

Ms. Caroline Paras
Greater Portland Council of Governments

Asbestos is present at greater than 1% in the following materials:

- 100 Federal Street
 - Projection Flashing Mastic (Roof);
- 96 Federal Street
 - Corrugated Pipe Insulation (Basement);
 - Residual Pipe Fitting Insulation (Basement);
 - Yellow Pebble Pattern Sheet Flooring (Unit #2, Kitchen);
 - Window Glaze (Exterior);
 - Window Caulk (Exterior);
- 42 Hampshire Street
 - Window Glaze (Exterior, select windows, upper floors);
 - Corrugated Pipe Insulation (Basement);
 - Residual Pipe Fitting Insulation (Basement);
 - Projection Flashing Mastic (Roof);
- 32 Hampshire Street
 - Residual Window Caulk (Exterior, building addition);
- 167 Newbury Street
 - Brown Pebble Pattern Sheet Flooring (1st Floor)
 - Orange Tile Pattern Sheet Flooring (2nd Floor, Kitchen);
- 169 Newbury Street
 - Red Brick Pattern Sheet Flooring (1st Floor, front and rear entries);
- 160 Newbury Street
 - Residual Pipe Fitting Insulation (Basement);
 - Asphalt Siding (Exterior);
- 24 Hampshire Street
 - *No ACM identified.*

If these materials are to be removed or disturbed due to future building renovation or demolition, they will require proper removal by trained asbestos abatement professionals, and proper handling and disposal as a special waste in accordance with local, state, and federal regulations.

If any buildings are to remain, ACM that is in good condition and would not be impacted by ongoing occupation or renovation activities may remain in place and does not need to be abated at this time. If this is the favored approach, Ransom recommends the implementation of an asbestos operations & management (O&M) plan for the future management of the identified ACM within such buildings. Damaged or disturbed ACM should be repaired or abated prior to re-occupancy:

1. Painted surfaces in interior and exterior sample locations tested using an X-Ray Fluorescence (XRF) analyzer contained lead at concentrations ranging from below the instrument detection limit (BDL) up to and exceeding 5.0 milligrams per square centimeter (mg/cm^2), the instrument's upper detection limit, in each of the Site Buildings. Special consideration was given to identifying LBP in the building at 96 Federal Street, as current plans involve renovating this building for continued residential use. The U.S. Housing and Urban Development (HUD) Lead-Based Paint Guidelines define lead at concentrations greater than 1.0 milligrams per square centimeter (mg/cm^2) as "Lead-Based". While HUD standards do not require remediation of LBP provided it is in intact condition, Ransom recommends abatement of lead paint in buildings that will continue to be inhabited, in order to mitigate the potential for future lead hazards to building occupants. Any renovation or demolition activities that disturb surfaces containing any amount of lead must be conducted in accordance with Occupational Safety and Health Administration (OSHA) Regulation 29 CFR 1926.62 "Lead Exposure in Construction; Interim Final Rule."
2. Minor quantities of other potentially hazardous building components were identified during our survey, including potentially PCB-containing fluorescent light ballasts, presumed mercury-containing fluorescent light tubes (including compact fluorescents) and thermostat switches, and several residential-sized refrigerator/freezer and air conditioning units. Disposal of each of these items is also subject to hazardous and/or universal waste disposal requirements.
3. A floor drain located in the basement of the Site building at 24 Hampshire Street, which was identified as a Recognized Environmental Condition (REC) during Ransom's July 2012 Phase I Environmental Site Assessment (ESA) was determined to be connected to the municipal sanitary sewer lines. Therefore, it is not anticipated that potential discharges in connection with this structure have impacted subsurface environmental conditions at the Site.

BACKGROUND

Eight buildings are included in the scope of this report, as listed above, and referred to herein as the "Site buildings". The Site buildings are located in a densely-developed residential neighborhood just east of the downtown area of Portland Maine. Each of the Site buildings is a three-story wood-framed structure constructed on a full foundation, and utilized currently or most recently for residential apartments. According to the available information, construction dates of the Site buildings range from circa 1886 to circa 1949. The buildings at 96 Federal Street, 100 Federal Street, 42 Hampshire Street, and 160 Newbury Street have flat roofs, consisting of built-up asphalt roofing layers covered with fully adhered rubber membranes. Each of the remaining Site buildings have pitched roofs covered with asphalt shingle. Each building is heated via natural gas-fired systems, with boilers located in the basements and/or residential-sized units located within the apartments.

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The buildings at 96 Federal Street, 100 Federal Street, and 32 Hampshire Street were partially occupied at the time of Ransom's inspection; all other buildings were vacant. Access to the Site buildings was coordinated through BellPort Property Management of Portland, Maine. Ransom understands that each Site building except the one at 96 Federal Street is currently slated for demolition. Current plans include rehabilitating/renovating the apartment building at 96 Federal Street for continued residential use. Ransom's investigation was conducted accordingly.

PREVIOUS REPORTS

Ransom did not identify prior reports documenting the presence, inspection for, or abatement of hazardous materials at the Site Buildings. Ransom's Phase I ESA dated July 2012 identified a floor drain in the basement of the Site building at 24 Hampshire Street, which was also assessed as part of this investigation.

ASBESTOS-CONTAINING MATERIALS

Ransom completed asbestos surveys of each the Site buildings between July 27 and August 1, 2012. The asbestos surveys were performed by Ransom's U.S. EPA- and State of Maine-certified asbestos inspector, Mr. Lucas Hathaway. Copies of Mr. Hathaway's State of Maine Asbestos Inspector certification and most recent EPA training certificate are provided as Attachment B.

OSHA defines asbestos-containing material (ACM) as "any material containing more than one percent asbestos," while the MEDEP defines ACM as "greater than or equal to one percent asbestos." The EPA and MEDEP are responsible for developing and enforcing regulations necessary to protect the general public from airborne contaminants that are known to be hazardous to human health.

Samples were analyzed by Optimum Analytical and Consulting, LLC (Optimum) of Salem, New Hampshire. Optimum is certified to perform bulk sample analysis by the State of Maine and the National Voluntary Laboratory Accreditation Program (NVLAP). Optimum's certificates are also provided as Attachment B. Laboratory analytical reports are provided as Attachment C.

The scope of the asbestos inspection included the identification and quantification of accessible suspect building materials on the Site buildings' interior and exterior. Ransom was assisted by Roof Management Consultants Inc. of Hopedale, Massachusetts during evaluation, sample collection, and patching of flat roofs. Roof Management's Core Cut Report is provided as Attachment D. Bulk samples of friable miscellaneous materials such as plaster, drywall and joint compound, fiber ceiling tile, etc. were analyzed using the PLM-EPA 600/R-93/116 visual estimation method (1993). Non-friable organically bound (NOB) materials such as floor tile, caulk, and asphalt-based roof materials were analyzed using PLM NOB-EPA 600/R-93/116 with gravimetric preparation method.

