HAZARDOUS MATERIALS INVENTORY
FORMER UNITED STATES LIFE SAVING STATION
WOOD ISLAND; KITTERY, MAINE

Prepared for:

Southern Maine Regional Planning Commission (SMRPC)
21 Bradeen Street, Suite 304
Springvale, Maine 04083
(Using US EPA Brownfields Funding Under SMRPC's Assessment Grant No. BF97187801)

On Behalf of:

Town of Kittery
200 Rogers Road Ext.
Kittery, Maine

Prepared by:

Ransom Environmental Consultants, Inc.
400 Commercial Street, Suite 404
Portland, Maine 04101
207-772-2891

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1.0 SUMMARY

Ransom Environmental Consultants, Inc. (Ransom) is pleased to provide Southern Maine Regional Planning Commission (SMRPC) a Hazardous Materials Inventory (HMI) of the former United States Lifesaving Station (USLSS) (the Site) located on Wood Island, Kittery Maine. This HMI report was prepared using United States Environmental Protection Agency (US EPA) Brownfields funding under SMRPC's Assessment Grant No. BF97187801.

The Site is developed with two buildings, including the former United States Coast Guard Life Saving Station (USCG-LSS) building and a shed/tool house (the Site Buildings). The USCG-LSS building is a, three-story, wood-framed building, constructed on a concrete foundation, and encompassing an approximate footprint of 2,400 square feet. The tool house is a single-story, wood-framed building, constructed on concrete footings, and encompassing an approximate footprint of 300 square feet. Based on the available information, the Site Buildings were constructed in 1907, for use by the United States Lifesaving Service and Coast Guard as a lifesaving station, from 1907 through circa 1941. The U.S. Navy reportedly used the facility as an observation station during World War II from circa 1941 through 1945. The Site Buildings have been vacant and idle since that time, used for recreational purposes only.

The HMI included an asbestos survey and lead-based paint testing, as well as a visual inspection for other hazardous and potentially hazardous materials. This HMI was performed in July, 2010 by Ransom's State of Maine and U.S. Environmental Protection Agency (EPA)-certified asbestos inspector Mr. Todd Young, as part of SMRPC's Brownfields Assessment Program. An inspection photograph log and certifications of the asbestos inspector(s) are presented in Appendix A and B, respectively.

1.1 Asbestos-Containing Materials (ACM)

Suspect friable and non-friable asbestos-containing materials (ACM) were identified in the Site Building and were sampled by Ransom's certified asbestos inspector. Materials identified as ACM that could be impacted by renovation or demolition activities must be properly removed or abated prior to these activities by a licensed asbestos abatement contractor. This work must be conducted in accordance with a project design prepared by a U.S. Environmental Protection Agency (U.S. EPA) and State of Maine certified Asbestos Abatement Project Designer.

The following building materials present at the Site contain asbestos at concentrations greater than one percent:

1. Thermal System Insulation (TSI), and associated Fittings;
2. TSI debris (USLSS Boiler Room/Basement);
3. Boiler Insulation (USLSS Basement);
4. Tank Insulation (USLSS Basement);
5. Exterior Siding Paper (USLSS – Entire);
6. Siding Paper (Tool House – Entire); and
7. Flooring Paper (USLSS – Throughout).

Laboratory results are provided in Appendix C. Complete lists of materials testing positive and negative for asbestos are provided in Appendix D. Photographs of ACM are provided in Appendix A. Ransom has also prepared cost estimates for the removal or abatement of these materials, presented in Section 9.0 and Appendix F of this report.

1.2 Lead-Based Paint (LBP)

Ransom also conducted an inspection for the presence of lead-based paint (LBP) as part of this HMI. Ransom conducted a visual assessment of each painted surface in the Site Buildings, and collected paint chip samples for laboratory analysis as warranted. According to laboratory analysis, paints on surfaces at the Site contain varying levels of lead ranging from 0.65 percent lead by weight to 54 percent lead by weight. The U.S. Housing and Urban Development (HUD) Lead-Based Paint Guidelines state that levels of lead greater than 0.5 percent lead by weight are considered as "lead-based" (Section 1017 of the Residential Lead-Based Paint Hazard Reduction Act of 1992 [also referred to as Title X], provided for comparison purposes only). Paint chip sampling for lead results are provided in Appendix E.

