POTENTIAL HAZARDOUS BUILDING MATERIALS INVENTORY

Miller's Department Store
230 Penobscot Avenue
Millinocket, Maine 04462

June 2016

TRC Project No: 233392

Prepared For:
Maine Department of Environmental Protection
17 State House Station
Augusta, Maine 04333

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Appendices

1.0 INTRODUCTION

Subject to the qualifications and limitations stated in Section 3.1 of this report, TRC Environmental Corporation (TRC) was retained by the Maine Department of Environmental Protection ("MEDEP" and the "Client") to perform a Potential Hazardous Building Materials Inventory (PHBMI) on the parcel identified as Miller's Department Store located at 230 Penobscot Avenue in the Town of Millinocket, Penobscot County, Maine (herein referred to as the "Site"). This PHBMI was performed in conjunction with an American Society of Testing and Materials Practice E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-13), which is presented under a separate cover.

The purpose of this PHBMI is to provide general information to support potential future work which may include but is not limited to sampling and analysis of the materials identified herein.

According to information obtained from the Town of Millinocket Tax Assessor, the Site is identified on Assessor's Map U5 as Lot 231, which is approximately 0.17 acres in size. Lot 231 is currently owned by the Town of Millinocket.

A spreadsheet of potential hazardous building materials identified during this Inventory can be found in **Appendix A**; a general schematic Floor Plan of the Site Building/Area depicting approximate locations and/or reference of potentially impacted materials can be found in **Appendix B**; a Photograph Log identifying select key findings can be found in **Appendix C**; and TRC Personnel License(s) can be found in **Appendix D**.

2.0 INVENTORY RESULTS

The following sections detail the results of the Potential Hazardous Building Materials Inventory conducted on May 10, 2016, based on the limitations presented herein.

2.1 Asbestos-Containing Material

2.1.1 Definition

ACM is material containing greater than one percent (1%) asbestos. There are six types of asbestos: chrysotile, amosite, crocidolite, anthophyllite, tremolite, and actinolite. The United States Environmental Protection Agency (USEPA) distinguishes between friable and non-friable forms of ACM; friable ACM contains more than 1% asbestos and can be "crumbled, pulverized, or reduced to powder by hand pressure when dry." ACM can only be confirmed as such with laboratory analysis, as later described in this section.

2.1.2 Identification of Suspect Asbestos-Containing Materials

Suspect homogeneous materials are defined as those materials that are visually similar in color, appearance, and texture and show evidence of being installed at the same general time. For the purpose of this Inventory, suspect homogeneous ACM was categorized into one of the three following groups:

- Surfacing Materials - sprayed or trowelled onto structural members (such as beams, columns, decking) for fire protection, on ceilings and walls for fireproofing, or for acoustical or decorative purposes.

- Thermal System Insulation - applied to hot and cold water systems and HVAC systems to prevent heat transfer and water condensation. This includes insulation on piping, pipe joints, and ducts.

- Miscellaneous Materials - all other suspect ACM including, but not limited to, gaskets, pumps, valves, roofing materials, caulk, tar, mastics, and transite insulations.

Specifically, potential ACM identified on Site includes, but is not limited to: mastic(s), plaster, wallpaper(s), sink lining(s), countertop, wallboard, ceiling tile(s), door caulk(s), floor tile(s), brick(s), mortar(s), floor covering(s), insulation(s), gasket(s), and roofing(s).

To confirm if a suspect homogenous area is an ACM, bulk samples will need to be collected from each suspect material in accordance with the Asbestos Hazard Emergency Response Act requirements and analyzed by a certified laboratory.

Suspect homogeneous ACM is listed in the spreadsheet found in **Appendix A**.

2.2 Lead-Based Coatings Inventory

Demolition/renovation activities involving lead-based coatings are regulated for worker exposure under the Lead Occupational Safety and Health Administration Standard and for disposal of materials under the USEPA Resource Conservation and Recovery Act.

