sellers and landlords of most residential housing built before 1978 to disclose all available records and reports concerning lead-based paint and/or lead-based paint hazards, including the test results contained in this notice, to purchasers and tenants at the time of sale or lease upon lease renewal. This disclosure must occur even if hazard reduction or abatement has been completed. Failure to disclose these test results is a violation of the US Department of Housing and Urban Development and the US Environmental Protection Agency regulations at 24 CFR Part 35 and 40 CFR Part 745 and can result in a fine of up to \$11,000 per violation. To find out more information about your obligations under federal lead-based paint requirements, call 1-800-424-LEAD or go to the web to www.epa.gov/lead or www.hud.gov/offices/lead/index.com."

By acceptance of this report, the receiver agrees Greentree Environmental Services, Inc. (and by extent the risk assessor, agents and or contractor's liability) is limited to the field sampling date only identified on the front of this report.

The information contained in this report is a true and accurate representation of the lead-based paint conditions at the subject property at the time of the investigation, based on the professional judgment of the person(s) who conducted and reported this lead-based paint inspection and risk assessment:



William C. Center

Indiana Registered Lead Risk Assessor, IND000368

Indiana State Department of Health
WILLIAM C. CENTER
 Lead Risk Assessor License # IND000368

Effective: 10/14/2009 Expiration: 10/14/2021
 Birth Date: 08/21/1984 Gender: M
 Height: 5' 8" Eye Color: Green
 Weight: 145 Hair Color: Brown

Indiana Department of Homeland Security
 302 W. Washington, E-241
 Indianapolis, IN 46204

Radioactive Material Facility Registration

Registration Number	Expiration Date	Registration Status
XN000605	11/20/2020	Active

Greentree Environmental Services, Inc.
 5287 Central Ave/ PO Box 2297
 Portage IN 46368

David W. Kane
 David W. Kane
 Executive Director
 Indiana Department of Homeland Security

Certificate of Training

Has completed the Heuresis Corp. training materials presented on the topic of Instrument Operator Training, Pb200i, with regards to the materials licensed by the Commonwealth of Massachusetts and the Nuclear Regulatory Commission.

HEURESIS CORPORATION

**Instrument Operator Training
 Heuresis Corporation, Pb200i**

I confirm that the above named individual has received the training listed on this certificate.

Adam Robison
 Name
 Sales and Product Specialist
 Title

October 22nd, 2018
 Date

I certify that I have received the stated training and understand the content presented. I understand that I can follow up this training with questions from Heuresis Corporation.

William Center
 Name
 October 22nd, 2018
 Date

CONGRATULATIONS

William Center

has successfully completed the U.S. Department
 of Housing and Urban Development,
 Office of Healthy Home and Lead Hazard Control's

VISUAL ASSESSMENT COURSE
 pursuant to 24 Code of Federal Regulations Part 35

Jeanette G. Haulicek
 Director, Program Management and Assessment Division
 Office of Healthy Home and Lead Hazard Control

U.S. Department of Housing and Urban Development

- APPENDIX -

8.0 SAMPLING PROCEDURES

8.1 Laboratory

Dust and soil samples were analyzed by SanAir Technologies Laboratory, Inc. located at 1551 Oakbridge Drive, Suite B, Powhatan, VA 23139, phone number 804-897-1177. SanAir Technologies Laboratory, Inc. participates in the Environmental Lead Proficiency Analytical Testing (ELPAT) quality control rounds and is approved by the National Lead Laboratory Accreditation Program (NLLAP).

8.2 Site Sketch Orientation

Perimeter walls are identified as A, B, C, and D. Each room equivalent was oriented so that the "A Wall" corresponds directly with the main entrance wall and/or the main street. Each room equivalent's side identification follows the scheme in a clockwise direction for the whole housing unit. Site sketches designating rooms by expected use (kitchen, bathroom, etc.) and walls by orientation (A through D) are located in Section 9.0.

8.3 Soil Sampling

Soil samples, if deemed appropriate by the Risk Assessor, were collected following HUD guidelines from areas of exposed soil located within the boundaries of the property, such as sandbox, play areas, and foundation drip line. Composite samples from the upper 1/2 inch of soil were collected and analyzed by SanAir Technologies Laboratory, Inc. Results are reported in mg/Kg.

8.4 Dust Wipe Sampling

Dust wipe samples, where deemed appropriate by the Risk Assessor, were collected according to HUD Guidelines, as follows:

- An area located on the surface to be sampled was measured and marked.
- A single approved sampling wipe (disposable towelette) was opened with a gloved hand and wiped across the sampling area in a series of "S" patterns.
- The wipe was then placed into a container labeled with the site location identification, sample location and size of area sampled.
- Samples were analyzed by SanAir Technologies Laboratory, Inc. The results are reported in $\mu\text{g}/\text{ft}^2$.

8.5 XRF Analysis

The instrument used for this Risk Assessment was an X-ray fluorescence unit (XRF) manufactured by Heuresis. The unit was operated according to Performance Characteristic Sheet recommendations. XRF technology utilizes low level radiation to excite atoms within painted surfaces. The XRF unit interprets the gamma radiation rebound to determine whether or not lead is present and if so to what degree. If the unit detects lead at the HUD defined threshold limit of $1.0 \mu\text{g}/\text{cm}^2$ or more, then a positive reading is reported. For this risk assessment, Heuresis Pb200i #2034 was used.

9.0 FLOOR PLANS

Exterior

LEAD RISK ASSESSMENT SITE DESCRIPTION
 # of Units: 1
 # of Bedrooms: 4

Site Address: 1415 W. LaSalle Ave
South Bend, IN

Date: 10-16-19
 Risk Assessor: LDN
 Standard Abbreviations For Use:

BR: Bedroom
 CH: Children's Bedroom
 AD: Adult Bedroom
 BK: Bathroom
 DR: Dining Room
 GR: Garage/Carpport
 KT: Kitchen
 LR: Living Room/Parade/Family Room
 MB: Mechanical (Plumbers/Water Heating)
 PA: Pory Area (Stair/Entry/Storage)
 ST: Storage (Closets/Entry Room/Wardrobe)
 TR: Utility Room (Laundry Room/Wardrobe)

Site Meter:
 XRF # 2034
 Start # 1 End # 121
 Start Call 1-3
 End Call 119-121
 Painter Clips Around Driveline: N
 Photo # _____

Stairs <input type="checkbox"/> None <input type="checkbox"/> Three <input type="checkbox"/> Placement <input checked="" type="checkbox"/> Other	Garage <input checked="" type="checkbox"/> Attached <input type="checkbox"/> Detached <input type="checkbox"/> Other	Foundation <input type="checkbox"/> Painted <input type="checkbox"/> Cinder <input checked="" type="checkbox"/> Brick <input type="checkbox"/> Non-painted <input type="checkbox"/> Concrete <input type="checkbox"/> Other	Siding <input type="checkbox"/> Wood <input type="checkbox"/> Metal <input type="checkbox"/> Stucco <input type="checkbox"/> Vinyl <input checked="" type="checkbox"/> Brick <input type="checkbox"/> Other	Soffit and Trim <input checked="" type="checkbox"/> Wood <input type="checkbox"/> Metal <input type="checkbox"/> Vinyl <input type="checkbox"/> Other	Windows <input checked="" type="checkbox"/> Wood <input type="checkbox"/> Metal <input type="checkbox"/> Vinyl <input type="checkbox"/> Other	Doors <input type="checkbox"/> Wood <input type="checkbox"/> Metal <input type="checkbox"/> Vinyl <input type="checkbox"/> Other	Porch 1 <input checked="" type="checkbox"/> Shielded <input type="checkbox"/> Enclosed <input type="checkbox"/> Covered <input type="checkbox"/> Open <input type="checkbox"/> Deck <input type="checkbox"/> Other	Porch 2 <input type="checkbox"/> Shielded <input type="checkbox"/> Enclosed <input type="checkbox"/> Covered <input type="checkbox"/> Open <input type="checkbox"/> Deck <input type="checkbox"/> Other
--	---	---	---	---	---	--	--	---

