BNF Consulting, Inc. | www.askBNF.com
152 Route 202, #404, Lincolndale, NY 10540-0404

April 25, 2024

To:

[redacted]

RE: Lead-Based Paint (LBP) Survey at [redacted]

Dear Ms. Jenny Saron:

1. Introduction

The survey conducted at [redacted] aimed to identify the presence of lead-based paint (LBP) through non-destructive techniques and to assess the necessity for implementing lead abatement strategies during the real estate transaction. This survey is critical for determining the potential health risks associated with lead exposure in accessible areas of the property.

2. Methodology

Date of Analysis: April 25, 2024
Instrumentation: SciAps X-550 Pb XRF Analyzer, Serial No. 02547
Methodology: Employing non-destructive X-Ray Fluorescence (XRF) technology, the survey provided on-site lead detection by analyzing the elemental composition of building materials. The XRF technology measures the secondary X-ray fluorescence that materials emit when excited by a primary X-ray source. This method was chosen for its precision and non-invasive nature, ensuring no damage to the building's aesthetics or structure.

Key Advantages of XRF Technology:

- Non-destructive Assessment: Ensures the structural integrity and visual appeal of tested surfaces remain intact.
- Immediate Results: Facilitates rapid on-site evaluation and decision-making.
- Extensive Data Collection: Allows for a comprehensive data analysis from a wide range of tested surfaces.

3. Survey Findings

The lead inspection results identified several critical areas within the property where lead levels

were above the EPA's acceptable thresholds for New York State, signifying the presence of LBP. These findings highlight the importance of regular monitoring and maintenance to prevent lead-related health hazards.

Property Overview:

- Type: single family
- Total Area: 2,730 square feet
- Initial Construction: Built in 1960
- Latest Renovation: N/A
- Structure Composition: Ranch with finished lower level and attached garage

Detailed Observations:

- Lower Level and Upper Level: Detected no LBP in the various elements such as doors, window trims/sills, walls, ceilings, and moldings as shown in the Appendix A, Site Photos 1 - 2.
- Exterior: Most areas are LBP including doors, walls, trim, and deck posts as shown in the Appendix A, Site Photos 3.

Comprehensive results and data sets are available in Appendix B, Tables 1 to 6, with key findings summarized in Table A below.

Table A. Summary of XRF Readings for the Property

Locations	Door & trim	Window, trim, sill	Wall,trim, ceiling	Moldings	Radiators	Others
Fam/Room LL	negative	negative	negative	negative	negative	negative
Bedroom LL	negative	negative	negative	negative	negative	negative
Bathroom LL	negative	negative	negative	negative	negative	negative
Laundry/Storage	negative	negative	negative	negative	negative	negative
Fam/Room UL	negative	negative	negative	negative	negative	negative
Kitchen	negative	negative	negative	negative	negative	negative
Mud Room	negative	negative	negative	negative	negative	negative
Entry/Hallway	negative	negative	negative	negative	negative	negative
Blue Bedroom	negative	negative	negative	negative	negative	negative
Light Blue Bed	negative	negative	negative	negative	negative	negative
Main Bedroom	negative	negative	negative	negative	negative	negative
Exterior	positive	negative	positive	-	-	positive

4. Abatement Strategy and Recommendations

The survey indicated that while the overall paint condition is currently intact and stable, preventive measures are recommended to maintain safety:

- Routine Monitoring and Maintenance: Continuous monitoring for any signs of paint deterioration is essential.
- Annual Inspections and Repainting: Proactive inspections and maintenance painting should be scheduled to prevent deterioration.

Targeted Abatement Measures for Deteriorated Paint Include:

- Interior and Exterior: Repainting, paint removal on high-friction and impact surfaces, and component replacement with non-lead alternatives like vinyl windows.
- Exterior Specific: Installation of non-lead-containing materials such as vinyl or aluminum siding, comprehensive material replacement, and specialized paint removal techniques on deteriorated exterior surfaces.

Recommendations:

- It is recommended to do lead testing for water and soil of the property.
- While New York State and US EPA define 1.0 mg/cm^2 as a LBP, New York City defines LBP at a level of 0.5 mg/cm^2, so any components between 0.5 and 1.0, for example, original doors and walls as shown in Site Photos 1-2 of Appendix A should be closely monitored and considered as a potential lead paint dust hazard.

5. Conclusion

The detailed XRF analysis conducted on April 25, 2024, confirms the presence of LBP in various structures of the building's exterior. Despite the generally good condition of the paint, the need for vigilant ongoing maintenance and the implementation of strategic abatement measures are critical to manage the potential lead exposure risks.