Potential lead-based coatings were not sampled. To confirm a lead-based coating, an inspection by a USEPA trained lead inspector using representative measurements of the painted building components may be conducted throughout the building(s) to evaluate the general presence of lead-based coatings.

Suspect and/or potential lead-based coatings are listed in the spreadsheet found in **Appendix A**.

2.3 PCB-Containing Materials

2.3.1 Definition

PCBs are commonly found in electrical equipment that require dielectric fluid such as transformers, oil-static cables, and capacitors as well as hydraulic machinery, vacuum pumps, compressors, and heat exchanger fluids. PCBs were also used in fluorescent lighting ballasts and caulking.

2.3.2 PCB-Containing Materials

Light Ballasts

Light fixtures (e.g., fluorescent, neon, high-pressure sodium lamps, mercury-vapor lamps, and metal halide lamps, etc.) with assumed PCB-containing ballasts were identified throughout most of the building. TRC assumed that there was one (1) ballast for each light fixture with one (1) to two (2) fluorescent tubes.

Caulk/Glaze Compound Material

Expansion joint and window caulk/glaze compound can contain PCBs. Expansion joint and window caulk/glaze compounds are present in most of the building's windows.

The approximate locations and estimated quantities of PCB-containing materials identified in the building are listed in the spreadsheet found in **Appendix A**.

2.4 Universal Waste

Universal wastes are those wastes that would reasonably be expected to be classified as hazardous wastes but, due to their universal use in industrial and residential properties, regulations were created to ensure that the wastes are managed in a manner that prevents harm to the environment while reducing the regulatory burden on generators of these wastes.

Potential universal wastes observed within the building included the following waste types:

1. Mercury-containing equipment; and
2. Lamps.

Mercury-containing equipment which may be generated during potential demolition may include multi-vapor lamps, thermometers, electrical switches, manometers, and regulators. TRC assumed that all multi-vapor lamps, thermometers, electrical switches, etc. contain elemental mercury.

Lamp types which may be generated during potential demolition include fluorescent lamps, high-pressure sodium lamps, and mercury vapor lamps.

The approximate locations and estimated quantities of mercury-containing equipment and lamps identified in the building are listed in the spreadsheet found in **Appendix A**.

2.5 Chemicals and Oils

2.5.1 Fire Suppressants/Extinguisher

Fire extinguishers were identified during the Inventory. The fire suppression equipment identified in the building are listed in the spreadsheet found in **Appendix A**.

2.5.2 Oil and Oil-Containing Equipment

TRC identified stored amounts of oil (i.e. fuel oil, etc.) and oil-containing equipment at the Site. No sampling of petroleum products was performed during this Inventory as these systems are active. The oil and oil-containing equipment identified during the Site visit can be found in the spreadsheet found in **Appendix A**.

2.5.3 Chemicals

Various chemicals were identified during the Inventory. A Contractor shall field verify, quantify, characterize, and dispose of any remaining chemicals and materials prior to renovation/demolition activities. The chemicals identified can be found in the spreadsheet found in **Appendix A**.

2.6 Used Electronic Equipment

Used electronic equipment can encompass a variety of equipment including, but not limited to: computers, cathode ray tubes (CRTs), wireless telephones, electronic keyboards, mice, televisions, printers, monitors, portable digital music players, video cassette recorders, DVD players, Blu-ray disc players, digital video recorders, digital converter boxes, cable or satellite receivers, electronic game consoles, PDAs, facsimile machines, and photocopiers, etc.

TRC encountered used electronic equipment including computers, printers, etc. throughout the building. These materials shall be handled as electronic waste ("eWaste"). eWaste is summarized in the spreadsheet found in **Appendix A**.

2.7 Facility-Specific Concerns

Facility-specific concerns are those present in the facility due to the historical use and activities within the building. TRC identified several facility-specific concerns as follows:

Mold

Mold was identified on-Site. According to the Centers for Disease Control:

> *Exposure to damp and moldy environments may cause a variety of health effects, or none at all. Some people are sensitive to molds. For these people, molds can cause nasal stuffiness, throat irritation, coughing or wheezing, eye irritation, or, in some cases, skin irritation. People with mold allergies may have more severe reactions. Immune-compromised people and people with chronic lung illnesses, such as obstructive lung disease, may get serious infections in their lungs when they are exposed to mold.*

On-Site mold may be tested and should be remediated in accordance with applicable guidelines.