Ransom collected a total of 375 bulk samples from 116 different suspect ACMs in the Site buildings. The following is a listing and brief discussion of each material determined to contain asbestos at concentrations equal to or greater than one percent (1%) during our inspection, thereby classified by MEDEP as ACM. These materials are also presented in Table 1:

100 Federal Street

- **Projection Flashing Mastic (sample set 100R-02):** This material was observed associated with flashing materials at the points of chimney and vent pipe penetrations through the rubber membrane roof. Asbestos was not detected in samples collected from other areas of the roof.

96 Federal Street

- **Corrugated pipe insulation (sample set 96-01):** This type of insulation is typically referred to as "air cell" insulation, and consists of multiple layers of kraft paper impregnated with asbestos fibers, with a cross-section resembling that of corrugated cardboard. A short section of insulated steam piping was observed running above an interior divider wall in the basement. It appears that additional asbestos pipe insulation has been removed previously, and this short section was left, likely due to difficult access.
- **Residual pipe fitting insulation (sample set 96-02):** This sample was taken from residue of insulation left behind after an apparent previous, but incomplete, asbestos removal. The material is consistent with "mudded" elbows and joints typically seen associated with asbestos pipe insulation.
- **Yellow pebble pattern sheet floor (sample set 96-09):** This material was observed beneath an overlying (non-ACM) sheet floor, in the kitchen of apartment unit #2.
- **Exterior window glaze (sample set 96-14):** This material was observed on the glass/sashes of each window installed on the Site building. No specific cost is carried for abatement of this material, as the associated caulking was identified as ACM as well, requiring full window removal.
- **Exterior window caulk (sample set 96-15):** This caulking was observed associated with each window on the Site building, adhering the window frame to the brick window opening.

42 Hampshire Street

- **Exterior window glaze (sample set 42-06):** This material was observed on the glass/sashes of select windows on the upper (2nd and 3rd) floors, particularly on the bays on the northeast side of the building, and in stairwells.
- **Corrugated pipe insulation (sample set 42-09) and associated fittings:** This "air cell" type insulation was observed installed on steam distribution pipes associated with the former oil-fired boiler in the basement.

- **Residual pipe fitting insulation (sample set 42-10):** This sample was taken from residue of insulation left behind after an apparent previous, but incomplete, asbestos removal. The material is consistent with the “mudded” elbows and joints associated with the remaining ACM pipe insulation.
- **Projection flashing mastic (sample set 42R-02):** This material was observed associated with flashing materials at points of chimney and vent pipes penetration through the rubber membrane roof. Asbestos was not detected in samples collected from other areas of the roof.

32 Hampshire Street

- **Residual exterior window caulk (sample set 32-03):** This material was observed associated only with windows installed on the addition (westerly) section of the Site building.

167 Newbury Street

- **Orange tile pattern sheet floor (sample set 167-09):** This material was observed installed throughout the kitchen area of the second-floor apartment.

169 Newbury Street

- **Red brick pattern sheet floor (sample set 169-04):** This material was observed installed on the first floor, in the entry areas near the front and rear exterior doors.

160 Newbury Street

- **Residual pipe fitting insulation (sample set 160-01):** This sample was taken from residue of insulation left behind after an apparent previous, but incomplete, asbestos removal. The material is consistent with the “mudded” elbows and joints typically associated with ACM pipe insulation. These fittings and associated pipes were no longer installed, and were observed stacked in piles, and also strewn about the basement floor.
- **Exterior siding (sample set 160-07):** This asphalt-based sheet material was installed on the entire exterior of the Site building.

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24 Newbury Street

- *No ACM identified.*

The MEDEP requires consultants to advise the building owner or owner's agent whenever the asbestos analytical laboratory has reported suspect asbestos-containing materials below ten percent asbestos, which the owner or owner's agent may either elect to treat the material as positive for asbestos or have the samples re-analyzed using an alternate method as listed below:

1. PLM EPA/600R-93/116 - Point Count (friable ACM); or
2. Transmission Electron Microscopy (TEM)
 - EPA NOB EPA/600/R-93/116b section 2.5; or
 - TEM Chatfield Method.

Re-analysis of samples testing negative for asbestos is not required. The following materials identified during Ransom's investigation fall within this 1% - 10% range:

- Exterior window glaze (96 Federal Street and 42 Hampshire Street);
- Exterior window caulk (96 Federal Street and 32 Hampshire Street); and
- Red brick pattern sheet floor (169 Newbury Street).

Based on the nature of the materials identified and the concentrations of asbestos fiber detected, re-analysis is not recommended at this time.

If any of the identified ACM is to be removed or disturbed as part of future renovation or demolition activities, these materials will require removal by trained asbestos abatement workers, as well as handling and disposal as special waste in a facility licensed to receive asbestos-containing materials. However, MEDEP does not require notification, or the use of licensed abatement workers to remove certain exempt materials, including exterior caulks and glazings, and asphalt-based roofing materials, provided that these materials are in good condition. OSHA training and exposure criteria are still applicable, as well as MEDEP disposal requirements.

A copy of the bulk asbestos analysis laboratory report is provided in Attachment C. Figures 2 through 12 provide sample locations for materials testing positive for asbestos.

PRESUMED ASBESTOS-CONTAINING MATERIALS

Ransom also identified two abandoned boiler units in the basement of the Site building at 42 Hampshire Street, which are considered presumed ACM (PACM). The units were not disassembled to gain access to access interior packings/components, but based on the age and appearance of these units; it is presumed that asbestos-containing internal components may be present. These boilers are considered PACM until further investigation and/or sampling is conducted to confirm or dismiss this presumption. A list of PACM is presented in Table 2.

QUALITY ASSURANCE/QUALITY CONTROL

Bulk asbestos samples were analyzed by Optimum Analytical Laboratory of Salem, New Hampshire (Optimum). Optimum provided analysis and data according to standard operating protocols and laboratory data validation guidance included in Ransom's SSQAPP for the Hampshire Street Properties site (RFA #08243, Addendum No. 20 to Ransom's Generic Quality Assurance Project Plan for Brownfield Sites in the State of Maine. Optimum provided the following information in analytical report:

- Data results sheets;
- Duplicate results/acceptance limits;
- Description of analytical methods and results; and
- Other pertinent results/limits as deemed appropriate.

As outlined in the SSQAPP and/or our Generic QAPP, at the completion of the field tasks and receipt of the analytical results, a data usability analysis was conducted to document the precision, bias, accuracy, representativeness, comparability, and completeness of the results. The following sections present this analysis.