A-4
 B-7
 C-2
 D-4

First Floor

Site Address: U15

Unit # 1

1 Store Basement Attic or Storage

LEAD RISK ASSESSMENT SITE DESCRIPTION
As of Disposition



Date: _____

Risk Assessment: _____

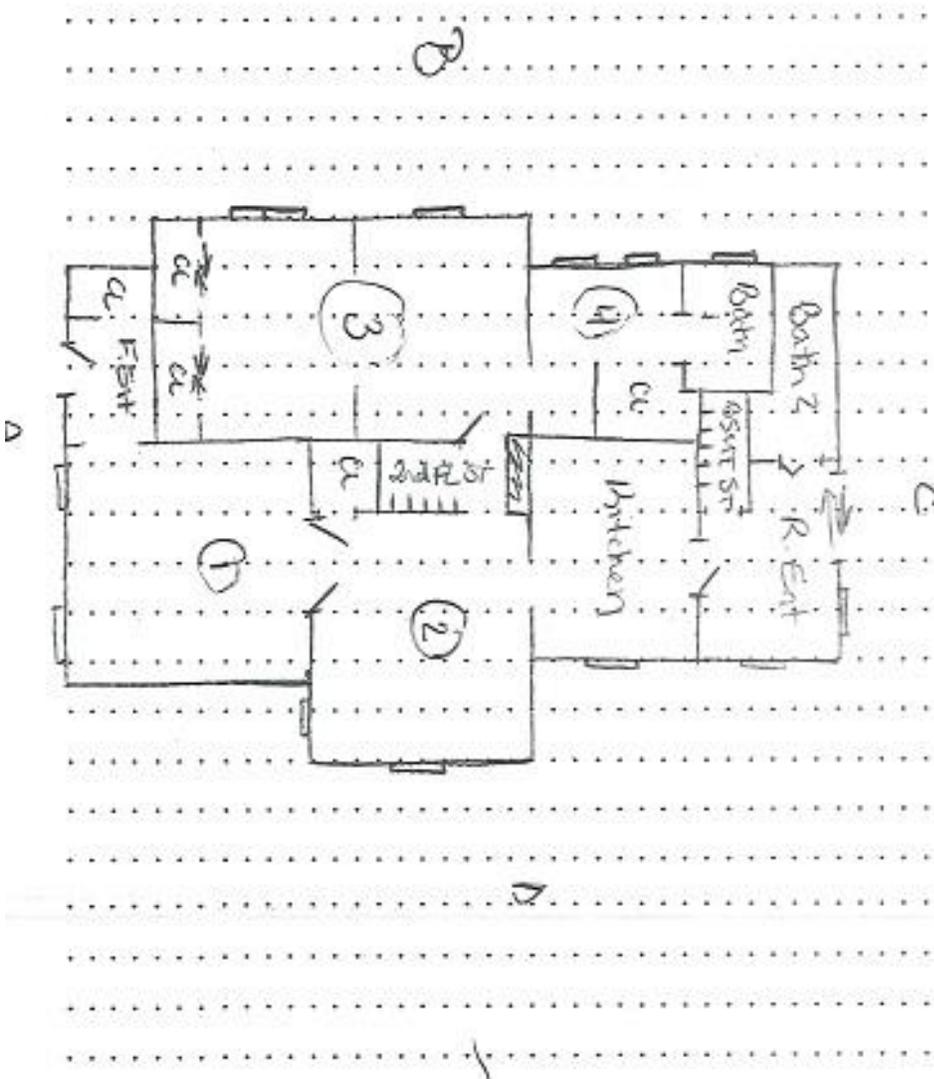
Standard Abbreviations for Use

- BR: Bedroom
- CBDR: Child's Bedroom
- MBDR: Master Bedroom
- BHR: Bathroom
- DR: Dining room
- Gar: Garage, carport
- K: Kitchen
- LR: Living room, den, family room
- M: Mechanical (HVAC, water heating)
- PA: Play area
- St: Storage area (closet, pantry, shed)
- Un: Utility (laundry room, mechanical)

Site Notes:

Dust Levels:

Light Modern Heavy



Second Floor

Site Address: 615

LEAD RISK ASSESSMENT SITE DESCRIPTION

Area Diagrammed

C

Unit # 1

2 Floor

Room(s) Air or storage

Lines: _____

Risk Assessment: _____

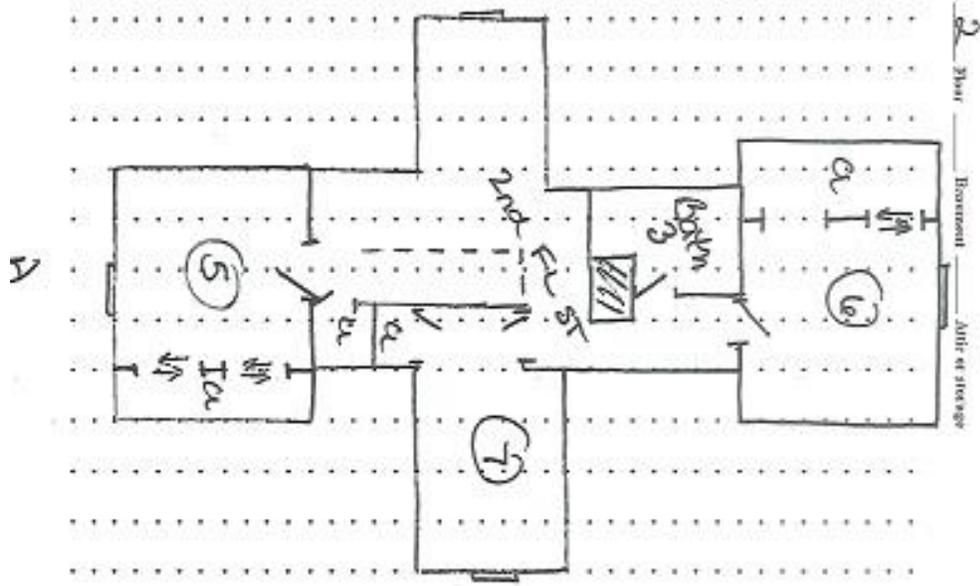
Standard Abbreviations For Use:

- BDR Bedroom
- CHDR Child's bedroom
- KBDR KMaster Bedroom
- BDR Bedroom
- DR Dining room
- GR Garage, carport
- KT Kitchen
- LR Living room, den, family room
- MAA Mechanical (hvac, water heating)
- PA Porch, patio
- SR Storage area (closet, pantry, shed)
- UB Utility (laundry room, walk-in)

Size Level:

Dust Levels:

Light Medium Heavy



Basement

Site Address: 6115

LEAD RISK ASSESSMENT SITE DESCRIPTION

Area Diagrammed

Unit # 1 Floor Basement Attic or storage



Date: _____

Risk Assessment: _____

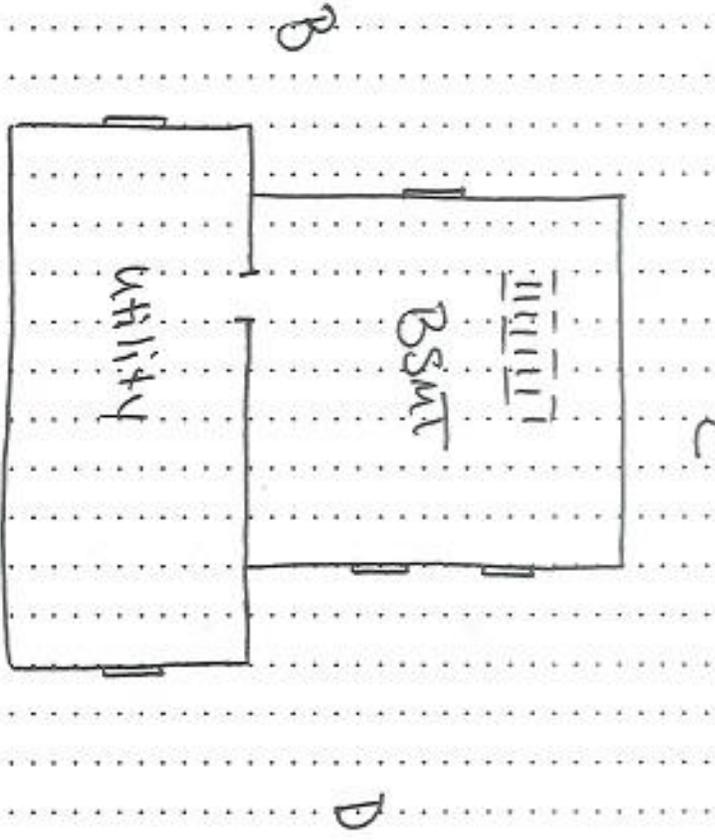
Standard Abbreviations for Use

- BRG Bedroom
- CLDR Closets & lockers
- MBRM Master Bedroom
- BRM Bedroom
- DR Dining room
- GR Garage, carport
- HT Kitchen
- LR Living room, den, family room
- Mch Mechanical (hvac, water heater)
- PA Play area
- Stg Storage area (boxes, pallets, shed)
- UD Utility laundry area, vestibule

