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ENVIRONMENTAL BASELINE SURVEY WATER AND WASTEWATER UTILITY SYSTEM
PRIVATIZATION NS MAYPORT FL
3/1/2005
PROJECT RESOURCES

**Environmental Baseline Survey
Water and Wastewater Utility System
Privatization
Naval Station Mayport
Mayport, Florida**



March 2005

Prepared for:

**Southern Division
Naval Facilities Engineering Command
North Charleston, South Carolina**

ENVIRONMENTAL BASELINE SURVEY
WATER AND WASTEWATER UTILITY SYSTEM PRIVATIZATION
NAVAL STATION MAYPORT, FLORIDA

LIST OF ACRONYMS AND ABBREVIATIONS

ACM	asbestos-containing material
AOC	Area of Concern
asl	above sea level
AST	aboveground storage tank
ASTM	American Society of Testing and Materials
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DoD	Department of Defense
DoN	Department of the Navy
DPW	Department of Public Works
EBS	Environmental Baseline Survey
EBSR	Environmental Baseline Survey Report
EPA	Environmental Protection Agency
FDEP	Florida Department of Environmental Protection
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FISC	Federal Industrial Supply Center
FNAI	Florida Natural Area Inventory
INRMP	Integrated Natural Resources Management Plan
HARP	Historic and Archeological Resources Protection Plan
HSWA	Hazardous and Solid Waste Amendment
ICW	Intracoastal Waterway
IR	Installation Restoration
LAMPS	Light Airborne Multi-Purpose System
LBP	lead-based paint
LUC	land use control
LUST	leaking underground storage tank
msl	mean sea level
NFA	No Further Action
NFD	Navy Fuel Depot
NS	Naval Station
OTWP	oily waste treatment plant
PCB	polychlorinated biphenyl

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PRI	Project Resources Inc.
PWC	Public Works Center
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
Ribault Bay	Ribault Bay Housing
RFP	Request for Proposal
Shaw	Shaw Environmental
SOW	Statement of Work
SPCC	Spill Prevention Control and Countermeasure
SWMU	Solid Waste Management Unit
TDP	Technical Data Package
UST	underground storage tank
WWTP	wastewater treatment plant

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EXECUTIVE SUMMARY

Project Resources Inc. (PRI) conducted a site visit in December 2004 as part of an Environmental Baseline Survey (EBS) of the water and wastewater utility systems at the Naval Station (NS) Mayport, Ribault Bay Housing (Ribault Bay), and the Federal Industrial Supply Center (FISC) in Duval County, Florida. FISC is also known as the Navy Fuel Dept (NFD).

The Department of the Navy (DoN) is privatizing the water and wastewater utility systems and their associated components at NS Mayport, Ribault Bay, and FISC, hereinafter referred to as “the subject property”. (See Water and Wastewater Utility Map, Figure A-1, Appendix A.) No maps depicting water or wastewater utility systems at Ribault Bay housing community or FISC were provided for inclusion in this EBSR. The DoN will issue the private entity an easement to gain access to the subject property.

The Department of Defense (DoD) policy requires an EBS before any property can be sold, leased, transferred, or acquired. This Environmental Baseline Survey Report (EBSR) meets that requirement specifically for the subject property and its associated realty, and generally for NS Mayport, Ribault Bay, and FISC as a whole. The subject property consists of all components of the water and wastewater utility systems at NS Mayport, Ribault Bay, and FISC. The associated realty includes the 100-foot wide corridor centered on the water and wastewater utility lines. If multiple utility lines exist, lines +/- 50 feet on either side of the outer most utility line define the associated realty. NS Mayport, Ribault Bay, and FISC, which are owned by the DoN, completely encompasses the limits of the subject property and its associated realty. The environmental condition of the subject property and its associated realty were assessed during this EBS.

In some cases, it may be difficult to distinguish whether only the subject property or the associated realty (or both) impact the identified recognized environmental conditions (RECs). For example, the associated realty may have been observed to encroach upon a REC (e.g., wetlands); however, only portions of the water and wastewater utility lines were observed to be within a REC. In these instances, both the subject property and the associated realty will be identified as impacting or being impacted by a REC.

The following recognized environmental conditions (RECs) were observed during this EBS:

Cultural Resources

Based on a review of the 1994 Summary of Historic and Archeological Resources Protection (HARP) Plan, eight areas of significant cultural resources are located within the associated realty at NS Mayport.

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Petroleum Contamination

There are reportedly 40 leaking petroleum storage tank (LPST) sites associated with NS Mayport and FISC. No LPST sites have been reported at Ribault Bay. Thirteen of the 40 LPST sites are active, and have not received a “no further action” letter from the Florida Department of Environmental Protection (FDEP). The 13 LPST sites are within the bounds of the associated realty.

Environmental Restoration

A total of 56 Solid Waste Management Unit (SWMU) sites, and two Areas of Concern (AOC) sites have been identified at NS Mayport. Nineteen of the 56 SWMU sites received NFA letters from the FDEP. Of the remaining 39 active SWMU and AOC sites, 29 appear to be located within the associated realty at NS Mayport.

Additionally, four active Installation Restoration (IR) sites (also referred to as the Federal Facilities Program Sites) have been identified within the associated realty at FISC. No SWMU, AOC, or IR sites were identified at Ribault Bay.

Asbestos-Containing Material

According to the NS Mayport environmental records reviewed, asbestos surveys were reportedly performed in September 1994. These reports indicate that asbestos-containing material (ACM) is present in many of the buildings. ACM was identified in locations including, but not limited to, drywall joint compound, window caulking, mastic, and sink undercoating.

According to a limited asbestos survey, conducted by Shaw Environmental (Shaw), it appears that an abandoned asphalt-wrapped underground fuel line and transite pipe system at FISC, located between 3rd Street and 5th Street, contained asbestos. Therefore, ACM is considered a REC for the subject property and associated realty. Additionally, in June 1997, an ACM inventory of FISC buildings was conducted to review the status of buildings that were previously identified as containing asbestos. PRI was unable to locate any additional information regarding ACM at FISC.

Lead-Based Paint

Based on the dates of construction, lead-based paint (LBP) may have been used on the portions of the water and wastewater utility systems. Over the years, some of the older equipment may have been decommissioned, removed, or replaced by newer equipment that does not contain LBP. During PRI’s site visit, painted surfaces on fire hydrants and other water and wastewater equipment and structures appeared to be well maintained and in good condition, with no evidence of peeling, cracking, or flaking of possible LBP.

Pesticides

Based on interview with the NS Mayport personnel, vegetated areas appear to be sprayed with commercially available pesticides and herbicides, as needed. Based on this information, it is likely that residual pesticides and herbicides could be found in soil

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or groundwater at and around the associated realty. Currently, there are no open issues at FDEP regarding residual pesticides and herbicides at the associated realty. Therefore, no further investigation is warranted at this time.

The findings presented in this EBS are relative to the dates of PRI's survey in December 2004 and should not be relied upon to represent conditions at substantially later dates. See Section 8.0 for further limitations.

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1.0 INTRODUCTION

1.1 Introduction and Background

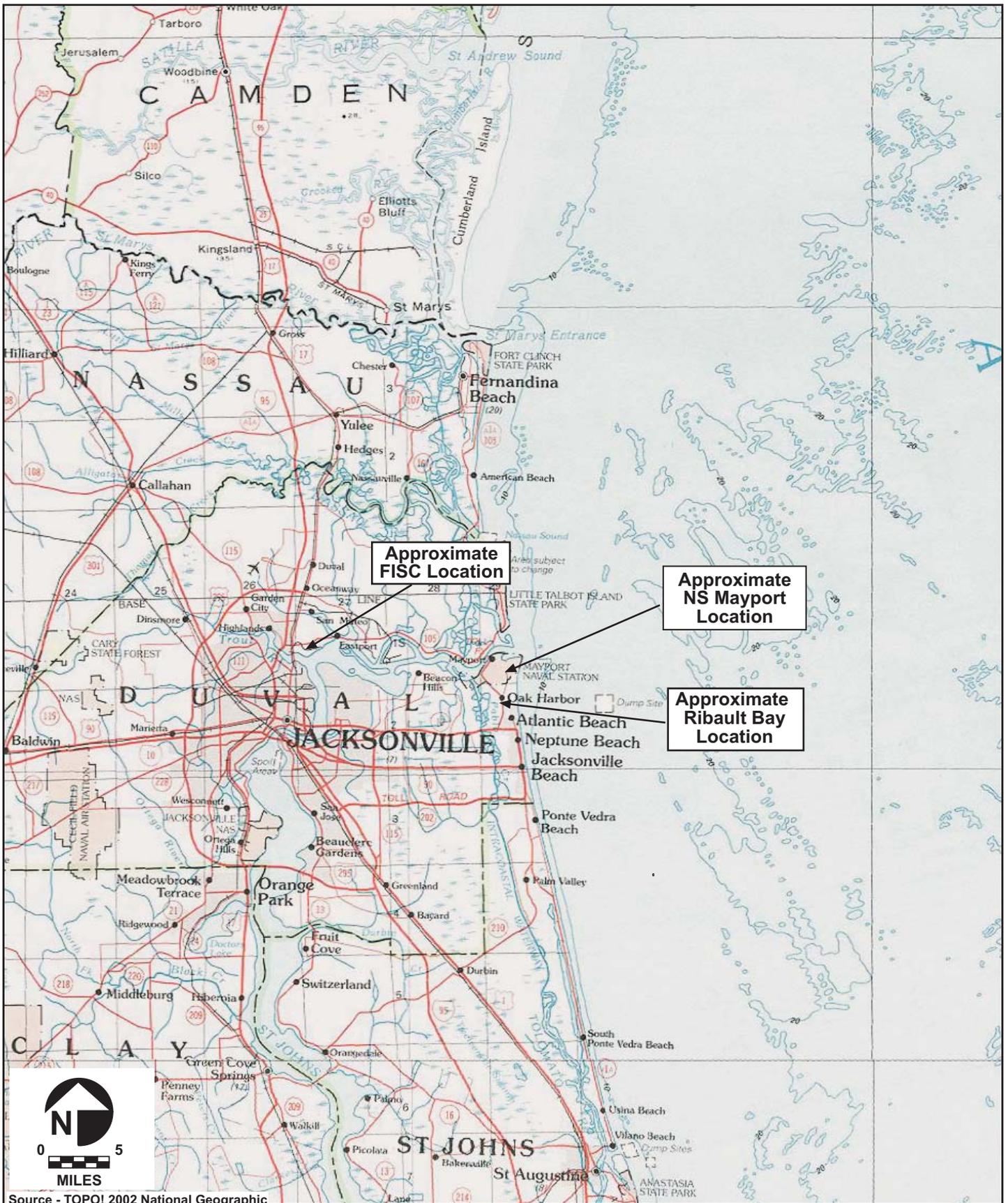
Project Resources Inc. (PRI) conducted a site visit as part of an Environmental Baseline Survey (EBS) of the water and wastewater utility systems at Naval Station (NS) Mayport, Ribault Bay Housing (Ribault Bay), and Federal Industrial Supply Center (FISC) in Duval County, Florida (See Regional Location Map, Figure 1-1.). No maps depicting water or wastewater utility systems at Ribault Bay or FISC were provided for inclusion in this report. NS Mayport is located approximately 20 miles northeast of the city of Jacksonville. Ribault Bay is located approximately 2.5 mile south of NS Mayport. FISC is located approximately 20 miles west of NS Mayport. FISC is also known as the Navy Fuel Depot (NFD).

The Department of the Navy (DoN) is privatizing the water and wastewater utility systems and their associated components at NS Mayport, Ribault Bay, and FISC, hereinafter referred to as “the subject property”. (See Water and Wastewater Utility Map, Figure A-1, Appendix A.) The DoN will issue the private entity an easement to gain access to the subject property.