The Occupational Safety and Health Administration (OSHA) has no threshold level of lead in paint. The OSHA Lead Standard for Construction (29 CFR 1926.62) is applicable where lead in paint has been identified at any concentration, and where there is potential for achieving an airborne exposure above OSHA's action level of 30 micrograms of airborne lead per cubic meter of air.

Under the existing conditions, facility maintenance staff or renovation/demolition contractors may perform renovation, demolition, abatement, stabilization, cleanup, and daily operations in buildings that have lead-based paint or lead-containing coatings, provided that regulatory requirements outlined in Section 5.2 "Regulatory Guidance" of this report are met. To minimize exposure to airborne dust or fumes and avoid the requirement to implement a lead exposure assessment, torch burning, cutting, grinding, or similar high-impact work on components coated by lead should be avoided.

Lead waste, including lead-based paint waste, with the exception of household waste, may be subject to the hazardous waste requirements of EPA's Resource Conservation and Recovery Act (RCRA). The generator of the waste (or the owner of the facility, for construction waste) is responsible for determining whether or not the solid waste is hazardous. For building materials from commercial building that are proposed to be landfilled, the Maine Department of Environmental Protection (MEDEP) regulations (Chapter 850 – Identification of Hazardous Wastes) requires that representative samples of building materials be collected for Toxicity Characteristic Leaching Procedure (TCLP) testing to determine if leachable lead concentrations are greater than five parts per million (ppm). If less than five ppm, materials may be disposed of as general construction debris; otherwise, the material would have to be transported to a hazardous waste disposal site.

1.3 Universal Wastes

Universal wastes such as electrical ballasts associated with fluorescent lighting fixtures, fluorescent light tubes and other mercury containing devices were not observed on site.

1.4 Other Potentially Hazardous Materials

Biological hazards in the form of bird droppings were observed throughout the building.

2.0 FACILITY DESCRIPTION

The Site is known as the Former United States Life Saving Station, located on Wood Island, Kittery Maine. The Site is improved with two structures, referred to herein as the former United States Coast Guard Life Saving Station (USCG-LSS), and the Tool House (the Site Buildings). The USCG-LSS is a three-story, wood-framed building, constructed on a concrete foundation, and encompassing an approximate footprint of 2,400 square feet. The tool house is a single-story, wood-framed building, constructed on concrete footings, and encompassing an approximate footprint of 300 square feet. Based on the available information, the Site Buildings were constructed in 1907, for use by the United States Lifesaving Service and Coast Guard as a lifesaving station, from 1907 through circa 1941. The U.S. Navy reportedly used the facility as an observation station during World War II from circa 1941 through 1945. The Site Buildings have been vacant and idle since that time, used for recreational purposes only.

4.0 ASBESTOS-CONTAINING BUILDING MATERIALS

4.1 Scope of Work

Ransom conducted an inspection of the Site Buildings for the presence of asbestos-containing materials (ACM). This HMI and sample analysis was conducted in July 2010 by Ransom's State of Maine and U.S. EPA-certified asbestos inspector, Mr. Todd Young. Copies of Mr. Young's most recent training certificate and State of Maine Asbestos Inspector Certification, and Ransom's Asbestos Consultant License are provided in Appendix B.

The scope of the ACM inspection included the identification and quantification of accessible suspect building materials on the building interior and exterior. The analytical method used for bulk sample determination of suspect ACM was polarized light microscopy (PLM) with dispersion staining. Samples were analyzed by Scientific Analytical Institute Inc. (SAI) located in Greensboro, North Carolina. SAI is a State of Maine-licensed asbestos analytical laboratory and is also certified to perform bulk sample analysis by the National Voluntary Laboratory Accreditation Program (NVLAP). SAI's certificates are provided in Appendix B. Copies of SAI's Bulk Asbestos Analysis reports are provided in Appendix C.