6. Observation on Mold

Airborne mold spore sampling was conducted in the basement bedroom to ascertain the presence of mold spores in the air. Analytical results from these samples indicated that the concentration of mold spores in the bedroom was within normal levels, consistent with the control baseline derived from an outdoor sample.

Notably, elevated moisture levels were detected in the ceiling area, attributable to water leakage from the bathroom situated directly above. To address this, it is advised to create an inspection opening in the ceiling to facilitate a thorough investigation of the water leak and to undertake necessary repairs. Should visible mold be identified during the investigation, it is imperative to contact our team for a reevaluation to mitigate the risk of mold spore cross-contamination into other living areas.

7. For Further Information

Please contact Justin H. Joe, PhD, CIH, CSP, CPE for additional details or with any questions regarding the findings and recommendations outlined in this report.

Warm regards,

Justin H. Joe, Ph.D., CIH, CSP, CPE
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APPENDIX A

Site Photos 1 - Living Areas

Figure 1. Door to the mudroom

Figure 2. Door to the garage

APPENDIX A

Site Photos 2 - Living Areas

Figure 3. Hallway

Figure 4. Entrance

APPENDIX A

Site Photos 4 - Exterior

Figure 5. Wall, trim (front)

Figure 6. Wall, trim (rear)

APPENDIX B: XRF Readings

Table. 1

Location	Components/Areas	XRF Readings*				
		A	B	C	D	Limit
Family Room Lower Level	Door 1 - exit	0				1.0
	Door 1 trim	0				1.0
	Door 2 closet	0				1.0
	Door 2 trim	0.1				1.0
	Baseboard molding	0				1.0
	Crown molding	0				1.0
	Window	0				1.0
	Window trim	0				1.0
	Windowsill	0				1.0
	Wall	0	0	0	0	1.0
	Ceiling	0				1.0
	Radiator	0.1				1.0
	Wall trim	0				1.0
	Fireplace brick wall	0				1.0
	Wall behind radiator	0				1.0
	Closet wall	0				1.0
	Closet base molding	0				1.0
	Staircase board	0				1.0
	Handrail	0				1.0
	Riser	0				1.0
Bedroom Lower Level	Door 1 entry	0.2				1.0
	Door 1 trim	0.2				1.0
	Door 2 closet	0.1				1.0
	Door 2 trim	0.1				1.0
	Baseboard molding	0				1.0
	Crown molding	-				1.0
	Window	0				1.0
	Window trim	0				1.0
	Windowsill	0				1.0
	Wall	0	0	0	0	1.0
	Ceiling	0				1.0
	Radiator	0				1.0
	Bookcase	0				1.0
	Bookcase trim	0				1.0
	Wall behind radiator	0				1.0

** Unit in mg/cm^2– micrograms of contaminant per square meter of surface area. LBP is defined by US EPA as equal to or greater than 1.0 mg/cm^2 for XRF analysis.

APPENDIX B: XRF Readings

Table. 2

Location	Components/Areas	XRF Readings*				
		A	B	C	D	Limit
Basement Bathroom	Door 1 - entry	0				1.0
	Door 1 - entry trim	0				1.0
	Door 2 - closet	0				1.0
	Door 2 - closet trim	0				1.0
	Window	0				1.0
	Window trim	0				1.0
	Windowsill	0.1				1.0
	Wall	0				1.0
	Ceiling	0				1.0
	Radiator	0				1.0
						1.0
Laundry Storage	Door 1 - entry	0				1.0
	Door 1 - entry trim	0				1.0
	Door 2 - closet	0				1.0
	Door 2- closet trim	0				1.0
	Drywall	0	0			1.0
	Base molding	0				1.0
	Ceiling tile	0				1.0
	Brick walls	0	0	0	0	1.0
	Closet wall	0				1.0
						1.0

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APPENDIX B: XRF Readings

Table. 3

Location	Components/Areas	XRF Readings*				
		A	B	C	D	Limit
Family Room Upper Level	Ceiling	0				1.0
	Crown molding	0				1.0
	Wall	0	0	0	0	1.0
	Door 1					1.0
	Door 1 trim	0	0			1.0
	Base molding	0				1.0
	Fireplace trim	0.2				1.0
	Window	0				1.0
	Window trim	0				1.0
	Windowsill	0				1.0
	Radiator	0				1.0
						1.0
Kitchen	Ceiling	0				1.0
	Crown molding	0				1.0
	Wall	0	0	0	0	1.0
	Door 1	0				1.0
	Door 1 trim	0	0			1.0
	Base molding	0				1.0
	Window	0	0	0		1.0
	Window trim	0	0	0		1.0
	Windowsill	0	0	0		1.0
	Radiator	0				1.0
	Cabinet	0	0			1.0
						1.0

