# **CAPE HATTERAS NATIONAL SEASHORE** Hatteras Island North Carolina

STATEMENT OF WORK: Remediate and Replace Lead Based Paint and Asbestos Flooring at Hatteras Island Fire Cache Building



NATIONAL PARK SERVICE Southeast Region

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### **BACKGROUND AND EXISTING CONDITIONS:**

The Hatteras Island Historic Fire Cache facility was tested and found to contain lead-based interior and exterior paint. Additionally, the upstairs floor tiles have become friable and have also tested positive for Asbestos Containing Materials (ACM). There are areas where the paint has chipped on the interior and exterior, and some areas have no paint at all. The exterior surfaces are covered with dirt and air pollutants and must be cleaned before painting. The Fire Cache facility is a 2900 square feet two story historic building that was built in 1938.

### **OBJECTIVES:**

Remove all loose lead-based paint and restore exterior and interior finishes of the Fire Cache building with new primer and paint.

Remove all asbestos flooring tile upstairs, remove particle board subflooring upstairs down to the original existing subflooring and install new plywood subflooring on top of original subflooring.

Move entire contents of the downstairs portion building into rented temporary storage units, then wipe clean and move all items back into the building placed in the same location where they were prior to moving, when asbestos containing materials and lead-based paint abatement measures are completed.

### PLACE OF PERFORMANCE:

Hatteras Island Fire Cache Building - 46500 Lighthouse Road, Buxton, NC 27920

### **TASKS AND SPECIFICATIONS:**

### 1.1 Clean exterior surfaces

- 1.1.1 Place plastic sheeting on the ground around the entire exterior of the building to catch paint flakes. Do not allow paint flakes to fall directly onto the ground.
- 1.1.2 Pressure-wash all exterior surfaces approximately 5100 sq ft with an approved cleaning solution to include all windows, doors, garage doors, and trim.
- 1.1.3 Allow surfaces to dry.
- 1.1.4 Pick up all paint flakes that are knocked off during pressure washing be advised the exterior paint has tested positive for containing lead.
- **1.2** Place signage on the exterior of the building to notify and ensure the employees working in the area do not enter or come within proximity of the building during the entire abatement process.
- **1.3** Scrape and sand all existing exterior painted surfaces.
  - 1.3.1.1 The existing exterior painted surfaces show signs of lead-based paint that is above laboratory reporting limits. Report is attached. All members of the contractors' team must be certified to work with remediation of lead-based paint and asbestos containing materials. Ensure compliance with all North Carolina Heath Hazards Control Unit notifications prior to renovation, safety requirements and permits. Ensure proper personal protective equipment is always used by all members of the abatement team. See Table 3

TABLE 3: Paint Chip Testing Results of Surfaces Lighthouse Rd, Buxton, NC								
Sample No.	Component	Substrate	Condition	Color	Location	Lab Results (% by wt)	Lab Results (by ppm)	
<mark>1-101</mark>	Outside building paint	Wood	Poor	White	Outside of Building	<mark>19.3</mark>	<mark>19300</mark>	
2-201	Inside walls	Drywall	Poor	Yellow/Grey	Interior walls	.0131	131	
<mark>3-301</mark>	Interior ceiling	Drywall	Poor	White	Interior ceiling	2.75	27500	
4-401	Base board	Wood	Poor	Black	Base Board interior	.385	3850	
<mark>5.501</mark>	Inside walls	Drywall	Poor	Green/Grey	Interior walls	1.49	14900	
<mark>6-601</mark>	Inside walls	Drywall	Poor	Red/Yellow	Interior wall 1≭ floor "Fire Ready Room"	1.57	15700	
7-701	Interior posts and rails	Metal	Poor	Yellow	Interior 1st Floor posts and stair railings	<mark>16.6</mark>	<mark>16600</mark>	
Sample No.	Component	Substrate	Condition	Color	Location	Lab Results (% by wt)	Lab Results (by ppm)	
<mark>8-801</mark>	Interior posts	Metal	Poor	Black	Interior 1 <sup>st</sup> floor	<mark>16.4</mark>	<mark>16400</mark>	
9-901	Interior ceiling	Drywall	Poor	Yellow	Interior 2 <sup>nd</sup> floor	.0696	696	
10-1001	Interior ceiling	Drywall	Poor	White	Interior 2 <sup>nd</sup> floor	.197	1970	