Site Notes:

Dust Levels:

Light Moderate Heavy



A

10.0 REPRESENTATIVE PICTURES



A



B



C



D



Address



Room 3 door and components B



Room 3 window and components B



Room 4 dormer window B



Window casing ABCD



Windowsill ABCD



Window casing B



Bathroom 1 window and components B



Basement window components BD



Front entry dormer window A



Room 2 closet baseboard



Room 2 dormer window A



Room 3 closet baseboard



Porch column A



Porch A support beam and ceiling



Soffit, fascia, and frieze board ABCD



Basement stairs door components D



Front entry closet baseboards



Front entry closet brackets



Kitchen door jamb C



Rear entry door jamb A



Rear entry door jamb B

11.0 LABORATORY RESULTS

11.1 Soil Sample Analysis



Name: Greentree Environmental Services, Inc
Address: PO Box 2297
Portage, IN 46368
Phone: 219-764-2828

Project Number:
P.O. Number:
Project Name: 615 W. LaSalle Ave South Bend IN
Collected Date: 10/16/2019
Received Date: 10/21/2019 9:00:00 AM

SanAir ID Number
19054124
FINAL REPORT
10/22/2019 8:52:22 AM

Analyst: Baird, Marti
Test Method: SW846/M3050B/7000B

Lead Soil Analysis

Sample	Description	µg Pb		Sample		Calculated	Sample
		In Sample	Size	Units	RL	Results	Units
19054124 - 1	11 / Outside CS	40	0.1062	Grams	94.2	372.4	µg/g

Method Reporting Limit < 10 µg/0.1 g soil. NOTE: µg/g=ppm

Signature: *Marti Baird*
Date: 10/21/2019

Reviewed: *Abina Balami*
Date: 10/21/2019

11.2 Dust Wipe Sample Analysis



Name: Greentree Environmental Services, Inc
 Address: PO Box 2297
 Portage, IN 46368
 Phone: 219-764-2828

Project Number:
 P.O. Number:
 Project Name: 615 W. LaSalle Ave South Bend IN
 Collected Date: 10/16/2019
 Received Date: 10/21/2019 9:00:00 AM

SanAir ID Number
 19054121
 FINAL REPORT
 10/22/2019 8:52:12 AM

Analyst: Oliver, Hannah
 Test Method: SW846/M3050B/7000B

Lead Wipe Analysis

Sample	Description	µg Pb			Calculated	Sample	Units
		In Sample	Area	Units	RL	Results	
19054121 - 1	1 / Kitchen F	76	1.000	Sq. Ft.	10	76.1	µg/ft2
19054121 - 2	2 / Bath 1 F	1297	1.000	Sq. Ft.	10	1297.0	µg/ft2
19054121 - 3	3 / Rm 3 F	313	1.000	Sq. Ft.	10	313.2	µg/ft2
19054121 - 4	4 / 2nd FL ST F	< 10	1.000	Sq. Ft.	10	<10	µg/ft2
19054121 - 5	5 / BSMT F	1350	1.000	Sq. Ft.	10	1350.0	µg/ft2
19054121 - 6	6 / Kitchen WS	18	0.25	Sq. Ft.	40	70.4	µg/ft2
19054121 - 7	7 / Rm 1 WS	19	0.25	Sq. Ft.	40	74.2	µg/ft2
19054121 - 8	8 / Rm 2 WS	18	0.25	Sq. Ft.	40	73.4	µg/ft2
19054121 - 9	9 / Rm 5 WW	139	0.25	Sq. Ft.	40	554.1	µg/ft2
19054121 - 10	10 / Rm 6 WW	346	0.25	Sq. Ft.	40	1384.0	µg/ft2

Method Reporting Limit < 10 µg/wipe

Signature: *Hannah J. Oliver*
 Date: 10/21/2019

Reviewed: *Ahmed Alami*
 Date: 10/21/2019

11.3 Chain of Custody

Form 70, Revision 4, 5/2/2013



1551 Oakbridge Drive, Suite B - Powhatan, VA 23139
 804-897-1177 / 888-895-1177 / Fax 804-897-0070
 www.sanair.com

Metals & Lead
 Chain of Custody

SanAir ID Number
 19054121

Company: Greentree Environmental Services, Inc	Project #:	Phone #: 219-764-2828
Address: PO Box 2297	Project Name: 615 W. LaSalle Ave Spartanburg, SC	Phone #:
City, St., Zip: Portage, IN 46368	Date Collected: 10-16-19	Fax #: 219-762-2828
Samples Collected By: William Center	P.O. Number:	Email: greentree@gmrtree.net

Matrix Types

Metals Analysis Types

<input type="checkbox"/> Air	<input type="checkbox"/> Aqueous	<input type="checkbox"/> Bulk	<input checked="" type="checkbox"/> Total Concentration of Lead	<input type="checkbox"/> ICP-total concentration of metals (please list metals):
<input type="checkbox"/> Paint	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Soil	<input type="checkbox"/> Total Concentration of RCRA & Metals	
<input type="checkbox"/> Dust	<input checked="" type="checkbox"/> Wipe	<input type="checkbox"/> Potable Water	<input type="checkbox"/> TCLP for Lead	<input type="checkbox"/> Other:
<input type="checkbox"/> Non-Potable Water	<input type="checkbox"/> Wastewater	<input type="checkbox"/> TCLP for RCRA & Metals	<input type="checkbox"/> TCLP Full (w/ Organics)	

*Turn Around Times	Same Day <input type="checkbox"/>	1 Day <input checked="" type="checkbox"/>	2 days <input type="checkbox"/>	3 Days <input type="checkbox"/>
	<input type="checkbox"/> Standard (3 day)	<input type="checkbox"/> Full TCLP (10d)		

*Courier charge for same day and 1 day TAT for offsite work.

Sample #	Sample Identification/Location	Flow Rate	Start Time	Stop Time	Volume (L) or Area (Sq ft)
1	Kitchen F				12x12
2	Bath 1 F				12x12
3	Rm 3 F				12x12
4	2nd FL ST F				12x12
5	BSMT F				12x12
6	Kitchen WS				2x18
7	Rm 1 WS				2x18
8	Rm 2 WS				2x18
9	Rm 5 WS				2x18
10	Rm 6 WS				2x18
11	OUTSIDE CS				

Special Instructions	
----------------------	--

Relinquished by	Date	Time	Received by	Date	Time
W Center	10-16-19		CS	10/21/19	9:00am

Unless scheduled, the turn around time for all samples received after 3 pm will begin at 8 am the next business morning.
 Weekend or Holiday work must be scheduled ahead of time and is charged for rush turn around time.
 Work with standard turn around time sent Priority Overnight and Billed To Recipient will be charged a \$10 shipping fee.

