

August 14, 2013

Mr. Paul Scharf Lead Real Estate/Property Mgmt Specialist Ramsey County Tax Forfeited Land 90 W Plato Blvd St. Paul, MN 55107

RE: Asbestos/Pre-Demolition Inspection Letter Report Vacant Duplex 614 W. Edmund Avenue St. Paul, Minnesota 55103 Bay West Job J130371

Mr. Scharf:

Bay West, Inc. (Bay West) conducted an asbestos/pre-demolition inspection of the vacant duplex (the Structure) currently owned by Hennepin County located at 614 W. Edmund Avenue in St. Paul, Minnesota. The Structure is slated for rehabilitation. A site location map is included as **Figure 1**, **Figures 2** through **6** show each suspect asbestos and lead sampling, mold/water damage locations, in addition to highlighting the asbestos-positive samples for each floor of the property including the garage/storage shed, where applicable. Photographs taken during the inspection are included as **Appendix A**. This letter report contains the following sections:

- 1.0 Structure Description
- 2.0 Methodology
- 3.0 Results
- 4.0 Recommendations
- 5.0 Limitations
- 6.0 Closure

1.0 STRUCTURE DESCRIPTION

The residential Structure consists of a basement, two finished above-grade stories, and an unfinished attic. The year of construction is 1884 and the HVAC system observed is a single natural gas forced-air furnace in the basement. Adjacent to the south of the Structure is a 528-square-foot (ft²) garage/storage shed.

2.0 METHODOLOGY

Bay West conducted the asbestos/pre-demolition inspection of the Structure on June 28, 2013. Mr. Killian Condon, a certified Minnesota Department of Health (MDH) Asbestos Inspector, was on-site to collect suspect bulk asbestos samples throughout the Structure. Copies of inspector certifications are provided in **Appendix B**. Suspect materials were sampled and analyzed following the MDH bulk asbestos sampling protocols. Bay West inspected homogenous area



types within the site structure(s). This survey did not inspect every portion of each area type in the structure and therefore creates the possibility that asbestos containing materials (ACM) may be present in an uninspected area. Bay West did not access building materials on the rooftops. If suspect ACM or other hazardous materials not identified in this survey are encountered during the demolition, the materials should be sampled/characterized so appropriate handling and disposal protocols can be followed.

Samples suspected of containing asbestos were submitted to International Asbestos Testing Laboratory (IATL), a National Voluntary Laboratory Accreditation Program (NVLAP)-accredited laboratory, and analyzed using polarized light microscopy (PLM) to determine asbestos content. Based on these guidelines, suspect materials analyzed and determined to contain greater than 1% asbestos were considered ACM. The materials were tested until positive, that is, for those materials where more than one sample was collected, as soon as one of the samples was determined to contain more than 1% asbestos, the remaining samples of that material were not analyzed. The laboratory provided written verification of each sample submitted and analyzed with appropriate chain-of-custody documentation. The laboratory bulk asbestos reports are included as **Appendix C** of this report.

Samples for lead paint analysis consisted of collecting a sample of damaged paint. The paint samples were submitted to IATL for analysis for lead by weight. MDH considers paint lead-based if it contains 0.5% or more by dry weight as measured by atomic absorption spectrophotometry or quantitative chemical analysis. The results for paint samples are provided in **Table 3**. The laboratory report is included as **Appendix D**.

Bay West personnel also quantified other hazardous materials requiring removal before demolition activities including, but not limited to, mercury-containing devices; PCB-containing devices; refrigerants (chlorofluorocarbons); household hazardous waste; and, other items requiring special handling and disposal prior to the proposed demolition activities or building relocation. The results of the pre-demolition survey are included on the MPCA Pre-Renovation/Demolition Environmental Checklist included as **Appendix E**.

3.0 RESULTS

3.1 Asbestos

A total of 60 suspect materials were sampled and submitted for analysis during the inspection. A list of all materials sampled is included in **Appendix C**. **Table 1** below summarizes the sample results that were positive or assumed to be asbestos containing. The asbestos analytical report including the results for all samples collected is provided as **Appendix C**.