Asbestos-Lead-Waste Survey, Lighthouse Rd, Buxton, NC

- 1.3.2 The contractor shall use the wet sanding method on all exterior surfaces to remove the existing lead-based paint. Sanding area is approximately 4220 square feet this will include the exterior of windows, gutters, railings, porch ceilings, overhead doors, entrance doors, soffit, and facia.
  - 1.3.2.1 Plastic sheeting shall be laid down on the ground of the abatement area prior to starting any sanding and scraping activities to prevent all paint chips from covering or encountering surfaces below them while sanding and scraping.
  - 1.3.2.2 Lightly mist with spray bottles to keep the immediate area that the sanding is taking place wet.
  - 1.3.2.3 Rags will be used to wipe off the paint and water from the sanded surface before it runs down the siding.
  - 1.3.2.4 Wet Sanded surfaces shell be limited to areas no larger than can be sanded and wiped so as not to allow the hazardous material to contaminate another neighboring surface or the ground.
  - 1.3.2.5 Wet sand all rough areas to obtain a smooth surface.

1.3.2.6 Used rags will be placed in a Hazardous container and disposed of at an authorized facility. Ensure to keep chain of custody for reporting and follow all NESHAP program requirements for safe handling and disposal of ACMs in North Carolina.

# **1.4 Exterior surface preparation for painting**

- 1.4.1 The COR has the responsibility to determine that surface preparation is complete and that the "quality of appearance" is such that it is ready for finish priming and painting. If "quality of appearance" of a surface, prior to finishing, is judged marginal or unacceptable by COR, such alleged defective work must be corrected prior to priming and finishing so that all surfaces are made complete and ready for finishing.
- **1.4.2** Provide advanced notice to the COR as to when you will have the exterior surface ready for inspection so that there are no delays.
- 1.4.3 Ensure that all cracks, gaps, holes, nail pops, nicks, dents on all exterior surfaces are patched and then sanded to a smooth finish.
- 1.4.4 Be sure to wipe (with a damp cloth) away any debris or dust that may be left behind by the sanding so that you have a smooth finish.
- 1.4.5 Remove all vegetation and sand and debris away from exterior surfaces that are going to be painted.
- 1.4.6 Cover all adjacent surfaces with plastic, tarps, or painter's tape to prevent other colors of paint coming in contact them.
- 1.4.7 Repair/Replace all defective surfaces that will be painted. If rotten wood exists, notify the COR for confirmation of replacement or repairing with wood filler.
  - 1.4.7.1 If it is determined that a piece of exterior siding, trim or other wood needs to be replaced, (this is not expected) the wood will be replaced in kind with the same size and material as existing. Approval of all replacement wood must be given by the COR prior to purchase and installation. All nails and screws used on the exterior of the building must be stainless steel 316.
- 1.4.8 Remove any paint and loose rust from the heads of any visible nails and countersink them, apply rust destroyer to all nails and allow to dry, fill in holes with a high-quality exterior wood patch, one that dries hard, and does not shrink. Sand to a smooth finish.
- 1.4.9 Remove approximately 1826 linear feet of all exterior existing caulking around all exterior doors, windows, and trim.
- 1.4.10 Apply approximately 1826 linear feet of new caulk to all exterior doors, trim, and windows.
  - 1.4.10.1Caulk should have enhanced UV resistance, paintable in one hour and the flexibility should be five times stretch and fifty percent joint movement.

### 1.5 Paint exterior surfaces.

1.5.1 The painting contractor will produce a "properly painted surface." A "properly painted surface" is defined as uniform in appearance, color, texture, hiding and sheen. It is also free of foreign material, lumps, skins, runs, sags, holidays, misses, or insufficient coverage. It is also a surface free of drips, spatters, spills, or overspray caused by the painting contractor's workforce. To determine whether a surface has been "properly painted" it shall be examined without magnification at thirty-nine (39) inches or one (1) meter, or more, under finished lighting conditions and from a normal viewing position. See PDCA P1. At PDCA-Standards-May28-2019.pdf (pcapainted.org)

- 1.5.2 Contractor shall complete one area of painted surface so that the COR can inspected it and deem it a "properly painted surface" before continuing to paint. Provide advanced notice to the COR as to when you will have the surface ready for inspection so that there are no delays.
- 1.5.3 All exposed surfaces will need one coat of primer. A combination of paint and primer is acceptable.
- 1.5.4 Paint approximately 8472 sq ft to include the exterior of all windows, doors, and siding with two coats of high-quality exterior breathable latex paint, color will be white and shall match existing color.
- 1.5.5 Remove any paint splatter and/ or spills by cleaning while being careful not to damage adjacent finished surfaces as they occur if possible or at the end of each phase of painting.
  - 1.5.5.1 Clean up exterior of building remove and dispose of all protective plastic sheeting and ensure the ground does not have any paint chips or debris from the lead-based paint abatement. The plastic sheeting that was used must be disposed of as hazardous waste.