Precision

Precision measures the reproducibility of measurements. The precision measurement is established using the relative percent difference (RPD) between the duplicate sample results. Duplicate samples were submitted to the laboratory in accordance with MEDEP asbestos sampling requirements, which require minimum triplicate analysis of samples in order for a material to be deemed negative for asbestos. Bulk samples of 116 distinct suspect ACM were submitted for triplicate laboratory analysis, 101 of which tested negative for asbestos. Of these 101 samples testing negative for asbestos, each of the corresponding triplicate analyses were also consistently non-detect.

Bias

Bias is the systematic or persistent distortion of a measurement process that causes errors in one direction. Bias assessments are made using personnel, equipment, and spiking materials or reference materials as independent as possible from those used in the calibration of the measurement system. Bias assessments were based on the analysis of spiked samples so that the effect of the matrix on recovery is incorporated into the assessment. A documented spiking protocol and consistency in following that protocol are important to obtaining meaningful data quality estimates.

Matrix spike and matrix spike duplicate samples (MS/MSD) are not required protocols of EPA Method 600, and were not employed during laboratory analysis. Therefore, no determination of laboratory bias was assessed.

Accuracy

Accuracy is a statistical measurement of correctness and includes components of random error (variability due to imprecision) and systemic error. It therefore reflects the total error associated with a measurement. A measurement is accurate when the value reported does not differ from the true value or known concentration of the spike or standard. For certain chemical analyses, surrogate compound recoveries are used to assess accuracy and method performance for each sample analyzed. Analysis of performance evaluation samples can provide additional information for assessing the accuracy of the analytical data being produced.

The laboratory did not provide quality control criteria such as calibration and calibration verification, surrogate recovery, holding time and method accuracy/precision for analysis. It is assumed that unless specifically noted in a non-conformance summary, all of the quality control criteria for these analyses were within acceptable limits. The laboratory data sheets did not provide specific comments.

Representativeness

Objectives for representativeness are defined for each sampling and analysis task and are a function of the investigative objectives. Representativeness was accomplished during this project through use of standard field, sampling, and analytical procedures. All objectives for sampling and analytical representativeness, as specified in SSQAPP, were met.

Comparability

Comparability is the confidence with which one data set can be compared to another data set. The objective for this QA/QC program is to produce data with the greatest possible degree of comparability. Comparability was achieved by using standard methods for sampling and analysis, reporting data in standard units, normalizing results to standard conditions and using standard and comprehensive reporting formats. Complete field documentation was used, including standardized data collection forms to support the assessment of comparability. Historical comparability shall be achieved through consistent use of methods and documentation procedures throughout the project.

Completeness

Completeness is calculated by comparing the number of samples successfully analyzed to the number of samples collected. The goal for completeness is 95 percent. The completeness for this project was 100 percent, as there were no samples that could not be analyzed due to holding time violations, samples spilled or broken, or any other reason.

LEAD-BASED PAINT

Concurrent with the ACM survey, Ransom performed an LBP survey using a direct-reading x-ray fluorescence analyzer (XRF). The inspection included XRF readings from interior and exterior walls, windows, doors, casings/jambs, and other miscellaneous surfaces on a variety of substrates including wood, brick, metal, plaster, and drywall. Special consideration was given to identifying LBP in the building at 96 Federal Street, as current plans involve renovating this building for continued residential use.

As shown in Table 3, painted surfaces at each Site building contained varying concentrations of lead, ranging from below the instrument's detection limit, up to and exceeding 5.00 mg/cm², the instrument's upper detection limit. The U.S. Housing and Urban Development (HUD) Lead-Based Paint Guidelines define lead at concentrations greater than 1.0 milligrams per square centimeter (mg/cm²) as "Lead-Based". For the Site buildings slated for demolition, the HUD standard is provided for comparison purposes only, and is not a regulatory consideration unless the buildings are to be re-inhabited.

Several interior and exterior surfaces at the 96 Federal Street Site building exhibited concentrations qualifying as LBP, including virtually all historic/original door and window sashes, mouldings, casings, jambs, etc. While HUD standards do not require remediation of LBP in intact condition, Ransom recommends abatement of lead paint in buildings that will continue to be residential in use, in order to mitigate the potential for future lead hazards to building occupants. The U.S. EPA issued rules in April 2010 regarding lead-containing paint that apply to pre-1978 housing and child-occupied facilities. Under the Renovation, Repair and Painting Rule (the RRP Rule), work done for compensation that disturbs more than six (6) square feet of lead-containing paint in a room in pre-1978 housing and child-occupied facilities must be done by certified renovators employed by certified contractors. Please note that no specific cost is carried in this report for the abatement of LBP at the 96 Federal Street building. If re-use plans include renovation of these units, Ransom recommends further delineation of the location and extent of LBP therein.

In the case of buildings to be demolished, it should be noted that OSHA has no minimum threshold for lead in paint; demolition activities that may disturb surfaces that contain any concentration of lead must be conducted in accordance with OSHA regulation 29 CFR 1926.62 "Lead Exposure in Construction: Interim Final Rule." This regulation requires that a site-specific health and safety plan be prepared before conducting activities such as cutting, grinding or sanding surfaces coated with lead-containing paint, that create airborne lead emissions that may exceed the action level of 30 micrograms per cubic centimeter of air. Such a plan should include the identification of lead components, an exposure assessment and, if applicable, the required work procedures and personal protective equipment (PPE) to be used.

OTHER POTENTIALLY HAZARDOUS MATERIALS AND COMPONENTS

Polychlorinated Biphenyls (PCBs)

PCB-containing oil is sometimes found in the dielectric fluid of older electrical transformers, including the capacitors associated with older fluorescent light fixture ballasts. Although electrical equipment which contains PCBs is currently required to be properly labeled indicating the presence of PCBs, this has not always been the case. Ransom observed a very limited number (fewer than 5) lighting fixtures inside the Site buildings which may have PCB-containing components.

Ransom recommends that if the Site buildings are to be demolished or renovated in the future, each fixture be removed and inspected for the "No PCBs" label, and if not present, the ballast should be disposed/recycled in accordance with U.S. EPA and State of Maine universal waste regulations. Since the cost of disposal (approximately \$20 each) is significantly less than the cost of testing (\$250), Ransom recommends that those ballasts that are not labeled be treated and disposed of as PCB-containing.

Mercury-Containing Components

Mercury-containing components such as fluorescent light tubes, cathode ray tubes (CRTs), mercury vapor lamps, and thermostat switches are classified as universal waste and are regulated by the U.S. EPA under 40 CFR Parts 260–273. Ransom observed a small number of fluorescent lamps (including compact fluorescents), as well as 6-8 thermostats that may contain mercury switches, during our inspection. Components known or assumed to contain mercury that would be impacted by any future renovation or demolition should be removed and recycled in accordance with universal waste regulations.

Ozone-Depleting Substances

Certain compounds used in air conditioning and refrigeration equipment have been identified by the U.S. EPA as ozone-depleting substances (ODS), for their potential to accelerate the breakdown of stratospheric ozone. Ransom identified a limited number of potential ODS-containing components during our inspection, including residential-sized refrigerator/freezers, and air conditioning units. ODS are also classified as universal wastes, and should be recycled in accordance with universal waste regulations.