Table 1 – Sampling Results: Asbestos Containing Materials						
Item	Sample ID Number	Description	Quantity	Friable/Non- friable	% Asbestos	
Miscellaneous	614-AS-9-A &10A	Siding (entire exterior)	2,000 ft ²	Friable	25	
TSI	614-AS-20	Ducting wrap (north hallway west wall)	2 ft ²	Friable	75	
TSI	614-AS-28	Pipe patching (basement south side of chimney)	1 ft ²	Friable	8.9	



Table 1 – Sampling Results: Asbestos Containing Materials						
Item	Sample ID Number	Description	Quantity	Friable/Non- friable	% Asbestos	
TSI	614-AS-34- A-C	Ducting insulation (1st floor – west bedroom closet)	20 ft ²	Friable	65	
Miscellaneous	614-AS- 43A	Black adhesive-roof north porch	10 ft ²	Non-friable	1.4	
The following materials are assumed to be ACM and were therefore not sampled						
TSI	NA	White 12" pipe-wrap – basement	10 lft	Friable	Assumed	
TSI	NA	White 14" pipe-wrap – basement	10 lft	Friable	Assumed	
TSI	NA	White 16" pipe-wrap – basement	10 lft	Friable	Assumed	
TSI	NA	White ducting joint patching – throughout basement	6 x 1 ft ²	Friable	Assumed	
TSI	NA	White ducting patching – north of furnace at ceiling joint in basement	2 x 3 ft ²	Friable	Assumed	
Miscellaneous	NA	Chimney flashing and roofing penetrations	2 x chimneys	Unknown	Assumed	

3.2 Mold

Bay West conducted visual observations for indications of mold/water damage at the Site. Visual indications of mold growth or wet building materials were observed at the time of the visit.

3.3 Lead-based Paint

A survey of damaged (flaking, chipping, or peeling) suspect lead-based paint was completed and five paint samples of damaged paint were analyzed for the presence of lead. The results for paint samples analyzed for lead are provided in **Table 2** below. A list of all paint samples collected and the analytical report is provided as **Appendix D**.

Table 2 – Sampling Results: Positive for Lead-Based Paint					
Sample ID Number	Description	Quantity	Lead (% by dry weight)		
614-Pb-1	Off-white white exterior bay window (east side), beneath Pb-2 paint	120 lft	20		
614-Pb-2	Off-white/grey/blue exterior bay window (east side)	120 lft	28		
614-Pb-4	Blue paint upper egress/front porch	400 ft ²	31		
614-Pb-5	Off-white/grey upstairs living room, all interior window frames	600 lft	1.1		



3.4 Hazardous Materials

The results of the hazardous materials survey are included on the MPCA Pre-Renovation/Demolition Environmental Checklist included as **Appendix E**. The survey list contains materials that should be removed prior to demolition. The following is an inventory of the non ACM or lead-based paint materials that should be removed prior to demolition.

Table 3 – Checklist Inventory – 614 W. Edmund Avenue					
Material Location	Material Description	Estimated Amount			
Garage	Latex paint	5-Gal			
	Propane cylinder	1 lb			
	Carpet seam sealer	12 oz			
Basement near sump	Primer	30 oz			
	Primer	2 x 1-Gal			
	Latex paint	2 x 1-Gal			
Main floor living room	Smoke detectors	5			
	CO detector	2			
2nd floor kitchen	Water heater	1			
Main and 2nd floors	Ceiling fans	5			

4.0 RECOMMENDATIONS

In regard to the asbestos/pre-demolition survey, Bay West makes the following recommendations:

- 1. The materials identified as ACM should be properly handled and disposed of as ACM by a certified Minnesota Asbestos Abatement contractor.
- The paint identified as lead-based paint should be removed or stabilized.
- 3. Remove various hazardous materials/waste identified throughout the Structure as listed on the MPCA Pre-Renovation/Demolition Environmental Checklist.
- 4. Other asbestos, lead-containing, or other hazardous materials identified during demolition should be managed appropriately.

5.0 LIMITATIONS

The results, findings, conclusions, and recommendations expressed in the report are based only on conditions that were noted during Bay West's June 28, 2013, Asbestos/Pre-Demolition Inspection of the property located at 614 W. Edmund Avenue in St. Paul, Minnesota.

This checklist does not represent an exhaustive listing of types of materials that may be required to be removed from a building prior to demolition.



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Any conditions or materials that could not be visually identified on the surface were not inspected and may differ from those conditions or materials noted. It should be noted that Bay West did not access the center of the roof or collect suspect asbestos samples from this area. The user of this report should keep in mind that conditions may change with time and observations made by Bay West at the time of the Site reconnaissance may not be consistent with future observations made by others.

The report is designed to aid the building owner, architect, construction manager, general contractors, and potential asbestos abatement contractors in locating hazardous materials to be removed prior to demolition activities.

Under **no** circumstances is the report to be utilized as a bidding document or as a project specification document. Contractors bidding the demolition of this Site should field verify project information.

6.0 CLOSURE

Bay West has prepared this report for the Ramsey County Tax Forfeiture Department for use of pre-demolition/remodeling purposes for the property located at 614 W. Edmund Avenue in St. Paul, Minnesota. If you have any questions or concerns regarding this letter report, please feel free to contact Killian Condon at (651) 285-1264 or Matt Schemmel at (651) 291-3410. Thank you for this opportunity.