4.2 Regulatory Guidance

The EPA, Occupational Health & Safety Administration (OSHA), and the MEDEP are responsible for regulating the release of asbestos into the environment and protecting workers from exposure to airborne asbestos fibers. 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.

Both OSHA and MEDEP are responsible for the health and safety of workers who may be exposed to ACM in connection with their jobs including asbestos abatement. They both specify requirements for the work practices and engineering controls that must be utilized during asbestos abatement projects. They also require that ACM be repaired, removed, or otherwise appropriately abated before maintenance, renovation, or demolition work disturbs them. OSHA states that thermal system insulation, surfacing materials, and floor tile installed before 1981 must be presumed to be ACM unless appropriate inspection and sampling analysis proves otherwise.

The EPA and MEDEP regulate ACM associated with renovation, demolition, and asbestos abatement projects via the EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) regulation and MEDEP asbestos regulation (Chapter 425 "Asbestos Management Regulations"). These regulations require that buildings be inspected for ACM prior to renovation and/or demolition projects. It stipulates that all friable ACM as well as non-friable ACM that is in poor condition, or could become friable by renovation activity, be removed or otherwise appropriately abated before they are disturbed. A complete listing of asbestos-containing materials, including locations and quantities, is provided in Appendix D of this report.

Table 4-1 below presents applicable state and federal regulations pertaining to asbestos.

TABLE 4-1: REGULATIONS PERTAINING TO ASBESTOS

AGENCY	REGULATION
U.S. Environmental Protection Agency	Asbestos Hazard Emergency Response Act (AHERA) - 40 CFR 763
U.S. Environmental Protection Agency	National Emission Standard for Hazardous Air Pollutants (NESHAP) - 40 CFR 61
U.S. Occupational Safety and Health Administration	Asbestos Standard for General Industry - 29 CFR 1910.1001
U.S. Occupational Safety and Health Administration	Asbestos Standard for Construction Industry - 29 CFR 1926.1101
State of Maine	Statutory Sections - Title 38, Chapter 12-A: Asbestos §1271 - §1284
Maine Department of Environmental Protection	Chapter 425 - Asbestos Management Regulations, effective May 29, 2004

4.3 Observations and Findings

During the HMI, Ransom identified, sampled, and quantified suspect ACM in accessible building areas including maintenance and mechanical spaces. The inspection was conducted in accordance with current U.S. EPA and OSHA protocols. A total of 46 bulk samples were collected for asbestos testing from the building materials listed in Table 4-2.

TABLE 4-2: TABLE OF SAMPLED BUILDING MATERIALS

Thermal System Insulation (TSI) (Pipe insulation and associated fittings)	Electrical Wire Insulation (2 styles)	Siding Paper
Sheet Flooring	Plaster – Base Coat	Plaster – Skim Coat (2 styles)
Drywall	Boiler Insulation	Tank Insulation
Asphalt Shingles	Exterior Siding Paper (2 styles)	Flooring Paper

The State of Maine defines asbestos-containing material as "any material containing greater than or equal to one percent asbestos." Laboratory analysis by polarized light microscopy of bulk samples (see Appendix C) found that asbestos was present in amounts greater than one percent in the following materials:

1. Thermal System Insulation (TSI), and associated Fittings
2. TSI debris (USLSS Boiler Room/Basement);
3. Boiler Insulation (USLSS Basement);
4. Tank Insulation (USLSS Basement);
5. Exterior Siding Paper (USLSS – Entire);
6. Siding Paper (Tool House – Entire);and
7. Flooring Paper (USLSS – Throughout).

Table D-1 provides the location and an estimated quantity for each of the identified ACM. Photographs of asbestos-containing materials are provided in Appendix A. Materials testing negative for asbestos are also listed in Appendix D.