Please note that due to the very limited number of the above-listed "universal" wastes encountered during our inspection, no specific cost is carried in this report for the disposal of these items. Ransom recommends that disposal of these components be included in the bid specification for hazardous building materials abatement or demolition contract.

FLOOR DRAIN INVESTIGATION

During our July 2012 Phase I ESA, Ransom identified petroleum staining around, and a slight sheen within, a drain in the poured concrete floor of the basement of the Site building at 42 Hampshire Street. The discharge location of this drain was not known, and Ransom recommended additional investigation to identify the discharge location of the drain pipe, in order to determine if environmental conditions at the Site may have been impacted.

As part of this investigation, Ransom conducted a dye tracer test of the floor drain. Ransom flushed approximately 10 gallons of dyed water into the floor drain opening, while monitoring two municipal sewer manholes in Hampshire Street, in presumed downstream locations. After less than 10 minutes, the dye was detected in a manhole located 100-150 feet southeast of the 24 Hampshire Street Site building. The dye tracer test confirmed that the floor drain pipe in question is indeed connected to the municipal sewer system. Based on these observations, petroleum product which may have been inadvertently discharged to the floor drain structure is not anticipated to have impacted subsurface conditions at the Site.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this HMI, Ransom makes the following conclusions and recommendations:

- J. Ransom identifies the following asbestos-containing building materials at the Site buildings:
 - Asphalt-based mastics associated with roof flashing (100 Federal Street, 42 Hampshire Street);
 - Pipe Insulation, associated fittings, and residue (96 Federal Street, 42 Hampshire Street, 160 Newbury Street);
 - Sheet flooring (96 Federal Street, 167 Newbury Street, 169 Newbury Street);
 - Window glaze and caulk (96 Federal Street, 42 Hampshire Street, 32 Hampshire Street); and
 - Asphalt-based siding (160 Newbury Street).

If these materials are to be removed or disturbed due to future building renovation or demolition, they will require proper removal by trained asbestos abatement professionals, and proper disposal in a facility permitted to accept asbestos waste.

Certain materials identified as ACM are exempt from MEDEP asbestos abatement requirements. Significant cost savings may be achieved by selecting the appropriate personnel and/or work practices, as discussed in the body of this report.

2. Surfaces tested for lead-based paint contained varying concentrations of lead, ranging from below the XRF instrument's detection limit, up to and exceeding 5.00 mg/cm², the instrument's upper detection limit. Ransom recommends abatement of lead paint in buildings that will continue to be residential in use, in order to mitigate the potential for future lead hazards to building occupants. Future renovation or demolition activities that disturb surfaces containing any concentration of lead must be conducted in accordance with OSHA regulation 29 CFR 1926.62 "Lead Exposure in Construction: Interim Final Rule."
3. Minor quantities of other potentially hazardous building components were identified during our survey, including potentially PCB-containing fluorescent light ballasts, presumed mercury-containing fluorescent light tubes (including compact fluorescents) and thermostat switches, and several residential-sized refrigerator/freezer and air conditioning units. Disposal of each of these items is also subject to hazardous and/or universal waste disposal requirements.
4. A floor drain located in the basement of the Site building at 24 Hampshire Street, which was identified as a Recognized Environmental Condition (REC) during Ransom's July 2012 Phase I Environmental Site Assessment (ESA) was determined to be connected to the municipal sanitary sewer lines. Therefore, it is not anticipated that potential discharges in connection with this structure have impacted subsurface environmental conditions at the Site.

COST ESTIMATES

Based on the conditions observed during our investigation and industry standards in recent years, Ransom estimates that the identified asbestos-containing materials have a removal and disposal cost of approximately **\$43,000**.

This cost estimate assumes that all identified ACM will be abated, regardless of whether they will be demolished or retained. For any buildings that are to remain, many or all of the ACM identified may be maintained in place, and **do not require removal**. In addition, certain materials identified as ACM may be exempt from MEDEP removal regulations, as noted herein.

Ransom has prepared these abatement cost estimates based upon industry standards observed over the past two years. Line-item cost estimates for asbestos abatement are provided in Table 4. Please note that the estimates provided do not include prices for the abatement of lead paint, nor the removal and disposal of so-called "universal" wastes.

The cost estimates presented are not intended to be quotes for these services, rather engineering cost estimates for project planning purposes. Ransom recommends that competitive contractor bids be solicited for proper abatement and/or disposal of the identified hazardous materials.

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LIMITATIONS

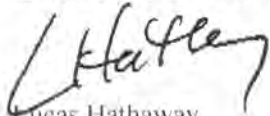
This survey is subject to certain limitations which must be considered in interpreting the results. No survey can identify all potentially hazardous materials throughout a facility. The conclusions presented in this report represent the professional judgment of Ransom, based on the data obtained from the work, the site conditions encountered at the time the work was performed, and our experience with similar types of buildings and hazardous building materials present. The surveys of occupied apartments were conducted utilizing non-destructive sampling techniques wherever requested by occupants. The conclusions presented herein do not cover concealed areas or items not inspected.

The information and conclusions presented in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices, current at the time the work was performed and general industry standard of care. Conclusions presented in this report should not be construed as legal advice. This survey was not a building code inspection or an assessment of proposed renovation or demolition activities. Code-related issues must be addressed prior to work in the buildings.

If you have any questions regarding the information in this report please do not hesitate to contact us.

Sincerely,

RANSOM CONSULTING, INC.



Lucas Hathaway
Project Scientist
Hazardous Materials Specialist



Stephen Dyer, P.E.
2012.08.22
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Stephen J. Dyer, P.E.
Senior Project Manager

LDH/SJD: jsh
Attachments

TABLE 1: SUMMARY OF ASBESTOS SAMPLING RESULTS

Hazardous Materials Inventory
 Hampshire Street Properties
 Portland, Maine

Sample Description	Sample Location	Sample Number	Asbestos Quantity and type	Estimated Quantity
Edge flashing	Roof	96R-02A through 96R-02C	NAD	--
42 Hampshire Street				
Plaster	Interior	42-01A through 42-01G	NAD	--
Drywall	Interior	42-02A through 42-02C	NAD	--
Joint compound	Interior	42-03A through 42-03C	NAD	--
1x2 ceiling tile	Interior	42-04A through 42-04C	NAD	--
Blown-in insulation	Interior	42-05A through 42-05C	NAD	--
Window glaze	Exterior – “old” windows (upper floors)	42-06A	1.6% Chrysotile	5 Each
		42-06B and 42-06C	NA/PS	
Siding paper	Exterior	42-07A through 42-07C	NAD	--
Window caulk	Exterior	42-08A through 42-08C	NAD	--
Corrugated pipe insulation	Basement - throughout	42-09A	70% Chrysotile	220 LF
		42-09B and 42-09C	NA/PS	
Residual fitting insulation		42-10A	40% Chrysotile	8 Each
		42-10B and 42-10C	NA/PS	
Field composite	Roof	42R-01A through 42R-01C	NAD	--
Projection flashing – asphalt mastic	Roof – Chimney/ vent penetrations	42R-02A	33.3% Chrysotile	40 SF
		42R-02B and 42R-02C	NA/PS	
32 Hampshire Street				