Sincerely,

Killian Condon

ACM Building Inspector

(651) 291-3487

killianc@baywest.com Date: July 29, 2013 Matt Schemmel, P.G.

Project Manager/Hydrogeologist

(651) 592-0167

matts@baywest.com Date: July 29, 2013

Attachments:

Figures

Appendix A – Photo Log

Appendix B – Asbestos Inspector Certification

Appendix C – Asbestos Analytical Report and Chain of Custody – IATL

Appendix D – Lead Analytical Report and Chain of Custody – IATL

Appendix E – MPCA Pre-Renovation/Demolition Environmental Checklist

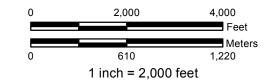


FIGURES

FIGURE 1 Site Location Map **614 West Edmund Avenue** St. Paul, MN 55104



Map Projection: NAD 1983 UTM Zone 15N USA Topo Maps WMS





Site Location



Drawn By: PM Date Drawn/Revised: 7/17/2013

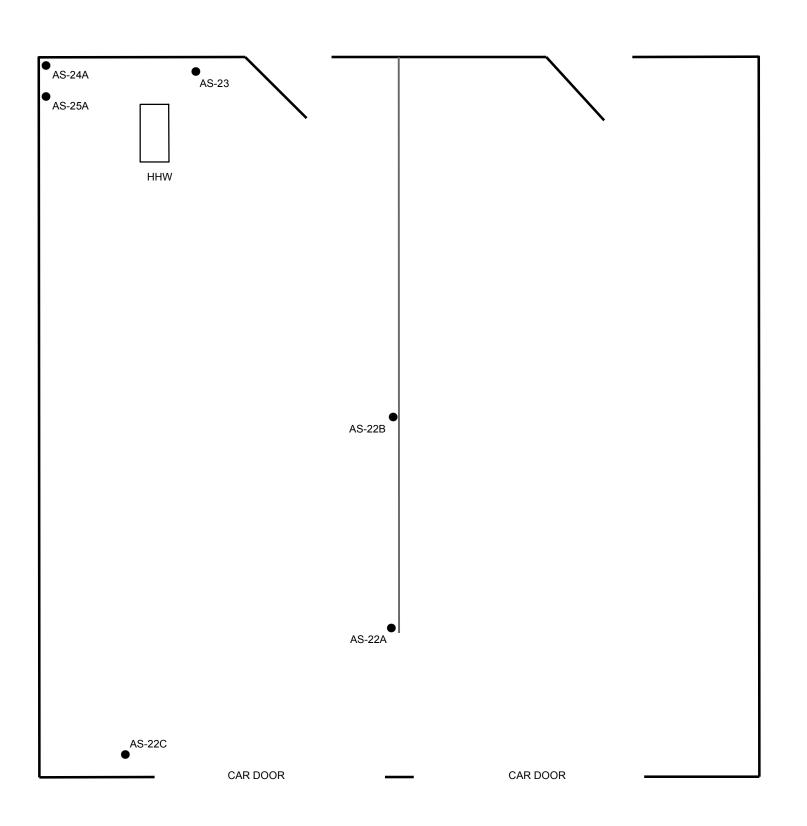


FIGURE 2 Garage Sample Locations 614 West Edmund Avenue St. Paul, MN 55104



- Positive Sample Location
- Sample Location

Exterior Wall

Interior Wall

Stairs

= Window

Note: Drawings Not To Scale

HHW = Household Hazardous Waste



Drawn By: PM

Date Drawn/Revised: 8/12/2013

FIGURE 3 Attic Sample Locations 614 West Edmund Avenue St. Paul, MN 55104



- Positive Sample Location
- Sample Location
- Exterior Wall
- Interior Wall
- Stairs
- ----- Window