12.0 XRF DATA

VACANT
615 W Lasalle Ave
South Bend, IN 46601

Reading #	Time	Type	Duration	Units	Components	Substrate	Side	Condition of Paint	Color	Room	Site	FLOOR	PbC	Result
1	10:20:19	Lead Paint	5	mg/cm2	CALIBRATE				Green		615 W Lasalle Ave		0.9	Negative
2	10:20:39	Lead Paint	5	mg/cm2	CALIBRATE				Green		615 W Lasalle Ave		1	Positive
3	10:21:00	Lead Paint	5	mg/cm2	CALIBRATE				Green		615 W Lasalle Ave		1	Positive
4	10:24:12	Lead Paint	2	mg/cm2	Door Casing	Wood	A	DETERIORATED	Tan	Exterior House	615 W Lasalle Ave		-0.1	Negative
5	10:24:29	Lead Paint	2	mg/cm2	Door Jamb	Wood	A	DETERIORATED	Tan	Exterior House	615 W Lasalle Ave		0.1	Negative
6	10:24:53	Lead Paint	2	mg/cm2	Porch Column	Wood	A	DETERIORATED	White	Exterior House	615 W Lasalle Ave		4.4	Positive
7	10:25:53	Lead Paint	2	mg/cm2	Siding	Brick	A	DETERIORATED	Red	Exterior House	615 W Lasalle Ave		0.1	Negative
8	10:27:07	Lead Paint	2	mg/cm2	Trim Lower	Concrete	A	DETERIORATED	Tan	Exterior House	615 W Lasalle Ave		0.2	Negative
9	10:27:32	Lead Paint	2	mg/cm2	Trim Lower	Concrete	A	DETERIORATED	Green	Exterior House	615 W Lasalle Ave		0.5	Negative
10	10:28:17	Lead Paint	2	mg/cm2	Foundation	Brick	A	DETERIORATED	Green	Exterior House	615 W Lasalle Ave		0.5	Negative
11	10:28:55	Lead Paint	2	mg/cm2	Siding	Brick	B	DETERIORATED	Green	Exterior House	615 W Lasalle Ave		0.3	Negative
12	10:29:29	Lead Paint	4	mg/cm2	Win. Sill-Stool	Concrete	A	DETERIORATED	Tan	Exterior House	615 W Lasalle Ave		1.2	Positive
13	10:30:26	Lead Paint	2	mg/cm2	Win. Sill-Stool	Brick	B	DETERIORATED	Green	Exterior House	615 W Lasalle Ave		0.7	Negative
14	10:31:30	Lead Paint	2	mg/cm2	Bsmt. Wn. Case	Wood	D	DETERIORATED	Brown	Exterior House	615 W Lasalle Ave		1.5	Positive
15	10:32:16	Lead Paint	3	mg/cm2	Bsmt. Wn. Case	Brick	D	DETERIORATED	Green	Exterior House	615 W Lasalle Ave		0.7	Negative
16	10:33:51	Lead Paint	2	mg/cm2	Win. Casing	Wood	B	DETERIORATED	Green	Exterior House	615 W Lasalle Ave		4.6	Positive
17	10:34:09	Lead Paint	2	mg/cm2	Win. Casing	Wood	B	DETERIORATED	Brown	Exterior House	615 W Lasalle Ave		6.5	Positive
18	10:36:17	Lead Paint	2	mg/cm2	Door Dormer Wn.	Wood	A	DETERIORATED	Green	Exterior House	615 W Lasalle Ave		5.3	Positive
19	10:36:33	Lead Paint	2	mg/cm2	Door Dormer Wn. Case	Wood	A	DETERIORATED	Green	Exterior House	615 W Lasalle Ave		5.1	Positive
20	10:37:19	Lead Paint	2	mg/cm2	Fascia	Wood	A	DETERIORATED	Tan	Exterior House	615 W Lasalle Ave		5	Positive
21	10:37:37	Lead Paint	2	mg/cm2	Frieze Board	Wood	A	DETERIORATED	Tan	Exterior House	615 W Lasalle Ave		5.2	Positive
22	10:37:57	Lead Paint	2	mg/cm2	Soffit	Wood	A	DETERIORATED	White	Exterior House	615 W Lasalle Ave		5	Positive
23	10:39:12	Lead Paint	2	mg/cm2	Porch Ceiling	Wood	A	DETERIORATED	Green	Exterior House	615 W Lasalle Ave		5.3	Positive
24	10:39:30	Lead Paint	2	mg/cm2	Porch Beam	Wood	A	DETERIORATED	Green	Exterior House	615 W Lasalle Ave		5.1	Positive
25	10:51:35	Lead Paint	2	mg/cm2	Wall	Drywall	A	DETERIORATED	Brown	Entry Front	615 W Lasalle Ave	1st	0.2	Negative
26	10:52:06	Lead Paint	2	mg/cm2	Clos. Wall	Plaster	B	DETERIORATED	White	Entry Front	615 W Lasalle Ave	1st	0.4	Negative
27	10:52:35	Lead Paint	2	mg/cm2	Clos. Bracket	Wood	B	DETERIORATED	White	Entry Front	615 W Lasalle Ave	1st	13.8	Positive
28	10:52:50	Lead Paint	2	mg/cm2	Clos. Baseboard	Wood	B	DETERIORATED	White	Entry Front	615 W Lasalle Ave	1st	9	Positive
29	10:53:11	Lead Paint	2	mg/cm2	Baseboard	Wood	C	DETERIORATED	Tan	Entry Front	615 W Lasalle Ave	1st	0.1	Negative
30	10:53:37	Lead Paint	5	mg/cm2	Floor	Wood		DETERIORATED	Brown	Entry Front	615 W Lasalle Ave	1st	0.9	Negative
31	10:54:34	Lead Paint	2	mg/cm2	Door Dormer Wn.	Wood	A	DETERIORATED	White	Entry Front	615 W Lasalle Ave	1st	13.2	Positive
32	10:55:24	Lead Paint	2	mg/cm2	Ceiling	Drywall		DETERIORATED	White	Entry Front	615 W Lasalle Ave	1st	-0.4	Negative
33	10:55:50	Lead Paint	2	mg/cm2	Ceiling	Drywall		DETERIORATED	White	Room 01	615 W Lasalle Ave	1st	0.1	Negative
34	10:56:08	Lead Paint	2	mg/cm2	Wall	Drywall	D	DETERIORATED	Brown	Room 01	615 W Lasalle Ave	1st	0	Negative
35	10:56:36	Lead Paint	2	mg/cm2	Fireplace Mantle	Wood	D	INTACT	Brown	Room 01	615 W Lasalle Ave	1st	0.2	Negative
36	10:57:00	Lead Paint	2	mg/cm2	Door	Wood	C	DETERIORATED	White	Room 01	615 W Lasalle Ave	1st	0	Negative
37	10:57:21	Lead Paint	2	mg/cm2	Door	Wood	A	DETERIORATED	White	Room 02	615 W Lasalle Ave	1st	0	Negative
38	10:57:49	Lead Paint	2	mg/cm2	Door Dormer Wn.	Wood	A	DETERIORATED	White	Room 02	615 W Lasalle Ave	1st	8.8	Positive