NOTES:

1. Samples were collected between July 27, and August 1, 2012, by Ransom Consulting, Inc., and were analyzed by Optimum Analytical and Consulting, LLC, of Salem, New Hampshire.
2. NAD = no asbestos detected. NA/PS = not analyzed/positive stop. Sample sets are analyzed until asbestos is identified in an amount greater than 1 percent. For example, since asbestos was identified in sample 100R-02A at 27.2 percent, samples -02B and -02C were not analyzed.
3. SF = square feet; LF = linear feet

TABLE 2: SUMMARY OF PRESUMED ACM (PACM)
Hazardous Materials Inventory
Hampshire Street Properties
Portland, Maine

Material	Location	Sample Number	Quantity
Abandoned Boilers	42 Hampshire Street – Basement	NS/PACM	2 Each

NOTES:

- I. NS/PACM: Not Sampled/Presumed ACM

TABLE 3: SUMMARY OF LEAD PAINT TESTING RESULTS

Hazardous Materials Inventory
 Hampshire Street Properties
 Portland, Maine

Reading Number	Color/Substrate/Component	Lead Concentration (milligrams per square centimeter [mg/cm ²])
42 Hampshire Street - Interior		
104	Green Plaster Wall	BDL
105	Brown Wood Stair Riser	>5.00
106	White Wood Door Casing	>5.00
107	White Plaster Wall	BDL
108	White Window Casing	0.62
42 Hampshire Street - Exterior		
109	Red Wood Door	3.38
110	Green Wood Door Jamb	4.19
111	Red Brick Foundation	0.16
112	Red Wood Basement Window Casing	>5.00
113	White Wood Overhang Supports	>5.00
160 Newbury Street - Interior		
114	Green Wood Window Casing	0.14
115	White Wood Window Sill	1.13
116	Green Wood Door Casing	BDL
117	Yellow Plaster Wall	0.07
118	Yellow Wood Window Sash	0.29
160 Newbury Street - Exterior		
119	White Wood Door	4.33
120	White Wood Overhang Support	>5.00
121	White Wood Window Apron	>5.00
122	Black Window Sash	0.14
123	Red Brick Foundation	2.16

NOTES:

1. Lead concentrations determined using an Innov-X Alpha Series X-Ray Fluorescence Analyzer.
2. BDL = Below instrument detection limit. Not detected above a concentration of 0.01 mg/cm².
3. Readings in boldface type above HUD guidelines for "lead-based paint".



OPTIMUM

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Project # 111,06156
Laboratory Batch # 1204166
Date Samples Received: 08/06/2012
Date Samples Analyzed: 08/06/2012
Date of Final Report: 08/08/2012

SAMPLE IDENTIFICATION:

Forty (40) Bulk samples from 42 Hampshire Street Portland, ME; submitted by Lucas Hathaway

These bulk samples were delivered to Optimum Analytical Consulting, LLC for asbestos content determination.

ANALYTICAL METHOD:

Analytical procedures were performed in accordance with the U.S. Environmental Protection Agency (EPA) Recommended Method for the Determination of Asbestos in Bulk Samples by Polarized Light Microscopy and Dispersion Staining (PLM/DS)(EPA-600/M4-82-020, EPA-600/ R-93-116) and the New York Department of Health Environmental Laboratory Approval Program (NYDOH-ELAP 198.1) with the exception of resinously bound materials (please refer to the comments at the end of this report). This report relates only to those samples actually analyzed, and may not be indicative of other similar appearing materials existing at this, or other sites.

Quantification of asbestos content was determined by Calibrated Visual Estimation.

The EPA requires that friable samples with analytical results of 10% or less asbestos, by visual estimation, be treated as asbestos-containing material unless these quantities are verified using the point counting method. The point counting method is a systematic technique for estimating concentration, also using PLM. The point counting method, however, does not increase the analyst's ability to detect fibers. If you would like any of your friable samples with an asbestos content of less than 10% to be point counted, please contact our office. Point counting is not required for those samples in which no asbestos is detected during analysis by PLM.

In any given material, fibers with a small diameter (<0.25mm) may not be detected by the PLM method. Floor tile and other resinously bound material may yield a false negative if the asbestos fibers are too small to be resolved using PLM. Additional analytical methods may be required. Optimum recommends using Transmission Electron Microscopy (TEM) for a more definitive analysis.

New York state regulations require that all friable samples in which asbestos is detected be point counted (using the NYDOH-ELAP stratified point counting method). New York state regulations also require TEM confirmation of NOB (Non Organically Bound) samples found to have No Asbestos Detected by PLM. These regulations apply only to samples taken within the State of New York.

Optimum Analytical and Consulting, LLC will retain all samples for a minimum of three months. Further analysis or return of samples must be requested within this three month period to guarantee their availability.

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Use of the NVLAP and AIHA Logo in no way constitutes or implies product certification, approval, or endorsement by the National Institute of Standards and Technology or the American Industrial Hygiene Association.

This report is considered preliminary until signed by the Laboratory Director and Supervisor.

If you have any questions regarding this report, please do not hesitate to contact us.

Jamie L. Noel
Laboratory Director

Kristina Scaviola
Laboratory Supervisor

NVLAP Lab ID#: 101433-0



OPTIMUM

Analytical and Consulting, LLC

85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

CLIENT: Ransom Environmental Consultants, Inc
ADDRESS: 400 Commercial St
CITY / STATE / ZIP: Portland ME 04101
CONTACT: Lucas Hathaway
DESCRIPTION: PLM Analysis
LOCATION: 42 Hampshire Street Portland, ME

BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-600/M4-82-020, EPA-600/ R-93-116) NVLAP Lab Code: 101433-0

ORDER #: 1204166
PROJECT #: 111.06156
DATE COLLECTED: 07/30/2012
COLLECTED BY: Lucas Hathaway
DATE RECEIVED: 08/06/2012
ANALYSIS DATE: 08/06/2012
REPORT DATE: 08/08/2012
ANALYST: Kristina Scaviola