# 1.6 Remove and replace upstairs flooring.

- 1.6.1 Existing upstairs blue/green colored flooring tiles have tested positive as an asbestos containing material and they are friable. The report is attached. All members of the contractors' team must be certified to work with lead-based paint and asbestos containing materials. See Table 2
- **1.6.2** Before working inside the building, create separation between the first floor and the second floor by placing plastic or other suitable materials on doorways and open-air flow locations.
- **1.6.3** Create negative air pressure inside the building and ensure compliance with all OSHA and NC NESHAP requirements for asbestos and lead-based paint abatement.

# TABLE 2: Summary of Category 1 Identified and Assumed ACMs which are Friable and must be removed

Sample No.	Description/ Location	Condition	Estimate d Extent (in sq ft)	Asbestos % and Type				
Main Maintenance Building								
A3-301, A3-302	2 <sup>nd</sup> floor interior flooring linoleum 9x9 tile	Significantly Damaged	<mark>810 sq ft</mark>	3% Chrysotile				
A4-401, A4-402	2 <sup>nd</sup> floor south side room linoleum flooring	Significantly Damaged	<mark>6 sq ft</mark>	3% Chrysotile				

<sup>1</sup> Chrysotile (white asbestos) is the most commonly used type of asbestos and accounts for about 95% of the asbestos found in buildings in the United States. Chrysotile fibers exhibit a sheet or layered crystalline structure.
<sup>2</sup> Amosite (brown asbestos) is from the amphibole group- which is more hazardous than the serpentine asbestos. Amosite asbestos was used primarily as a fire retardant in thermal insulation products.

1.6.4 Remove all upstairs ACM flooring tile using proper personal protective equipment and following OSHA and NC HESHAP recommended procedures for asbestos abatement. Ensure air monitoring is performed, documented, and maintain the records to ensure compliance with OSHA and NC HESHAP regulations for asbestos abatement.

- 1.6.5 Remove and dispose of all existing particle board and plywood on the floor, approximately 2500 sqft leaving only the original subflooring upstairs. All flooring materials removed from upstairs will be placed in a hazardous container and disposed of at an authorized facility that is able to accept ACMs in North Carolina. Ensure to keep chain of custody for reporting and follow all NESHAP program requirements for safe handling and disposal of ACMs in NC.
- 1.6.6 Install new <sup>3</sup>/<sub>4</sub> inch tongue-and-groove plywood on top of the subflooring for the entire upstairs floor, approximately 2500 sqft. The plywood shall be glued and screwed down, do not use nails. Use countersinking flat head subfloor screws.
- 1.6.7 The finished flooring shall be one smooth level for the entire upstairs. No tripping hazards will be acceptable on the finished floor.

# 1.7 Prep interior surfaces for painting.

- 1.7.1 Obtain and have delivered to the site storage unit or units that are large enough for the entire contents of the downstairs. The downstairs contains equipment, cabinets, and other random work materials.
  - 1.7.1.1 The storage units shall be placed onsite verify location with the COR. These storage units will be needed for the duration of the interior renovations.
- 1.7.2 Remove all items from the downstairs of the building and place them safely and secure them into the storage units.
  - 1.7.2.1 Take pictures prior to moving all items to ensure they go back in the same exact location inside the building when they are moved back.
- 1.7.3 The existing interior painted surfaces tested positive for lead-based paint above laboratory reporting limits. Th report is attached.
  1.7.3.1 All members of the contractors' team must be certified to perform abatement of lead-based paint and asbestos containing materials.
- 1.7.4 Wet-Sand the lead-based paint downstairs interior on all walls, ceilings, windows, doors, and trim.
- 1.7.5 The contractor shall use the wet sanding method on all interior surfaces prior to priming. The sanding and scraping areas are approximately 4220 square feet that includes downstairs interior of all windows, walls, ceilings, interior of overhead doors, and the interior of all entrance doors.
- 1.7.6 Tarps, plastic sheeting, or other suitable protections shall be laid down to prevent paint from covering surfaces below them while performing lead-based paint abatement.
- 1.7.7 Lightly mist with spray bottles to keep the immediate area that the sanding is taking place wet.
- 1.7.8 Rags will be used to wipe off the paint and water from the sanded surface before it runs down the interior walls.
- 1.7.9 Wet sanded interior surfaces shell be limited to areas no larger than can be sanded and wiped so as not to allow the hazardous material to contaminate another surface or the ground.
- 1.7.10 Wet sand all rough areas to obtain a smooth surface.
  - 1.7.10.1Used rags will be placed in a Hazardous container and disposed of at an authorized facility that accepts HCM's in North Carolina following all NESHAP and OSHA requirements.
    - 1.7.10.1.1 Provide documentation to the COR.

