Addendum #1

This Addendum modifies, amends, and supplements designated parts of the Contract Documents, Specifications and Drawings for:

Norway Readiness Center Renovation Efficiency Maine HVAC - Project No:23SR21-400-D1, Bid Number #24-033

Directorate of Facilities Engineering

24 January 2024

It shall be the responsibility of the Contractor to notify all Subcontractors and Suppliers for various portions of the work of any changes or modifications contained in this Addendum.

Specification Items:

1. Specification Section 00 73 46, Wage Determination Schedule, <u>**Remove**</u> in entirety and <u>**Insert**</u> attached Specification Section 00 73 46, Wage Determination Schedule. Wage rates are now available.

2. Bid opening is moved to <u>8 February 2024</u>. Deadline for technical questions moved to 4 pm, <u>1 February</u> <u>2024</u>.

Attachments: 1.

- Specification Section 00 73 46, Wage Determination Schedule
 Pre-Bidding Conference Minutes
- 3 Points of Contact List
- 4. Pre-Bidding Conference Attendee List
- 5. RPF Report Armory
- 6. RPF Report Follow Up

00 73 46 Wage Determination Schedule

PART 1- GENERAL

1.1 Related Documents

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specifications Sections, apply to this Section.

1.2 Summary

A. This Section includes the wage determination requirements for Contractors as issued by the State of Maine Department of Labor Bureau of Labor Standards or the United States Department of Labor.

1.3 Requirements

A. Conform to the wage determination schedule for this project which is shown on the following page.

PART 2 - PRODUCTS (not used)

PART 3 - EXECUTION (not used)

THIS DOCUMENT MUST BE CLEARLY POSTED AT ALL CONSTRUCTION SITES FUNDED IN PART WITH STATE FUNDS

State of Maine Department of Labor - Bureau of Labor Standards Augusta, Maine 04333-0045 - Telephone (207) 623-7906

Wage Determination - In accordance with 26 MRS §1301 et. seq., this is a determination by the Bureau of Labor Standards, of the fair minimum wage rate to be paid to laborers and workers employed on the below titled project.

2024 Fair Minimum Wage Rates -- Building 2 Oxford County (other than 1 or 2 family homes)

Occupational Title	Minimum Wage	Minimum Benefit	Total
Brickmasons And Blockmasons	\$34.00	\$4.49	\$38.49
Bulldozer Operator	\$31.50	\$7.53	\$39.03
Carpenter	\$31.43	\$12.51	\$43.94
Cement Masons And Concrete Finisher	\$23.00	\$2.43	\$25.43
Commercial Divers	\$30.00	\$4.62	\$34.62
Construction And Maintenance Painters	\$31.11	\$4.74	\$35.85
Construction Laborer	\$24.33	\$2.66	\$26.99
Crane And Tower Operators	\$40.00	\$10.86	\$50.86
Crushing Grinding And Polishing Machine Operators	\$23.00	\$4.94	\$27.94
Drywall And Ceiling Tile Installers	\$26.20	\$10.62	\$36.82
Earth Drillers - Except Oil And Gas	\$22.31	\$6.19	\$28.50
Electrical Power - Line Installer And Repairers	\$38.93	\$8.91	\$47.84
Electricians	\$38.51	\$6.97	\$45.48
Elevator Installers And Repairers	\$68.38	\$45.29	\$113.67
Excavating And Loading Machine And Dragline Operators	\$26.00	\$7.18	\$33.18
Excavating And Loading Machine And Diagine Operators	\$30.00	\$2.65	\$32.65
Fence Erectors	\$26.75	\$4.05	\$30.80
Flaggers	\$20.00	\$0.38	\$20.38
Floor Layers - Except Carpet/Wood/Hard Tiles	\$27.25	\$6.59	\$33.84
Glaziers	\$33.78	\$16.35	\$50.13
Grader/Scraper Operator	\$23.00	\$1.99	\$24.99
Hazardous Materials Removal Workers	\$22.00	\$2.03	\$24.99
Heating And Air Conditioning And Refrigeration Mechanics And Installers	\$33.00	\$5.61	\$38.61
Heavy And Tractor - Trailer Truck Drivers Highway Maintenance Workers	\$23.50	\$3.00 \$0.00	\$26.50
	\$20.00		\$20.00 \$32.26
Industrial Machinery Mechanics	\$31.25 \$29.25	\$1.01	1
Industrial Truck And Tractor Operators		\$4.06	\$33.31
Insulation Worker - Mechanical	\$23.00	\$3.59	\$26.59
Ironworker - Ornamental	\$27.75	\$4.50	\$32.25
Light Truck Or Delivery Services Drivers	\$23.34	\$1.67	\$25.01
Millwrights	\$33.75	\$8.78	\$42.53
Mobile Heavy Equipment Mechanics - Except Engines	\$27.75	\$4.89	\$32.64
Operating Engineers And Other Equipment Operators	\$24.00	\$2.38	\$26.38
Paver Operator	\$27.03	\$6.49	\$33.52
Pile-Driver Operators	\$32.75	\$1.95	\$34.70
Pipelayers	\$28.50	\$4.89	\$33.39
Plumbers Pipe Fitters And Steamfitters	\$29.50	\$5.56	\$35.06
Pump Operators - Except Wellhead Pumpers	\$31.49	\$32.08	\$63.57
Radio Cellular And Tower Equipment Installers	\$26.00	\$3.77	\$29.77
Reclaimer Operator	\$27.03	\$7.68	\$34.71
Reinforcing Iron And Rebar Workers	\$21.43	\$6.49	\$27.92
Riggers	\$29.25	\$7.79	\$37.04
Roofers	\$24.00	\$2.74	\$26.74
Screed/Wheelman	\$29.25	\$4.94	\$34.19
Sheet Metal Workers	\$24.75	\$4.89	\$29.64
Structural Iron And Steel Workers	\$30.08	\$7.59	\$37.67
Tapers	\$32.63	\$0.00	\$32.63
Telecommunications Equipment Installers And Repairers - Except Line Installers	\$28.00	\$6.46	\$34.46
Telecommunications Line Installers And Repairers	\$36.29	\$21.31	\$57.60
Tile And Marble Setters	\$27.75	\$6.73	\$34.48

Welders are classified as the trade to which welding is incidental (e.g. welding structural steel is Structural Iron and Steel Worker)

Apprentices – The minimum wage rates for registered apprentices are the rates recognized in the sponsorship agreement for registered apprentices working in the pertinent classification.

For any other specific trade on this project not listed above, contact the Bureau of Labor Standards for further clarification.

Title 26 §1310 requires that a clearly legible statement of all fair minimum wage and benefits rates to be paid the several classes of laborers, workers and mechanics employed on the construction on the public work must be kept posted in a prominent and easily accessible place at the site by each contractor and subcontractor subject to sections 1304 to 1313.

Appeal – Any person affected by the determination of these rates may appeal to the Commissioner of Labor by filing a written notice with the Commissioner stating the specific grounds of the objection within ten (10) days from the filing of these rates.

