



December 19, 2018

Public Housing Agency of the City of St. Paul
555 Wabasha Street North, Suite 400
St. Paul, Minnesota 55102

Attn: Ka Yang
PHA Project Leader

651-292-6089

Subject: Lead Risk Assessment
Mount Airy Homes (MN1-3, MN1-8B and MN1-10) and Community Center
St. Paul, Minnesota
PSI Project No. 06731050-4

Dear Mr. Yang:

On October 15, 16, 17, 18, 19, 21, 26, 29 and 30, 2018, Mr. Michael Tjaden, Mr. John Lynch and Mr. Jacob Frahm of Professional Service Industries, Inc. (PSI), an Intertek company, conducted a lead risk assessment at the above multi-family housing development. Mr. Tjaden, Mr. Lynch and Mr. Frahm are certified Risk Assessors through the Minnesota Department of Health. The current owner of this property is the Public Housing Agency of the City of St. Paul (PHA).

Were Lead-Based Paint (LBP) Hazards discovered at this development?

Yes No

A lead-based paint hazard is any of the following:

- LBP on a friction surface subject to abrasion and where the dust levels on the nearest horizontal surface (sill or floor) exceed the floor or window levels shown below;
- LBP damaged by impact;
- LBP showing evidence of teeth marks; or
- Any other deteriorated LBP.

Based on the HUD Guidelines, the following lead hazards were identified:

MN1-3

ADDRESS #	ROOM #	COMPONENT	LOCATION	SUBSTRATE	COLOR	CONDITION
120 ARCH	1 - BASEMENT	POST	X	METAL	GRAY	POOR
123 ARCH #A	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
123 ARCH #B	1 - BASEMENT	POST	X	METAL	GRAY	POOR
123 ARCH #D	1 - BASEMENT	POST	X	METAL	GRAY	POOR
123 ARCH #F	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
125 ARCH #B	1 - BASEMENT	POST	X	METAL	GRAY	POOR





ADDRESS #	ROOM #	COMPONENT	LOCATION	SUBSTRATE	COLOR	CONDITION
127 ARCH #B	1 - BASEMENT	POST	X	METAL	GRAY	POOR
131 ARCH #B	1 - BASEMENT	POST	X	METAL	GRAY	POOR
134 ARCH	1 - BASEMENT	POST	X	METAL	GRAY	POOR
141 ARCH #D	1 - BASEMENT	POST	X	METAL	GRAY	POOR
145 ARCH #C	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
142 ARCH	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
150 ARCH	1 - BASEMENT	POST	X	METAL	GRAY	POOR
157 ARCH #B	1 - BASEMENT	POST	X	METAL	GRAY	POOR
158 ARCH	1 - BASEMENT	POST	X	METAL	GRAY	POOR
166 ARCH	1 - BASEMENT	POST	X	METAL	GRAY	POOR
169 ARCH #A	1 - BASEMENT	POST	X	METAL	GRAY	POOR
169 ARCH #C	1 - BASEMENT	POST	X	METAL	GRAY	POOR
173 ARCH #A	1 - BASEMENT	POST	X	METAL	WHITE	FAIR
175 ARCH	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
177 ARCH	1 - BASEMENT	POST	X	METAL	GRAY	POOR
181 ARCH #D	1 - BASEMENT	POST	X	METAL	WHITE	FAIR
183 ARCH #A	1 - BASEMENT	POST	X	METAL	GRAY	POOR
207 ARCH	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
211 ARCH	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
214 ARCH	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
219 ARCH	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
720 JACKSON	1 - BASEMENT	POST	X	METAL	GRAY	POOR
612 WALES	1 - BASEMENT	POST	X	METAL	GRAY	POOR
615 WALES	1 - BASEMENT	POST	X	METAL	GRAY	POOR
618 WALES	1 - BASEMENT	POST	X	METAL	GRAY	POOR
605 LINDEN	1 - BASEMENT	POST	X	METAL	GRAY	POOR
626 LINDEN	1 - BASEMENT	POST	X	METAL	RED	POOR
649 LINDEN	1 - BASEMENT	POST	X	METAL	WHITE	FAIR
629 LINDEN	1 - BASEMENT	POST	X	METAL	GRAY	POOR
637 LINDEN	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
631 LINDEN	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
619 LINDEN	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
616 WALES	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
34 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	POOR
50 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
64 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	POOR
78 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	POOR
157 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	POOR
167 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	POOR
190 MT AIRY	1 - BASEMENT	POST	X	METAL	WHITE	POOR
85 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	POOR
94 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
82 MT AIRY	1 - BASEMENT	POST	X	METAL	BROWN	FAIR