The Department of Defense (DoD) policy requires an EBS before any property can be sold, leased, transferred, or acquired. This Environmental Baseline Survey Report (EBSR) meets that requirement specifically for the subject property and its associated realty, and generally for NS Mayport, Ribault Bay, and FISC as a whole. The subject property consists of all components of the water and wastewater utility systems at NS Mayport, Ribault Bay, and FISC. The associated realty includes the 100-foot wide corridor centered on the water and wastewater utility lines. If multiple utility lines exist, lines +/- 50 feet on either side of the outer most utility line define the associated realty. NS Mayport, Ribault Bay, and FISC, which are owned by the DoN, completely encompasses the limits of the subject property and its associated realty. The environmental condition of the subject property and its associated realty were assessed during this EBS.

In some cases, it may be difficult to distinguish whether only the subject property or the associated realty (or both) impact the identified recognized environmental conditions (RECs). For example, the associated realty may have been observed to encroach upon a REC (e.g., wetlands); however, only portions of the water and wastewater utility lines were observed to be within a REC. In these instances, both the subject property and the associated realty will be identified as impacting or being impacted by a REC.

Readily available sources of information regarding topography, geology, hydrogeology, and historical use were obtained and reviewed during this EBS. A site reconnaissance was conducted by PRI in December 2004. Photographs taken during the site visit are presented in Appendix B. It should be noted that not all areas of concern were photographed due to security restrictions at NS Mayport.



FIGURE

Regional Location Map
 Naval Station Mayport, FISC, and Ribault Bay Housing
 Mayport, Florida

1-1

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1.2 Organization of EBSR

The organization of this EBSR follows the format for a base-wide EBS prescribed by the Naval Facilities Engineering Command Environmental Baseline Survey Guidance, March 1995. PRI has performed this EBS and prepared this EBSR following the Statement of Work (SOW) [985] – Utility Privatization, NS Mayport, Florida dated July 29, 2004. Guidelines were also followed from the American Society of Testing and Materials (ASTM D 6008-96).

1.3 Parcel Identification and Boundaries

The subject property only includes the components of water and wastewater utility distribution systems at NS Mayport (See Appendix A, Figure A-1). A 100-foot corridor centered on the water and wastewater utility lines bounds the subject property, and defines the associated realty. If multiple utility lines exist, lines approximately 50 feet on either side of the outer most utility line define the associated realty.

NS Mayport occupies approximately 3,400 acres of land, and is the third largest naval facility in the continental United States. NS Mayport is adjacent to the confluence of the Saint Johns River and the Atlantic Ocean, and is situated on a narrow strip of land surrounded by residential, commercial, and industrial development in the community of Mayport.

Ribault Bay is approximately 2.5 miles south of NS Mayport, and is situated on five acres of land. Ribault Bay is bounded on the north by residences; on the west by undeveloped property and a wetland area; on the south by undeveloped property and a Navy childcare center; and on the east by Puckett Creek.

FISC is located on approximately 150 acres of land north of the city of Jacksonville, Florida, approximately 20 miles west of NS Mayport. FISC is located in a sparse industrial area that is surrounded by highly urbanized areas of Jacksonville, and the Saint Johns River to the south.

2.0 SURVEY METHODOLOGY

2.1 Approach and Rationale

This EBS employed a variety of methods to obtain the necessary information to assess the environmental condition of the subject property. This includes the following:

1. A search and review of available information and records in the possession of the Navy, and records made available by the regulatory agencies or other involved federal agencies.
2. Review of reasonably obtainable federal, state, and local government records of each adjacent facility where there has been a release or likely release of any hazardous substance or petroleum product or its derivatives, and which is likely to cause or contribute to a release or threatened release of any hazardous substance or petroleum product or its derivative on the subject property.
3. Analysis of historic aerial and/or satellite imagery of the subject property and of nearby adjacent areas.
4. Interviews with current owners and/or occupants of the property.
5. Visual assessment of the subject and immediately adjacent properties, noting sewer lines, runoff patterns, evidence of environmental impact (e.g., stained soil, stressed vegetation, or dead or ill wildlife), and other observations, which indicate actual or potential release of hazardous substances or petroleum products.
6. Review of ongoing response actions that have been taken at the subject or adjacent properties (either those properties contiguous to the boundaries of the parcel being surveyed or other nearby properties).

2.2 Related Reports

The following is a listing of the documents that have been reviewed for this EBS:

- ABB Environmental Services. 1995. *Resource Conservation and Recovery Act Corrective Action Program General Information Report, U.S. Naval Station, Mayport, Florida, Volume I of II*. July 1995.
- A.T. Kearney, Inc. 1989. *RCRA Facility Assessment of the Naval Station Mayport*. September 1989.
- Brockington and Associates, Inc. 1996. *Phase I Historic Resources Survey of the Main Cantonment Dune Line*. February 1996.
- Burns & McDonnell. 2001. *RFP Technical Data Package (for water and wastewater systems at NS Mayport, Ribault Bay Housing, and FISC, three reports)*. April 2001.

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- DoN. 2002a. *Environmental Assessment for the Proposed Integrated Natural Resources Management Plan for the Fleet and Industrial Supply Center, Jacksonville-Navy Fuel Depot, Jacksonville, Florida*. January 2002.
- DoN. 2002b. *Integrated Natural Resources Management Plan for Naval Station Mayport*. February 2002.
- EnSafe. 2002. *Spill Prevention, Control, and Countermeasure Plan*. March 2002.
- Hardy Heck Moore, Inc. 2001. *Integrated Cultural Resource Management Plan and Cold War Update Naval Station Mayport*. October 2001.
- Naval Station Mayport. 1996a. *Asbestos Survey Summary*. 1996
- Naval Station Mayport. 1996b. *Asbestos Management Plan*. 1996
- Naval Station Mayport. 1996c. *Lead Action Summary*. 1996
- Naval Station Mayport. 1996d. *Lead Management Plan*. 1996
- Naval Station Mayport. 2002. *Naval Station Mayport Hazardous Waste Management Plan*. May 2002.
- PanAmerican Consultants, Inc. 2000. *Archaeological Resources Survey of Navy-owned Undeveloped Land Adjacent to Ribault Bay Family Housing*. May 2000.
- U.S. Army Corps of Engineers. 1994. *Historic and Archaeological Resource Protection Plan (HARP)*. 1994.
- Weston Solutions, Inc. 2004. *Draft Annual Long-Term Monitoring Report Year 2003, Long-Term Monitoring Program – AOC 1, LPST ID 104524*. March 2004.

3.0 PAST AND CURRENT USE

3.1 Subject Property

The subject property includes only the components of water and wastewater utility distribution system at NS Mayport, Ribault Bay, and. A 100-foot corridor centered on the water and wastewater utility lines bounds the subject property, and defines the associated realty. If multiple utility lines exist, lines approximately 50 feet on either side of the outer most utility line define the associated realty.

Water

According to NS Mayport Technical Data Package (TDP), the original water utility distribution system was reportedly constructed in the 1940s, with expansions and upgrades since then. Potable water is supplied to NS Mayport by three groundwater wells that are located on NS Mayport. Raw water is pumped from the groundwater wells to the NS Mayport water treatment plant, which was installed in 1994. The water is passed through two forced aerators to remove sulfides, and then stored in two storage tanks (2,000,000 gallons and 500,000 gallons). From these storage tanks, the water is chlorinated before entering the distribution system. The water utility system also includes one pump station, 215, 545 linear feet (lf) of piping, comprised of asbestos cement, cast iron, ductile iron, and polyvinyl chloride (PVC), 1,067 valves, 42 backflow preventers, and 182 fire hydrants.

Ribault Bay is supplied potable water through a connection with the City of Atlantic Beach waste distribution system. According to the TDP, the water utility system at Ribault Bay was constructed in 1976 and includes approximately 14,000 lf of PVC piping, 124 valves, 5 backflow preventers, and 14 fire hydrants.

Since December 2000, FISC has reportedly been supplied potable water by Jacksonville Electric Authority via a single connection point along Sommers Road. According to the TDP, the water utility system was installed in the 1940s and 1950s, and is in generally poor condition. The water utility system at FISC includes approximately 15,810 lf of ductile iron, cast iron, and asbestos cement piping, 38 valves, 2 backflow preventers. In 1991, the fire hydrants were removed from the water utility distribution system, and are now supplied water by a separate brine water distribution system.

Wastewater

According to the MS Mayport TDP, the wastewater utility system includes a wastewater treatment plant, an oily waste treatment plant, 167,103 lf of vitrified clay gravity and force main piping, 28 lift stations, and 450 manholes. The majority (90-95%) of the wastewater utility system was installed in the 1940s. Effluent discharge is pumped from the wastewater treatment plant to the Saint Johns River.

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The Ribault Bay wastewater utility system was installed in 1976, and includes 15,270 lf of vitrified clay gravity piping and 26 manholes. According to the TDP, the wastewater generated at Ribault Bay is transported via pipes to the City of Atlantic Beach for treatment.

The FISC wastewater utility system was installed in 1976, and includes 12,044 lf of gravity vitrified clay and cast iron gravity piping and six manholes. According to the TDP, domestic wastewater, generated at FISC, is treated off-site by the City of Jacksonville. However, industrial wastewater is stored at FISC and transported off-site on a monthly basis for treatment and disposal.

3.2 Adjacent Property

The land surrounding the subject property is occupied by NS Mayport. NS Mayport was commissioned in 1942 on approximately 700 acres of land, and consisted of a harbor (Mayport Turning Basin) and an airfield that were constructed from the dredging of Ribault Bay. At the conclusion of World War II, NS Mayport was placed on caretaker's status from 1946 to 1948, and was placed under the cognizance of the United States Coast Guard. NS Mayport was reactivated in 1948. Currently, the NS Mayport is the third largest fleet concentration area in the United States, and encompasses approximately 3,400 acres of land. NS Mayport's operational composition is unique, with a busy seaport that is capable of accommodating 34 ships, and an 8,000-foot runway that conducts over 135,000 flight operations per year.

The mission of NS Mayport includes the operation of patrol craft, target boats, rescue boats, and aircraft carriers. NS Mayport is host to more than 70 tenant commands, including the aircraft carrier USS John F. Kennedy (CV 67), as well as 20 other naval ships, and six Light Airborne Multi-Purpose System (LAMPS) Mark III helicopter squadrons. NS Mayport is also the operational and training headquarters for the SH-60B Seahawk LAMPS MKIII with a primary mission of anti-submarine warfare.

NS Mayport provides necessary support for the naval ships, and associated facilities and personnel. Operations performed at NS Mayport include: ship building, ship and aircraft repair and maintenance, painting, paint removal, and engine repair and maintenance.

The DoN acquired the 150 acres FISC in 1949. FISC originally had four petroleum storage tanks and operated under Naval Air Station Jacksonville as a Fleeting Refueling Unit. Nine additional petroleum storage tanks – seven 80,000-barrel floating roof tanks and two 20,000-barrel tanks – were added in 1952. FISC is owned by NS Mayport and distributes fuel to multiple locations throughout the southeast. FISC functions as a subordinate Command under Navy Supply Systems, and is responsible for the operation of the government-owned, government-operated fuel terminal, including maintenance of facility in compliance with federal, state, and local laws and regulations.

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Ribault Bay is located on approximately 5 acres of land, and includes 360 housing units. Ribault Bay was built in the early 1980s in support of military personnel and their families.

4.0 ENVIRONMENTAL SETTING

4.1 Location

The subject property is located at NS Mayport, near the town of Mayport, within the city limits of Jacksonville, in northeastern Duval County, Florida. NS Mayport is located on the northern end of a peninsula bounded by the Atlantic Ocean to the east and the Saint Johns River to the north and west. Ribault Bay is located approximately 2.5 miles south of NS Mayport. The FISC is located approximately 20 miles west of NS Mayport.