A true copy

Scatt R. Cotneri Attest:

Scott R. Cotnoir Wage & Hour Director Bureau of Labor Standards

Expiration Date: 12-31-2024 Revision Date: 1-3-2024

NORWAY READINESS CENTER RENOVATION EFFICIENCY MAINE HVAC 18 JANUARY 2024 Norway Armory, 133 Elm Street, Norway, Maine

- A. Attendees
 - Record names of each individual and their entity
 - Owner (DVEM)
 - Paul R. Lapointe, PM
 - AJ Ballard, MEARNG Energy Manager CEM
 - Consultant (Harriman)
 - Rudy Caron, Architect, PM Not Present
 - Jeff LaPierre, ME
 - General Contractors (GC)
 - Subcontractors
 - \circ Commissioning agent N/A
 - o Bureau of General Services (BGS) Mr. Deane Rykerson, Architect, PM Not Present
 - Other State Agencies NA
 - Unit 1SG Randall Keene Maine Army National Guard Not Present
 - SSG Logan Hansen Maine Army National Guard
- B. General Information on the Bid Process
 - This pre bid conference is mandatory for general contractors. Please ensure you sign the attendance sheet.
 - Bids will be opened at 2:00 pm, 1 Feb 24 in Bldg. 7, Camp Keyes, Augusta, ME. 194 Winthrop Street, Augusta, Maine. Bids must be hand carried to this location. Changed to 2:00 pm 8 Feb 24 per this addendum.
 - All questions will be in writing and sent to the Harriman PM and Owner. <u>Deadline for</u> <u>technical questions is 4:00 pm, 25 Jan 24.</u> Any questions submitted after the deadline will not be addressed. <u>Changed to 4 pm 1 Feb 24 per this addendum.</u>
 - Bid security is required to be provided in your bidding packet. Payment and performance bonds are required for the contract.
 - Clarifications and addenda will be sent via email to the email address provided by the GCs on the pre bid attendance form. Note: State of Maine Wage Determination for this project is now available and will be issued in an addendum. They were not available when this project was put out for competitive bid. Included in Addendum #1
 - o Bidders are responsible to review all project requirements.
- C. Specific Information on the Project
 - Bidders to note all insurance requirements. Builder's risk is not required for this project.
 - o Scope of work: Installation of an exterior propane fueled Air Handling Unit (AHU) to

provide heating and cooling to the assembly hall at the Norway Armory. AHU to be mounted on a concrete pad with infrastructure to support a 1000-gallon propane tank (provided by Owner). Airflow serving the assembly wall will be via a fabric ductsox around the assembly hall perimeter. Alternate Bid Item (ABI) #1 is for the installation of destratification fans in the assembly hall. ABI's 2-5 are for demolition of existing HVAC systems.

- Note parking requirements. TBD at Pre- Construction meeting.
- Note lay-down areas, location for trailers. TBD at Pre-Construction meeting.
- o Address access to the facility, if needed. TBD at Pre-Construction Meeting
- Define work hour restrictions. M-F 7-4. Confirm with Unit. Compressed days? No work done on weekends or federal holidays. There is no compressed day for this unit.
- Note the project schedule. Project may start upon receipt of a fully executed construction contract. Substantial Completion is <u>15 July 2024</u>. Contract expiration date is <u>30 August 2024</u>.
- State the roles of each entity (not a complete list).
 - Owner: Responsible for all aspects of the project. Executes funding, payment requisitions and change orders. Serves as liaison between GC, unit and BGS. Issues any changes to the project plans and specifications as required and after consultation with the AE. The only entity that can legally authorize changes to project funding, schedule, and scope. Works in conjunction with AE for any changes in project scope.
 - AE: Ensures project is executed IAW contract plans and specifications. Reviews all change order proposals. Works in conjunction with Owner for any changes in project scope. Reviews all submittals, substitution requests and Request for Information (RFI). Issues ASI's as needed. The only entity that can make changes to project specification and drawings. Ensures all closeout requirements are met by the GC prior to the payment of the final requisitions and is responsible for the creation of project record drawings and any GIS data requirements.
 - Geneal Contractor: Responsible for the execution of the project. Develops
 project schedule IAW with the project documents. Responsible for notifying the
 owner and AE of any conflicts discovered between existing conditions and project
 requirements. Informs the Owner of any potential negative impacts to the project
 schedule. Responsible for the actions of all sub-contractors. Provide the Owner
 with personnel lists for background checks. Ensures project site is clean and
 serviceable at the end of each working day. Provides AE with closeout
 documents as required as well as any "red line" drawings.
 - Unit: Provides access to the facility as well as parking and laydown areas. Informs the Owner of any issues that may arise during the execution of the

project. Informs the owner of any mission related activities that may have an impact upon the project schedule.

- Bureau of General Services: Final approval authority on all contracts, change orders and payment requisitions. Provides guidance to the Owner.
- Tour the site and facility; note other pre-bid possibilities for access if any.
- Conclude the tour.
- Record questions and answers from this conference in the next Addendum

Items that came up to be addressed.

- 1. AE to determine required permits. (Next addendum)
- 2. AE to provide guidance on sprinklers and placement of DuctSox in relation to trusses in assembly hall. (Next Addendum)
- 3. The destratification fans are not the large ones but the smaller ones.
- 4. Roof curbs to remain as is.
- 5. Electrical Conduit to remain in place but wire pulled to the breaker.
- 6. **RPF** HazMat report supplied in this addendum. There are two of these. The overall one for the armory and the follow up which includes the assembly hall.
- 7. GC is responsible to carry the controls sub-contractor in their bid.
- 8. AE to determine if fire control panel is adequate for HVAC detectors. (Next Addendum.)
- 9. There may be a change in the metering requirements (Next Addendum)

POINTS OF CONTACT: NORWAY READINESS CENTER RENOVATION EFFICIENCY MAINE HVAC

PROJECT NUMBER: 23SR21-400-D1

- 1. All technical questions to be directed to the AE.
- 2. All bidding questions to be directed to the contract Grant Specialist
- 3. All other questions to be directed to the DFE Project Manager.
- 4. DFE PROJECT MANAGER IS TO BE COPIED ON ALL CORRESPONDENCE.

DFE PROJECT MANAGER

PAUL R. LAPOINTE, FACILITIES PROJECT MANAGER PHONE (207) 430-6329 EMAIL: <u>PAUL.R.LAPOINTE.NFG@ARMY.MIL</u>

HARRIMAN PROJECT MANAGER

RUDY CARON: PROJECT MANAGER PHONE: 207-775-0053 EMAIL: RCARON@HARRIMAN.COM

DFE CONTRACT GRANT SPECIALIST

SARA THOMPSON PHONE: (207) 430-5223 EMAIL: SARA.THOMPSON@MAINE.GOV

Pre Bid Attendance sheet
NORWAY READINESS CENTER RENOVATION EFFICIENCY MAINE HVAC
Fill out Completely and Please Print Clearly