Standing Water Containing Sediment

TRC identified a large pool of standing water in the basement during the Inventory. The Contractor shall assume that any residual liquids within the building are potentially contaminated. The Contractor shall remove and containerize the residual liquids and perform waste classification sampling in order to characterize the material for disposal. The basement floor shall be power washed to remove residual sediment. Materials including but not limited to the standing water should be sampled and disposed of off-Site in accordance with applicable waste handling regulations.

The facility specific concerns identified are listed in the spreadsheet found in **Appendix A**.

3.0 SUMMARY OF FINDINGS

Building components and materials visible during the Site walk identified during the PHBMI include:

- Potential and/or suspect asbestos-containing materials (ACM);
- Potential and/or suspect lead-based coatings;
- Potentially Polychlorinated Biphenyl (PCB)-containing materials such as light-fixture ballasts, glazing, and caulking;
- Potential and/or suspect mercury-containing equipment, such as thermostats, hydrostats, manometers, natural gas meters, reed, float, and tilt-switches;
- Lamps (with potential and/or suspect hazardous material containing contents), such as fluorescent, neon, high pressure sodium, mercury vapor, and metal halide;
- Fire extinguishers and fire suppression systems (with potential and/or suspect hazardous material containing contents);
- Oils such as fuel oil, etc.;
- Used electronic equipment (with potential and/or suspect hazardous materials containing contents);
- Stored chemicals and combustible liquids; and
- Facility-specific concerns associated with building materials with potential and/or suspect hazardous materials contents.

The findings included in this report provide information regarding potential and/or suspect building materials to support potential future work which is anticipated to include sampling and analysis of the materials identified.

This report should be used in conjunction with the Spreadsheet and general schematic Floor Plan (found in **Appendix A** and **Appendix B**, respectively). A Photograph Log identifying select key findings can be found in **Appendix C**.

3.1 Limitations

The findings presented in this Inventory are based upon reasonably available information and observed Site conditions at the time of the Site walk. Conditions may have changed since that time and the findings and conclusions of this Inventory are not meant to be indicative of future conditions at the Site. This report does not warrant against conditions that were not evident from visual observations or historical information obtained, or conditions that could only be determined by physical sampling or other intrusive investigation techniques that are outside the proposed scope of work.

Due to the potential for concealed potential and/or suspect ACM or other regulated materials, this report should not be construed to represent all potential and/or ACM and regulated materials within the Site building. Due to inaccessibility, some materials were assumed to contain ACM for the purpose of this report. All quantities of potential and/or suspect ACM and other regulated

materials identified and all dimensions in this report are approximate and shall be verified on-Site. This Inventory was limited to accessible materials.

The purpose of this PHBMI was to provide information regarding potential and/or suspect building materials to support potential future work which is anticipated to include sampling and analysis of the materials identified. **No samples of suspect ACM or hazardous materials were collected during this Inventory**; this Inventory was visual in nature for general quantitative, not qualitative purposes. Site-specific measurements of floors, walls, and/or other building materials referenced herein was not conducted due to the limited scope of the Inventory. Due to inaccessibility (i.e. roofing, portions of the rooms with significant debris, etc.), some areas/rooms can be assumed to contain ACM, LBP, etc., for the purpose of this report. All quantities of materials identified and all dimensions in this report are approximate and shall be verified on Site. This Inventory was limited to accessible rooms and materials only.

This report is not a bidding document. The Contractor bidding on and performing the sampling removal of these estimated materials shall independently field verify all materials and quantities. Some existing materials may not be identified in this report. The materials described herein are to be considered an estimate and, as such, there may be more of one type of material and less of another. The Contractor shall be responsible for identifying all materials and calculating all quantities independently at the Site regardless of discrepancies with this report.