4.2 Physiography

NS Mayport, Ribault Bay, and FISC are located in the southeastern Coastal Plain physiographic province, with an average land elevation of approximately 10 feet above mean sea level (msl). Development, stream erosion, dredging, and filling activities have modified the remnants of two ancient marine terraces, the Pamilco and the Silver Bluff. Few surface water drainage features are present at NS Mayport because the soils along the Saint Johns River are high in sand content and water infiltration rates. However, the drainage areas slope gently towards Saint Johns River (A. T. Kearney Inc., 1989).

Surface Waters, Drainage, and Floodplains

Surface waters are primarily estuarine and marine due to the existing elevations and tidal influences in streams and creeks located throughout NS Mayport. The Saint Johns River and its tributaries are the main sources of surface water at NS Mayport and FISC. Additionally, one shallow freshwater pond, Hatchet Pond, is located at the northwestern portion of FISC. Ribault Bay contains no surface water resources; however, it is adjacent to an extensive salt marsh, the Garden and De Blieu Creeks, as well as the Intracoastal Waterway (ICW).

The Saint Johns River borders NS Mayport to the north and northwest, flowing southeast then west. The majority of the storm water runoff from the northeastern portion of NS Mayport drains towards the Saint Johns River. Sherman Creek is the primary drainage for the uplands and an intertidal saltwater marsh in the south-central portion of NS Mayport. Sherman Creek then flows to the Pablo Creek, which empties into the Chicopit Bay.

According to the Flood Insurance Rate Map (FIRM) produced by the Federal Emergency Management Agency (FEMA), floodplains and flood hazard areas are significant environmental factors affecting existing and future development in the regions. Because of the generally flat topography and low-lying land, 100-year flood elevations around NS Mayport are reportedly between 6 feet and 14 feet above mean sea level (msl). Low-lying areas of NS Mayport and FISC, adjacent to the Saint Johns River and the Atlantic Ocean, are subject to varying degrees of flooding. Flood zones at Ribault Bay reach a base flood elevation of 7 feet above msl. As such, two small sections, in the southwest and northeast portions of Ribault Bay, are located within the 100-year flood hazard zone.

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4.3 Geology

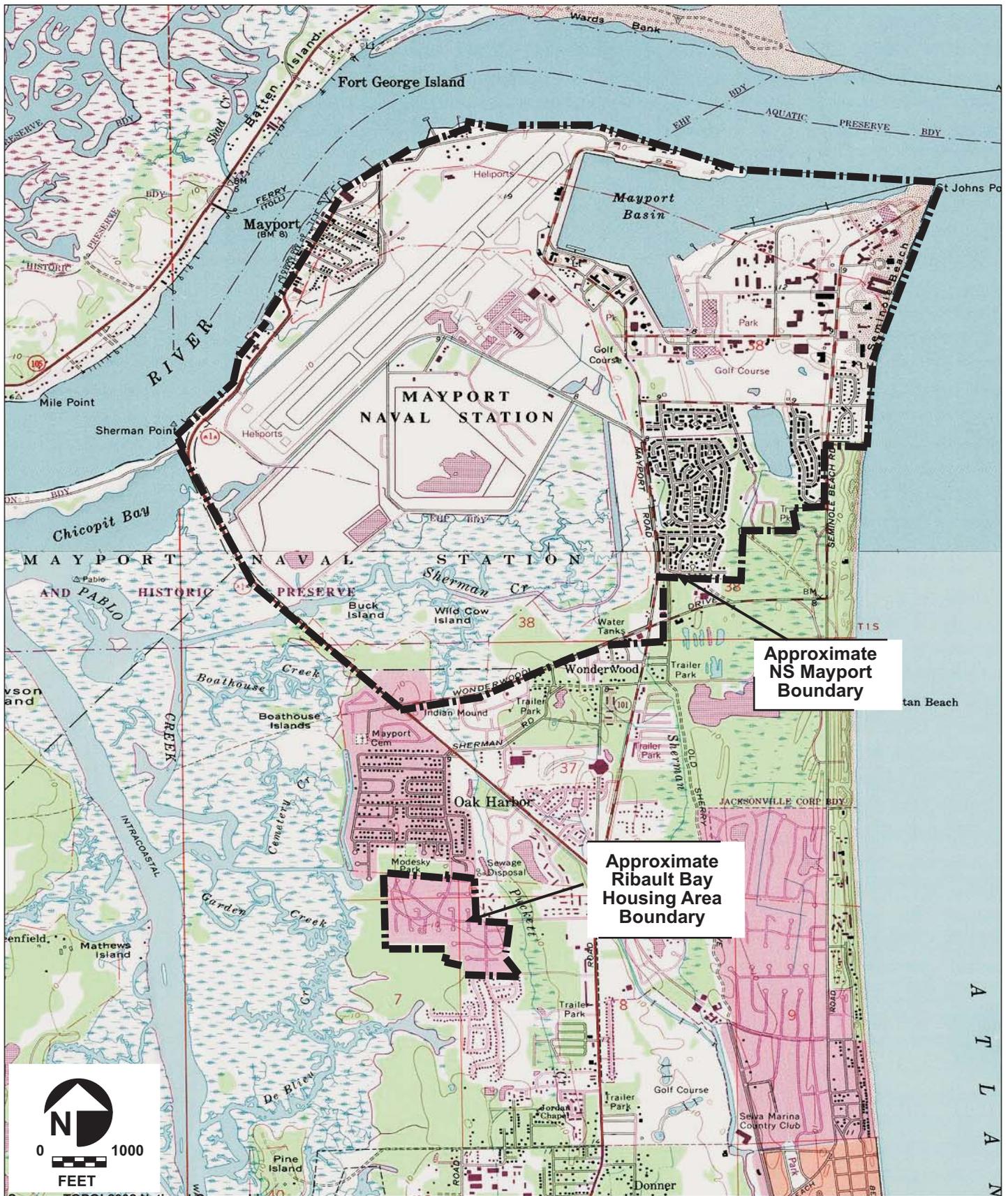
Duval County is underlain with a thick layer of Eocene and younger siliciclastic and marine carbonate sediments that include three separate geologic sequences – a thick unit of surficial deposits, Hawthorn Group, and Eocene marine carbonate. The uppermost sequence, the surficial deposits, consists of Holocene- and Pleistocene-aged silts, sands, clays, and shell beds, as well as Pliocene-aged Cypresshead and Nashua Formation sands, silty clays, shell beds and limestone beds dredged from the Mayport Turning Basin and the Saint Johns River. These surficial deposits are approximately 8 to 16 feet below ground surface (bgs) and approximately 70 feet thick. Underlying this sequence is the Hawthorn Group, which consists of interbedded phosphatic and silty-clayey sands, sandy clays, along with phosphatic, sandy, silty dolostones and limestones. The Hawthorn Group sequence is approximately 500 feet thick in the vicinity of NS Mayport. The third sequence, Eocene-aged marine carbonate consists of, in descending order, the Ocala Limestone, Avon Park Formation, and Oldsmar Formation. This sequence is more than 1,500 feet thick, and consists of massive fossiliferous, chalky to granular limestone, and interbedded limestones and dolostones. The natural soils at NS Mayport consist of three major groups: sand ridges, tidal marsh, and flatwoods (DoN, 2002).

4.4 Hydrogeology

NS Mayport is situated at the mouth of the Saint Johns River. At the subject property, groundwater flows generally north towards the Mayport Turning Basin entrance channel and the Saint Johns River. Major sources of potable water for Duval County are artesian wells that tap into the Floridan aquifer, which is approximately 260 to 600 feet bgs. Tidal influence is not anticipated to affect the direction of groundwater flow. The groundwater elevation ranges from approximately 3 feet to 6 feet above msl. The depth to groundwater ranges from approximately 4 feet to 11 feet bgs. (Tetra Tech NUS Inc., 2003)

4.5 Topography

NS Mayport, Ribault Bay, and FISC are located within the Jacksonville, Florida, 7.5-Minute Topographic Quadrangle Map (Figures 4-1 and 4-2). NS Mayport is located in the Northern Coastal Strip, and is part of the Sea Island District. NS Mayport is generally flat, with surface elevations ranging from approximately 0 to 30 feet above msl. Most of NS Mayport has been filled with dredge spoil resulting from construction and maintenance of Mayport Turning Basin. Elevations at the runways are higher than the surrounding land to provide drainage. The runways serve as a topographic drainage divide between the southeast and northwest portions of NS Mayport. FISC is predominantly flat with elevations ranging from 0 to approximately 10 feet above msl.



Source - TOPOI 2002 National Geographic

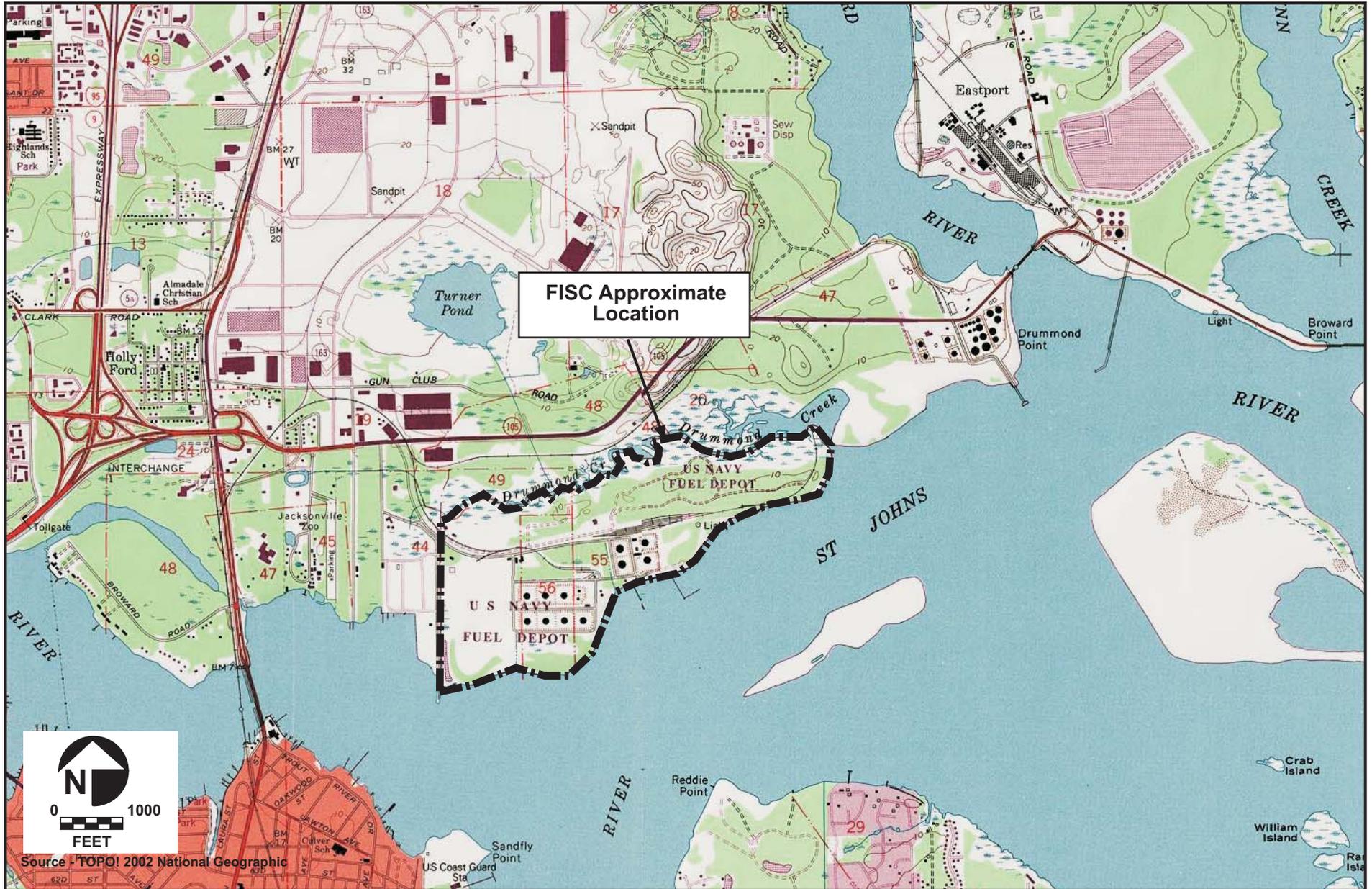
Map created with TOPOI © 2001 National Geographic (www.nationalgeographic.com/topo)



Site Topographic Map
 Naval Station Mayport and Ribault Bay Housing Area
 Mayport, Florida

FIGURE

4-1



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4.6 Natural Resources

NS Mayport is located on approximately 3,400 acres of land, with approximately half of which is classified as jurisdictional wetland. According to the February 2002 Integrated Natural Resources Management Plan (INRMP), wetland communities identified at NS Mayport include Mixed Wetland Hardwoods, Wetland Forested Mixed, Vegetated Non-Forested Wetland, Freshwater Marsh, and Saltwater Marsh. In addition, Tidal Flats and Oyster Bars occur throughout the estuarine environment. Major wetland areas at NS Mayport exist in the southwestern portion of the base property in the area west of Mayport Road and south of the magazine area, and along the western edge of Ribault Bay. The wetland survey concluded that approximately 20 acres of jurisdictional wetlands are located within Ribault Bay. Wetland communities on Ribault Bay are characteristic of hydric hammock. Additionally, a wetlands survey was reportedly conducted at FISC in 1997, with approximately 20 acres of wetlands identified that consist of mixed pine hardwood forests.