Project Number 23SR21-400-D1					
Incomplete or illegible information may exclude you from bidding					
Company name Mailing address	Attendee Name	Phone #	e-mail		
Phelan Construction N. Andover, Mt 01845	Brett Phelan	617-999- 4005	bphelanephelanconstruction com		
DAMON MECHANICACSEEN P.O. BOX104 AUBURN, ME 04210	MIKE BEOCHU	207-784 - 7461	MBROCHU@DAMONMECHANICAL, COM		
Granite Corp P.D. Box 370 Oakland, ME 04963	John Gromek	207-680- 8004	John@Granite-Corp. Com		
HARCSMAN Drive 40 HUNSIMM Drive 40 AUBUIN, ME 04210	Jeff Lalitik	784-5100	; I APPRESA @ MARCHMAN. COM		
AJBAILLED	AJBALLAD				
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Hazardous Materials Inspection & Assessment Asbestos, Mold, Lead Paint, Radon, PCBs Air Quality Testing and Investigations Industrial Hygiene, Safety & Training

April 4, 2022

Rudy Caron Harriman 80 Exchange Street, 3rd Floor Portland, ME 04101

Re: Norway Armory Building Survey Findings RPF File No. 22.0958

Dear Mr. Caron,

On February 17, 2022, and March 24, 2022, RPF Environmental, Inc. (RPF) conducted a survey at the Norway Armory located at 19 Elm Street in Norway, ME. The survey was performed in the building, as designated by you or your site representative, for accessible hazardous building material as indicated herein. Below is a summary of findings, discussion of the results and preliminary recommendations for proper management of the identified hazardous building material. Attached to this report are the survey data tables, laboratory results, survey methodologies and limitations.

Summary of Findings

The Norway Armory consists of a 2-story masonry structure with a basement attached to a tall, one-story masonry structure. The front 2-story portion of the building consists of various offices, communal areas, and mechanical rooms. The tall, one-story portion consists of the locker rooms, assembly hall, kitchen area, and garage. The scope of the survey included accessible asbestos-containing building material in accordance with the initial asbestos inspection requirements prior to renovation or demolition work as stated in the State regulations and applicable federal regulations. In addition, the survey included screening for lead paint (LP), collection of lead wipe samples, sampling for polychlorinated biphenyls (PCB) caulk, and inventories of other universal wastes.

Asbestos

Several types of suspect asbestos-containing building material (ACBM) were observed by RPF, including friable and nonfriable suspect material. Based on the testing performed by RPF asbestos was detected in the following materials:

- Black Old Roof Debris
- White Pipe Insulation
- White Pipe Fitting Insulation
- Hard Tan Window Caulk

This report is not intended to be used as an abatement specification or work plan. To proceed with abatement work, a work plan or project design documents must be prepared prior to abatement by a certified abatement project designer.

Lead Paint

Based on the year of construction and extent of renovation conducted over the years, it is reasonable to assume that some lead paint (LP) is present. RPF conducted limited spot testing of paint and LP was confirmed to be present on various interior and exterior building components. The intent of the lead testing was for potential lead hazardous waste disposal screening purposes only.

Lead Wipes

RPF conducted wipe sampling of the firing range floor in basement room 005 for the presence of lead dust. Lead dust was present on the floor of the firing range, but the levels were below the standard.

PCB Caulk

RPF collected five (5) samples of representative types of suspect exterior caulk. Four of the five samples had no PCBs detected and the last sample had a concentration of PCBs well below the standard.

Other Universal Wastes

Based on the RPF visual observations, potentially polychlorinated biphenyl (PCB) containing light ballasts, mercury containing switches, refrigerants, batteries, building system hydraulics, oil tanks, stored chemicals, and fluorescent light bulbs are present in the building.

Depending on the extent of renovation and final construction plans, proper abatement and/or management of the materials will be required in accordance with applicable State and federal regulations. Renovation and demolition plans should be reviewed by a certified industrial hygienist and a licensed project designer for possible asbestos impact issues. Based on the impact assessment and planned usage, technical specifications should be prepared for abatement, as applicable. A management plan should also be prepared to address any asbestos or other hazardous material scheduled to remain after construction.

Discussion of Findings

Asbestos-Containing Building Material

Asbestos is the name for a group of naturally occurring minerals that separate into strong, fine fibers. The adverse health effects associated with asbestos exposure have been extensively studied for many years. Results of these studies and epidemiological investigations have demonstrated that inhalation of asbestos fibers may lead to increased risk of developing one or more diseases. In all cases, extreme care must be used not to disturb asbestos-containing materials or to create fiber release episodes.

In the accessible locations surveyed, RPF identified fifty-five (55) homogeneous groups of accessible suspect asbestos-containing building material. Suspect materials were identified based on current industry standards, EPA, and other guideline listings of potential suspect ACBM.

The following is a summary list of the suspect ACBM identified and sampled during this survey:

- White Plaster Finish
- Gray Plaster Base
- Gray/White Squiggle Pattern Suspended Ceiling Tile
- Red Firestop Caulk
- Red Door Caulk
- Gray Door Caulk
- Green Cove Base with Tan Adhesive
- White Floor Tile with Yellow Mastic
- Cream Building Seam Caulk
- Green Cove Base with Tan Adhesive
- White Gypsum Board and Joint Compound
- Black Old Roof Debris

- White Ceramic Wall Tile Grout
- Yellow Ceramic Wall Tile Adhesive
- White Door Caulk
- Grey Ceramic Floor Tile Grout
- Yellow Carpet Adhesive
- Grey Duct Caulk
- Grey Cementitious Patch
- White Wall Panel Adhesive
- Yellow Laminate Countertop Adhesive
- Black Flooring Paper
- 12" Pale Pink and White Floor Tile with Yellow Mastic
- White Pipe Insulation

- Pink 12" Floor Tile with Yellow Adhesive and Gray Leveler
- White Caulk
- 12" Tan-Streaked Floor Tile and Yellow Mastic
- 12" Gray Streaked Floor Tile and Yellow Mastic
- Tan Cove Base Adhesive
- Gray Cementitious Ceiling with Black Paper
- 12" Beige Floor Tile with Yellow Mastic
- Gray Floor Tread with Yellow Adhesive

- 12" light Grey-Streaked Floor Tile with Yellow Mastic
- 12" Black Floor Tile with Yellow Mastic
- White Fitting Insulation
- Yellow Caulk
- Brown Window Caulk
- Light Grey Building Seam Caulk
- Light Grey Door Caulk
- Hard Grey Caulk
- White Door Caulk
- Hard Tan Window Caulk
- Black Vapor Barrier

A total of one hundred and seventy-eight (178) samples were extracted from the different groups of suspect material in accordance with EPA sampling protocols. Of the samples collected by RPF, asbestos was detected in four (4) groups of suspect ACBM. Table of Appendix A includes a list of ACBM identified in the building, EPA category listings, and asbestos content. A listing of the different homogenous groups of suspect material identified, samples collected, and analytical results is included as Table 2 in Appendix A with actual laboratory results included in Appendix B.

The ACBM identified during this survey consists of friable and nonfriable material. The ACBM was generally observed to be in good to fair condition and, left undisturbed and properly managed, is unlikely to cause any major fiber release episodes.

At the time of the survey, RPF was unable to access the ceiling panels in the Assembly Hall and the roofing materials. The roof is currently covered by a metal roof system, however during the inspection of the interior of the building roofing debris was observed in the plenum above the suspended ceiling tiles along with remnants of roofing observed in the tank room 004. This material was sampled and found to contain greater than 1% asbestos. RPF recommends that further investigation be conducted to attempt to determine the presence of any additional roofing materials and debris.