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APPENDIX B: XRF Readings

Table. 4

Location	Components/Areas	XRF Readings*				
		A	B	C	D	Limit
Mudroom	Door	0.7				1.0
	Door trim	0				1.0
	Door to garage	0.6				1.0
	Door to garage trim	0				1.0
	Window	0				1.0
	Window trim	0				1.0
	Windowsill	0				1.0
	Closet	0				1.0
	Bench	0				1.0
	Floor	0				1.0
	Radiator	0				1.0
	Door to outside	0				1.0
	Door to outside trim	0				1.0
	Door to outside wall	0	0	0	0	1.0
	Door to outside floor	0.2	0.1			1.0
						1.0
Entry Hallway	Door entry	0.7				1.0
	Door entry trim	0.3				1.0
	Door closet	0				1.0
	Door closet trim	0.1				1.0
	Door closet wall	0				1.0
	Door closet baseboard	-				1.0
	Door to basement	0				
	Door to basement trim	0				
	Door to closet hallway	0				
	Door to closet hallway trim	0.1				
	Door to closet hallway wall	0				
	Door to closet hallway baseboard	-				
	Wall entry	0.6	0	0	0.7	1.0
	Radiator	0.5				1.0
	Wall Hallway	0.9	0	0	0	1.0
						1.0

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APPENDIX B: XRF Readings

Table. 5

Location	Components/Areas	XRF Readings*				
		A	B	C	D	Limit
Bathroom 1st Floor	Door	0				1.0
	Door trim	0.2				1.0
	Ceiling	0				1.0
	Wall	0				1.0
	Baseboard	0				1.0
	Radiator	0.1				1.0
	Window	0				1.0
	Window trim	0				1.0
	Windowsill	0				1.0
						1.0
Bedroom Blue	Ceiling	0				1.0
	Wall	0				1.0
	Door entry	0				1.0
	Door entry trim	0				1.0
	Door closet	0				1.0
	Door closet trim	0.1				1.0
	Door closet wall	0				1.0
	Door closet molding	-				1.0
	Window	0				1.0
	Window trim	0				1.0
	Windowsill	0				1.0
	Radiator	0.2				1.0
						1.0

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APPENDIX B: XRF Readings

Table. 6

Location	Components/Areas	XRF Readings*				
		A	B	C	D	Limit
Bedroom Light Blue	Ceiling	0				1.0
	Wall	0.2	0.2	0.1	0.2	1.0
	Windows	0	0			1.0
	Window trim	0	0			1.0
	Windowsill	0	0			1.0
	Door entry	0				1.0
	Door entry trim	0.1	0			1.0
	Door closet	-				1.0
	Door closet trim	0				1.0
	Door closet wall	0				1.0
	Door closet molding	0				1.0
	Radiator	0.1				1.0
	Baseboard	0				1.0
	Wall trim	0				1.0
						1.0
Exterior	Wall front	1.7	1.1	2.3		1.0
	Window	0	0			1.0
	Window trim	0	0			1.0
	Garage door	0	0			1.0
	Garage door trim	1.8	2.0			1.0
	Wall trim	0.6	2.3			1.0
	Door Entry	1.3				1.0
	Wall North	0.4	0.6			1.0
	Window North	0	0			1.0
	Window North trim	2.4	2.3			1.0
	Black wall	0				1.0
	Black wall trim North	0				1.0
	Wall rear	1.8	1.8			1.0
	Window rear	0				1.0
	Window rear trim	0				1.0
	Door trim rear	0				1.0
	Wall trim	0.2				1.0
	Deck post	2.4				1.0
	Deck board side	0				
	Deck board bottom	0				1.0
	Wall East	2.4				

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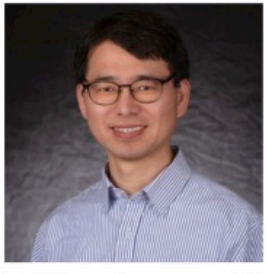
United States Environmental Protection Agency

This is to certify that



Justin H Joe

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Risk Assessor

In the Jurisdiction of:

All EPA Administered Lead-based Paint Activities Program States, Tribes and Territories

This certification is valid from the date of issuance and expires June 13, 2025

LBP-R-I200866-2

Certification #

April 03, 2022

Issued On

Ben Conetta

Ben Conetta, Chief

Chemicals and Multimedia Programs Branch