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type (%)	Non-Asbestos Components (%)
1204166-001 42-01A	Interior Plaster, White Note: Sample Analyzed in Composite	LAYER 1 100%	None Detected	Cellulose Fiber 10% Hair 5% Non-Fibrous Material 85%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-002 42-01B	Interior Plaster, White Note: Sample Analyzed in Composite	LAYER 1 100%	None Detected	Cellulose Fiber 10% Hair 5% Non-Fibrous Material 85%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-003 42-01C	Interior Plaster, White Note: Sample Analyzed in Composite	LAYER 1 100%	None Detected	Cellulose Fiber 10% Hair 5% Non-Fibrous Material 85%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-004 42-01D	Interior Plaster, White Note: Sample Analyzed in Composite	LAYER 1 100%	None Detected	Cellulose Fiber 10% Hair 5% Non-Fibrous Material 85%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-005 42-01E	Interior Plaster, White Note: Sample Analyzed in Composite	LAYER 1 100%	None Detected	Cellulose Fiber 10% Hair 5% Non-Fibrous Material 85%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-006 42-01F	Interior Plaster, White Note: Sample Analyzed in Composite	LAYER 1 100%	None Detected	Cellulose Fiber 10% Hair 5% Non-Fibrous Material 85%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-007 42-01G	Interior Plaster, White Note: Sample Analyzed in Composite	LAYER 1 100%	None Detected	Cellulose Fiber 10% Hair 5% Non-Fibrous Material 85%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%



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BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-600/M4-82-020, EPA-600/ R-93-116) NVLAP Lab Code 101433-0

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REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type (%)	Non-Asbestos Components (%)
1204166-008 42-02A	Interior Drywall, Gray	LAYER 1 100%	None Detected	Cellulose Fiber 10% Fibrous Glass 1% Non-Fibrous Material 89%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-009 42-02B	Interior Drywall, Gray	LAYER 1 100%	None Detected	Cellulose Fiber 10% Fibrous Glass 1% Non-Fibrous Material 89%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-010 42-02C	Interior Drywall, Gray	LAYER 1 100%	None Detected	Cellulose Fiber 10% Fibrous Glass 1% Non-Fibrous Material 89%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-011 42-03A	Interior Joint Compound, White	LAYER 1 100%	None Detected	Cellulose Fiber 2% Non-Fibrous Material 98%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-012 42-03B	Interior Joint Compound, White	LAYER 1 100%	None Detected	Cellulose Fiber 2% Non-Fibrous Material 98%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-013 42-03C	Interior Joint Compound, White	LAYER 1 100%	None Detected	Cellulose Fiber 2% Non-Fibrous Material 98%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-014 42-04A	Interior 1x2 Ceiling Tile, Beige	LAYER 1 100%	None Detected	Cellulose Fiber 99% Non-Fibrous Material 1%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%



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Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type (%)	Non-Asbestos Components (%)
1204166-015 42-04B	Interior 1x2 Ceiling Tile, Beige	LAYER 1 100%	None Detected	Cellulose Fiber 99% Non-Fibrous Material 1%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-016 42-04C	Interior 1x2 Ceiling Tile, Beige	LAYER 1 100%	None Detected	Cellulose Fiber 99% Non-Fibrous Material 1%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-017 42-05A	Interior Blown-in Insulation, Multi-colored	LAYER 1 100%	None Detected	Cellulose Fiber 99% Non-Fibrous Material 1%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-018 42-05B	Interior Blown-in Insulation, Multi-colored	LAYER 1 100%	None Detected	Cellulose Fiber 99% Non-Fibrous Material 1%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-019 42-05C	Interior Blown-in Insulation, Multi-colored	LAYER 1 100%	None Detected	Cellulose Fiber 99% Non-Fibrous Material 1%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-020 42-06A	Exterior Window Glazing, White	LAYER 1 100%	Chrysotile 1.57%	Cellulose Fiber 2% Binder/Filler 96.43%
Total % Asbestos:			1.6%	Total % Non-Asbestos: 98.4%
1204166-021 42-06B	Exterior Window Glazing, White Note: Positive Stop	LAYER 1 100%		
1204166-022 42-06C	Exterior Window Glazing, White Note: Positive Stop	LAYER 1 100%		



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Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type (%)	Non-Asbestos Components (%)
1204166-023 42-07A	Exterior Siding Paper, Beige	LAYER 1 100%	None Detected	Cellulose Fiber 90% Non-Fibrous Material 10%
		Total % Asbestos:	No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-024 42-07B	Exterior Siding Paper, Beige	LAYER 1 100%	None Detected	Cellulose Fiber 90% Non-Fibrous Material 10%
		Total % Asbestos:	No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-025 42-07C	Exterior Siding Paper, Beige	LAYER 1 100%	None Detected	Cellulose Fiber 90% Non-Fibrous Material 10%
		Total % Asbestos:	No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-026 42-08A	Exterior Window Caulk, White	LAYER 1 100%	None Detected	Cellulose Fiber 1% Non-Fibrous Material 99%
		Total % Asbestos:	No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-027 42-08B	Exterior Window Caulk, White	LAYER 1 100%	None Detected	Cellulose Fiber 1% Non-Fibrous Material 99%
		Total % Asbestos:	No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-028 42-08C	Exterior Window Caulk, White	LAYER 1 100%	None Detected	Cellulose Fiber 1% Non-Fibrous Material 99%
		Total % Asbestos:	No Asbestos Detected	Total % Non-Asbestos: 100.0%
1204166-029 42-09A	Basement Corrugated Pipe Insulation, Gray	LAYER 1 100%	Chrysotile 70%	Cellulose Fiber 10% Non-Fibrous Material 20%
		Total % Asbestos:	70.0%	Total % Non-Asbestos: 30.0%
1204166-030 42-09B	Basement Corrugated Pipe Insulation, Gray Note: Positive Stop	LAYER 1 100%		



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BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-600/M4-82-020, EPA-600/ R-93-116) NVLAP Lab Code: 101433-0

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REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type	(%)	Non-Asbestos Components	(%)
1204166-031 42-09C	Basement Corrugated Pipe Insulation, Gray Note: Positive Stop	LAYER 1 100%				
1204166-032 42-10A	Basement Residual Fitting Insulation, Gray	LAYER 1 100%	Chrysotile	40%	Cellulose Fiber Non-Fibrous Material	10% 50%
Total % Asbestos:				40.0%	Total % Non-Asbestos: 60.0%	
1204166-033 42-10B	Basement Residual Fitting Insulation, Gray Note: Positive Stop	LAYER 1 100%				
1204166-034 42-10C	Basement Residual Fitting Insulation, Gray Note: Positive Stop	LAYER 1 100%				
1204166-035 42R-01A	Roof Field Composite, Black	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	20% 80%
Total % Asbestos:				No Asbestos Detected	Total % Non-Asbestos: 100.0%	
1204166-036 42R-01B	Roof Field Composite, Black	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	20% 80%
Total % Asbestos:				No Asbestos Detected	Total % Non-Asbestos: 100.0%	
1204166-037 42R-01C	Roof Field Composite, Black	LAYER 1 100%	None Detected		Cellulose Fiber Non-Fibrous Material	20% 80%
Total % Asbestos:				No Asbestos Detected	Total % Non-Asbestos: 100.0%	
1204166-038 42R-02A	Roof Projection Flashing, Black	LAYER 1 100%	Chrysotile	33.29%	Cellulose Fiber Binder/Filler	10% 56.71%
Total % Asbestos:				33.3%	Total % Non-Asbestos: 66.7%	
1204166-039 42R-02B	Roof Projection Flashing, Black Note: Positive Stop	LAYER 1 100%				