APPENDIX A:
PHBMI SPREADSHEET

Location[A]		Description of Suspect Material		Potential Contaminant/ Laboratory Analysis[B]	Approximate Quantity[C]
		Type	Area		
Asbestos Containing					
1[D]	Interior	Bead boards and/or glues	Basement, 1st floor, and 2nd floor	ACM	≈ 1,000+ SF
2[E]	Interior	Plaster	Basement, 1st floor, and 2nd floor	ACM	≈ 1,000+ SF
3[F]	Interior	Countertop	1st floor and 2nd floor	ACM	≈ 100± SF
4	Interior	Wallpaper(s)	2nd floor	ACM	≈ 1,000± SF
5[D]	Interior	Sink lining	Basement, 1st floor, and 2nd floor	ACM	3
6	Interior	2' X 4' Ceiling tile	2nd floor	ACM	≈ 100± SF
7[G]	Interior	1' X 1' Ceiling tiles	Basement, 1st floor, and 2nd floor	ACM	≈ 1,000+ SF
8	Interior	Wallboard	Basement, 1st floor, and 2nd floor	ACM	≈ 1,000+ SF
		Joint compound			
9[E]	Interior	9" X 9" floor tiles	2nd floor	ACM	≈ 500± SF
		Mastics			
10	Interior/Exterior	Door caulk	1st floor and 2nd floor	ACM	≈ 100+ LF
11	Interior	Carpet mastic(s)	1st floor, 2nd floor, and stairways	ACM	≈ 1,000± SF
12[D]	Interior	Basecoves	1st floor and 2nd floor	ACM	≈ 500± LF
		Mastics			
13	Interior	Mirror glue puck(s)	1st floor	ACM	< 100 SF
14	Interior	Linoleum	Basement	ACM	≈ 500± SF
15[I]	Interior	Cinder blocks	Basement	ACM	≈ 5,000± SF
		(Associated) mortar			
16	Interior	Bricks	Basement	ACM	≈ 1,000+ SF
		(Associated) mortar			
17[E]	Interior	Vermiculite	Ceiling(s)	ACM	≈ 1,000± SF
18[J]	Exterior	Faux brick siding	Building face	ACM	≈ 5,000± SF
19	Interior	Insulation, gaskets, etc.	Boiler, ASTs	ACM	≈ 10 LF, ≈ 10
20[I]	Interior	Gaskets and/or caulking	Basement	ACM	≈ 10+
21	Exterior	Roofing material(s)	Roof	ACM	≈ 1,000± SF
Lead-Based Paint					
22	Interior	Pink	Basement	LBP	Standard
23[D]	Interior	Beige/Peach	2nd floor	LBP	Standard

24	Interior	Red	2nd floor	LBP	Standard
25[D]	Interior	Burgundy	Basement and 2nd floor	LBP	Standard
26	Interior	Yellow	2nd floor	LBP	Standard
27	Interior	Mustard	Basement and 2nd floor	LBP	Standard
28[H]	Interior	Gray	2nd floor	LBP	Standard
29[H]	Exterior/Interior	Mint	Exterior, basement, and 2nd floor	LBP	Standard
30	Interior	Various (grafitti)	Basement	LBP	Standard
31	Interior	Light blue	1st floor and 2nd floor	LBP	Standard
32[E]	Exterior/Interior	White	Portion of front face, 1st floor, and 2nd floor	LBP	Standard
Universal and Hazardous Waste					
Mercury Containing					
33	Interior	Multi vapor lamp fixtures - bulbs	Basement, 1st floor, and 2nd floor	UW - Hg Lamps	≈ 10+
34[G]	Interior	Fluorescent lamps - 4 foot tube	Basement, 1st floor, and 2nd floor	UW - Hg Lamps	≈ 100+
35	Interior	Thermostats/switches	Basement, 1st floor, and 2nd floor	Hg	≈ 5
Fire Suppressant					
36[K]	Interior	CO_2 Fire extinguisher and/or dry chem fire extinguisher	Stored throughout building	Non-haz	≈ 5
Oil-Containing					
37[I]	Interior	275-gallon AST	Basement	Fuel oil	3
Chemicals					
38	Interior	Cans of paint, cleaning solutions, etc.	Stored throughout building	Combustible liquids	≈ 10+
eWaste					
39[F]	Interior	Computers	Stored throughout building	eWaste	≈ 10+
Misc.					
40	Interior	Mold	Basement and 1st floor	Airborne fungus and aerosolized spores	Standard
41	Interior	Standing water	Basement	Airborne fungus and aerosolized spores	Standard
PCB Containing					
42[G]	Interior	Ballast	Basement, 1st floor, and 2nd floor	PCB	≈ 25+
43[G]	Interior/Exterior	Window caulk	1st, 2nd, and 3rd floors	PCB	≈ 25 (windows)
44[G]	Interior/Exterior	Window glaze	1st, 2nd, and 3rd floors	PCB	≈ 25 (windows)