During the site visit, no maps of the designated wetland areas were available to PRI. In comparing the water and wastewater utility system maps to the wetland areas mentioned above, it is unlikely that wetlands are an environmental concern to the subject property or the associated realty.

According to the INRMP, during a 1995 Florida Natural Area Inventory (FNAI) survey for rare, threatened, and endangered plant and vertebrate animal species at NS Mayport, 26 rare, threatened, endangered, or declining animal species, and 11 rare, threatened, endangered, or declining plant species were identified within area. The survey concluded that due to lack of habitat, no rare, threatened, or endangered plant species are located at NS Mayport. The Ribault Bay area was also reported to contain no suitable habitat for federally rare, threatened, or endangered plant species. According to a January 2002 FISC INRMP, it appears that no rare, threatened or endangered plant or vertebrate animal species survey have been conducted at FISC.

The FNAI surveyed also concluded that 11 rare, threatened, and endangered terrestrial vertebrate animals occur at NS Mayport. Copies of the NS Mayport INRMP tables listing the threatened and endangered terrestrial vertebrate species are provided in Appendix C. The FNAI survey did not include Ribault Bay area. However, a field survey by E&E Company in 1999 confirmed the presence of wood stork (endangered), and found burrows belonging to the gopher tortoise (a state species of special concern) in Ribault Bay. Although no survey for the rare, threatened, and endangered animal species has reportedly been conducted at FISC, bald eagles are reportedly known to exist in the vicinity. The listed rare, threatened, and endangered terrestrial vertebrate animals are reportedly the inhabit wetland areas throughout NS Mayport, Ribault Bay, and FISC. Therefore, these animal species are not anticipated to occur at the subject property or the associated realty.

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4.7 Cultural and Archeological Resources

Based on a review of the 1994 Summary of Mayport Naval Stations Historic and Archeological Resources Protection Plan (HARP), the following eight areas are located within the associated realty, and are reportedly considered significant cultural resources: 8Du296, 8Du5545, 8Du7458, 8Du78, 8Du7512, 8Du7513, 8Du8116, and 8Du8117. A copy of the Site-Specific Management Actions Table from the HARP, summarizing the management recommendations for these eight areas at NS Mayport, is provided in Appendix C.

5.0 ENVIRONMENTAL CONDITIONS

5.1 Federal / State Regulatory Agreements / Permits

According to NS Mayport Environmental Division, NS Mayport is current with required permits issued by local, state, and federal agencies. Additionally, the remedial activities at NS Mayport are driven by the Hazardous and Solid Waste Amendment (HSWA) portion of RCRA, which identifies procedures to be implemented during environmental investigations and remediation. NS Mayport has been issued a HSWA permit by Florida Department of Environmental Protection (FDEP).

5.2 Hazardous Substances / Waste Management

According to the NS Mayport Environmental Division, a Hazardous Waste Management Plan is in place for both NS Mayport and FISC. No hazardous waste is generated at Ribault Bay. An outside contractor performs transportation and disposal of hazardous waste.

The hazardous waste accumulation areas are located within the associated realty. Based on observations made during site visit, and environmental records reviewed to date, the hazardous waste accumulation areas do not appear to have had an adverse impact on the environmental integrity of the subject property or the associated realty.

There are reportedly three one-ton chlorine gas cylinders and three one-ton sulfur dioxide gas cylinders located at the wastewater treatment plant (WWTP), as well as three one-ton chlorine gas cylinders at the water treatment plant, which are within the subject property. Currently, the water and wastewater treatment systems are working from iAP-Hill process safety manual, which is part of the United States Environmental Protection Agency (USEPA) Risk Management Program (RMP) requirement. No incidents involving releases or leaks of chlorine or sulfur dioxide gases were identified during PRI's site visit, and therefore are not considered an environmental concern at the subject property.

5.3 Petroleum Contamination

During PRI's site visit, documentation for the existing aboveground storage tanks (ASTs), underground storage tanks (USTs), oil/water separators (OWSs), emergency generators, and associated releases was reviewed at NS Mayport.

According to the NS Mayport Environmental Division, a UST/AST management program and Spill Prevention Control and Countermeasure (SPCC) Plan are in place for both NS Mayport and FISC. Review of the December 14, 2004 Base Site Management Plan indicated that there are 40 leaking petroleum storage tank (LPST) sites associated with NS Mayport and FISC. No LPSTs have been reported at Ribault Bay. Twenty-seven of the 40 LPST sites have been granted a "no further action" (NFA) or a "conditional NFA"

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from FDEP. The remaining 13 LPST sites appear to be within the associated realty as follows:

- UST Site 351
- UST Site 425
- UST Site 460
- UST Site 1586 (BEQ and the New Building)
- NSC Fuel Farm
- Pier Alpha/Delta
- UST Site 283
- UST Site 1330
- UST Site 25
- UST Site 1343
- UST Site 1363/1363-G
- UST Site 245
- UST Site 250.

Cleanup activities are currently underway at these sites. Summary documentation for all the LPSTs is included in Appendix C.

5.4 Environmental Restoration

A total of 56 Solid Waste Management Unit (SWMU) sites (designated as SWMUs 1 through 56), and two Areas of Concern (AOC) sites (designated as AOC C and AOC D) have been identified at NS Mayport. Nineteen of the 56 SWMU sites received NFA or NFA with land use control (LUC) letters from the FDEP. Of the remaining 39 active SWMU and AOC sites, 29 appear to be located within the associated realty at NS Mayport, and are presented in Table 5-1 below:

**Table 5-1
SWMUs and AOCs at NS Mayport within the Associated Realty**

SWMU - AOC	Name
SWMU 1	Landfill A
SWMU 2	Landfill B
SWMU 5	Landfill E
SWMU 6	Waste Oil Pit
SWMU 7	Oily Waste Treatment Plant (OWTP) Sludge Beds
SWMU 8	OWTP Percolation Pond
SWMU 9	OWTP
SWMU 10	Hazardous Waste Storage Area

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SWMU 11	Fuel Spill Area
SWMU 12	Neutralization Basin
SWMU 14	Mercury & Oily Waste Spill Area
SWMU 17	Carbonaceous Fuel Boiler
SWMU 18	Fleet Training Center
SWMU 20	Hobby Shop Drain
SWMU 21	Hobby Shop Scrap Storage
SWMU 22	Building 1600 Blasting Area
SWMU 23	Jacksonville Shipyard, Inc. (JSI) Shipyard
SWMU 24	North Florida (NF) Shipyard
SWMU 25	Atlantic Marine Industrial (AMI) Shipyard
SWMU 26	Landfill C
SWMU 28	Defense Reutilization Marketing Office (DRMO) Yard
SWMU 44	Waste Water Treatment Facility (WWTF) Clarifiers
SWMU 45	WWTF Sludge Beds
SWMU 47	Oily Waste Collection System
SWMU 52	PWD Service Station Storage Area
SWMU 53	Sewer System
SWMU 55	Storm Sewer System
SWMU 56	Building 1552 Accumulation Area
AOC C	Building 191/Echo Pier

A summary table presenting the exit strategy, and location map for the above sites are provided in Appendix C. According to NS Mayport environmental department personnel, the exit strategy document provided in Appendix C is a proposed/draft document, and does not have regulatory approval. It is subject to change or modification.

Additionally, four active Installation Restoration (IR) sites (also referred to as the Federal Facilities Program Sites) have been identified within the associated realty at FISC, and are presented in Table 5-2 below:

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Table 5-2
Active IR Sites at FISC within the Associated Realty

IR Site No.	Name
IR Site 1	SRR – DFM Pipeline Leak at “A” Road
IR Site 2	SRR – JP-5 Pipeline Leak (East of Valve Pit #4)
IR Site 3	Train Rack Piping Closure (Facility 54)
IR Site 4	Abandoned DFM Piping

A summary table presenting the activity performed, comments, proposed activities for fiscal year 2005, in addition to IR site location map at FISC are provided in Appendix C.

No SWMU, AOC, or IR sites have been reported at Ribault Bay.

Based on PRI’s review of available documentation, it is unclear whether these above-mentioned SWMU, AOC, or IR sites have had a significant adverse impact upon the environmental integrity of the associated realty. However, because these sites have been identified as contaminated and the appropriate closure has not been obtained, it appears that contamination from these sites could impact the environmental integrity of the associated realty and are considered a REC.

5.5 Solid / Biohazardous Waste

Unregulated solid waste accumulation at the subject property is limited to paper and plastic generated in the offices, and household items generated in the housing areas. The unregulated solid waste is picked up and removed from the subject property by an outside contractor. No evidence of illegal dumping of hazardous materials was observed at the associated realty during PRI’s site visit.

Biohazardous waste is generated at the medical building located within NS Mayport. The biohazardous waste is stored at designated areas at and near the medical building, and removed routinely by outside licensed contractor. No storage of biohazardous waste was observed within the bounds of the subject property or the associated realty.

5.6 Polychlorinated Biphenyl Compliance

Polychlorinated biphenyls (PCBs) are potentially toxic substances that are commonly found in electrical transformers. The commercial use of PCBs has been banned since 1979.

According to NS Mayport personnel, a base-wide program to identify PCB-containing transformers and oil switches was reportedly completed by Public Works Center (PWC) personnel in the early 1990s. This program included testing existing transformers and

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oil switches for PCBs; wipe testing visible stains adjacent to the transformers; and identifying transformers with PCB-containing insulating fluid and retro-filling with non-PCB containing insulating fluid. The removal of PCB-containing transformers was performed at both NS Mayport and FISC. According to the Ribault Bay TDP, there reportedly are no known sources of PCBs at Ribault Bay.

Due to the efforts of the base-wide PCB identification program in the early 1990s, it appears that the historical presence of PCB-containing transformers is not anticipated to have an adverse impact on the environmental integrity of the subject property or the associated realty. PCB containing transformers and other related electrical equipment at FISC were reportedly retro-filled with non-PCB containing insulating fluid. Additionally, an April 1, 1996 letter, addressed to the Commanding Officer at Naval Facilities Engineering Service Center, identified NS Mayport as free of all PCBs. A copy of this NS Mayport "PCB-free" letter has been provided in Appendix C.