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CONTACT: Lucas Hathaway
DESCRIPTION: PLM Analysis
LOCATION: 42 Hampshire Street Portland, ME

BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-600/M4-82-020, EPA-600/ R-93-116) NVLAP Lab Code: 101433-0

ORDER #: 1204166
PROJECT #: 111.06156
DATE COLLECTED: 07/30/2012
COLLECTED BY: Lucas Hathaway
DATE RECEIVED: 08/06/2012
ANALYSIS DATE: 08/06/2012
REPORT DATE: 08/08/2012
ANALYST: Kristina Scaviola

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type (%)	Non-Asbestos Components (%)
1204166-040 42R-02C	Roof Projection Flashing, Black Note Positive Stop	LAYER 1 100%		

Approved Signatory:

Approved Signatory:





OPTIMUM

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CLIENT: Ransom Environmental Consultants, Inc
ADDRESS: 400 Commercial St
CITY / STATE / ZIP: Portland ME 04101
CONTACT: Lucas Hathaway
DESCRIPTION: PLM Analysis
LOCATION: 42 Hampshire Street Portland, ME

BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-600/M4-82-020, EPA-600/ R-93-116) NVLAP Lab Code: 101433-0

ORDER #: 1204166
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DATE COLLECTED: 07/30/2012
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ANALYSIS DATE: 08/06/2012
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ANALYST: Kristina Scaviola

Client: Ransom Consulting, Inc. 400 Commercial St Portland ME 04101
 Contact: Lucas Hathaway
 Phone: 207-772-2891
 Project: Hampshire/Federal/Newbury Street Properties
 Location: 42 Hampshire Street Portland Maine
 Ransom Client: MEDEP Brownfields
 Ransom Project #: 111.06156
 Sample Date: 7/30/2012
 Analysis: Bulk PLM/Gravimetric Reduction for asbestos
 TAT: Standard
 Report Results to: lucas.hathaway@ransomenv.com
 PO: 4412
 Notes/Requests: Please analyze NOB samples via Gravimetric Reduction, per MEDEP regulations.
 Stop analysis on positive detection for all
 Please analyze specified samples in composite; please do not analyze additional layers, except where specified.

41176

Sample ID	Location	Material
42-01A	Interior	Plaster
42-01B	Interior	Plaster
42-01C	Interior	Plaster
42-01D	Interior	Plaster
42-01E	Interior	Plaster
42-01F	Interior	Plaster
42-01G	Interior	Plaster
42-01H	Interior	Drywall
42-01I	Interior	Drywall
42-01J	Interior	Drywall
42-01K	Interior	Drywall
42-01L	Interior	Drywall
42-01M	Interior	Joint Compound
42-01N	Interior	Joint Compound
42-01O	Interior	Joint Compound
42-01P	Interior	1x2 Ceiling Tile
42-01Q	Interior	1x2 Ceiling Tile
42-01R	Interior	1x2 Ceiling Tile
42-01S	Interior	Blow-in Insulation
42-01T	Interior	Blow-in Insulation
42-01U	Exterior	Window Glass
42-01V	Exterior	Window Glass
42-01W	Exterior	Window Glass
42-01X	Exterior	Window Glass
42-01Y	Exterior	Window Glass
42-01Z	Exterior	Window Glass
42-02A	Exterior	Window Caulk
42-02B	Exterior	Window Caulk
42-02C	Exterior	Window Caulk
42-02D	Exterior	Window Caulk
42-02E	Exterior	Window Caulk
42-02F	Exterior	Window Caulk
42-02G	Exterior	Window Caulk
42-02H	Exterior	Window Caulk
42-02I	Exterior	Window Caulk
42-02J	Exterior	Window Caulk
42-02K	Exterior	Window Caulk
42-02L	Exterior	Window Caulk
42-02M	Exterior	Window Caulk
42-02N	Exterior	Window Caulk
42-02O	Exterior	Window Caulk
42-02P	Exterior	Window Caulk
42-02Q	Exterior	Window Caulk
42-02R	Exterior	Window Caulk
42-02S	Exterior	Window Caulk
42-02T	Exterior	Window Caulk
42-02U	Exterior	Window Caulk
42-02V	Exterior	Window Caulk
42-02W	Exterior	Window Caulk
42-02X	Exterior	Window Caulk
42-02Y	Exterior	Window Caulk
42-02Z	Exterior	Window Caulk
42-03A	Basement	Corrugated Pipe Insulation
42-03B	Basement	Corrugated Pipe Insulation
42-03C	Basement	Corrugated Pipe Insulation
42-03D	Basement	Residual Fitting Insulation
42-03E	Basement	Residual Fitting Insulation
42-03F	Basement	Residual Fitting Insulation
42-03G	Basement	Residual Fitting Insulation
42-03H	Basement	Residual Fitting Insulation
42-03I	Basement	Residual Fitting Insulation
42-03J	Basement	Residual Fitting Insulation
42-03K	Basement	Residual Fitting Insulation
42-03L	Basement	Residual Fitting Insulation
42-03M	Basement	Residual Fitting Insulation
42-03N	Basement	Residual Fitting Insulation
42-03O	Basement	Residual Fitting Insulation
42-03P	Basement	Residual Fitting Insulation
42-03Q	Basement	Residual Fitting Insulation
42-03R	Basement	Residual Fitting Insulation
42-03S	Basement	Residual Fitting Insulation
42-03T	Basement	Residual Fitting Insulation
42-03U	Basement	Residual Fitting Insulation
42-03V	Basement	Residual Fitting Insulation
42-03W	Basement	Residual Fitting Insulation
42-03X	Basement	Residual Fitting Insulation
42-03Y	Basement	Residual Fitting Insulation
42-03Z	Basement	Residual Fitting Insulation
42-04A	Roof	Field Composite
42-04B	Roof	Field Composite
42-04C	Roof	Field Composite
42-04D	Roof	Field Composite
42-04E	Roof	Field Composite
42-04F	Roof	Field Composite
42-04G	Roof	Field Composite
42-04H	Roof	Field Composite
42-04I	Roof	Field Composite
42-04J	Roof	Field Composite
42-04K	Roof	Field Composite
42-04L	Roof	Field Composite
42-04M	Roof	Field Composite
42-04N	Roof	Field Composite
42-04O	Roof	Field Composite
42-04P	Roof	Field Composite
42-04Q	Roof	Field Composite
42-04R	Roof	Field Composite
42-04S	Roof	Field Composite
42-04T	Roof	Field Composite
42-04U	Roof	Field Composite
42-04V	Roof	Field Composite
42-04W	Roof	Field Composite
42-04X	Roof	Field Composite
42-04Y	Roof	Field Composite
42-04Z	Roof	Field Composite
42-05A	Roof	Projection Flashing
42-05B	Roof	Projection Flashing
42-05C	Roof	Projection Flashing
42-05D	Roof	Projection Flashing
42-05E	Roof	Projection Flashing
42-05F	Roof	Projection Flashing
42-05G	Roof	Projection Flashing
42-05H	Roof	Projection Flashing
42-05I	Roof	Projection Flashing
42-05J	Roof	Projection Flashing
42-05K	Roof	Projection Flashing
42-05L	Roof	Projection Flashing
42-05M	Roof	Projection Flashing
42-05N	Roof	Projection Flashing
42-05O	Roof	Projection Flashing
42-05P	Roof	Projection Flashing
42-05Q	Roof	Projection Flashing
42-05R	Roof	Projection Flashing
42-05S	Roof	Projection Flashing
42-05T	Roof	Projection Flashing
42-05U	Roof	Projection Flashing
42-05V	Roof	Projection Flashing
42-05W	Roof	Projection Flashing
42-05X	Roof	Projection Flashing
42-05Y	Roof	Projection Flashing
42-05Z	Roof	Projection Flashing