Suspect materials encountered at the site subsequent to this survey, which are not included on the enclosed listings of suspect material sampled, should be assumed to be ACBM until proper testing proves otherwise (for example prior to any disturbance due to maintenance, renovation, or demolition activity). Please notify RPF in this event to arrange for proper testing and assessments. Please reference the attached methodology and limitations.

Lead Paint Screening

For the purposes of this survey, RPF extracted nine (9) representative suspect paints samples from building components in the building. These samples were submitted for analysis by flame atomic absorption (Flame AA) for lead content. The results for the paint chip testing completed during this survey are summarized in the table below with actual laboratory results included in Appendix B.

Summary of Lead Paint Results				
Sample ID Location/Description		Lead Result* (%/wt.)		
021722-PC101	Cream color paint, Room 208, <0.0072			
021722-PC102	White paint, Room 207, north wall	<0.0065		
021722-PC103	Seafoam Green Paint, Room 201, west wall	0.0057		
021722-PC104	Dark Green Paint, Boiler Room, South Wall	0.088		
021722-PC105	Gray Paint, Boiler Room, East Wall 0.071			
021722-PC106	Yellow/Cream Color Paint, Room 006 Hall, South Wall	<0.0053		
021722-PC107	Purple/Gray Paint, Room 006 Hall, south wall	0.018		
021722-PC108	Gray Paint, Boiler Room	<0.0069		
021722-PC109	White Paint, Room 102, Above suspended ceiling tiles	0.10		

*Results expressed in percent by weight (%/wt.)

As you can see, lead was detected in five (5) of the samples collected including Room 201 west wall (seafoam green), Boiler Room south wall (dark green), Hallway 006 south wall (purple/gray), Boiler Room east wall (gray), and Room 102 above the suspended ceiling tiles (white). Lead was not detected in the remaining 4 samples: Boiler Room (gray), Hallway 006 south wall (yellow/cream), Room 207 north wall (white), and Room 208 north wall (cream). Based on this limited testing, it should be assumed that other painted surfaces at the site may also contain lead.

In addition, based on the type and age of building construction, it is reasonable to assume that various painted surfaces contain some lead. It is not uncommon in buildings such as this and that have had various renovation and upgrades to have both lead containing paint and non-lead containing paint. Lead is a toxic metal that was used for many years in paint and other products found in and around buildings and homes. Exposure to lead may cause a range of health effects, from behavioral problems and learning disabilities, to seizures and death. Children six years old and under are most at risk; however, adults are also susceptible to the effects of lead <u>over</u> exposure

Current State of Maine Lead Poisoning regulations consider any paint that contains greater than 1.0 mg/cm² to be lead-based paint. However, the intent of this survey was for construction purposes only and preliminary demolition waste stream implications, not for compliance with State, HUD, or any regulatory abatement order.

Any surfaces with lead present should be managed in accordance with current rules and guidelines, including but not limited to OSHA worker safety rules and State and EPA waste handling and disposal regulations. U.S. Occupational Safety and Health Administration (OSHA) construction rules do not specify any "safe" or acceptable levels of lead within paint for the purposes of occupational exposures. Therefore, construction work involving paint found to contain lead must be completed in accordance with OSHA regulations, not limited to the lead standard, 29 CFR 1926.62. Contractors completing work in areas found to contain lead, or where it is reasonable to assume lead may be present, should be notified of the presence (and potential presence) of lead and proper work protocols should be used.

As lead was found to be present in the screening, proper waste testing with TCLP extraction for lead and potentially other toxic materials should also be completed prior to disposal of any waste generated in accordance with current EPA requirements. Often times it is recommended that pre-demolition TCLP testing be completed such that waste can be segregated as required during demolition activity. Construction/demolition waste that is found to contain lead greater or equal to 5.0 milligrams per liter (mg/L) by TCLP analysis must be handled and treated as hazardous waste.

Please also note that construction and renovation work involving lead paint in housing and child-occupied facilities built before 1978 is also regulated under the EPA Renovation, Repair, and Painting (RRP) rule. Any contractors conducting such work must be properly certified and must use lead safe work methods pursuant to the EPA RRP rule. In addition, pursuant to Title X requirements landlords and sellers are required to disclose the results of lead inspections to tenants and purchasers, and to provide the warning notice and pamphlets in accordance with Title X and State requirements.

Lead Wipes

For the purposes of this survey, RPF collected three (3) wipe samples from the floor of the firing range, basement room 005. The results for the lead wipe samples completed during this survey are summarized in the table below with actual laboratory results included in Appendix B. As you can see, lead was detected in all three (3) wipe samples collected and ranged from 11 to 21 ug/ft^2 .

Summary of Lead Wipe Results			
Sample ID	Location/Description	Lead Result* (ug/ft ²)	
021722-W1	Shooting Range Floor, East	11	
021722-W2	Shooting Range Floor, Center	19	
021722-W3	Shooting Range Floor, West	21	

**Results expressed in micrograms per square foot (ug/ft^2)*

Fluorescent Lamps, PCB Light Ballasts, Batteries, Refrigerants, Building System Hydraulics, Stored Chemicals, Oil Tanks, and Mercury Switches

PCB or assumed PCB ballasts were observed by RPF throughout both of the buildings. For this survey, RPF inventoried representative fluorescent lamps throughout each building. The following table shows the inventory of fluorescent light bulbs, light fixture ballasts, batteries, refrigerants, building system hydraulics, stored chemicals, oil tanks, and mercury switches throughout each building:

Summary of Visual Observations			
Universal Waste Quantities			
Fluorescent Bulbs	701		
Light Ballasts	327		
Batteries	79		
Refrigerants	4		

Summary of Visual Observations			
Universal Waste	Quantities		
Building System Hydraulics	1		
Oil Tanks	1		
Mercury Switches	0		
Smoke Detectors	24		
Stored Chemicals	443		
Fire Extinguishers	20		
Floor Drains	4 (3 in kitchen rooms, 1 in garage area)		
Tanks	2 Acetylene 2 Oxygen 1 Nitrogen 1 Argon 1 propane		
Car Batteries	2		

Fluorescent lamps contain a small quantity of mercury that may pose a hazard to human health or the environment if the materials are not managed properly. These bulbs, along with mercury switches (thermostats) should be segregated and properly disposed of during demolition.

In addition, during demolition, additional inspections should be made to identify PCB versus non-PCB containing ballasts. Ballasts should be checked for a "PCB-Free" or "No PCBs" label prior to disposal. PCB and non-PCB ballasts should be segregated and packaged for waste disposal in accordance with State and federal requirements. There is a substantial cost difference for disposal of PCB ballasts versus non-PCB ballasts.

PCBs have been shown to cause chronic toxic effects and are a human carcinogen. PCBs are toxic according to the U.S. EPA and are a regulated material. The two primary federal laws that affect the handling of PCBs are the Toxic Substance Control Act and the Superfund Law (CERCLA). Other regulations include various State requirements, Department of Transportation, U.S. OSHA, and the Resource Conservation and Recovery Act. The regulations establish various requirements for the removal, handling, storage, and disposal of PCBs.