5.7 Asbestos-Containing Material

According to the NS Mayport environmental records reviewed, asbestos surveys were reportedly performed in September 1994. These reports indicate that asbestos-containing material (ACM) is present in many of the buildings. ACM was identified in locations including, but not limited to, drywall joint compound, window caulking, mastic, and sink undercoating.

According to a limited asbestos survey, conducted by Shaw Environmental (Shaw), it appears that an abandoned asphalt-wrapped underground fuel line and transite pipe system at FISC, located between 3rd Street and 5th Street, contained asbestos. Additionally, in June 1997, an ACM inventory of FISC buildings was conducted to review the status of buildings that were previously identified as containing asbestos. PRI was unable to locate any additional information regarding ACM at FISC.

Based on PRI's review of available documentation and site visit, it appears that ACMs may be associated with the water and wastewater utility systems, and are therefore considered a REC. Identified ACM locations and laboratory results for the housing areas at NS Mayport and Ribault Bay are presented in Appendix C.

5.8 Lead-Based Paint

Based on PRI's review of the NS Mayport environmental records, a lead survey was reportedly performed in September 1994. These reports indicate that lead-based paint (LBP) is present on both interior and exterior components of many of the buildings. Based on the dates of construction, it is assumed that LBP may have been used on the original portions of the water and wastewater utility systems. Over the years, some of the older equipment has been decommissioned, removed, or replaced by newer equipment that does not contain LBP. During PRI's site visit, painted surfaces on the fire hydrants and other equipment generally appeared to be in good condition with no evidence of peeling, cracking, or flaking of possible LBP. A summary of LBP locations

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and laboratory results for the housing areas at NS Mayport and Ribault Bay is provided in Appendix C.

5.9 Pesticides and Herbicides

Based on interview with the NS Mayport personnel, vegetated areas appear to be sprayed with commercially available pesticides and herbicides, as needed. The specific use of chlordane was not determined during PRI's site visit. However, due to its common usage prior to the late 1980s, it was likely applied at NS Mayport, Rebault Bay, and FISC. Because chlordane persists in the environment for many years, it potentially still exists where it was applied. The use of chlordane was stopped in 1988, mainly because of concern over cancer risk, evidence of human exposure, build-up in body fat, persistence in the environment, and danger to wildlife.

Based on the above information, it is likely that residual pesticides and herbicides could be found in soil or groundwater at and around the associated realty. Currently, there are no open issues at FDEP regarding residual pesticides and herbicides at the associated realty. Therefore, no further investigation is warranted at this time.

6.0 ADJACENT PROPERTIES

Land immediately adjacent to the subject property is within the boundaries of NS Mayport, Ribault Bay, and FISC. Environmental condition and its effect on the subject property and associated realty at the adjacent navy-owned land have been evaluated through out this survey.

Adjoining landowners to NS Mayport, Ribault Bay, and FISC are primarily residential, commercial, and woodland areas. Based on the nature of their use and distance from the subject property, these properties do not appear to present an environmental concern to the subject property or its associated realty at this time.

7.0 PROPERTY ASSESSMENT

The following section summarizes the RECs identified during the EBS.

Cultural Resources

Based on a review of the 1994 Summary of HARP Plan, eight areas of significant cultural resources are located within the associated realty at NS Mayport.

Petroleum Products

There are reportedly 40 LPST sites associated with NS Mayport and FISC. Thirteen of the 40 LPST sites are active, and have not received a NFA letter from the FDEP. The 13 LPST sites are within the bounds of the associated realty.

Environmental Restoration

A total of 56 SWMU, and two AOC sites have been identified at NS Mayport. Nineteen of the 56 SWMU sites received NFA letters from the FDEP. Of the remaining 39 active SWMU and AOC sites, 29 appear to be located within the associated realty at NS Mayport.

Additionally, four active IR sites have been identified within the associated realty at FISC. No SWMU, AOC, or IR sites were identified at Ribault Bay.

Asbestos-Containing Material

According to the NS Mayport environmental records reviewed, asbestos surveys were reportedly performed in September 1994. These reports indicate that ACM is present in many of the buildings. ACM was identified in locations including, but not limited to, drywall joint compound, window caulking, mastic, and sink undercoating.

According to a limited asbestos survey, conducted at FISC by Shaw, it appears that an abandoned asphalt-wrapped underground fuel line and transite piping located between 3rd Street and 5th Street, contained asbestos. Therefore, ACM is considered a REC for the subject property and associated realty.

Lead-Based Paint

Based on the dates of construction, it is assumed that LBP may have been used on the original portions of the water and wastewater utility systems. Over the years, some of the older equipment has been decommissioned, removed, or replaced by newer equipment that does not contain LBP. During PRI's site visit, painted surfaces on fire hydrants and other water and wastewater equipment generally appeared to be in good condition, with no evidence of peeling, cracking, or flaking of possible LBP.

Pesticide

Based on interview with the NS Mayport personnel, vegetated areas appear to be sprayed with commercially available pesticides and herbicides, as needed. Based on this information, it is likely that residual pesticides and herbicides could be found in soil

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or groundwater at and around the associated realty. Currently, there are no open issues at FDEP regarding residual pesticides and herbicides at the associated realty. Therefore, no further investigation is warranted at this time.

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8.0 CERTIFICATION

This report describes the pertinent information obtained during the EBS. The findings presented in this EBSR are relative to the dates of PRI's survey in 2004 and should not be relied upon to represent conditions at substantially later dates. PRI's observations reflect site conditions as of the latest survey visit to particular areas of the subject property, and should not be construed as representing previous or future site conditions. Any opinions included herein are based on the information obtained during this survey and PRI's experience with similar surveys. Although this survey has attempted to identify the potential for environmental impacts to the subject property resulting from possible contamination, sources may have escaped detection due to: 1) the limited scope of this survey; 2) the inaccuracy of public records; 3) the presence of undetected or unreported environmental incidents; or 4) other site and area specific factors. It has not been the purpose of this survey to determine the actual presence, degree or extent of contamination, if any, at the site.

I certify that the property conditions stated in this report are based on a review of available records, visual inspections, and interviews as noted, and are true and correct, with the above qualifications, to the best of my knowledge and belief.

Date

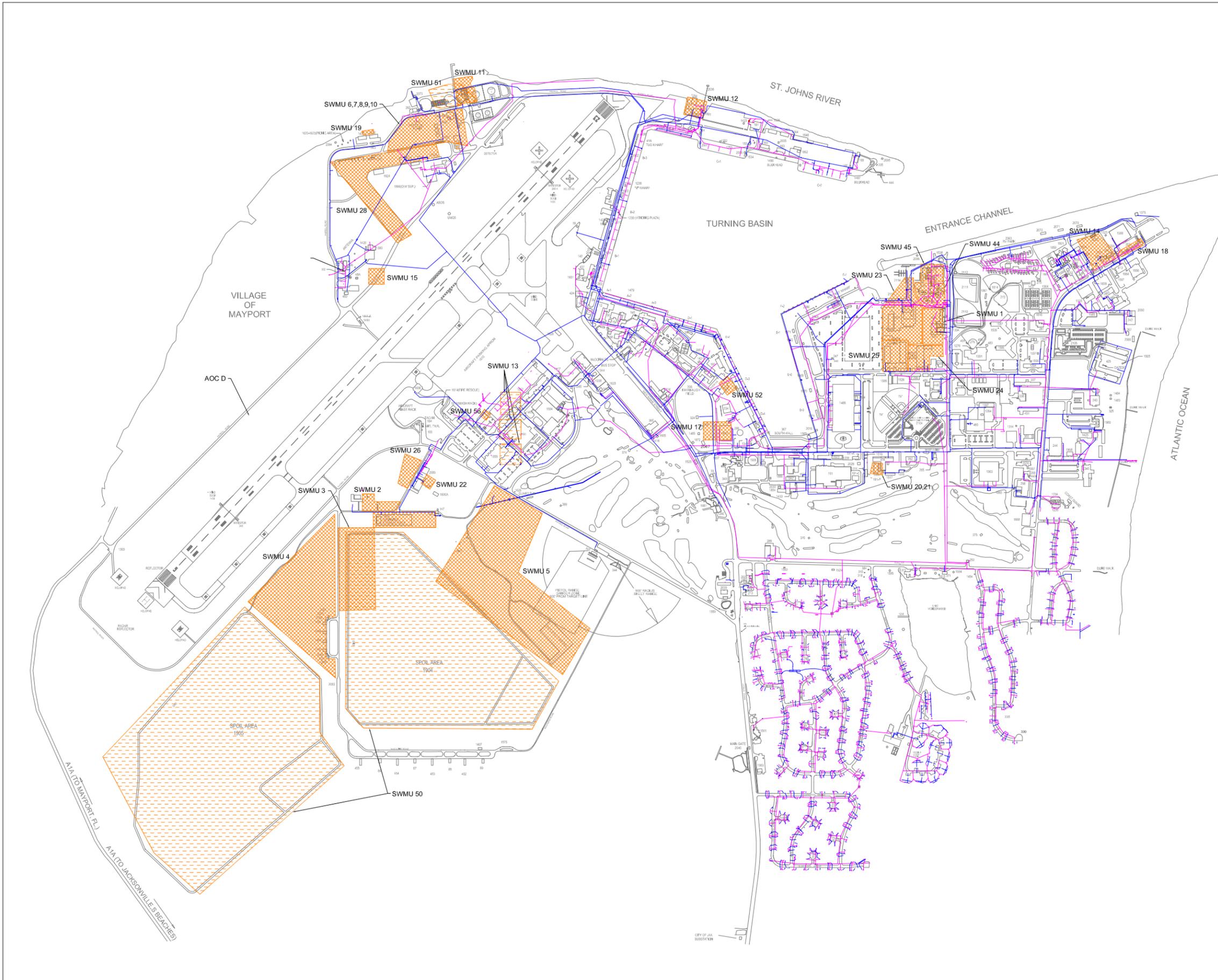
Jeremiah D. Jackson, PhD, PE
Program Manager
Project Resources Inc.

Date

Keri Anselmo
Project Manager
Project Resources Inc.