[Handwritten signature] 8/6/12



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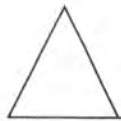
ORDER #: 1204166
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Sample ID	Crucible Weight	Sample Weight	Crucible Weight - Average	Actual Sample Weight	% Reduction	Residue Weight	Acid Insoluble Residue	% Reduction	Residue Weight	Acid Insoluble Residue	% Reduction	Residue Weight	Acid Insoluble Residue	% Reduction	Residue Weight	Acid Insoluble Residue	% Reduction	Residue Weight	Acid Insoluble Residue	% Reduction
42-08A	15.31397	0.232	31.815	0.153	91.95%	0.014	0.218	0.042	0.028	12.84%	12.84%	0.000	0.000	0.00%	1.57%	CHY	0	0	0	0
42-08B	22.25286	0.206	25.887	0.151	73.97%	0.012	0.151	0.036	0.024	18.89%	18.89%	0.000	0.000	0.00%	0.00%	NAD	0	0	0	0
42-08C	20.24172	0.269	24.202	0.052	19.55%	0.012	0.052	0.048	0.049	19.95%	19.95%	0.000	0.000	0.00%	0.00%	NAD	0	0	0	0
42R-01A	30.490	0.206	30.507	0.008	3.88%	0.012	0.008	0.061	0.011	94.23%	94.23%	0.000	0.000	0.00%	0.00%	NAD	0	0	0	0
42R-01C	30.24739	0.212	24.809	0.07	33.02%	0.013	0.07	0.062	0.046	70.00%	70.00%	0.000	0.000	0.00%	0.00%	NAD	0	0	0	0
42R-02A	14.31205	0.202	31.246	0.041	20.99%	0.012	0.041	0.054	0.042	102.44%	102.44%	0.000	0.000	0.00%	33.89%	CHY	26	0	0	0

ATTACHMENT D

Core Cut Report
prepared by Roof Management Consultants Inc.

Hazardous Building Materials Inventory and Floor Drain Investigation
"Hampshire Street Properties"
Portland, Maine



Roof Management Consultants, Inc.

DATE: 7-30-12

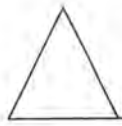
TO: Mr. Lucas Hathaway PROJECT: 160 Newbury St., 42
Hampshire St, 100
Federal St and 96
Federal St.
Portland, ME

ACCOUNT: Ransom Environmental Consultants, Inc.

FROM: John Donato – Senior Project Manager

Listed below is my description of the cores taken as directed at the above referenced project. Also, I have attached the roof drawings and photos as requested.

Core Cut #:	Building:	Description of Material
1	160 Newbury St, In-Field	Wood Deck, Two Built-Up Roof's, 2" Polyisocyanurate insulation, Adhered EPDM
2	160 Newbury St, In-Field	Same as Above
3	160 Newbury St, In-Projection Flashing, Chimney	Brick Substrate, Metal Pan, EPDM Flashing Material
4	160 Newbury St, In-Projection Flashing, Chimney	Same as Above
5	160 Newbury St, In-Projection Flashing, Roof Access Structure	Wood Sheathing, Metal Pan, EPDM Flashing Material
1	42 Hampshire St., In-Field	Wood Deck, Built-Up Roof, 1 1/2" Polyisocyanurate Insulation, Adhered EPDM
2	42 Hampshire St., In-Field	Same as Above
3	42 Hampshire St., In-Perimeter	Wood Blocking, Adhered EPDM



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Core Cut #:	Building:	Description of Material
4	42 Hampshire St., In-Projection Flashing, Chimney	Brick Substrate, Asphalt Mastic, EPDM Flashing
5	42 Hampshire St., In-Projection Flashing, Chimney	Same as Above
6	42 Hampshire St., In-Projection Flashing, Roof Hatch	Wood Substrate, Metal Pan, EPDM Flashing Material
1	100 Federal St. In-Field	Wood Deck, Built-Up Roof, 1/2" Wood Fiberboard, Adhered EPDM, 1/2" Wood Fiberboard, Adhered EPDM
2	100 Federal St. In-Field	Same as Above
3	100 Federal St. In-Perimeter	Wood Blocking, Adhered EPDM
4	100 Federal St. In-Projection Flashing, Vent Pipe	Corrugated Pipe, Asphalt Mastic, Pre-Fabricated EPDM Pipe Boot Flashing
5	100 Federal St. In-Projection Flashing, Chimney	Brick Substrate, Metal Pan, EPDM Flashing Material
6	100 Federal St. In-Projection Flashing, Vent Pipe	Corrugated Pipe, Asphalt Mastic, Pre-Fabricated EPDM Pipe Boot Flashing
1	96 Federal St. In-Field	Wood Deck, Craft paper, Built-Up Roof, 1/2" Wood Fiberboard, Adhered EPDM
2	96 Federal St. In-Field	Same as Above
3	96 Federal St. In-Perimeter	Wood Deck, Craft paper, Built-Up Roof, 1/2" Wood Fiberboard, Adhered EPDM Flashing Material
4	96 Federal St. In-Perimeter	Same as Above
5	96 Federal St. In-Perimeter	Same as Above
6	96 Federal St. In-Projection Flashing, Chimney	Brick Substrate, Metal Pan, EPDM Flashing Material