Reading #	Time	Type	Duration	Units	Components	Substrate	Side	Condition of Paint	Color	Room	Site	FLOOR	PbC	Result
39	10:58:26	Lead Paint	2	mg/cm2	Clos. Wall	Plaster	B	DETERIORATED	White	Room 02	615 W Lasalle Ave	1st	-0.4	Negative
40	10:58:45	Lead Paint	2	mg/cm2	Clos. Baseboard	Wood	B	DETERIORATED	White	Room 02	615 W Lasalle Ave	1st	9.7	Positive
41	10:59:30	Lead Paint	2	mg/cm2	Wall	Plaster	D	DETERIORATED	Brown	Room 02	615 W Lasalle Ave	1st	0	Negative
42	11:00:03	Lead Paint	2	mg/cm2	Ceiling	Plaster		DETERIORATED	White	Room 02	615 W Lasalle Ave	1st	0.4	Negative
43	11:02:37	Lead Paint	2	mg/cm2	Ceiling	Plaster		DETERIORATED	White	Room 03	615 W Lasalle Ave	1st	0.2	Negative
44	11:03:01	Lead Paint	2	mg/cm2	Wall	Plaster	B	DETERIORATED	White	Room 03	615 W Lasalle Ave	1st	0.2	Negative
45	11:03:18	Lead Paint	2	mg/cm2	Wall	Drywall	D	DETERIORATED	White	Room 03	615 W Lasalle Ave	1st	0.1	Negative
46	11:03:43	Lead Paint	2	mg/cm2	Clos. Wall	Drywall	A	DETERIORATED	White	Room 03	615 W Lasalle Ave	1st	0.6	Negative
47	11:04:10	Lead Paint	2	mg/cm2	Clos. Bracket	Wood	A	DETERIORATED	White	Room 03	615 W Lasalle Ave	1st	-0.1	Negative
48	11:04:27	Lead Paint	2	mg/cm2	Clos. Baseboard	Wood	A	DETERIORATED	White	Room 03	615 W Lasalle Ave	1st	11	Positive
49	11:05:07	Lead Paint	2	mg/cm2	Win. Casing	Wood	B	DETERIORATED	White	Room 03	615 W Lasalle Ave	1st	12.8	Positive
50	11:05:22	Lead Paint	2	mg/cm2	Win. Sill-Stool	Wood	B	DETERIORATED	White	Room 03	615 W Lasalle Ave	1st	9.3	Positive
51	11:05:36	Lead Paint	2	mg/cm2	Win. Sash	Wood	B	DETERIORATED	White	Room 03	615 W Lasalle Ave	1st	9.9	Positive
52	11:06:08	Lead Paint	2	mg/cm2	Floor	Wood		DETERIORATED	White	Room 03	615 W Lasalle Ave	1st	0.1	Negative
53	11:06:40	Lead Paint	2	mg/cm2	Door Jamb	Wood	D	DETERIORATED	White	Room 03	615 W Lasalle Ave	1st	-0.2	Negative
54	11:07:28	Lead Paint	2	mg/cm2	Door Dormer Wn.	Wood	B	DETERIORATED	White	Room 04	615 W Lasalle Ave	1st	10.2	Positive
55	11:07:56	Lead Paint	2	mg/cm2	Wall	Drywall	A	DETERIORATED	White	Room 04	615 W Lasalle Ave	1st	0.1	Negative
56	11:08:29	Lead Paint	2	mg/cm2	Clos. Wall	Drywall	D	DETERIORATED	White	Room 04	615 W Lasalle Ave	1st	-0.1	Negative
57	11:09:05	Lead Paint	2	mg/cm2	Win. Casing	Wood	B	DETERIORATED	White	Bathroom	615 W Lasalle Ave	1st	13.9	Positive
58	11:09:21	Lead Paint	2	mg/cm2	Win. Sash	Wood	B	DETERIORATED	White	Bathroom	615 W Lasalle Ave	1st	13.4	Positive
59	11:09:48	Lead Paint	2	mg/cm2	Wall	Plaster	B	DETERIORATED	White	Bathroom	615 W Lasalle Ave	1st	0.1	Negative
60	11:10:14	Lead Paint	2	mg/cm2	Ceiling	Drywall		DETERIORATED	White	Bathroom	615 W Lasalle Ave	1st	0.1	Negative
61	11:13:46	Lead Paint	2	mg/cm2	Ceiling	Drywall		INTACT	White	Kitchen	615 W Lasalle Ave	1st	-0.2	Negative
62	11:14:21	Lead Paint	2	mg/cm2	Wall	Drywall	B	INTACT	White	Kitchen	615 W Lasalle Ave	1st	0.1	Negative
63	11:15:04	Lead Paint	2	mg/cm2	Door Jamb	Wood	C	DETERIORATED	White	Kitchen	615 W Lasalle Ave	1st	6.3	Positive
64	11:15:23	Lead Paint	2	mg/cm2	Door Jamb	Wood	A	DETERIORATED	White	Entry Rear	615 W Lasalle Ave	1st	7.7	Positive
65	11:15:40	Lead Paint	2	mg/cm2	Door Jamb	Wood	B	DETERIORATED	White	Entry Rear	615 W Lasalle Ave	1st	6.9	Positive
66	11:15:57	Lead Paint	2	mg/cm2	Door Jamb	Wood	B	DETERIORATED	Pink	Entry Rear	615 W Lasalle Ave	1st	6.1	Positive
67	11:16:28	Lead Paint	2	mg/cm2	Door Casing	Wood	B	DETERIORATED	Pink	Entry Rear	615 W Lasalle Ave	1st	6.5	Positive
68	11:16:45	Lead Paint	2	mg/cm2	Door Casing	Wood	B	DETERIORATED	White	Entry Rear	615 W Lasalle Ave	1st	6.6	Positive
69	11:17:06	Lead Paint	2	mg/cm2	Win. Casing	Wood	C	DETERIORATED	White	Entry Rear	615 W Lasalle Ave	1st	9.7	Positive
70	11:17:21	Lead Paint	2	mg/cm2	Win. Sash	Wood	C	DETERIORATED	White	Entry Rear	615 W Lasalle Ave	1st	10.4	Positive
71	11:17:44	Lead Paint	2	mg/cm2	Wall	Plaster	C	DETERIORATED	White	Entry Rear	615 W Lasalle Ave	1st	2.3	Positive
72	11:19:54	Lead Paint	2	mg/cm2	Wall	Plaster	C	DETERIORATED	Pink	Entry Rear	615 W Lasalle Ave	1st	0.1	Negative
73	11:20:09	Lead Paint	2	mg/cm2	Wall	Plaster	D	DETERIORATED	Pink	Entry Rear	615 W Lasalle Ave	1st	0.3	Negative
74	11:20:26	Lead Paint	2	mg/cm2	Wall	Plaster	D	DETERIORATED	White	Entry Rear	615 W Lasalle Ave	1st	0.2	Negative
75	11:22:15	Lead Paint	2	mg/cm2	Wall	Plaster	C	DETERIORATED	White	Bathroom 2	615 W Lasalle Ave	1st	0	Negative
76	11:22:30	Lead Paint	2	mg/cm2	Wall	Plaster	B	DETERIORATED	White	Bathroom 2	615 W Lasalle Ave	1st	0.1	Negative
77	11:23:10	Lead Paint	2	mg/cm2	Pipe	Plastic	C	DETERIORATED	Pink	Bathroom 2	615 W Lasalle Ave	1st	0	Negative
78	11:23:54	Lead Paint	2	mg/cm2	Wall	Drywall	A	DETERIORATED	White	Bsmt. Stair	615 W Lasalle Ave	1st	0.1	Negative
79	11:24:13	Lead Paint	2	mg/cm2	Door Casing	Wood	D	DETERIORATED	White	Bsmt. Stair	615 W Lasalle Ave	1st	7.1	Positive
80	11:24:38	Lead Paint	2	mg/cm2	Door Jamb	Wood	D	DETERIORATED	White	Bsmt. Stair	615 W Lasalle Ave	1st	9.2	Positive
81	11:24:56	Lead Paint	2	mg/cm2	Door Jamb	Wood	D	DETERIORATED	Pink	Bsmt. Stair	615 W Lasalle Ave	1st	7.5	Positive
82	11:25:19	Lead Paint	2	mg/cm2	Stair Header Trim	Wood	A	DETERIORATED	White	Bsmt. Stair	615 W Lasalle Ave	1st	0	Negative
83	11:25:38	Lead Paint	2	mg/cm2	Stair Tread	Wood		DETERIORATED	Grey	Bsmt. Stair	615 W Lasalle Ave	1st	0.1	Negative
84	11:25:54	Lead Paint	2	mg/cm2	Stair Riser	Wood		DETERIORATED	Grey	Bsmt. Stair	615 W Lasalle Ave	1st	0	Negative
85	11:28:41	Lead Paint	2	mg/cm2	Wall	Brick	C	DETERIORATED	White	Utility Room	615 W Lasalle Ave	Bsmt	-0.1	Negative