APPENDIX A

**WATER AND WASTEWATER UTILITIES DISTRIBUTION
SYSTEMS DETAIL MAP**



LEGEND

- UTILITIES**
- POTABLE WATER UTILITIES
 - SANITARY SEWER UTILITIES

INSTALLATION RESTORATION IR SITES

- SWMU (LUC)
- SWMU

SWMU NUMERICAL LISTING	
1	LANDFILL A
2	LANDFILL B
3	LANDFILL D
4	LANDFILL E
5	LANDFILL F
6	WASTE OIL PIT
7	OWTP SLUDGE BEDS
8	OWTP PERCOLATION POND
9	OWTP
10	HAZ WASTE STORAGE
11	FUEL SPILL AREA
12	NEUTRALIZATION POND
13	OLD FIRE TRAINING
14	MERCURY/OILY WASTE SPILL
15	OLD PESTICIDE AREA
16	OLD TRANSFORMER STORAGE AREA
17	CARBONACEOUS FUEL BOILER
18	FTC DIESEL GENERATOR SUMP
19	NADEP BLASTING AREA
20	HOBBY SHOP DRAIN
21	HOBBY SHOP SCRAP STORAGE
22	BLDG 1600 BLASTING AREA
23	JAX SHIPYARDS
24	N FLA SHIPYARDS
25	ATLANTIC MARINE
26	LANDFILL C
28	DRMO YARD
29	OILY WASTE PIPELINE BREAK
44	WWTP CLARIFIERS 1 & 2
45	WWTP SLUDGE DRYING BEDS
46	SIMA ENGINE DRAIN SUMP
47	OILY WASTE COLLECTION SYSTEM
48	FORMER CHEMICAL LAB AREA
49	FLIGHT LINE RETENTION PONDS
50	DREDGE SPOIL DISPOSAL AREAS
51	WASTE OIL TANKS
52	PWD SERVICE STATION STORAGE
53	SEWER PIPELINES
54	OIL/WATER SEPARATORS
55	STORM SEWER/DRAINAGE SYSTEM
56	BLDG 1552 ACCUMULATION AREA (AOC C)
BLDG 1986 PART B HWSF	
AOC A FUEL DISTRIBUTION LINES	
AOC B PRODUCT STORAGE TANKS	
AOC C BUILDING 191 WAREHOUSE	
AOC D AIRFIELD SOIL PLACEMENT SITE	



NAVAL FACILITIES ENGINEERING COMMAND
MAYPORT, FLORIDA

**WATER AND WASTEWATER UTILITIES
DISTRIBUTION SYSTEMS
DETAIL MAP**

FIGURE	SIZE	DWG NO.	REV
A-1	B		
SCALE:	AS SHOWN		SHEET 1 of 1

APPENDIX B

PHOTOGRAPHS OF SUBJECT PROPERTY

Naval Station Mayport
Water and Wastewater Utility Privatization
Mayport, Florida



1. View of fueling stands at the Navy Fuel Depot at NS Mayport.



2. View of Oily Waste Treatment Plant and SWMUs 6, 7, 8, and 9.

Naval Station Mayport
Water and Wastewater Utility Privatization
Mayport, Florida



3. View of SWMU 10, Hazardous Waste Storage Area.



4. View of Navy Fuel Depot.

Naval Station Mayport
Water and Wastewater Utility Privatization
Mayport, Florida



5. Diesel Generator Sump at Fleet Training Center, site of SWMU 18.



6. View of SWMU 20, Hobby Shop Drain.

Naval Station Mayport
Water and Wastewater Utility Privatization
Mayport, Florida



7. View of SWMU 21, Hobby Shop Scrap Storage Area.



8. View of SWMU 28, Defense Reutilization Marketing Office Yard.

Naval Station Mayport
Water and Wastewater Utility Privatization
Mayport, Florida



9. View of SWMU 44, Wastewater Treatment Facility Clarifiers 1 and 2.



10. View of the new Wastewater Treatment Facility sludge drying beds.

APPENDIX C
SUPPORTING DOCUMENTS

CULTURAL AND NATURAL RESOURCES TABLE

**Table 2
Site Specific Management Actions
Naval Station Mayport**

Site Number	Management Recommendations
St. Johns Lighthouse 8Du296	<ul style="list-style-type: none"> ● Awaiting Condition Assessment report, recommendations should be incorporated when final.
8Du78	<ul style="list-style-type: none"> ● Phase II archeological testing to determine National Register eligibility. ● Fence Navy property to protect site integrity. ● Quarterly inspection
8Du5545	<ul style="list-style-type: none"> ● Phase II archeological testing to determine National Register eligibility. ● Fence Navy property to protect site integrity. ● Quarterly inspection
8Du7458	<ul style="list-style-type: none"> ● Formal nomination to the National Register. ● Quarterly inspection
8Du7512	<ul style="list-style-type: none"> ● Phase II archeological testing to determine National Register eligibility. ● Quarterly inspection
8Du7513	<ul style="list-style-type: none"> ● Phase II archeological testing to determine National Register eligibility. ● Phase II testing should be oriented for deeply buried sites. ● Quarterly inspection
8Du8116	<ul style="list-style-type: none"> ● Phase II archeological testing to determine National Register eligibility. ● Quarterly inspection
8Du8117	<ul style="list-style-type: none"> ● Phase II archeological testing to determine National Register eligibility. ● Quarterly inspection

did not include the Ribault Bay Village Housing area specifically, but did include similar habitats in the nearby vicinity.

3.6.1 Federally and State-Protected Plants

The 1995 FNAI survey concluded that no threatened or endangered plant species were located on NS Mayport (Hipes and Chafin 1995). This is largely attributable to the lack of appropriate habitat on NS Mayport. The Ribault Bay Village housing area contains no suitable habitat for federally threatened and endangered plant species. Although not present on NS Mayport, the plant species most likely to occur on NS Mayport include the Southern lip fern (*Cheilanthes microphylla*) and Slender-leaved dragon head (*Physostegia leptophylla*). Colonization of these species may occur within the hydric hammocks and the transition zone between the hammocks and tidal marsh.

3.6.2 Federally and State-Protected Vertebrates

The 1995 FNAI survey also concluded that ~~12~~¹¹ species of rare, threatened, or endangered terrestrial vertebrates occur on NS Mayport. Table 3-3 presents the rare, threatened and endangered terrestrial species identified on NS Mayport. Although the FNAI survey did not include the Ribault Bay Village Housing site specifically, the survey did include similar habitats in the nearby vicinity.

Common Name (Scientific Name)	Federal Status	State Status	Habitat
Gopher tortoise (<i>Gopherus polyphemus</i>)	N	SSC	Buckhorn Hammock, grassy area north of Building 436.
Worthington's marsh wren (<i>Cistothorus palustris griseus</i>)	N	SSC	Tidal marsh (nest found southeast of western dredge material disposal site).
Least tern (<i>Sterna antillarum</i>)	N	T	Nesting on western most dredge material disposal site off the perimeter road and on building 191.
Great egret (<i>Casmerodius albus</i>)	N	SSC	Most aquatic habitats.
Snowy egret (<i>Egretta thula</i>)	N	SSC	Most aquatic habitats.
Little blue heron (<i>Egretta caerulea</i>)	N	SSC	Most aquatic habitats.
Tricolored heron (<i>Egretta tricolor</i>)	N	LS	Most aquatic habitats.

Table 3-3			
Threatened and Endangered Terrestrial Vertebrate Species Known to Occur on or Near NS Mayport			
Common Name (Scientific Name)	Federal Status	State Status	Habitat
White ibis (<i>Eudocimus albus</i>)	N	SSC	Golf course and most aquatic habitats.
Bald eagle (<i>Haliaeetus leucocephalus</i>)	T	T	One adult individual observed foraging over the tidal marsh.
Wood stork (<i>Mycteria americana</i>)	E	E	Tidal marsh, two ponds in the western portion of the golf course, in the western dredge material disposal site, and the Sherman creek canal.
Florida burrowing owl ¹ <i>Speotyto cunicularia floridan</i>	N	SSC	Dry prairie and other open grassy habitats

Sources: Hipes and Chafin 1995; NS Mayport 1997; E & E 1999a; Dial Cordy and Associates, Inc. 1998; and FFWCC 1997.

Notes:

¹ Species' burrows have been observed on the Ribault Bay Village housing area.

The 1994 FNAI also identified the species of Island glass lizard (*Ophisaurus compressus*) and loggerhead shrike (*Lanius ludovicianus*) as C2 (Candidate species), respectively. Candidate species have been removed from the federal listing and are provided no protective status at this time.

Key:

- E = Endangered.
- FFWCC = Florida Fish and Wildlife Conservation Commission.
- N = No protective legal status.
- SSC = Species of Special Concern.
- T = Threatened.
- T(S/A) = Threatened due to Similarity of Appearance.
- LS = Listed as Species of Special Concern by the FFWCC.

Additionally, field reconnaissance performed in January 1999 conducted by E & E in association with the *Environmental Assessment for the Construction of Family Housing Assigned to Naval Station Mayport*, confirmed the presence of a wood stork (*Mycteria americana*) at the stormwater pond located at the Ribault Bay Village Housing area. In addition, burrows belonging to the gopher tortoise (*Gopherus polyphemus*), a state species of special concern (SSC), have been identified within the uplands at the Ribault Bay Village Housing area (Dial Cordy and Associates, Inc. 1998). Also, the Worthington's marsh wren (*Cistothorus palustris griseu*), wood stork, tri-colored heron (*Egretta tricolor*), snowy egret (*Egretta thula*), little blue heron (*Egretta caerulea*), and white ibis (*Eudocimus albus*) inhabit wetland areas throughout NS Mayport (including the Ribault Bay Village Housing area).

LPST SITE INFORMATION

Base Site Management Plan

12/14/2004

MAYPORT

BLDG 1241, STEAM PLANT Site (PWC -- Scott Dombrosky)-TtNUS-Peterson

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Aval</u>	<u>Comment</u>
CA				***** 8000 gals tanker release (200 to 300 gal diesel fuel) Contamination Assess Plan received from TtNUS for additional assess of Sites 250 & 1241. HASP also 8-3-01...Scott Dombrosky will research package and determine direction. Site requires investigation..... 12-8-01... Jim and Scott to walk site 12-10-01.....7-5-02.... Scott to have Sampling Plan developed..... 2-28-03... Started contractng to have TtNUS perform SA..... 5-5-03.... SA underway
TECMEM				3-2-04.... Contamiantion Assess plan recieved from TtNUS 6/20/03 for additional assess of Sites 250 & 1241. HASP also received. Draft SAR est. 19 Mar 04... NFA anticipated.
SAR	5/28/04	9/23/2004		***** Second gw water sampling event resulted in no excedences above GCTLs. NFA is recommended in SAR dated May 2004.
NFA	5/28/04	9/23/2004		***NFA APPROVED 23 Sept 04.

Bldg 351...(B0218) Site (Mayport -D. Lancaster) #2 Fuel Oil -- TtNUS(Mark

Discovery Date: 7/1/1999

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Aval</u>	<u>Comment</u>
SAR				7-30-99 -- Broken pipe, 23 drums of contaminated soils removed, pipe repaired. Anticipate Site Investigation in FY 2000. 2-8-00..... 1200 gals of free product recovered.
SAR	2/14/01	3/5/2001	10-10-00..... Field activity, early May.00, Benzene (2.2 ug/l) in one temp well only. No COC in soils above target. Propose 5 wells installed. One well, 351-MW05, in the source area, exhibited hydrocarbon constituent above GCTLs. Total xylenes at 500 ug/l exceed default criteria for NA at 200ug/l..... 4-2-01.....FDEP suggest resample well (351-MW05). It contained total xylenes above Nat. Atten. Default Concentration.....12-8-01..... IRA to be performed utilizing Aggressive Fluid Vapor Recovery (AFVR) prior to RAP development. A new 4" well shall be installed near the sump to perform IRA..... 7-5-02... 4" well installed 12 June. 1st AFVR- 15 July..... 10-7-02....3 AFVR events performed and resampled - one detectionof benzo(a)anthracene (0.06 ug/l, exceeds 0.02 ug/l GCTL);..... 1-6-03.... SARA anticipated early Mar.. MNA
SARA	3/27/03	5/9/2003		9-15-03..... FDEP approves Mon Nat. Atten. 1st qtr sampling event is scheduled for Oct 03. Determination of sampling frequency will be based on analyticals.... 3-2-04... TtNUS to Mon..... ***** Continue to monitoring on a weekly basis

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Qtrly Report	6/9/04	9/8/2004	***** 1st Quarter GW Report.....Since monitoring completion, two new releases of fuel oil have occurred at Bldg 351. The first is a daytank 75 ft west of RW-01. The 2nd is the sump located between RW-01 and MW-05 that has impacted both wells with free prod. Next sampling event is Mar 04.
Qtrly Report	6/12/04		*****2nd Quarterly GW Report13 inches of free prod present in 2 of 3 wells, RW-01 & MW-05 (dedicated monitoring wells). doubtful that daytank is the source of free product in wells. Free product was also observed in the sump estimated to be greater than 10 inches. Appears to be fresh diesel. ... MONA to be modified since conditions no longer apply. Next 2 product monitoring events will replace 3rd & 4th qtr MONA. New wells to sample will include MW-05, MW-01, MW-02 & MW-03. Sampling of wells located cross & down gradient will provide info on mobility of free product and gw impacts. Effectiveness of free product removal will be evaluated..... 8-31-04.. ... Limited soil removal conducted by Aerostar. Site requires new investigation.