Note: Drawings Not To Scale



Drawn By: PM

Date Drawn/Revised: 8/12/2013

FIGURE 4 2nd Floor Sample Locations 614 West Edmund Avenue St. Paul, MN 55104



- Positive Sample Location
- Sample Location

Exterior Wall

— Interior Wall

Stairs

= Window

Note: Drawings Not To Scale



Drawn By: PM

Date Drawn/Revised: 7/31/2013

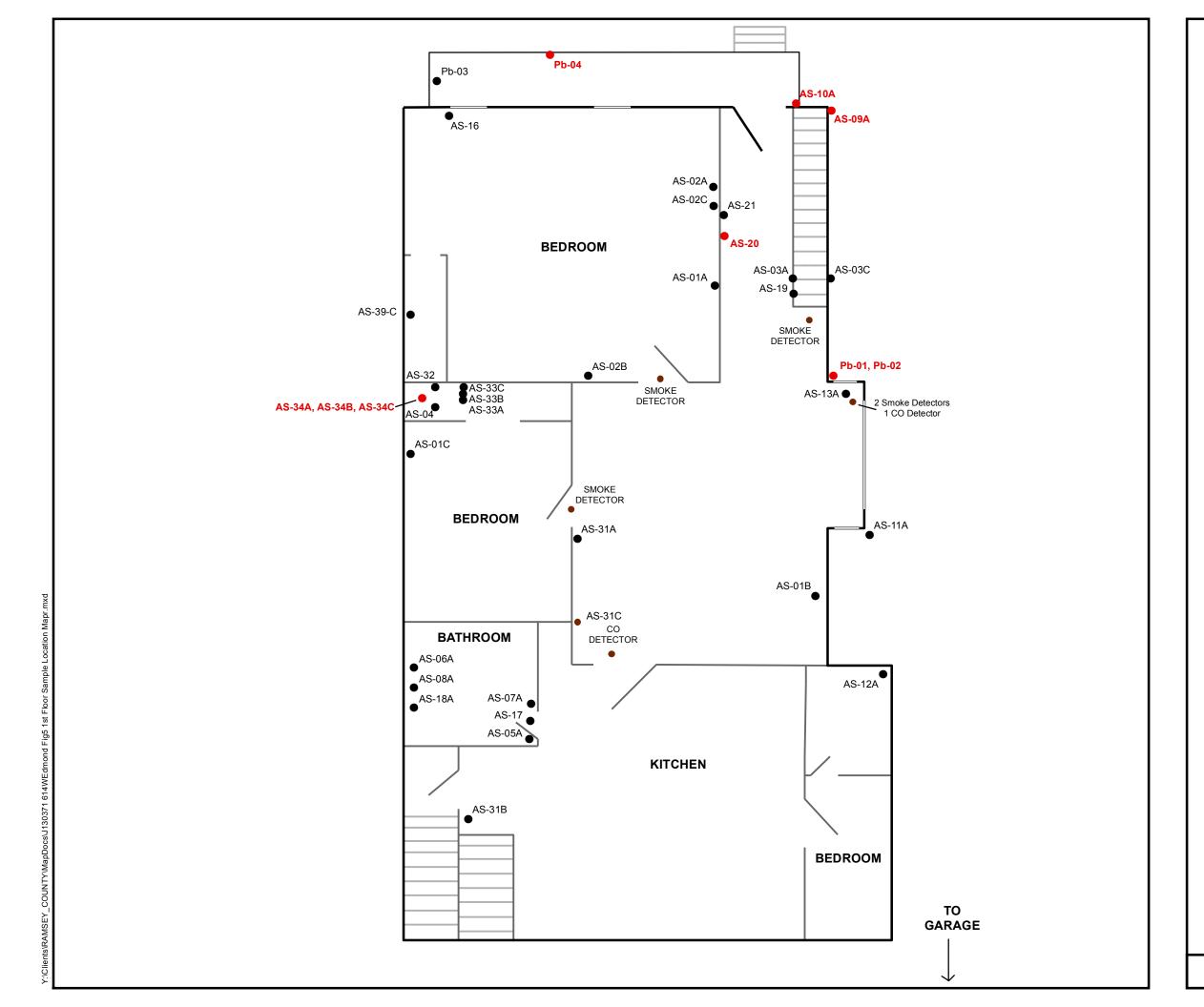


FIGURE 5 1st Floor Sample Locations **614 West Edmund Avenue** St. Paul, MN 55104



- Positive Sample Location
- Sample Location
- **Exterior Wall**
- Interior Wall
- Stairs
- Window

Note: Drawings Not To Scale



Drawn By: PM

Date Drawn/Revised: 8/12/2013

FIGURE 6 Basement Sample Locations 614 West Edmund Avenue St. Paul, MN 55104



- Positive Sample Location
- Sample Location

Exterior Wall

Interior Wall

---- Stairs

Window

vviiidov

Assumed Asbestos Containing

Note: Drawings Not To Scale

HHW = Household Hazardous Waste



Drawn By: PM

Date Drawn/Revised: 7/31/2013



Appendix A

Photo Log

Appendix A 614 Edmund Avenue Street, Saint Paul, MN



1: Front view of the residence.



2: Rear view of the residence.



3: Household hazardous waste (HHW) located in the garage



4: Assumed ACM piping in the basement.



5: Assumed ACM piping in the basement.



6: Assumed ACM ducting joint compound in the basement.

Appendix A 614 Edmund Avenue Street, Saint Paul, MN



Appendix A 614 Edmund Avenue Street, Saint Paul, MN