Reading #	Time	Type	Duration	Units	Components	Substrate	Side	Condition of Paint	Color	Room	Site	FLOOR	PbC	Result
86	11:29:02	Lead Paint	2	mg/cm2	Wall	Cinderblock	B	DETERIORATED	Beige	Utility Room	615 W Lasalle Ave	Bsmt	0.1	Negative
87	11:29:26	Lead Paint	2	mg/cm2	Ceiling	Wood		DETERIORATED	White	Utility Room	615 W Lasalle Ave	Bsmt	-0.3	Negative
88	11:30:22	Lead Paint	2	mg/cm2	Bsmt. Wn. Sash	Wood	B	DETERIORATED	Stain	Utility Room	615 W Lasalle Ave	Bsmt	0	Negative
89	11:31:07	Lead Paint	2	mg/cm2	Bsmt. Wn. Case	Wood	B	DETERIORATED	White	Basement	615 W Lasalle Ave	Bsmt	-0.1	Negative
90	11:31:34	Lead Paint	2	mg/cm2	Wall	Stone	B	DETERIORATED	White	Basement	615 W Lasalle Ave	Bsmt	0.2	Negative
91	11:31:59	Lead Paint	2	mg/cm2	Wall	Brick	A	DETERIORATED	Tan	Basement	615 W Lasalle Ave	Bsmt	0.1	Negative
92	11:32:20	Lead Paint	2	mg/cm2	Ceiling	Wood		DETERIORATED	White	Basement	615 W Lasalle Ave	Bsmt	-0.1	Negative
93	11:33:19	Lead Paint	2	mg/cm2	Ceiling	Drywall		INTACT	White	2nd Fl. Stair	615 W Lasalle Ave	1st	0	Negative
94	11:33:44	Lead Paint	2	mg/cm2	Stair Wall	Plaster	B	INTACT	White	2nd Fl. Stair	615 W Lasalle Ave	1st	0.1	Negative
95	11:34:25	Lead Paint	2	mg/cm2	Wall	Drywall	B	INTACT	White	2nd Fl. Stair	615 W Lasalle Ave	2nd	0.1	Negative
96	11:34:58	Lead Paint	2	mg/cm2	Ceiling	Drywall		INTACT	White	2nd Fl. Stair	615 W Lasalle Ave	2nd	-0.1	Negative
97	11:35:22	Lead Paint	2	mg/cm2	Win. Sash	Wood	B	DETERIORATED	White	2nd Fl. Stair	615 W Lasalle Ave	2nd	-0.1	Negative
98	11:35:44	Lead Paint	2	mg/cm2	Railing	Wood		DETERIORATED	White	2nd Fl. Stair	615 W Lasalle Ave	2nd	-0.1	Negative
99	11:36:07	Lead Paint	2	mg/cm2	Door Jamb	Wood	A	DETERIORATED	White	2nd Fl. Stair	615 W Lasalle Ave	2nd	0	Negative
100	11:36:31	Lead Paint	2	mg/cm2	Win. Sash	Wood	A	DETERIORATED	White	Room 05	615 W Lasalle Ave	2nd	-0.1	Negative
101	11:36:52	Lead Paint	2	mg/cm2	Door	Wood	D	DETERIORATED	Green	Room 05	615 W Lasalle Ave	2nd	0.1	Negative
102	11:37:08	Lead Paint	2	mg/cm2	Door	Wood	D	DETERIORATED	Blue	Room 05	615 W Lasalle Ave	2nd	0.1	Negative
103	11:37:30	Lead Paint	2	mg/cm2	Wall	Drywall	A	INTACT	White	Room 05	615 W Lasalle Ave	2nd	0.1	Negative
104	11:37:48	Lead Paint	2	mg/cm2	Ceiling	Drywall		INTACT	White	Room 05	615 W Lasalle Ave	2nd	0.1	Negative
105	11:38:15	Lead Paint	2	mg/cm2	Ceiling	Drywall		INTACT	White	Bathroom 3	615 W Lasalle Ave	2nd	0	Negative
106	11:38:33	Lead Paint	2	mg/cm2	Wall	Drywall	A	INTACT	White	Bathroom 3	615 W Lasalle Ave	2nd	0.1	Negative
107	11:39:08	Lead Paint	2	mg/cm2	Wall	Plaster	C	DETERIORATED	White	Room 06	615 W Lasalle Ave	2nd	0	Negative
108	11:39:27	Lead Paint	2	mg/cm2	Wall	Drywall	A	DETERIORATED	White	Room 06	615 W Lasalle Ave	2nd	0.2	Negative
109	11:39:43	Lead Paint	2	mg/cm2	Door Casing	Wood	A	DETERIORATED	White	Room 06	615 W Lasalle Ave	2nd	-0.1	Negative
110	11:39:58	Lead Paint	2	mg/cm2	Baseboard	Wood	A	DETERIORATED	White	Room 06	615 W Lasalle Ave	2nd	-0.2	Negative
111	11:40:30	Lead Paint	2	mg/cm2	Clos. Wall	Plaster	B	DETERIORATED	White	Room 06	615 W Lasalle Ave	2nd	0.1	Negative
112	11:40:53	Lead Paint	2	mg/cm2	Door	Wood	B	DETERIORATED	Green	Room 06	615 W Lasalle Ave	2nd	0.1	Negative
113	11:41:15	Lead Paint	2	mg/cm2	Ceiling	Drywall		DETERIORATED	White	Room 06	615 W Lasalle Ave	2nd	0	Negative
114	11:41:35	Lead Paint	2	mg/cm2	Ceiling	Drywall		DETERIORATED	White	Room 07	615 W Lasalle Ave	2nd	-0.1	Negative
115	11:41:51	Lead Paint	2	mg/cm2	Wall	Drywall	D	DETERIORATED	White	Room 07	615 W Lasalle Ave	2nd	0.2	Negative
116	11:42:09	Lead Paint	2	mg/cm2	Clos. Wall	Drywall	A	DETERIORATED	White	Room 07	615 W Lasalle Ave	2nd	0	Negative
117	11:42:29	Lead Paint	2	mg/cm2	Win. Sash	Wood	D	DETERIORATED	White	Room 07	615 W Lasalle Ave	2nd	-0.1	Negative
118	11:42:46	Lead Paint	2	mg/cm2	Win. Sash	Wood	C	DETERIORATED	White	Room 06	615 W Lasalle Ave	2nd	-0.1	Negative
119	11:43:50	Lead Paint	5	mg/cm2	CALIBRATE						615 W Lasalle Ave		0.9	Negative
120	11:44:09	Lead Paint	5	mg/cm2	CALIBRATE						615 W Lasalle Ave		1	Positive
121	11:44:28	Lead Paint	5	mg/cm2	CALIBRATE						615 W Lasalle Ave		1	Positive

13.0 GLOSSARY

COMMON LEAD-BASED PAINT TERMS

Abatement: A measure or set of measures designed to permanently eliminate lead-based paint hazards or lead-based paint. Abatement strategies include the removal of lead-based paint, enclosure, encapsulation, replacement of building components coated with lead-based paint, removal of lead-contaminated dust, and removal of lead-contaminated soil or overlaying of soil with a durable covering such as asphalt (grass and sod are considered interim control measures). All of these strategies require preparation; cleanup; waste disposal; post-abatement clearance testing; recordkeeping; and, if applicable, monitoring. See also **complete abatement** and **interim controls**.

Bare soil: Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.

Building component: Any element of a building that may be painted or have dust on its surface. Building components include, for example, walls, stair treads, floors, railings, doors, jambs, casings, windowsills, casings, etc. Building component replacement: See **replacement**.

Chewable surface: Any interior or exterior surface painted with lead-based paint that a young child can mouth or chew. A chewable surface is any painted surface that shows evidence of having been chewed or mouthed by a young child. A chewed surface is the same as an "accessible surface" as defined in 42 USC 4851b(2). It is usually a protruding, horizontal part of a building, such as an interior windowsill. Hard metal substrates and other materials that cannot be dented by the bite of a young child are not considered chewable.