45	Interior/Exterior	Door caulk	1st floor and second floor	PCB	≈ 100 LF

Note: Information provided in this Spreadsheet was prepared in conjunction with TRC's PHBMI report dated June 2016, and is subject to the qualifications and limitations stated therein.

[A] Refer to Floor Plan found in **Appendix B** for suspect material location(s).

[B] No samples of suspect ACM or hazardous materials were taken during this Inventory.

[C] Approximate quantities are based on the footprint of the building and/or observations made during TRC's May 10, 2016 Site reconnaissance. As discussed with MEDEP during the Site reconnaissance, specific quantit(ies) were not determinable. Contractor must field verify quantities given in this Spreadsheet.

[D] Refer to Photograph 1 in the Photograph Log found in **Appendix C**.

[E] Refer to Photograph 2 in the Photograph Log found in **Appendix C**.

[F] Refer to Photograph 3 in the Photograph Log found in **Appendix C**.

[G] Refer to Photograph 4 in the Photograph Log found in **Appendix C**.

[H] Refer to Photograph 5 in the Photograph Log found in **Appendix C**.

[I] Refer to Photograph 6 in the Photograph Log found in **Appendix C**.

[J] Refer to Photograph 7 in the Photograph Log found in **Appendix C**.

[K] Refer to Photograph 8 in the Photograph Log found in **Appendix C**.

Acronyms:

ACM: Asbestos-containing material
PCB: Polychlorinated Biphenyl
UW - Hg Lamps: Universal waste mercury lamps
LBP: Lead-based paint
LF: Linear feet
SF: Square feet

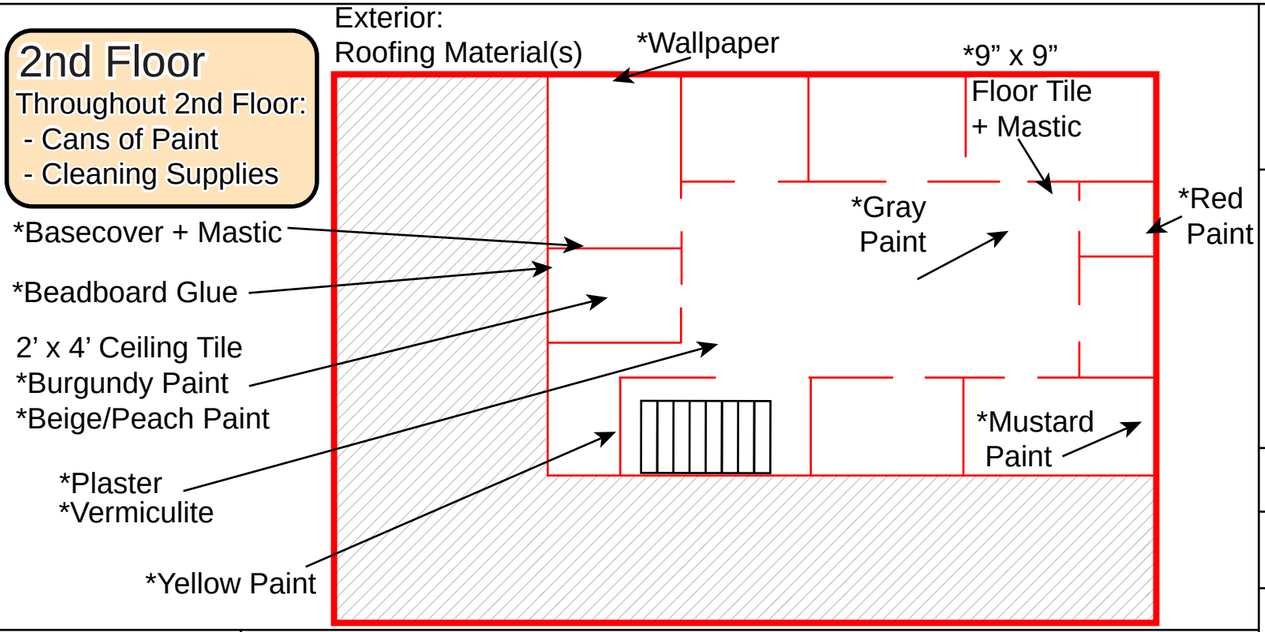
APPENDIX B:

FLOOR PLAN OF SITE BUILDING/AREA

N

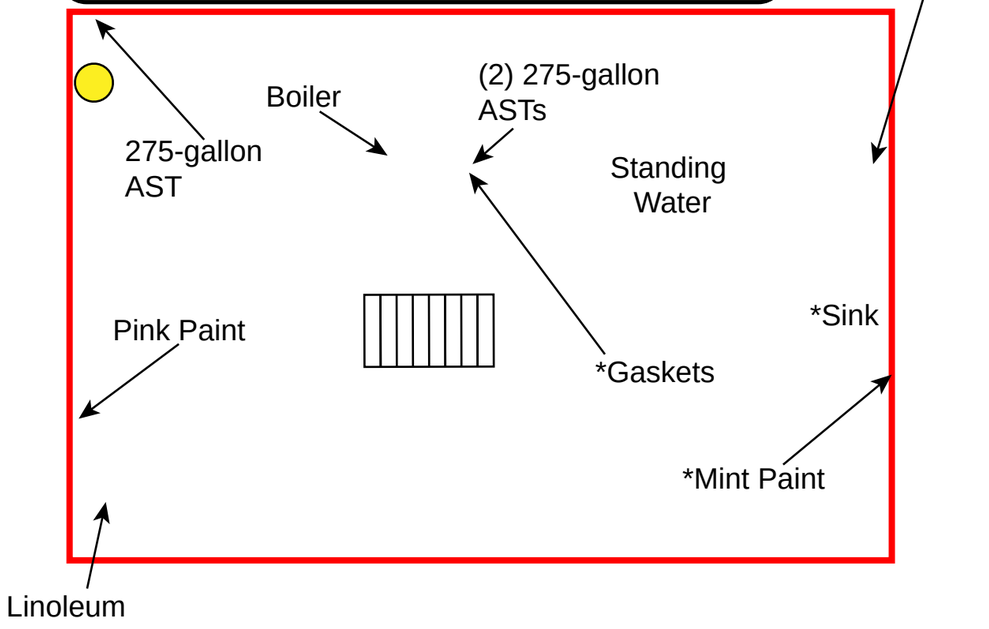
2nd Floor

Throughout 2nd Floor:
- Cans of Paint
- Cleaning Supplies



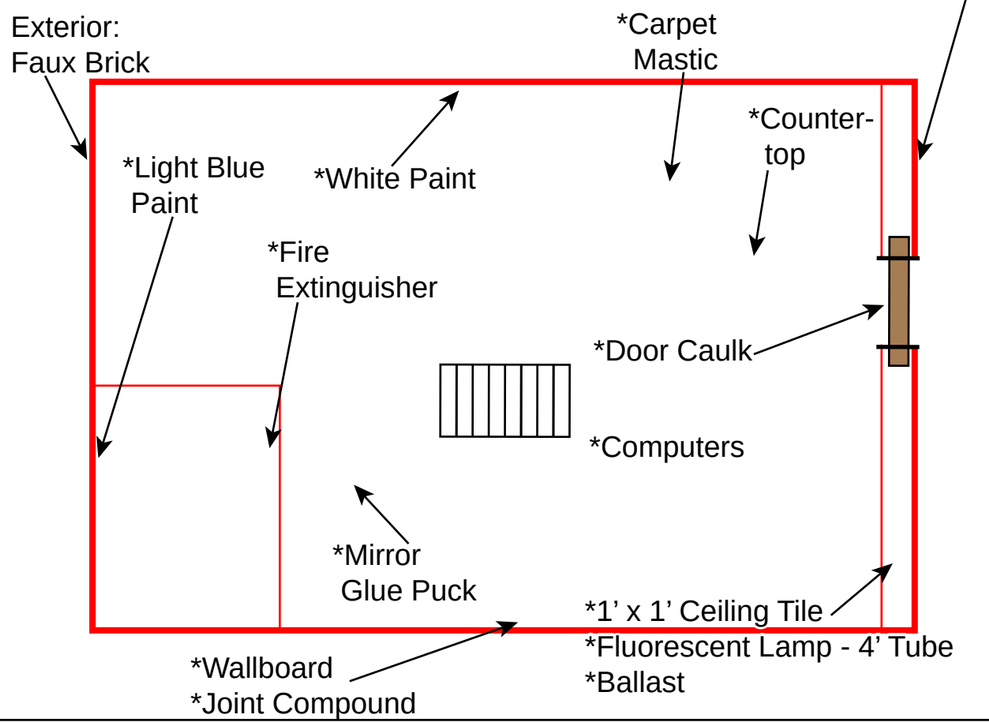
Basement

Throughout Basement:
- Grafitti
- Mold
- Cans of Paint
- Cleaning Supplies
- Bricks / Cinder Blocks and Mortar



1st Floor

Throughout 1st Floor:
- Mold
- Cans of Paint
- Cleaning Supplies



TRC
6 Ashley Drive
Scarborough, ME 04074
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Floor Plan

Miller's Department Store
Millinocket, Maine

Maine Department of
Environmental Protection

June 2016

Figure Not to Scale

Legend

- Approximate Building Outline
- * Item is an example of a feature that can be found in multiple locations within building: see corresponding spreadsheet for said locations
- *Bulb
- *Door/Entry Way
- *Window
- Staircase

Note

See spreadsheet for locations and approximate quantities observed during TRC's May 10, 2016 Site reconnaissance

Basemap: Google Earth

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APPENDIX C:
PHOTOGRAPH LOG

PHBMI Photo Log
Miller's Department Store
Millinocket, Maine

1. Image showing bead board (and glue), sink lining, basecove (and mastic), beige/peach paint, and burgundy paint on 2nd floor.

2. Image showing plaster, vermiculite, and white paint of second floor ceiling.

3. Image showing countertop and computers on 1st floor.

4. Imagine showing 1' X 1' ceiling tile, fluorescent lamps - 4 foot tube, ballasts, window caulk, and window glaze in the front display area.

PHBMI Photo Log
Miller's Department Store
Millinocket, Maine

5. Image showing 9" X 9" floor tile (and mastic), mint paint, and gray paint on 2nd floor.

6. Image of cinder blocks (and mortar), ASTs, and gasket(s), in basement.

7. Image showing the faux brick siding (behind metal sheeting) on the exterior of the building.

8. Image showing a fire extinguisher on the 1st floor.

APPENDIX D:

TRC PERSONNEL LICENSE(S)

State of Maine
Asbestos Abatement Program

Lindsay M. Paradis

Inspector

Cert No. AI-0647
Trn Exp Date 08/14/2016

Expiration Date 08/31/2016

This is not a legal form of official identification