4.4 Conclusions and Recommendations

Asbestos fibers present potential health hazards when they become airborne. ACM may be managed in-place as long as it remains intact, undamaged, and in good condition. Current regulations require that asbestos-containing building materials be removed if they will be disturbed by renovation, demolition, or other building maintenance activities. ACM identified inside and outside the Site Building that will be impacted by the proposed renovation will require removal prior to the initiation of these activities.

ACM abatement should be performed using approved methods in accordance with applicable regulations established by the U.S EPA, OSHA, and the State of Maine. ACM must be removed by a licensed asbestos abatement contractor and in accordance with a project design prepared by a certified Abatement Project Designer.

5.0 LEAD-BASED PAINT

5.1 Scope of Work

An inspection for the presence of lead-based paint was conducted as part of this HMI. Ransom inspectors evaluated each painted surface on interior and exterior portions of the Site Buildings, and collected confirmatory paint chip samples for laboratory analysis, where applicable.

5.2 Regulatory Guidance

In areas where lead in paint is disturbed by demolition or renovation activities, and where components covered by lead-containing paint are scheduled for disposal, applicable OSHA and U.S. EPA regulations apply.

5.2.1 OSHA

Renovation or demolition activities that disturb surfaces that contain lead must be conducted in accordance with the 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 that create airborne lead emissions such as cutting, grinding, or sanding surfaces coated with lead-containing paint. Such a plan must include the identification of lead components, an exposure assessment, and, if applicable, the required work procedures and personal protective equipment (PPE) to be used.

5.2.2 U.S. EPA

The U.S. EPA and MEDEP regulate the disposal of potentially hazardous wastes. Such wastes include paint chips and residue generated during abatement or repainting work, or whole components, such as wood windows, doors, and trim coated with lead-containing paint and disposed of as a result of renovation or demolition work. Metal components are not regulated if they will be recycled and not disposed of in a landfill.

To determine the required method for the disposal of these permeable items coated with lead-containing paint, the U.S. EPA and the MEDEP (Chapter 850) require representative sampling of the debris to determine the quantity of lead that would be expected to leach into the environment if the debris were disposed of in a landfill. The representative sample(s) must be analyzed by TCLP. If the result of this procedure indicates that lead will leach at a concentration below 5 parts per million (ppm), the debris is not regulated and can be disposed of in accordance with MEDEP solid waste regulations (Chapter 850). However, the debris must be disposed of as hazardous waste if the TCLP result exceeds 5 ppm. To minimize the total volume of hazardous waste (if present), segregating hazardous from non-hazardous waste is advisable.

5.2.3 HUD

The U.S. Department of Housing and Urban Development (HUD) has established a standard for lead-based paint, as tested using an x-ray fluorescence analyzer (XRFA), of 1.0 milligram per square centimeter (mg/cm^2), or 0.5 percent lead by weight for paint chips. Although this standard only applies to housing funded by the federal government, it is a useful reference concentration for assessing hazards associated with lead in paint in other settings. Thus, when paint contains greater than 1.0 mg/cm^2 or 5 percent by weight, special care should be taken when conducting activities that impact these paints. However, when lead-painted surfaces are impacted by abrasive blasting, torch burning, or similar activities that generate significant dust or fumes, hazardous airborne concentrations can be generated even if the lead content is below the HUD standard.

5.3 Observations and Findings

Ransom collected five (5) paint chip samples for laboratory analysis for lead content from various building components and surfaces at the Site. Lead concentrations in samples submitted for analysis ranged from 0.65 percent lead by weight to 54 percent lead by weight. Paint chip analytical results are provided in Appendix E. Laboratory data sheets are provided in Appendix C.

5.4 Conclusions and Recommendations

Lead in paint was detected on each surface tested at the Site. Handling of components coated with lead-containing paint requires compliance with the OSHA lead standard ("Lead in Construction," 29 CFR 1926.62). Under the existing conditions, renovation/demolition contractors may perform demolition, renovation, abatement, stabilization, cleanup, and daily operations in buildings that have lead-based paint or lead-containing coatings, provided that regulatory requirements outlined in Section 5.2 are met.