Cleaning: The process of using a HEPA vacuum and wet cleaning agents to remove leaded dust; the process includes removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

Clearance examination: Visual examination and collection of environmental samples by an inspector or risk assessor and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance job that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

Complete abatement: Abatement of all lead-based paint inside and outside a dwelling or building and reduction of any lead-contaminated dust or soil hazards. All of these strategies require preparation; cleanup; waste disposal; post-abatement clearance testing; recordkeeping; and, if applicable, reevaluation and on-going monitoring. See also **abatement**.

Deteriorated paint: Any paint coating on a damaged or deteriorated surface or fixture, or any interior or exterior lead-based paint that is peeling, chipping, blistering, flaking, worn, chalking, alligating, cracking, or otherwise becoming separated from the substrate.

Dripline/foundation area: The area within three feet out from the building wall and surrounding the perimeter of a building.

Dust-lead hazard: Surface dust in residences that contains an area or mass concentration of lead equal to or in excess of the standard established by the EPA under Title IV of the Toxic Substances Control Act. EPA standards for dust-lead hazards, which are based on wipe samples, are published at 40 CFR 745.65(b); as of the publication of this edition of these *Guidelines*, these are 10 µg/ft² on floors and 100 µg/ft² on interior windowsills. Also called lead-contaminated dust.

Encapsulation: Any covering or coating that acts as a barrier between lead-based paint and the

environment, the durability of which relies on adhesion and the integrity of the existing bonds between multiple layers of paint and between the paint and the substrate. See also **enclosure**.

Enclosure: The use of rigid, durable construction materials that are mechanically fastened to the substrate to act as a barrier between the lead-based paint and the environment.

Friction surface: Any interior or exterior surface, such as a window or stair tread, subject to abrasion or friction.

Garden area: An area where plants are cultivated for human consumption or for decorative purposes.

Impact surface: An interior or exterior surface (such as surfaces on doors) subject to damage by repeated impact or contact.

Inspection (of paint): A surface-by-surface investigation to determine the presence of lead-based paint (in some cases including dust and soil sampling) and a report of the results.

Interim controls: A set of measures designed to temporarily reduce human exposure or possible exposure to lead-based paint hazards. Such measures include specialized cleaning, repairs, maintenance, painting, temporary containment, and management and resident education programs. Monitoring, conducted by owners, and reevaluations, conducted by professionals, are integral elements of interim control. Interim controls include dust removal; paint film stabilization; treatment of friction and impact surfaces; installation of soil coverings, such as grass or sod; and land-use controls. See also **monitoring**, **reevaluation**, and **abatement**.

Lead-based paint hazard control: Activities to control and eliminate lead-based paint hazards, including interim controls, abatement, and complete abatement.

Lead-based paint hazard: A condition in which exposure to lead from lead contaminated dust, lead contaminated soil, or deteriorated lead-based paint would have an adverse effect on human health (as established by the EPA at 40 CFR 745.65, under Title IV of the Toxic Substances Control Act). Lead-based paint hazards include, for example, **paint-lead** hazards, **dust-lead** hazards, and **soil-lead hazards**.

Lead-based paint: Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by dry weight (5,000 mg/g, 5,000 ppm, or 5,000 mg/kg) as measured by laboratory analysis. (Local definitions may vary.)

Maintenance: Work intended to maintain adequate living conditions in a dwelling, which has the potential to disturb lead-based paint or paint that is suspected of being lead-based.

Monitoring: Surveillance to determine (1) that known or suspected lead-based paint is not deteriorating, (2) that lead-based paint hazard controls, such as paint stabilization, enclosure, or encapsulation have not failed, (3) that structural problems do not threaten the integrity of hazard controls or of known or suspected lead-based paint, and (4) that dust lead levels have not risen above applicable standards. There are two types of monitoring activities; visual surveys by property owners and reevaluations by certified risk assessors. Visual surveys are generally conducted annually for the purpose of making the first three determinations listed above. Reevaluations are conducted in accordance with the Standard Reevaluation Schedule (or more frequently, if needed) for the purpose of making all four determinations. Monitoring is not required in properties known to be free of lead-based paint. See also **reevaluation**.

Paint film stabilization: The process of wet scraping, priming, and repainting surfaces coated with deteriorated lead-based paint; paint film stabilization includes cleanup and clearance.

Paint removal: An abatement strategy that entails the removal of lead-based paint from surfaces. For lead hazard control work, this can mean using chemicals, heat guns below 1,100°F, and certain *contained*

abrasive methods. Open flame burning, open abrasive blasting, sandblasting, water blasting, and extensive dry scraping are prohibited paint removal methods. (Methylene chloride paint removers and dry scraping are also not recommended).

Paint-lead hazard: Lead-based paint on a friction surface that is subject to abrasion and where a dust-lead hazard is present on the nearest horizontal surface underneath the friction surface (e.g., the window sill or floor); damaged or otherwise deteriorated lead-based paint on an impact surface that is caused by impact from a related building component; a chewable lead-based painted surface on which there is evidence of teeth marks; or any other deteriorated lead-based paint in any residential building or child-occupied facility or on the exterior of any residential building or child-occupied facility.

Play area: An area of frequent soil contact by children age six or under as indicated by, but not limited to, such factors including the following: the presence of outdoor play equipment (e.g., sandboxes, swing sets and sliding boards), toys, or other children's possessions, observations of play patterns, or information provided by parents, residents, caregivers, or property owners.

Reevaluation: In lead hazard control work, the combination of a visual assessment and collection of environmental samples performed by a certified risk assessor to determine if a previously implemented lead-based paint hazard control measure is still effective and if the dwelling remains lead-safe.

Replacement: A strategy of abatement that entails the removal of building components coated with lead-based paint (such as windows, doors, and trim) and the installation of new components free of lead-based paint.

Risk assessment: An onsite investigation of a residential dwelling to discover any lead-based paint hazards. Risk assessments include an investigation of the age, history, management, and maintenance of the dwelling, and the number of children under age 6 and women of child-bearing age who are residents; a visual assessment; limited environmental sampling (i.e. collection of dust wipe samples, soil samples, and deteriorated paint samples); and preparation of a report identifying acceptable abatement and interim control strategies based on specific conditions.

Soil-lead hazard: Bare soil on residential property that contains lead in excess of the standard established by the EPA under Title IV of the Toxic Substances Control Act. EPA standards for soil-lead hazards, published at 40 CFR 745.65©, as of the publication of this edition of these *Guidelines*, is 400 µg/g in play areas and 1,200 µg/g in the rest of the yard. Also called lead-contaminated soil.

Treatment: In residential lead-based paint hazard control work, any method designed to control lead-based paint hazards. Treatment includes interim controls, abatement, and removal. Hazardous waste “treatment” is a method, technique, or process (such as neutralization) that is designed to change the physical, chemical, or biological character or composition of hazardous waste to neutralize it; render it non-hazardous or less hazardous; recover it; make it safer to transport, store, or dispose; or allow for easier recovery, storage, or volume reduction.

KEY UNITS OF MEASUREMENT

Gram (g or gm): A unit of mass in the metric system. A nickel weighs about 1 gram, as does 1 cube of water 1 centimeter on each side. A gram is equal to about 35/1000 (thirty-five thousandths) of an ounce. Another way to think of this is that about 28.4 grams equal 1 ounce.

µg (microgram): A microgram is 1/1000th of a milligram (or one millionth of a gram). To put this into perspective, a penny weighs 2 grams. To get a microgram, you would need to divide the penny into 2 million pieces. A microgram is one of those two million pieces.

µg/dL (microgram per deciliter): used to measure the level of lead in children’s and worker's blood to establish whether the intervention is needed. A deciliter (1/10th of liter) is a little less than half a cup.

µg/ft² (micrograms per square foot): the unit used to express levels of lead in dust samples. All reports should report levels of lead in dust in µg/ft².

mg/cm² (milligrams per square centimeter): used to report levels of lead in paint through XRF testing.

ppm (parts per million): Typically used to express the concentrations of lead in soil. Can also be used to express the amount of lead in a surface coating on a mass concentration basis. This measurement can also be shown as: µg/g (micrograms per gram), mg/kg (milligrams per kilogram) or mg/l (milligrams per liter).

ppb (parts per billion): Typically used to express the amount of lead found in drinking water. This measurement is also sometimes expressed as µg/L (micrograms per liter).