With regard to light ballasts, approximately half were manufactured prior to 1979 and nearly all pre-1979 ballasts contain PCBs. Ballasts manufactured after July 1, 1978, and that do not contain PCBs are required to be clearly marked "No PCBs". Please note that it is possible that post 1979 ballasts may contain some PCBs in the capacitor oils and more information should be requested if needed for applicable State and federal agencies. PCBs may also be present in common household appliances with small capacitors and as dielectric fluids; other electric equipment such as transformers, switches, and voltage regulators; and recent studies have shown PCB content in caulk and some paints. Documentation of current conditions and in-depth hazard assessments, and laboratory testing for these other PCB usages, is beyond the scope-of-work for this initial survey.

PCB in Caulking

RPF collected five (5) samples of representative suspect PCB caulk from the building. These samples were submitted for analysis for PCB content at Eastern Analytical Laboratory in Concord, NH by EPA Method 8082A

with Soxhlet Extraction. The results for the PCB samples completed during this survey are summarized below with actual analytical results included in Appendix B.

Summary of Total PCB Results				
Sample ID Location/Description Total PCB Result* (mg/kg)				
032422-PCB1	Light Gray Caulk at Building Seams	BDL**		
032422-PCB2	Light Gray Caulk at Doors	BDL		
032422-PCB3	Brown Caulk at Windows	BDL		
032422-PCB4	Yellow Caulk at Exterior	BDL		
032422-PCB5	Tan Caulk at Exterior	1.4		

*Results expressed in milligrams per kilograms (mg/kg) which is equivalent to parts per million (ppm) **BDL means below detection limit.

Four of the samples had no PCBs detected and the fifth sample had trace PCBs present, which were well below the concentration of 50ppm. PCB oils were added to building products prior to the material being banned in 1978. PCBs in building materials greater than or equal to 50 parts per million is a non-authorized usage and would need to be remediated.

Conclusions

Based on the survey findings, the building was found to contain ACBM, LP and other universal waste materials.

In accordance with current regulatory requirements, ACBM that may be impacted or disturbed (such that asbestos fiber release occurs) by renovation, demolition or other such activity must be removed by qualified, licensed firms. Although regulations for removal of nonfriable ACBM are somewhat less stringent than the requirements for friable ACBM, it should be noted that nonfriable ACBM that is subjected to grinding, abrasion, and other forces, could be rendered friable. In this event, the nonfriable ACBM would be re-categorized friable ACBM.

ACBM that will not be impacted by renovation or demolition activity may be left in place if managed properly and if the materials are maintained in good condition. ACBM to remain in the building should be included in an asbestos management plan and operations and maintenance (O&M) program detailing the measures to be used to safely occupy the building until the ACBM is fully removed. An accredited Management Planner should prepare the O&M Program in accordance with the guidelines set forth in 40 CFR Part 763 (AHERA).

Work impacting LP, fluorescent light bulbs, mercury (and potential PCB ballasts) must be performed in accordance with current State and federal standards, including but not limited safe work practices, engineering controls, proper waste packaging, and proper disposal. Work involving LP may require notification of tenants, if rented or leased space, prior to start of work.

Sufficiently in advance of the start of renovation and/or remediation work, abatement project design should be completed. As part the initial design steps any planned renovation and demolition activity should be reviewed for potential impact on ACBM. Asbestos removal is highly regulated at the State and federal level, and in some cases, at the local level also. Notification to Maine Department of Environmental Protection is required 10-days prior to the start of abatement work and demolition. Only qualified, trained, and licensed firms, as applicable,

should be engaged to complete asbestos removal or other abatement activity. Asbestos abatement work must be designed (abatement specifications or work plan prepared) by licensed personnel.

All employees and contractors that may access or otherwise disturb areas with suspect ACBM present should be notified of the presence of ACBM and possible hidden ACBM, and the need to use caution when proceeding with work. Appropriate notifications, labeling and other hazard communications should be completed to all employees, contractors, and others in accordance with US OSHA regulations and other applicable requirements (including asbestos labeling in accordance with 29 CFR Part 1926). The scope of RPF services for this survey did not include labeling of ACBM or hazard communications to other employees, building occupants, contractors, or subcontractors.

Documentation of current ACBM conditions and in-depth hazard assessment is beyond the scope-of-work for this initial survey. With the exception of the specific testing and analysis detailed herein, no other samples of materials, oil, water, ground water, air, or other suspect hazardous materials were collected in the course of this inspection that supports or denies these conclusions. No additional services beyond those explicitly stated herein were performed and none should be inferred or implied. The summary and conclusions are based on reasonably ascertainable information as described in this report. RPF Environmental, Inc. makes no guarantees, warranties, or references regarding this property or the condition of the property after the period of this report.

If you have any questions at this time, or if you would like to discuss the remediation process, please call our office.

Sincerely, RPF ENVIRONMENTAL, INC.

Brianna Ham, CMI EH&S Consultant ME Licensed Inspector

Enclosures:

- Appendix A: Data and Analytical Tables
- Appendix B: Laboratory Results
- Appendix C: Floor Plan of Sample Locations
- Appendix D: Floor Plan of ACBM
- Appendix E: Picture Form
- Appendix F: Summary of Methodology and Limitations

22.0958 Norway Armory 021722 Survey Report



January 16, 2023

Hazardous Materials Inspection & Assessment Asbestos, Mold, Lead Paint, Radon, PCBs Air Quality Testing and Investigations Industrial Hygiene, Safety & Training

Rudy Caron, Senior Architect Harriman Architects 80 Exchange Street, 3rd Floor Portland, ME 04101

Re: Norway Armory Follow-Up Building Survey RPF File No. 22.1411

Dear Mr. Caron,

On November 28, 2022, RPF Environmental, Inc. (RPF) conducted a follow-up survey at the Norway Armory located at 19 Elm Street in Norway, Maine. The intent of this survey was to attempt to delineate areas of ACBM roofing materials and debris in the armory and to conduct sampling of previously inaccessible ceiling panels in the drill hall of the Armory for asbestos content. Below is a summary of findings, discussion of the results and preliminary recommendations for proper management of the identified asbestos containing building material. Attached to this report are the survey data tables, laboratory results, survey methodologies and limitations.

This report is not intended to be used as an abatement specification or work plan. To proceed with abatement work, a work plan or project design documents must be prepared prior to abatement by a certified abatement project designer.

Summary of Findings

The initial building material survey report prepared by RPF Environmental and dated April 4, 2022, identified the presence of the following ACBM materials:

- Roofing Debris
- White Pipe Insulation
- White Pipe Fitting Insulation
- Hard Tan Window Caulk

At the time of the initial building material survey in February of 2022, RPF inspectors were unable to access and sample panels located on the ceiling of the Assembly Hall of the Armory. Additionally, during that initial survey RPF identified the presence of ACBM roofing debris on top of drop in style ceiling tiles in various areas of the Armory. During this follow-up survey RPF was able to complete sampling of the ceiling panels in the Assembly Hall and conduct a more targeted inspection to identify and delineate the presence of ACBM roofing debris throughout the Armory.

The scope of the survey included accessible asbestos-containing building material in accordance with the initial asbestos inspection requirements prior to renovation or demolition work as stated in the State regulations and applicable federal regulations.