BLDG 425 (B0234) Site (NS Mayport -- D. Lancaster), #2 Fuel Oil AST -- TtNUS(M) Discovery Date: 7/1/1999

<u>Action:</u>	<u>Date to</u> <u>FDEP</u>	<u>Rev Date</u> <u>by FDEP</u>	<u>Amt Activity</u> <u>Funds Aval</u>	<u>Comment</u>
TECMEM TECMEM		4/25/2003		05-05-03.... Requires remediation. 2-28-03..... RAP (3 AFVR events) unsuccessful. Will formally close out RAP order and recommend different action to address contamination. Smear zone contamination believed to impact gw.
RAP	7/1/01			12-8-01..... Interim Measure, Aggressive Fluid Vapor Recovery (AFVR), will be implemented at Bldg 425..... Air Emissions Monitoring for RAP submitted 1/26/02... 6-7-02.....
CA	7/30/99			7-30-99----- Two spills; 1st, accidental pipe cutting occurred, 700 gals released; 2nd, float valve failed, tank pumped itself dry, 500 gals released... ..10-10-00....SA Field activity, mid May. Both soil & gw contam. Recom. RAP. POSSIBLE BIOVENTING /
SAR	12/14/00	2/22/2001		4-2-01 ... Prepare a RAP for contaminated soils at Area 2. Area 1 requires no additional assessment.....
RAP	10/23/01	12/14/2001		7-5-02..... 1st AFVR - 15 July..... ..10-7-02... After 3 AFVR events on MW-04, no product extracted. (on 5 Oct 02, 0.16 of product in well) Recommendations are: use of passive skimmers, peristaltic pumps, 1 inch piezometers placed around MW-04 for monitoring - no prod in piezoms... prod. believed to be adsorbed in soils and capillary fringe.... 1-6-03..... IM to be conducted to excavate contaminated smear zone soils believed to impact gw. Following removal, gw mon will be proposed in SAR.
RA	8/4/03	10/13/2003		8-31-04.... Remedial Action Report.... specifies limited soil excavation to address presence of contam soil in smear zone.

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BLDG 460 ... (B0231) Site (NS Mayport -- D Lancaster) #2 Fuel Oil/Dsl -

Discovery Date: 3/31/1994

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Avail</u>	<u>Comment</u>
CAR	2/26/96	3/1/1996		DIRECTED TO RE-SAMPLE AND SUBMIT ADDENDUM.
CAR ADD1	10/11/96	10/11/1996		GW is clean. Soil is contaminated. Under asphalt. A possible candidate for Risk Base assessment. FDEP requests RAP submittal to address contam. soil and a proposed MOP. No funds presently available
CAR ADD2	4/3/98	4/7/1998		5-12-98 JAN BOVIER -----ABB performed SPLP on 28 Jan 98. Soil is not a continued source of gw contam. GW sampling indicates a decrease in CoC's from June 95 to Jan 98. Anticipate RAP in FY 99-10-22-98 ----- Expect to: Awaiting HLA response to FDEP's comments. Evaluate site for LUC versus remedial action as an alternative. Anticipate CAR Addendum Mid Nov. '98. Sample soil 4th quarter FY '99; Design RAP to remediate soil and implement RAP design 2nd and 3rd FY 2000 if required.
Annual Report RAP	11/13/98 2/12/99	12/4/1998 5/6/1999		3-31-99 RAP proposes to utilize SVE system for a period of 1 year and monitor for 5 years. Soil -- TRPH (8,7000 AND 6,400 mg/kg). SCTL is 350 mg/kg. GW -- MTBE (36ug/l). GCTL is 35 ug/l. ... 5-28-99 FDEP approved RAP. 2-8-00..... SVE start-up was 12-13-99. Several sys shutdowns due to water recovery in moisture separator. Sys oper. at 180 - 200 scfm air flow rate, 10" of water vacuum, 0.01 lbs/day max VOC recov rate. But, sys design is 200 scfm, 50" of water, and 13.7lbs/day respectively. Recom rml of carbon treatment.....4-8-00..... Sys operates at 0.01lbs/day ...CCI proposes early soil samp to see if lower soil levels have been achieved.
TECMEM	8/21/00	10/19/2000		10-10-00 ...ElectronicTech Mem, dtd 8-16-00 (emailed 8-21-00) requesting early SPLP sampling and discontinued operation of carbon Adsorption canister on SVE Sys was submitted to Jim Cason 8-21-00. Informal approval to remove canister was given. Since action is a RAP Mod, formal approval will be given following signed and certified submittal of calculations supporting request.

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TECMEM	12/4/00	2/21/2001	02-07-01.. . . .Completion Report, Long term effectiveness will be determined by future confirmatory sampling and groundwater monitoring results. Awaiting SPLP results.....4-2-01.... FDEP confirms receipt of Operation of SVE Trench Sys Bldg 260 Report... acceptable. FDEP Bldg 460 Document dated, 29 Mar 01; obtain gw sample from source well and analyze for VOC's, MTBE and SVOCs. If GCTLs are met, propose NFA with conditions.....
Semi-An	12/10/00	 8-3-01..... SVE System down since 7/3/01 due to damaged moisture sep float and vacuum blower discharge hose. Isopropylbenzene increased from 3.8 to 5.8 ppb; naphthalene from 5.3 to 23 ppb. Qtrly GW mon to commence for one year.....12/8/01..... SVE System is shutdown. Soils remain contaminated.....
Annual Report	5/23/02		3-2-04.... Semi-Ann O&M Status Rpt.... since SVE was shut down 3 Jul 01, only isopropylbenzene detected above GCTL target. No parameter detected sbove Nat Att Default Source Conc values. Potential risk to be evaluated while petitioning for site closure.
Qtrly Report	11/4/02	12/20/2002	7-5-02..... Continue gw mon..... 10-7-02..... From qtrly to semi-annual gw mon..... Next event in Nov 02
Semi-An	8/18/03	10/13/2003	****Post Active Remediation MOP Plan approved.
Semi-An	12/10/03	2/13/2004	**** Semi-Ann Rpt; O&M 1/1/03 - 6/30/03.... Isopropylbenzene atill present in gw... perform Risk Eval for site.
Semi-An	3/30/04	6/4/2004	3-2-04.....Semi-Ann Rpt 1/1/03 - 6/30/03..Recommends continuation of semi-annual mon. Isopropylbenzene in one well. Will petition for site closure through a Risk Assessment Eva via Tech Memo..... FDEP concurs but requests remaining soil contamination be be included in evaluation.

NEW Bldg 1586 (B0242) Site NS Mayport -D. Lancaster)

Discovery Date: 1/12/2001

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Aval</u>	<u>Comment</u>
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CAR	6/11/03	10/14/2003	<p>7-5-02.....1,400 gals of heating oil released from improperly piped day tank during UST replacement, April 2000. No recovery operations performed. Gw and soil impacted.....Phase 1 of SA field activities -- 31 July - 2 Aug. Phase 2 field activities-- 19 August..... 10-7-02.....Hits of EDB in gw; Measurable product in wells during field invest. Recommend IRA (vac truck) to extract product & resample prior to SAR. Excavation was backfilled with rocks/pebbles and ground may not be conducive for AFVR.....1-6-03..... Free prod is still present..... 2-28-03.....Base to perform free prod removal during SAR completion and RAP design. 05-05-03..... VAC truck extraction on 1st two wells, next two wells to follow..... ..3-2-04.... Wells installed. 8-38-04..... RAP required for both soil an gw.....8-31-04..... SAR submitted and Site approved for RAP to</p>
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Discovery Date: 9/19/1996

NSC FUEL FARM Site (FISC JAX -- Ralph Crist)-- CCI

<u>Action:</u>	<u>Date to</u> <u>FDEP</u>	<u>Rev Date</u> <u>by FDEP</u>	<u>Amt Activity</u> <u>Funds Avail</u>	<u>Comment</u>
CAR	12/15/97	1/23/1998		5-12-98 ---- RALPH CRIST -----JP-5 & DIESEL----- Tanks 201 & 202 each have 13,500 barrel (BBL) or 567,000 gals JP-5; Tanks 203 & 204 each have 27,000 BBL or 1,134,000 gals Diesel Fuel Marine; GP-19 & GP-25 EXHIBIT HIGH TPH VALUES (1,100 & 14,000 ppm, respectively). 2 ADDITIONAL WELLS AND SAMPLING SHALL BE PERFORMED
CAR ADD1	11/2/98			10-22-98 ----- CAR Addendum show soil and gw contamination localized in extent to an area around Tank 202. Tank and associated piping are suspected contamination sources. GW is not impacted by petroleum hydrocarbons greater than FDEP cleanup Target Levels, except at MPT-16-MW02S (41 ppm TRPH) and FF-MW-10 (37 ppb Naphthalene). RAP Design is anticipated in 3rd quarter '99. MILCON is scheduled for Feb.
SARA	12/20/98	12/30/1998		
SARA 2	8/28/99	8/9/1999		3-31-99 Draft Addendum 3, dated 2-25-99, is presently under review (NS Mayport & SDIV). CH2M Hill submitted a "Focussed Remedail Options Evaluation, NSC Fuel Farm" that discusses a remedial system that can be installed after completion of the MILCON project.10-8-99 -- DPT will be performed during MILCON..... ..2-8-00 ---- Field activity for DPT borings to commence mid March. ...4-8-00... MILCON field activity presently commencing. Large quantities of contaminated soils excavated. Soils are being sampled for hazardous waste.

PIER ALPHA/DELTA Site (NS Mayport- D. Lancaster) TtNUS/ ACOE

Discovery Date: 1/1/1990

<u>Action:</u>	<u>Date to</u> <u>FDEP</u>	<u>Rev Date</u> <u>by FDEP</u>	<u>Amt DERA</u> <u>Funds Avail</u>	<u>Comment</u>
CAR	12/1/92	1/1/1993	200000	Diesel Fuel ----- Pipeline leak
CAR ADD1	4/1/93	5/1/1993		

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RAP ADD1	8/1/94	9/1/1994	Combined manual free prod. rmv. with gw monitoring..... Post Completion Report for the Pipe Slip Lining at the A/D Piers.also submitted 4/1/95.
RAP	8/1/94	10/1/1994	
RA	1/15/95	2/15/1995	
Qtrly Rpt	12/2/96	1/22/1996	FDEP not pleased with method of extracting free prod. from electrical manhole.
Qtrly Report	12/12/96		
Qtrly Report	2/28/97		Letter submitted to FDEP to halt monitoring. No presence of free prod. in July or August.
Qtrly Rpt	2/28/97		ABB HAS HALTED GW MONITORING UNTIL FURTHER INSTRUCTIONS. NO CONSISTENT PRESENCE OF FREE PROD. NO SYS IN PLACE TO REMOVE FREE PROD.
Annual Report	1/30/98	4/6/1998	5-12-98 -----Randy Bishop ----- NS Mayport will bail prod. upon occurrence. RAP will be re-evaluated by ABB.
Qtrly Report	6/3/98		10-22-98 ----- MW 16 contained free product in Jun 97. Activity bails product as it occurs. 3-31-99..... ACOE will sample again in mid April.
Qtrly Report	4/21/99		***** ACOE Qtrly GW Mon Rpt
Qtrly Report	6/30/99		5-28-99 Moved to monthly sampling for MPT-1406-6 & MPT-1406-16. Qtrly for
Annual Report	12/7/99	12/28/1999	2-8-00 --- Sheen in MPT-1406-4; 1.31 ft. of product in MW-1406-16. Continue free prod. Rmvl and monitoring.
Qtrly Report	4/12/00		10-10-00... Qtrly Free prod. Letter to FDEP. 0.408 gals from MPT-1406-16. Total of 8.258 gals to date.
Qtrly Report	6/26/00		Qtrly Free Prod Letter from Station to FDEP... Free prod. level from 1998 to date is 11.024
Qtrly Report	11/16/00		02-07-01 . . . Qtrly Rpt (ACOE).. Intermittent passive free product skimmers recommended w/ periodic manhole/sumps pumping.
Qtrly Report	12/14/00	2/23/2001	
Qtrly Report	1/25/01		02-7-01... . Quarterly Free Prod Mon. A/D Piers letter, dated 25 Jan 01, 11.509 gal of prod recovered since May 1998.
Qtrly Report	4/5/01	8/24/2001	6-03-01..... Approx. 2 ft prod in MW 16..... 8-2-01....MPT-1406-4 had 23.4 ug/L total PAHs and 2.9 ug/L total VOCs. MPT-1406-16 had 56.4 ug/L total PAHs and 6.3 ug/L total VOCs..12-8-01.... Vacuum truck Extr. performed 12-4-01 on mw-16. More than 1500 gals of prod/wtr removed. Mostly product....Free prod still found in well -16...
Qtrly Report	7/11/02	9/30/2002	7-5-02.....IRA to remove LNAPL (ACOE)... Qtrly Report (ACOE dated March 2002) 10-7-02.... (TtNUS) Site is not conducive to Geophysical Probing. LNAPL EM method would not work. Research Bldg 2 as built for pp lines..... 1-6-03..... TtNUS subcontracted w/ Batelle Lab for free prod fingerprint analyses. Awaiting results of 8 Dec sampling event. Also, Qtrly Rpt from ACOE indicates product is still present in MW-16...2-28-03... Product is not new....exploring directions.