To minimize exposure to airborne dust or fumes containing lead and avoid the requirement to implement a lead exposure assessment, torch burning, cutting, grinding, or similar high impact work on components covered by lead-containing paint should be avoided. Such work would need to be conducted by properly trained workers using appropriate worker protection and engineering controls. For work activities that may generate airborne lead, the employer should perform an initial exposure assessment (personal air monitoring) for each individual task (e.g. demolition, abrasive blasting, and painting) that has the potential for causing worker exposure to be at or above the OSHA Action Level (30 micrograms of lead per cubic meter of air). In lieu of monitoring, recent historical data from similar operations may be used to comply with OSHA requirements.

Lead waste, including lead based paint waste with the exception of household waste may be subject to the hazardous waste requirements of EPA's Resource Conservation and Recovery Act (RCRA). The generator of the waste (or the owner of the facility, for construction waste) is responsible for determining whether or not the solid waste is hazardous. For building materials from commercial building that are proposed to be landfilled, the MEDEP regulations (Chapter 850 – Identification of Hazardous Wastes) requires that representative samples of building materials be collected for TCLP testing to determine if leachable lead concentrations are greater than five ppm.

If less than five ppm, materials may be disposed of as general construction debris; otherwise, the material would have to be transported to a hazardous waste disposal site.

The cost for the removal of lead-based paint is dependent upon the end-use of the buildings. For instance the standards for lead paint are stricter when the end use is residential opposed to commercial or industrial. Lead-paint does not necessarily need to be abated if the building is to be demolished. The waste disposal would be dependent upon the TCLP test results. Management options for lead paint can range from enclosure and encapsulation, to surface stabilization and re-painting, to a complete de-leading of the facility. A preliminary cost estimated to maintain and/or conduct very limited abatement measures of lead-based paint is estimated at approximately $10,000. Ransom recommends re-evaluating lead paint abatement costs once a redevelopment plan has been finalized.

6.0 UNIVERSAL WASTES

Ransom conducted an inspection for universal wastes including fluorescent light fixtures with potential polychlorinated biphenyl (PCB)-laden ballasts, and mercury-containing bulbs, mercury containing thermostats, and batteries. Universal wastes were not observed on site by Ransom.

7.0 OTHER POTENTIALLY HAZARDOUS MATERIALS

Ransom observed bird droppings throughout the USCG LSS building. Accumulations of bird droppings create a nitrogen rich environment favorable to the growth of the fungus *H. capsulatum*. Spores from *H. capsulatum* can lead to histoplasmosis a respiratory disease. The National Institute for Occupational Safety and Health (NIOSH) recommends that individuals avoid creating dust in areas where there is accumulated bird droppings. Dust control practices include use of high efficiency particulate air (HEPA) filtered vacuums, misting material prior to shoveling, and avoid dry sweeping or use of compressed air. The NIOSH also recommends that at a minimum, workers wear respirators and protective clothing when removing material that may contain *H. capsulatum.* Workers should be informed of the potential of encountering bird droppings and to avoid creating dust. Bird droppings are not a regulated waste.

Ransom recommends that the bird droppings be removed in conjunction with the removal of asbestos-containing pipe insulation. Since the removal of ACM requires a regulated area and workers with respiratory protection. The cost for removal of the observed bird droppings can range from $5,000 to $7,500.

8.0 QUALITY ANALYSIS/QUALITY CONTROL

Bulk asbestos samples were analyzed by Scientific Analytical Institute (SAI) of Greensboro, North Carolina. SAI provided analysis and data according to standard operating protocols and laboratory data validation guidance included in Ransom's SSQAPP for the Central Hall site (RFA #08243, Addendum No. 8 to Ransom's Generic Quality Assurance Project Plan for Brownfield Sites in the State of Maine. SAI 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.