Ceiling Panel Sampling

RPF was able to access and sample the pressboard ceiling panels in the Assembly Hall during this site visit. In accordance with current industry sampling protocols, a total of three (3) samples were collected and submitted for analysis using polarized light microscopy. Asbestos containing material (ACM) is defined by current EPA regulations as materials having greater than 1% asbestos content. As you can see in the enclosed results, asbestos was not detected in the samples collected.

ACBM Roofing Debris

During this site visit, RPF conducted targeted inspections above ceiling tiles in the upper level areas of the building in an attempt to identify areas with ACBM roofing debris on top of the suspended ceiling tile system as well as identify the presence of ACBM roofing on the upper surfaces of the roof decking. Based on visual observations, RPF identified the presence of ACBM roofing debris on top of suspended ceiling tiles as well as on top of the existing plaster ceiling surfaces in the following locations:

2nd floor Corridor 202 CO's Office 201 Corridor 202A Latrine 204 Conference Room 210 Administration Office 214 1st Sergeants Office 205 Day Room 206 Stairwell 208 Foyer 208B Room 207

Lower Level Fuel Storage Room and adjacent Hallway

Based on observations made at the Armory, these areas coincide with the areas where new roofing was installed over the original roofing deck. No ACBM roofing debris was observed in classroom 203, or activity room 211, family coordinator room 212, and office 213. These areas appear to be where a 2nd floor level was added on to the original structure and as such it is reasonable to assume that the original roofing was removed when creating the new floor surfaces. The areas of ACBM roofing debris have been added to the original Summary Table of ACBM Identified by the initial building material survey and included in Appendix A of this report.

In accordance with current regulatory requirements, ACBM that may be impacted or disturbed (such that asbestos fiber release occurs) by renovation, demolition or other such activity must be removed by qualified, licensed firms. Although regulations for removal of nonfriable ACBM are somewhat less stringent than the requirements for friable ACBM, it should be noted that nonfriable ACBM that is subjected to grinding, abrasion, and other forces, could be rendered friable. In this event, the nonfriable ACBM would be re-categorized friable ACBM.

ACBM that will not be impacted by renovation or demolition activity may be left in place if managed properly and if the materials are maintained in good condition. ACBM to remain in the building should be included in an asbestos management plan and operations and maintenance (O&M) program detailing the measures to be used to safely occupy the building until the ACBM is fully removed. An accredited Management Planner should prepare the O&M Program in accordance with the guidelines set forth in 40 CFR Part 763 (AHERA).

Sufficiently in advance of the start of renovation and/or remediation work, abatement project design should be completed. As part the initial design steps any planned renovation and demolition activity should be reviewed for potential impact on ACBM. Asbestos removal is highly regulated at the State and federal level, and in some cases, at the local level also. Notification to the Maine Department of Environmental Protection is required 10-days prior to the start of abatement work and demolition. Only qualified, trained, and licensed firms, as applicable, should be engaged to complete asbestos removal or other abatement activity. Asbestos abatement work must be designed (abatement specifications or work plan prepared) by licensed personnel.

All employees and contractors that may access or otherwise disturb areas with suspect ACBM present should be notified of the presence of ACBM and possible hidden ACBM, and the need to use caution when proceeding with work. Appropriate notifications, labeling and other hazard communications should be completed to all employees, contractors and others in accordance with US OSHA regulations and other applicable requirements (including asbestos labeling in accordance with 29 CFR Part 1926). The scope of RPF services for this survey did not include labeling of ACBM or hazard communications to other employees, building occupants, contractors, or subcontractors.

Documentation of current ACBM conditions and in-depth hazard assessment is beyond the scopeof-work for this initial survey. With the exception of the specific testing and analysis detailed herein, no other samples of materials, oil, water, ground water, air, or other suspect hazardous materials were collected in the course of this inspection that supports or denies these conclusions. No additional services beyond those explicitly stated herein were performed and none should be inferred or implied. The summary and conclusions are based on reasonably ascertainable information as described in this report. RPF Environmental, Inc. makes no guarantees, warranties, or references regarding this property or the condition of the property after the period of this report. If you have any questions at this time, or if you would like to discuss the remediation process, please call our office.

Sincerely, RPF ENVIRONMENTAL, INC.

Alla Mercia

Allan D. Mercier, CMC Operations Manager

Enclosures:Appendix A: Summary of ACBM IdentifiedAppendix B: Laboratory ResultsAppendix C: Map Delineating ACBMAppendix D: Summary of Methodology and Limitations

22.1411 Norway 120222 Report

APPENDIX A



Hazardous Materials Inspection & Assessment Asbestos, Mold, Lead Paint, Radon, PCBs Air Quality Testing and Investigations Industrial Hygiene, Safety & Training

TABLE 1

HARRIMAN NORWAY ARMORY 19 Elm Street, Norway, ME

SUMMARY OF ACBM IDENTIFIED

Building Material	Location	Approximate Quantity	EPA Category	Asbestos Results
Black Roofing Remnants and Debris	2nd floor Corridor 202, CO's Office 201, Corridor 202A, Latrine 204, Conference Room 210, Administration Office 214, 1st Sergeants Office 205, Day Room 206, Stairwell 208, Foyer 208B, and Room 207 Lower Level Fuel Storage Room and adjacent Hallway	3,375 square feet	Category I Nonfriable	1.5% Chrysotile
White Pipe Insulation	Basement, Rooms 000, 001, 002, and 004	200 linear feet	Friable ACM	30% Amosite 10% Chrysotile
White Fitting Insulation	Basement, Rooms 000, 001, 002, and 004	10 fittings	Friable ACM	30% Amosite 10% Chrysotile
Hard Tan Window Caulk	Exterior of Building, north side windows and east side windows with a wooden frame	220 linear feet (13 windows)	Category II Nonfriable	3.4% Chrysotile

Notes:

- Please note that Category 1 and Category 2 nonfriable ACM are recategorized as friable and/or RACM under certain conditions. Current State asbestos regulations are stricter and more comprehensive than the EPA NESHAPs requirements.
- All quantities are approximate only and should be confirmed during abatement project design and abatement bidding.
- It is possible that some concealed or inaccessible ACBM is present. Care should be used when renovating/demolishing inaccessible building space. Further explorative survey work may be necessary during design and/or in conjunction with demolition.

APPENDIX B



Bulk Asbestos Analysis

By Polarized Light Microscopy EPA Method: 600/R-93/116 and 40 CFR, Part 763, Subpart E, App.E

Customer: RPF Environmental Inc. 320 1st NH Turnpike Northwood, NH 03261

Project: 22.0958

Attn: Brianna Ham

łam	Lab Order ID:	10011338
	Analysis:	PLM
	Date Received:	12/02/2022
	Date Reported:	12/05/2022

Sample ID Lab Sample ID	Description Lab Notes	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes Treatment
112822_HG1A	Press Board, Brown, Assembly Hall, Ceiling	None Detected	98% Cellulose	2% Other	Brown Fibrous Heterogeneous
10011338_0001					Teased
112822_HG1B	Press Board, Brown, Assembly Hall, Ceiling	None Detected	98% Cellulose	2% Other	Brown Fibrous Heterogeneous
10011338_0002					Teased
112822_HG1C	Press Board, Brown, Assembly Hall, Ceiling	None Detected	98% Cellulose	2% Other	Brown Fibrous Heterogeneous
10011338_0003					Teased

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 1%.