ADDRESS #	ROOM #	COMPONENT	LOCATION	SUBSTRATE	COLOR	CONDITION
202 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	POOR
208 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	POOR
210 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	POOR

MN1-8B

ADDRESS #	ROOM #	COMPONENT	LOCATION	SUBSTRATE	COLOR	CONDITION
599 L'ORIENT	1 - BASEMENT	POST	X	METAL	WHITE	POOR
601 L'ORIENT	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
632 WALES	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
630 WALES	1 - BASEMENT	POST	X	METAL	GRAY/YELLOW	FAIR
624 WALES	1 - BASEMENT	POST	X	METAL	WHITE	FAIR
628 WALES	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
181 MT AIRY #A	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
181 MT AIRY #B	1 - BASEMENT	POST	X	METAL	GRAY	POOR
181 MT AIRY #D	1 - BASEMENT	POST	X	METAL	GRAY	POOR
183 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
185 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	POOR
187 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
189 MT AIRY	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
191 MT AIRY #F	1 - BASEMENT	POST	X	METAL	GRAY	POOR
191 MT AIRY #E	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
191 MT AIRY #D	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
191 MT AIRY #C	1 - BASEMENT	POST	X	METAL	GRAY	POOR
191 MT AIRY #B	1 - BASEMENT	POST	X	METAL	GRAY	FAIR
191 MT AIRY #A	1 - BASEMENT	POST	X	METAL	GRAY	FAIR

MN1-10

ADDRESS #	ROOM #	COMPONENT	LOCATION	SUBSTRATE	COLOR	CONDITION
627 WALES #A	1 - BASEMENT	POST	X	METAL	RED	POOR

NOTE: X = not along a wall

Based on the HUD Guidelines, the following components must be treated as LBP throughout the buildings.

COMPONENT	# TESTED	# POSITIVE	% POSITIVE
Development 1-3 – Post – Basements	53	46	87%
Development 1-8B – Post – Basements	20	19	95%
Development 1-10 – Post – Basements	2	1	50%

No other components tested were found to contain lead at greater than or equal to 1.0 mg/cm². Detailed XRF testing results are contained in Section A-1 of this report.



Were Lead Dust Hazards discovered at this development?

Yes No

A lead-dust hazard is surface dust exceeding the levels shown below on one or more of the following components:

- Floors: 40µg/Square Foot
- Window Sills: 250µg/Square Foot
- Window Troughs 400µg/Square Foot

Dust sample results location: Section A-2. Hazard recommendations: Section A-3

The average dust level for each category was determined to be:

	FLOOR	STAIRS	WINDOW SILLS	WINDOW TROUGHS
MN1-3	11.4 µg/SqFt	27.1 µg/SqFt	15.4 µg/SqFt	NA
MN1-8B	13.6 µg/SqFt	13.5 µg/SqFt	51.2 µg/SqFt	NA
MN1-10	18.4 µg/SqFt	156.9 µg/SqFt	34.0 µg/SqFt	251.0 µg/SqFt
COMMUNITY CENTER	<10.0 µg/SqFt	NA	8.8 µg/SqFt	NA

NA = Not Applicable

Unit 627 Wales Street is a residential home. Window troughs were present within only this building. The remainder of the slider windows found at the subject property did not have a trough and therefore no trough samples were collected.

Seventeen (17) of the individual dust wipe samples were found to contain lead dust above the respective regulatory standards.

MN1-3

ADDRESS #	ROOM #	COMPONENT	LEAD
145 ARCH #C	1 – BASEMENT	FLOOR	53 µg/SqFt
720 JACKSON	1 – BASEMENT	STAIRS	720 µg/SqFt
626 LINDEN	1 – BASEMENT	FLOOR	170 µg/SqFt
219 ARCH	1 – BASEMENT	STAIRS	54 µg/SqFt
618 WALES	1 – BASEMENT	STAIRS	57 µg/SqFt
214 ARCH	1 – BASEMENT	FLOOR	41 µg/SqFt
649 LINDEN	1 – BASEMENT	STAIRS	110 µg/SqFt
616 WALES	1 – BASEMENT	STAIRS	48 µg/SqFt
82 MT. AIRY	1 – BASEMENT	STAIRS	89 µg/SqFt

MN1-8B

183 MT. AIRY	1 – BASEMENT	FLOOR	110 µg/SqFt
181 ARCH #A	1 – BASEMENT	FLOOR	170 µg/SqFt
191 MT. AIRY #D	1 – BASEMENT	STAIR	100 µg/SqFt
191 MT. AIRY #C	4 – BEDROOM	SILL	300 µg/SqFt
191 MT. AIRY #A	1 – BASEMENT	FLOOR	66 µg/SqFt

MN1-10

627A WALES	1 – BASEMENT	STAIRS	310 µg/SqFt
627A WALES	1 – BASEMENT	FLOOR	140 µg/SqFt
627B WALES	3 – BEDROOM	WINDOW TROUGH	420 µg/SqFt

These areas should be cleaned using lead-safe practices and retested.