### **1.8 Interior calking**

1.8.1 Remove approximately 826 linear feet of all interior existing caulking around all doors and windows.

- 1.8.2 Apply approximately 826 linear feet of new caulk to all interior doors and windows.
- 1.8.3 Caulk should have enhanced UV resistance, paintable in one hour and the flexibility should be five times stretch and fifty percent joint movement.

# **1.9** Paint interior surfaces downstairs.

- 1.9.1 The painting contractor will produce a "properly painted surface." A "properly painted surface" is defined as uniform in appearance, color, texture, hiding and sheen. It is also free of foreign material, lumps, skins, runs, sags, holidays, misses, or insufficient coverage. It is also a surface free of drips, spatters, spills, or overspray caused by the painting contractor's workforce. To determine whether a surface has been "properly painted" it shall be examined without magnification at thirty-nine (39) inches or one (1) meter, or more, under finished lighting conditions and from a normal viewing position. See PDCA P1. At PDCA-Standards-May28-2019.pdf (pcapainted.org)
- 1.9.2 Contractor shall complete one area of painted interior surface so that the COR can inspected it and deem it a "properly painted surface" before continuing to paint. Provide advanced notice to the COR as to when you will have the surface ready for inspection so that there are no delays.
- 1.9.3 All exposed downstairs painted surfaces will need one coat of ZERO-VOC primer. A combination paint and primer is acceptable.
- 1.9.4 Paint approximately 9472 sq ft to include the downstairs interior of the windows, doors, ceilings, and walls with two coats of high-quality interior ZERO-VOC breathable water-based latex acrylic eggshell paint, color will be white.
- 1.9.5 Remove any paint splatter and/ or spills by cleaning while being careful not to damage adjacent finished surfaces as they occur if possible or at the end of each phase of painting.

# 1.9.5.1 Plastic sheeting that was used must be disposed of as hazardous waste.

# 1.10 Wipe, sanitize and move all items back into the building.

- 1.10.1 Clean the complete exterior of each item as it leaves the storage unit with disposable all-purpose cleaning wipes.
  - 1.10.1.1Use disposable cleaning wipes on each item when it is cleaned asbestos can remain on a traditional rag if reused on multiple items and will be transferred to other items when cleaned – using disposable wipes eliminates this possibility of cross contamination and transfer of asbestos fibers.
  - 1.10.1.2Use a vacuum with a HEPA-filter equipped to remove any excessive dust dirt or debris as needed.
- 1.10.2 Move all items back into the same location inside the building.

# 1.11 Clean entire site interior and exterior prior to final inspection

# 2.0 WARRANTIES

- **2.1** A one-year warranty is required on all contractor and sub-contractor labor, which does not include the individual manufacturer's part or product implied warranties.
- **2.2** A five-year manufacturer's warranty on all paint, and primer. All paint will be applied in accordance with manufacturer's instructions to obtain manufacturer's warranty.

### **3.0 DELIVERY:**

- **3.1** Deliver all materials to the project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.
- **3.2** Delivery of materials to the park will be brought in when needed. Items stored outside will be done at the Contractor's own risk. Use and storage of a work trailer can be coordinated with the COR.

### 4.0 GOVERNMENT-FURNISHED EQUIPMENT:

**4.1** No Government equipment will be provided. Water is available via exterior hose bibs. Electricity is available at interior and exterior receptacles.