Analyst Approved Signatory Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

Eloisa Blake (3)

APPENDIX C



NORWAY ARMORY RENOVATION NORWAY, MAINE



BASEMENT FLOOR PLAN

BASEMENT FLOOR PLAN





EXISTING FLOOR PLANS





NORWAY ARMORY RENOVATION NORWAY, MAINE



SECOND FLOOR PLAN

0 4' 8' 12'



BASEMENT FLOOR PLAN

0 4' 8' 12'

EXISTING FLOOR PLANS

APPENDIX D

Summary of Methodology: Asbestos-Containing Building Materials Survey

EPA accredited inspector(s) surveyed accessible space in the building or site areas included within the RPF Scope of Work (SOW) to identify suspect asbestos-containing building material (ACBM). Suspect ACBM was inventoried and categorized into homogeneous groups of materials. To the extent indicated in the report, samples were then extracted from the different groups of homogeneous materials in accordance with applicable State and federal rules and regulations. For surveys in which the SOW included full inspections of the affect space, sampling methodologies were based on the requirements set forth in 40 CFR Part 763 (EPA) and 29 CFR Part 1926.1101 (OSHA). For preliminary or limited surveys, findings apply to only the affected material or space as indicated in the RPF SOW and Report and additional inspection and testing will be required to satisfy regulatory obligations associated with renovation, demolition, maintenance and other occupational safety and health requirements. Sampling methodologies used are as set forth in 40 CFR Part 763 (EPA):

- Surfacing Material: 3 bulk samples from each homogenous area and/or material that is 1,000 square feet or less. 5 bulk samples from each homogenous area that is greater than 1,000 square feet but less than or equal to 5000 square feet. 7 bulk samples from each homogenous area that is greater than 5,000 square feet.
- Thermal System Insulation: 3 bulk samples from each homogenous area. 1 bulk sample from each homogenous area of patched thermal system insulation if the patched section is less than 6 linear or square feet. Samples sufficient to determine whether the material is ACM from each insulated mechanical system where cement is utilized on tees, elbows, or valves.
- Miscellaneous ACM: 3 samples from each miscellaneous material. 1 sample if the amount of miscellaneous material is less than 6 square or linear feet.

Collected samples were individually placed into sealed containers, labeled, and submitted with proper chain of custody forms to the RPF NVLAP-accredited vendor laboratory. Sample containers and tools were cleaned after each sample was collected. Samples were analyzed for asbestos content using polarized light microscopy (PLM). Although PLM is the method currently recognized in State and federal regulations for asbestos identification in bulk samples, PLM may not be sensitive enough to detect all of the asbestos fibers in certain types of materials, such as floor tile and other nonfriable ACBM. In the event that more definitive results are requested in cases of with negative or trace results of asbestos are detected, RPF recommends that confirmation testing be completed using transmission electron microscopy.

For each homogeneous group of suspect material, a "stop at first positive" (SFP) method may have been employed during the analysis. The SFP method is based on current EPA sampling protocols and means that if one sample within a homogeneous group of suspect material is found to contain >1% asbestos, then further analysis of that specific homogenous group samples is terminated and the entire homogeneous group of material is considered to be ACBM regardless of the other sample results. This is based on the potential for inconsistent mix of asbestos in the product yielding varying findings across the different individual samples collected from the same homogeneous group. Unless otherwise noted in the report, sample groups found to have 1% to <10% asbestos content are assumed to be ACBM; to rebut this assumption further analysis with point count methods are required.

Inaccessible and hidden areas, including but not limited to wall/floor/ceiling cavity space, space with obstructed access (such as fiberglass insulation above suspended ceilings), sub floors, interiors of mechanical and process equipment, and similar spaces were not included in the inspection and care should be used when accessing these areas in the future. Unless otherwise noted in the RPF Report, destructive survey techniques were not employed during this survey.

In the event that additional suspect materials are encountered that are not addressed in this report, the materials should be properly tested by an accredited inspector. For example, during renovation and demolition it is likely that additional suspect material will be encountered and such suspect materials should be assumed to be hazardous until proper inspection and testing occurs.

RPF followed applicable industry standards; however, various assumptions and limitations of the methods can result in missed materials or misidentification of materials due several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to fully inspection, assumptions regarding the determination of homogenous groups of suspect material, assumptions regarding attempts to conduct representative sampling, and potential for varying mixtures and layers of material sampled not being representative of all areas of similar material. Also reference the Limitations document attached to the report.

LIMITATIONS

- 1. The observations and conclusions presented in the Report were based solely upon the services described herein, and not on scientific tasks or procedures beyond the RPF Environmental, Inc. Scope of Work (SOW) as discussed in the proposal and/or agreement. The conclusions and recommendations are based on visual observations and testing, limited as indicated in the Report, and were arrived at in accordance with generally accepted standards of industrial hygiene practice and asbestos professionals. The nature of this survey or monitoring service was limited as indicated herein and in the report or letter of findings. Further testing, survey, and analysis is required to provide more definitive results and findings.
- 2. For site survey work, observations were made of the designated accessible areas of the site as indicated in the Report. While it was the intent of RPF to conduct a survey to the degree indicated, it is important to note that not all suspect ACBM material in the designated areas were specifically assessed and visibility was limited, as indicated, due to the presence of furnishings, equipment, solid walls and solid or suspended ceilings throughout the facility and/or other site conditions. Asbestos or hazardous material may have been used and may be present in areas where detection and assessment is difficult until renovation and/or demolition proceeds. Access and observations relating to electrical and mechanical systems within the building were restricted or not feasible to prevent damage to the systems and minimize safety hazards to the survey team.
- 3. Although assumptions may have been stated regarding the potential presence of inaccessible or concealed asbestos and other hazardous material, full inspection findings for all asbestos and other hazardous material requires the use of full destructive survey methods to identify possible inaccessible suspect material and this level of survey was not included in the SOW for this project. For preliminary survey work, sampling and analysis as applicable was limited and a full survey throughout the site was not performed. Only the specific areas and /or materials indicated in the report were included in the SOW. This inspection did not include a full hazard assessment survey, full testing or bulk material, or testing to determine current dust concentrations of asbestos in and around the building. Inspection requirements unless specifically stated as intended for this use in the RPF report and considering the limitations as stated therein and within this limitations document.
- 4. Where access to portions of the surveyed area was unavailable or limited, RPF renders no opinion of the condition and assessment of these areas. The survey results only apply to areas specifically accessed by RPF during the survey. Interiors of mechanical equipment and other building or process equipment may also have asbestos and other hazardous material present and were not included in this inspection. For renovation and demolition work, further inspection by qualified personnel will be required during the course of construction activity to identify suspect material not previously documented at the site or in this survey report. Bordering properties were not investigated and comprehensive file review and research was not performed.
- 5. For lead in paint, observations were made of the designated accessible areas of the site as indicated in the Report. Limited testing may have been performed to the extent indicated in the text of the report. In order to conduct thorough hazard assessments for lead exposures, representative surface dust testing, air monitoring and other related testing throughout the building, should be completed. This type of in depth testing and analysis was beyond the scope of services for the initial inspection. For lead surveys with XRF readings, it is recommended that surfaces found to have LBP or trace amount of lead detected with readings of less than 4 mg/cm² be confirmed using laboratory analysis if more definitive results are required. Substrate corrections involving destructive sampling or damage to existing surfaces (to minimize XRF read-through) were not completed. In some instances, destructive testing may be required for more accurate results. In addition, depending on the specific thickness of the paint films on different areas of a building component, differing amounts of wear, and other factors, XRF readings can vary slightly, even on the same building component. Unless otherwise specifically stated in the scope of services and final report, lead testing performed is not intended to comply with other state and federal regulations pertaining to childhood lead poisoning regulations.