8.1 Precision

Precision measures the reproducibility of measurements. The precision measurement is established using the relative percent difference (RPD) between the duplicate sample results. Relative percent differences were calculated for bulk samples where both sample and duplicate values were greater than five times the Practical Quantitation Limit (PQL) of the analyte. According to SAI's report, the Minimum Detection Limit (MDL) for asbestos fiber in bulk samples analyzed via U.S. EPA Method 600 is 0.5%, which is considered the PQL in this instance. The RPD is calculated as follows:

$$RPD = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Mean of the Two Results}} \times 100$$

One or more duplicate bulk samples were collected for each suspect ACM submitted for laboratory analysis. Each duplicate sample was analyzed for asbestos fiber via U.S. EPA Method 600. At least one subsample of the following sample sets tested positive for asbestos at 5 times the PQL (i.e. at least 2.5% asbestos fiber):

- 01A through 01C;
- 04 and 04B;
- 11A through 11C;
- 12A through 12C;
- 14A and 14B;
- 15A and 15B;
- 16A and 16B; and
- 17A and 17B.

Ransom requested "positive stop" analysis on the bulk samples submitted to the laboratory from this project. (The laboratory stopped analysis of the subsamples of any given sample set when one subsample tested greater than 1 percent asbestos.) This approach is typically used for analytical cost savings, as well as a quality assurance measure in designing remediation. It is considered a conservative approach to identifying and abating ACM, as it lends presumptive certainty to an entire sample set based on a single positive detection.

Asbestos was detected at concentrations ranging from 30 percent to 45 percent in the bulk samples listed above. Duplicate samples were not analyzed due to positive stop methodology. Therefore RPDs are not calculated for any sample set.

8.2 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.

8.3 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.

8.4 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.

8.5 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.

8.6 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.

9.0 COST ESTIMATES

Ransom has prepared the following cost estimates based upon industry standards observed over the past two years. Ransom has provided cost estimate summaries for asbestos removal, as well as other hazardous building materials, presented in Table 9-1. Itemized cost estimate for the removal of asbestos-containing materials from the site is provided in Appendix F.

The cost estimates presented below are for informational purposes only and are not intended to be an estimate for these services. Ransom recommends that competitive contractor bids be solicited for proper abatement and/or disposal of the identified hazardous materials.

TABLE 9-1: HAZARDOUS BUILDING MATERIALS REMOVAL COST ESTIMATE SUMMARY

MATERIALS	ESTIMATED ABATEMENT/REMOVAL COSTS[1]
Confirmed Asbestos-Containing Materials (ACM) Abatement	$112,500
Maintenance (Only-Limited Abatement) of Lead-Based Paint Pending Final Reuse Plans	$10,000
Other Hazardous Materials Removal	$7,500
Engineering & Remediation Oversight[2]	$20,000
Subtotal:	**$150,000**
Contingency[3]:	**$37,500**
TOTAL:	**$187,500**

Notes:

a. Abatement costs cited above include disposal, as well as removal costs. Lead-based paint will likely include a combination of maintenance and very limited abatement and is dependent on final reuse/redevelopment plans.

b. Engineering and remediation fees include final engineering design plans and specifications and part-time asbestos abatement oversight, documentation, and monitoring by a 3rd party consultant and is estimated at approximately 15% of the abatement costs

c. A 25% contingency is added to cover additional unknown costs, market fluctuations, and logistical costs associated with working on a semi-remote island.

10.0 SIGNATURE(S)

Ransom has completed a Hazardous Materials Inventory (HMI) for the Former United States Life Saving Station, located on Wood Island, Kittery, Maine. The HMI was performed at the request of Southern Maine Regional Planning Commission (SMRPC) as part of their Brownfields Assessment Program and was conducted using methods and procedures consistent with good commercial and customary practice designed to conform to acceptable industry standards. The conclusions presented represent our professional judgment based on information and data available to us during the course of this project.

Todd Young
2010.09.08 12:42:23
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Todd C. Young
Project Manager/HMI Technical Specialist

Peter J. Sherr
2010.09.08 12:30:43 -04'00'

Peter J. Sherr, P.E.
Senior Project Manager/SMRPC Brownfields Program Manager

Stephen J. Dyer, P.E.
2010.09.08 12:01:27
-04'00'

Nicholas O. Sabatine, P.G.
Vice President/SMRPC Brownfields QA Officer