### 5.0 SECURITY.

**5.1** All access to the site will be during normal business hours (M-F 7:00 to 5:00 PM) unless temporarily approved by the COR. An escort will be provided during any necessary entry into non-public or secure areas. No work will be accomplished during federal holidays, during inclement weather, in advent of an emergency or during planned park events.

### 6.0 SPECIAL MATERIAL REQUIREMENTS:

**6.1** The contractor must submit for government approval all products to be used on this project prior to the start of the project.

# 7.0 OTHER UNIQUE REQUIREMENTS:

- **7.1** This work is to be conducted with preservation of original materials in mind. Care must be used when demolishing, removing, repairing, and replacing building materials so as not to cause damage to adjacent building fabric.
- 7.2 This site is part of the Cape Hatteras National Seashore. Therefore, additional care must be taken while working around exhibits and visitor areas. No obscene language on clothing will be allowed. Appropriate clothing and shoe wear must be worn inside of the park's areas. No smoking or tobacco products in or around the buildings (within 50 feet of buildings or entrances). The COR will show the crew members where the established smoking areas are located. No inside lunch areas are available. Clean-up will be accomplished 45 minutes prior to schedule closing time. No trash or debris will remain in the work site overnight. Dumpster locations if needed will be coordinated by the COR and is the sole responsibility of the contractor. Contractor's vehicles will be parked be at the discretion and coordination of the COR to prevent impact on the visiting public or employees who work in the area.
- **7.3** During the demolition and construction phases of the project, work will be done to prevent the greatest impact on the visiting public and government occupants. Areas that need to be closed will be coordinated with the COR.
- **7.4** The contractor will provide all technical support, materials, tools, equipment, and manpower required complete the project. The contractor is responsible for verifying existing conditions and dimensions. A site visit will be made available.

### **8.0 QUALITY ASSURANCE:**

- **8.1** Contractor shall maintain a qualified crew throughout the duration of the project and ensure quality control. Only qualified journeypersons shall be engaged in work. Apprentices may be used provided they work under the direct supervision of a qualified journeyperson. A qualified crew will consist of the project manager, journeymen, and apprentices.
- **8.2** The services to be performed by the contractor shall be inspected by the Contracting Officer Representative, the COR.
- **8.3** All work shall comply with the policies and standards of the governing bodies and applicable regulations, which include but are not limited to:
  - 8.3.1 State and Local Codes (latest addition)
  - 8.3.2 International Building Code (IBC, latest addition)
  - 8.3.3 Occupational Safety and Health Act (OSHA, latest addition)
- **8.4** The contractor shall have a minimum of 3 years' experience and expertise of successfully completed projects in:
  - 8.4.1 Asbestos abatement.
  - 8.4.2 Lead-based paint abatement.
  - 8.4.3 Painting interior and exterior of buildings.
  - 8.4.4 Subflooring removal and installation.
- **8.5** The Contractor must submit proof of experience by providing a list of references for projects completed of painting of historic structures or other related work like this project.

### 9.0 SUBMITTALS:

- **9.1** Submittals shall be submitted to the CO/COR and approved **prior to obtaining notice to proceed**.
- 9.2 Work schedule delineating the various stages of work by phase (milestones).
- **9.3** Contractor shall provide copies of product specifications, manufacturer's literature and installation instructions of materials and products to be furnished and installed.
- **9.4** The contractor must submit for the government approval all products to be used on this project. All paint, caulk, wood filler, rust protection, wood products and nails must be approved prior to use.
- **9.5** The following submittals will-be required to-be submitted to the COR before final payment is made:
  - 9.5.1 All work warranties and product guarantees.
  - 9.5.2 Chain of custody documentation showing safe transportation and disposal of all HCM's
  - 9.5.3 Receipts from the landfill where ACM flooring was disposed.
  - 9.5.4 Manufacturers recommended care and cleaning requirements for all newly painted surfaces.
  - 9.5.5 Submit certifications for crew members working with LBP and ACM's

# **10.0 BARRIERS & RESOURCE PROTECTION MEASURES:**

- **10.1** Protect all exterior/interior surfaces of the building and adjacent landscaping, walks, drives, walls, signage, all adjacent buildings, and government equipment from damage by project operations. Use shields, masking, templates, tape, plastic sheeting, or other suitable protective means. Protect glass windowpanes, and metal hinges and all other non-painted features from breakage, paint splatters or other damage during project work.
- **10.2** Erect temporary construction barriers to protect visitors, employees and restrict all access as needed. Minimum is OSHA standards.