Were Lead Soil Hazards discovered at this development?

Yes No

A soil-lead hazard is bare soil containing 100 µg/g (micrograms per gram) in composited samples collected from the bare soil areas around the drip-line of the house or in the rest of the yard. Soil sample results are located in Section A-2 of this report. Hazard information and recommendations are located in Section A-3.

The average lead soil level for each category within the each multi-family complex was determined to be:

	DRIP LINE	BARE SOIL	PLAY AREA
MN1-3	71.2 µg/g	81.2 µg/g	29.3 µg/g
MN1-8B	106.5 µg/g	106.2 µg/g	<20 µg/g
MN1-10	60.0 µg/g	95.5 µg/g	NA

NA = Not Applicable

Twenty-one (21) of the soil samples collected for this assessment exceeded the soil-lead hazard standard.

MN1-3

SAMPLE NO.	ADDRESS	LOCATION	BARE/COVERED	RESULT (µg/g)
134-A-DS	134 ARCH ST	DRIP LINE	BARE	110
181-A-BS	181 ARCH ST	YARD	BARE	100
649-L-BS	649 LINDEN ST	YARD	BARE	110
618-W-BS	618 WALES ST	YARD	BARE	120
618-W-DS	618 WALES ST	DRIP LINE	BARE	110
612-W-DS	612 WALES ST	DRIP LINE	BARE	120
720-J-DS	720 JACKSON ST	DRIP LINE	BARE	230
626-L-DS	626 LINDEN ST	DRIP LINE	BARE	110
605-L-DS	605 LINDEN ST	DRIP LINE	BARE	110
50-MA-BS	50 MOUNT AIRY ST	YARD	BARE	100
157-MA-BS	157 MOUNT AIRY ST	YARD	BARE	110
157-MA-DS	157 MOUNT AIRY ST	DRIP LINE	BARE	120
627-W-DS	627 WALES ST	DRIP LINE	BARE	100
85-MA-BS	85 MOUNT AIRY ST	YARD	BARE	110
64-MA-DS	64 MOUNT AIRY ST	DRIP LINE	BARE	140

MN1-8B

601-LO-BS	601 L'ORIENT ST	YARD	BARE	170
601-LO-DS	601 L'ORIENT ST	DRIP LINE	BARE	200
181-MA-BS	181 MOUNT AIRY ST	YARD	BARE	100
181-MA-DS	181 MOUNT AIRY ST	DRIP LINE	BARE	110
628-W-DS	628 WALES ST	DRIP LINE	BARE	150

MN1-10

621-W-BS	621 WALES ST	YARD	BARE	110
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None of the soil samples for individual play areas were above the soil-lead hazard of 100 µg/g.

The simplest 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. A guide to



reducing lead hazards in the home is included in Section C of this report. 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 Minnesota Department of Health Lead Program at (651) 201-4620 for information regarding lead hazard remediation or selection of qualified lead professionals. Additional Information is also available on the internet at www.health.state.mn.us/topics/lead/index.html

The purpose of this lead-based paint investigation was to identify painted and varnished surfaces for the presence of lead exceeding the regulatory level and to evaluate the property for the location, type and severity of existing or potential health hazards associated with lead-based paint in tenant and public accessible areas, and then develop recommendations for remediation of those hazards. The following report details the results of the assessment.

The findings 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 *Protect Your Family from Lead in Your Home*, 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 the Minnesota Department of Health Lead Program at 651-201-4620.

We share your concern for the safety and well-being of your family or tenants and you are invited to call us at 651-646-8148 with any questions you may have concerning this report or your needs for additional guidance.

Sincerely,

Professional Service Industries, Inc.

A handwritten signature in blue ink that reads "Jacob Frahm".

Jacob Frahm, MDH Risk Assessor No. LR3835

A handwritten signature in blue ink that reads "John Lynch".

John Lynch, MDH Risk Assessor No. LR4182

A handwritten signature in black ink that reads "Michael Tjaden".

Michael Tjaden
Principal Consultant