RPF Service Limitations (cont.)

- 6. Air testing is to be considered a "snap shot" of conditions present on the day of the survey with the understanding that conditions may differ at other times or dates or operational conditions for the facility. Results are also limited based on the specific analytical methods utilized. For phase contrast microscopy (PCM) total airborne fiber testing, more sensitive asbestos-specific analysis using transmission electron microscopy (TEM) can be performed upon request.
- 7. For asbestos bulk and dust testing, although polarize light microscopy (PLM) is the method currently recognized in State and federal regulations for asbestos identification in bulk samples, some industry studies have found that PLM may not be sensitive enough to detect all of the asbestos fibers in certain nonfriable material, vermiculate type insulation, soils, surface dust, and other materials requiring more sensitive analysis to identify possible asbestos fibers. In the event that more definitive results are requested, RPF recommends that confirmation testing be completed using TEM methods or other analytical methods as may be applicable to the material. Detection of possible asbestos fibers may be made more difficult by the presence of other non-asbestos fibrous components such as cellulose, fiber glass, etc., by binder/matrix materials which may mask or obscure fibrous components, and/or by exposure to conditions capable of altering or transforming asbestos. PLM can show significant bias leading to false negatives and false positives for certain types of materials. PLM is limited by the visibility of the asbestos fibers. In some samples the fibers may be reduced to a diameter so small or masked by coatings to such an extent that they cannot be reliably observed or identified using PLM.
- 8. For hazardous building material inspection or survey work, RPF followed applicable industry standards; however, RPF does not warrant or certify that all asbestos or other hazardous materials in or on the building has been identified and included in this report. Various assumptions and limitations of the methods can result in missed materials or misidentification of materials due to several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to fully inspect, assumptions regarding the determination of homogenous groups of suspect material, assumptions regarding attempts to conduct representative sampling, and potential for varying mixtures and layers of material sampled not being representative of all areas of similar material.
- 9. Full assessments often requires multiple rounds of sampling over a period of time for air, bulk material, surface dust and water. Such comprehensive testing was beyond the scope of RPF services. In addition clearance testing for abatement, as applicable, was based on the visual observations and limited ambient area air testing as indicated in the report and in accordance with applicable state and federal regulations. The potential exists that microscopic surface dust remains with contaminant present even in the event that the clearance testing meets the state and federal requirements. Likewise for building surveys, visual observations are not sufficient alone to detect possible contaminant in settled dust. Unless otherwise specifically indicated in the report, surface dust testing was not included in the scope of the RPF services.
- 10. For abatement or remediation monitoring services: RPF is not responsible for observations and test for specific periods of work that RPF did not perform full shift monitoring of construction, abatement or remediation activity. In the event that problems occurred or concerns arouse regarding contamination, safety or health hazards during periods RPF was not onsite, RPF is not responsible to provide documentation or assurances regarding conditions, safety, air testing results and other compliance issues. RPF may have provided recommendations to the Client, as needed, pertaining to the Client's Contractor compliance with the technical specifications, schedules, and other project related issues as agreed and based on results of RPF monitoring work. However, actual enforcement, or waiving of, contract provisions and requirements as well as regulatory liabilities shall be the responsibility of Client and Client's Contractor(s). Off-site abatement activities, such as waste transportation and disposal, were not monitored or inspected by RPF.
- 11. For services limited to clearance testing following abatement or remediation work by other parties: The testing was limited to clearance testing only and as indicated in the report and a site assessment for possible environmental health and safety hazards was not performed as part of the scope of this testing. Client, or Client's abatement contractor as applicable, was responsible for performing visual inspections

of the work area to determine completeness of work prior to air clearance testing by RPF.

- 12. For site work, including but not limited to air clearance testing services, in which RPF did not provide full site safety and health oversight, abatement design, full shift monitoring of all site activity, RPF expresses no warranties, guarantees or certifications of the abatement work conducted by the Client or other employers at the job site(s), conditions during the work, or regulatory compliance, with the exception of the specific airborne concentrations as indicated by the air clearance test performed by RPF during the conditions present for the clearance testing. Unless otherwise specifically noted in the RPF Report, visual inspections and air clearance testing results apply only to the specific work area and conditions present during the testing. RPF did not perform visual inspections. In these instances, some contamination may be present following RPF clearance testing and such contamination may be exposed during and after removal of the containment barriers or other obstructions following RPF testing services. Client or Client's Contractor is responsible for using appropriate care and inspection to identify potential hazards and to remediate such hazards as necessary to ensure compliance and a safe environment.
- 13. The survey was limited to the material and/or areas as specifically designated in the report and a site assessment for other possible environmental health and safety hazards or subsurface pollution was not performed as part of the scope of this site inspection. Typically, hazardous building materials such as asbestos, lead paint, PCBs, mercury, refrigerants, hydraulic fluids and other hazardous product and materials may be present in buildings. The survey performed by RPF only addresses the specific items as indicated in the Report.
- 14. For mold and moisture survey services, RPF services did not include design or remediation of moisture intrusion. Some level of mold will remain at the site regardless of RPF testing and Contractor or Client cleaning efforts. RPF testing associated with mold remediation and assessments is limited and may or may not be representative of other surfaces and locations at the site. Mold growth will occur if moisture intrusion deficiencies have not been fully remedied and if the site or work areas are not maintained in a sufficiently dry state. Porous surfaces in mold contaminated areas which are not removed and disposed of will likely result in future spore release, allergen sources, or mold contamination.
- 15. Existing reports, drawings, and analytical results provided by the Client to RPF, as applicable, were not verified and, as such, RPF has relied upon the data provided as indicated, and has not conducted an independent evaluation of the reliability of these data.
- 16. Where sample analyses were conducted by an outside laboratory, RPF has relied upon the data provided, and has not conducted an independent evaluation of the reliability of this data.
- 17. All hazard communication and notification requirements, as required by U.S. OSHA regulation 29 CFR Part 1926, 29 CFR Part 1910, and other applicable rules and regulations, by and between the Client, general contractors, subcontractors, building occupants, employees and other affected persons were the responsibility of the Client and are not part of the RPF SOW.
- 18. The applicability of the observations and recommendations presented in this report to other portions of the site was not determined. Many accidents, injuries and exposures and environmental conditions are a result of individual employee/employer actions and behaviors, which will vary from day to day, and with operations being conducted. Changes to the site and work conditions that occur subsequent to the RPF inspection may result in conditions which differ from those present during the survey and presented in the findings of the report.