LEAD-BASED PAINT AND LEAD-BASED PAINT HAZARD STANDARDS

Lead-based Paint (may be determined in either of two ways)

- Surface concentration (mass of lead per area) 1.0 µg/cm²
- Bulk concentration (mass of lead per volume) 0.5%, 5000 µg/g, or 5000 ppm

Dust-thresholds for Lead Contamination

- Floors 10 µg/ft²
- Interior windowsills 100 µg/ft²
- Window troughs (clearance examination only) 100 µg/ft²
- Porch floors 40 µg/ft²

Soil-thresholds for Lead Contamination

- Play areas used by children age 6 or under 400 µg/g or 400 ppm
- Other areas 1200 µg/g or 1200 ppm

14.0 PERFORMANCE CHARACTERISTIC SHEET

HEURESIS PCS December 2015

Performance Characteristic Sheet

EFFECTIVE DATE: December 1, 2015

MANUFACTURER AND MODEL:

Make: *Heuresis*
Models: *Model Pb200i*
Source: *⁵⁷Co, 5 mCi (nominal – new source)*

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Action Level mode

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm ² (inclusive)

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

ACTION LEVEL MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm²)
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

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 using test results on building components in the HUD archive. Testing was conducted on 146 test samples in November 2015, with two separate instruments running software version 2.1-2 in Action Level test mode. The actual source strength of each instrument on the day of testing was approximately 2.0 mCi; source ages were approximately one year.

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.

XRF CALIBRATION CHECK:

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 the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Chapter 7 of the HUD Guidelines provides guidance on correcting XRF results for substrate bias. Supplemental guidance for using the paint film nearest 1.0 mg/cm² for substrate correction is provided:

XRF results are corrected for substrate bias by subtracting from each XRF result a correction value determined separately in each house for single-family housing or in each development for multifamily housing, for each substrate. The correction value is an average of XRF readings taken over the NIST SRM paint film nearest to 1.0 mg/cm² at test locations that have been scraped bare of their paint covering. Compute the correction values as follows:

Using the same XRF instrument, take three readings on a bare substrate area covered with the NIST SRM paint film nearest 1 mg/cm². Repeat this procedure by taking three more readings on a second bare substrate area of the same substrate covered with the NIST SRM.

Compute the correction value for each substrate type where XRF readings indicate substrate correction is needed by computing the average of all six readings as shown below.

For each substrate type (the 1.02 mg/cm² NIST SRM is shown in this example; use the actual lead loading of the NIST SRM used for substrate correction):

$$\text{Correction value} = (1\text{st} + 2\text{nd} + 3\text{rd} + 4\text{th} + 5\text{th} + 6\text{th Reading})/6 - 1.02 \text{ mg/cm}^2$$

Repeat this procedure for each substrate requiring substrate correction in the house or housing development.

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.

Conduct XRF re-testing 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 and multi-family housing, a result is defined as 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 the 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 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF readings.

Compute the average of all ten re-test XRF readings.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

In the Action Level paint test mode, the instrument takes the longest time to complete readings close to the Federal standard of 1.0 mg/cm². The table below shows the mean and standard deviation of actual reading times by reading level for paint samples during the November 2015 archive testing. The tested instruments reported readings to one decimal place. No significant differences in reading times by substrate were observed. These times apply only to instruments with the same source strength as those tested (2.0 mCi). Instruments with stronger sources will have shorter reading times and those with weaker sources, longer reading times, than those in the table.

Mean and Standard Deviation of Reading Times in Action Level Mode by Reading Level		
Reading (mg/cm²)	Mean Reading Time (seconds)	Standard Deviation (seconds)
< 0.7	3.48	0.47
0.7	7.29	1.92
0.8	13.95	1.78
0.9 – 1.2	15.25	0.66
1.3 – 1.4	6.08	2.50
≥ 1.5	3.32	0.05

CLASSIFICATION OF RESULTS:

XRF results are classified as **positive** if they are **greater than or equal** to the stated threshold for the instrument (1.0 mg/cm²), and *negative* if they are *less than* the threshold.

DOCUMENTATION:

A report titled *Methodology for XRF Performance Characteristic Sheets* (EPA 747-R-95-008) provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. The report may be downloaded at <http://www2.epa.gov/lead/methodology-xrf-performance-characteristic-sheets-epa-747-r-95-008-september-1997>.

This XRF Performance Characteristic Sheet (PCS) was developed by QuanTech, Inc., under a contract with the XRF manufacturer.

15.0 SUMMARY NOTICE OF LEAD-BASED PAINT RISK ASSESSMENT

Address of unit where risk assessment was conducted:

615 W Lasalle Ave
South Bend, IN 46601

Lead-based paint risk assessment description:

Date of risk assessment: October 16, 2019

Summary of risk assessment results (check all that apply):

- No lead-based paint hazards were identified.
- Lead-based paint hazards were identified.
- A brief summary of the findings of the assessment.

Summary of types and locations of lead-based paint hazards identified:

Dust-lead Locations

- *Lead dust is assumed to be present around all positive components noted in the following charts.*
- *There are lead dust levels around kitchen floor, bathroom floor, room 3 floor, room 5 window well and room 6 window well (including basement floors and all stairwell stair treads) that exceed HUD guidelines.*

Bare Soil Locations

- *There are no lead soil levels around the dripline of the house that exceed HUD guidelines.*

Building Components

EXTERIOR				
<i>General note: If any exterior inaccessible components are ever removed, all painted surfaces must be assumed positive.</i>				
Room/Location	Component(s)	Square Feet	Quantity	Assumed Positive <i>(check if yes)</i>
Exterior ABCD	Window casings	5	10	
Exterior B	Basement window and components	4		
Exterior ABCD	Windowsills	2	13	
Exterior ABCD	Soffit	500		
Exterior ABCD	Fascia	400		
Exterior ABCD	Frieze board	400		
Exterior A	Porch columns	8	2	
Exterior A	Porch beam	12		
Exterior A	Ceiling	20		
Exterior BCD (1 st floor)	Window sashes	5	5	
Exterior AB (1 st floor)	Dormer windows and casings	3	3	
Exterior B (1 st floor)	Windowsill	4	1	
Exterior BD (1 st floor)	Basement window components	3	4	

INTERIOR

General note: If any interior inaccessible components (paneling, drop ceiling, wall boards, etc.) are ever removed, all painted surfaces must be assumed positive.

Room/Location	Component(s)	Square Feet	Quantity	Assumed Positive <i>(check if yes)</i>
Front entry B	Closet bracket	3		
Front entry B	Closet baseboard	5		
Front entry A	Dormer window	2	1	
Room 2 B	Closet baseboard	5		
Room 3 A	Closet baseboards	5	2	
Room 3 B	Window sashes	5	3	
Room 3 B	Window components	5	1	
Room 3 B	Window components	10	1	
Room 2 A	Dormer and window components	3	1	
Room 4 B	Dormer window and components	3	1	
Bathroom 1 B	Window and components	5	1	
Kitchen C	Door jamb	5	1	
Rear entry A	Door jamb	5	1	
Rear entry B	Door components	12	1	
Rear entry CD	Windows and components	6	2	
Rear entry C	Wall (white)	100		
Basement stairs D	Door components	10	1	

Staff person to contact for more information regarding risk assessment:

Pat Lynch
 South Bend Heritage
 803 Lincolnway West
 South Bend, IN 46616
 Phone: 574-289-1066
patlynch@sbheritage.org

Person who prepared this Summary Notice:

William C. Center
 Greentree Environmental Services, Inc.
 P. O. Box 2297
 Portage, IN 46368
 Phone: 219-764-2828
 Toll-free: 888-584-LEAD (5323)
 E-mail: greentree@grntree.net



October 16, 2019