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Annual Report	3/21/03	4/17/2003	8-31-04.....ACOE Final GW Monitoring Rpt - Decline in contaminant concentrations above GCTLs in all but three wells, MPT-1406-4 and MPT-1406-5. MPT-1406-16 continue to have periodic presence of product, believed to be influenced by rainfall events and pumping activities.
TECMEM	8/17/04		8-31-04.... Tech Memo Free Prod Determination..... Free prod detected over approx. 60 ft by 60 ft area. Free prod restricted to well MW-16, piezometers PZ-3, PZ-5 & PZ-6. RAP Addendum recommended. RARA to include installation of recovery wells, use of automatic skimmers, monthly monitoring of wells and quarterly monitoring of nearby

PWTP TANK Site 283 (PWC -- Scott Dombrosky), TtNUS

Discovery Date: 12/23/1992

<u>Action:</u>	<u>Date to</u> <u>FDEP</u>	<u>Rev Date</u> <u>by FDEP</u>	<u>Amt DERA</u> <u>Funds Avail</u>	<u>Comment</u>
TECMEM				5-12-98 ----- A 2000 gals Diesel Fuel UST was removed Dec 23, 1992 from Bldg 23 (Pumphouse). Tank removal and closure assessment samples (4 out of 5) indicated presence of petro hydrocarbon vapors. Two samples collected below the water table were excessively contaminated. A gw sample from a temp well indicated levels above GCTLs.... SA field activities 10 July 02..... No gw contam; one hot soil hit; Presence of EDE. Possible limited soil rmvl required via IRA to obtain clean closure vice a RAP.... 1-6-03..... New borings show PAHs above SCTLs..... 9-15-03. Additional sampling required, then move to SAR Addendum. Small area of soil requires removal..... 1-22-04....SAR results: No gw impact, Estimated soil impact of industrial SCTLs exceedences is 60 ft x 40 ft x 3.5 ft deep (311 cu yds); Additional sampling to refine soil volume is required. Results will be provided to FDEP in Source Removal Excavation Workplan. GW sampling of well MPT-283-MW-01 shall be included..... 3-2-04..... Draft Source Rmvl Plan est. 3/30/04..
SAR	12/19/03	2/13/2004		8-31-04.... FDEP notes proper specification of the upcoming post excavation and monitoring Reports and East side of Site 283 is not fully characterised. Comments to be addressed.

SITE 1330 Site (NS Mayport- D. Lancaster)- CCI, Halil

Discovery Date: 12/31/1986

<u>Action:</u>	<u>Date to</u> <u>FDEP</u>	<u>Rev Date</u> <u>by FDEP</u>	<u>Amt DERA</u> <u>Funds Avail</u>	<u>Comment</u>
TECMEM			absence of free product & limited contamination leads to recommendation of enhanced MNA w/ORC
CAR CAR ADD1	5/1/92 10/29/96	6/1/1992 11/29/1996	25000	Gasoline 5-12-98 --- Jan Bovier -----25K IS AVIL '98 FOR LTM. FDEP HAS APPROVED LTM FOR '98. COE SHALL IMPLEMENT LTO. 10-22-98 ----- Samples were analyzed using method 8260. High concentrations of isopropylbenzene were found. Resampling is required. Awaiting FDEP's comments on quarterly report.
Qtrly Report	8/15/98	10/22/1998		

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Qtrly Report	1/6/99	3/23/1999	3-31-99 Will utilize adjacent wells at Bravo Pier to continue isopropylbenzene monitoring. Wells at 1330 not previously sampled will be sampled for isopropylbenzene in mid April.5-28-99.....10-8-99 ----- Remaining site 1330 wells were sampled and found to contain isopropylbenzene. Installation of new wells performed 8/99.2-8-00----- New wells sampled 9-27-99. Isopropylbenzene in 5 wells. Benzene above target in 3 wells. Working on Tech Memo to formally include Bravo Pier wells with site 1330. Site may become IR site.
Annual Report	1/15/00		12/11/00...limited contamination, absence of free product leads to recommendation of enhanced MNA w/ ORC.... Anticipate next report submittal mid Jan 01.
Qtrly Report	2/14/00	6/14/2000	1st Qtrly Rpt (ACOE)
Qtrly Report	8/18/00	12/19/2000	02-07-01... ..2nd Qtrly Rpt (ACOE)...FDEP suggests future data presentations document levels of of isopropylbenzene over time to better assess the decline or pervasiveness of the contaminant.
TECMEM	8/21/00	12/19/2000	10-10-00.. Tech Memo documents inclusion of Bravo Pier wells, BP-MW2 & BP-MW5, at Site 1330. Anticipate more aggressive action for isopropylbenzene. ...8-3-01.... Last sampled May 01. New well, MAY-1330-16, installed down-gradient (northeast) from the main site.
Qtrly Report	12/13/01	1/11/2002	7-5-02..... New Investigation by TtNUS planned. CAP under development.... ACOE Draft Monitoring Report (dated March 2002) received 7-5-02 does not address FDEP's 11 Jan 02 Letter/Comments regarding graphic presentations (contamination levels vs time) for wells with isopropylbenzene contamination....10-7-02...Geophysical survey done Aug 02 results indicate possible abandoned pp. Only hits of isopropylbenzene. BDL for others COC. Recommend Chem-Ox vice ORC or fixed air sparge system. Soils are clean.
Qtrly Report	7/11/02	9/30/2002	3rd Qtrly Rpt (ACOE)
Annual Report	12/31/02	2/21/2003 ACOE 4th/Final Qtrly Rpt - Isopropylbenzene levels still elevated..... New Investigation by TtNUS propose 3 new wells in source area for ORC injection....2-28-03....Wells installed, sampling week of 3 Marfor VOCs and gw chemistry, vertical profile in center of source area ... will
Qtrly Report	3/21/03	4/7/2003	9-15-03.....SAR in preparation. Est completion 2 Sept 03. CCI to further define and remove source in FY 04. Job to be awarded in Oct 03.
SARA	12/19/03	2/13/2004	3-2-04.....Horizonatal extent of isopropylbenzene is 400 ft by 240 ft. Vertical extent is not determined (TtNUS). Remediation will include removal of abandoned fuel line & overburdened contam soils..... FDEP approves RAP preparation.
WP	2/19/04	6/3/2004	8-31-04..... UST Petroleum Work Plan Addendum 02(TtNUS) approved...

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TRANSHOP Site 25 (NS Mayport- D. Lancaster) -- CCI

Discovery Date: 7/19/1991

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt DERA Funds Avail</u>	<u>Comment</u>
Annual Report				
Qtrly Report				
CAR	5/1/92	5/30/1992		GASOLINE
CAR ADD1	2/1/93	2/1/1993		
RAP	9/1/93	5/19/1995		
RA	10/1/95	11/1/1995	209000	Remedial system start-up 12-1-96.
Qtrly Report	3/18/97	6/18/1997		Constr. Compl Rpt for SVE/AS received by FDEP 6/18/97. FDEP suggests moving to semi-annual report if mon. data stabilizes after next qtrly report.
Qtrly Report	8/11/97	9/11/1997		2nd Qtrly Report (dated 7/14/97)
Qtrly Report	9/25/97	9/30/1997		
Qtrly Report	1/12/98			
Annual Report	1/29/98	4/6/1998		5-12-98 ----- Randy Bishop----- MW MAY-25-9 has contam. concent above target clean-up levels. May continue until target lvl is achieved vs monitoring for natural attenuation. ----- -----10-22-98----- Proposing an exit strategy the SVE-AS system. System is achieving desired target levels. Final quarterly sampling will occur in Nov. '98. A Post Operative Monitoring Plan is anticipated for March '99.
Qtrly Report	1/19/99	3/25/1999		3-31-99..... Proposing to shut system down. Levels remain above SGCL's in one well only. Levels meet natural attenuation parameters.
Annual Report	3/26/99	5/18/1999		5-28-99..... The report recommends Monitoring Only for Natural Attenuation. FDEP states that Navy should assure the process outlined in chapter 62-770.690, FAC, including professional certification is followed.
Qtrly Report	6/2/99	8/20/1999		
Annual Report	7/2/99			
Qtrly Report	7/7/99	8/20/1999		10-8-99 --- Benzene levels ranges from 9 to 620 ug/l (MAY-25-9). Target is 100 ug/l for Mon. Nat. Atten. Recommend repair of air sparge
Qtrly Report	12/17/99	12/30/1999		2-8-00 --- Considering returning Air Sparge system to service. Transferring to CCI.
Annual Report	3/22/00			
TECMEM	4/14/00	6/14/2000		Work Plan addendun No. 3, O&M of the Treatment Sys for Bldgs 25 and 265
Qtrly Report	5/19/00	9/28/2000		...4-8-00... Petro contamination appears limited to mw MAY-25-9 which showed the highest levels of dissolved petro carbons at the site. Results of last two quarters, show levels below Nat. Atten. Default Source concentrations. Recommend system shutdown and monitor only..... 10-10-00..... System shut-down approved. Will submit Monitoring Plan.... 02-07-01... seeking to MO.
Annual Report	6/26/01	6/27/2001		Bldg 25 Annual O&M Status Report, 1 Apr 01 - 31 Mar 02... O&M, Apr 1, 2000 - Mar 31, 2001

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Qtrly Report	6/26/01	6/27/2001	8-2-01.....June 26 GW mon analyticals results show MAY-25-9 from 52 to 131 ppb (ethylbenzene), 19 to 49 ppb (xylenes); MAY25-13 from 47 to 3 ppb(xylenes), from 2.2 to 107 ppb (lead), from 1,850 to 421,000 ppb (TRPH) Resampled MAY-25-1 on 6/26/01. Awaiting results. Submitted Ann O&M Status Rpt with sealed page 31 Jul 01.
Qtrly Report	8/1/01		***Ann O&M Status Rpt, 1 Apr 00 - 31 Mar 01...Three wells showed contam conc above GCT as specified in Chap 632-777, table V, FAC during this period; MAY-25-9, MAY-25-13, MAY-25-15. recommend continued operation of AS/SVE Sys until 0.01 ft of LNAPL is present. Once removed, evaluate and recommend shut down based on Chap 62-777.690 FAC.
Qtrly Report	3/21/02		1-6-03.... Bldg 25 Annual O&M Status Report, 1 Apr 01 - 31 Mar 02... Operational efficiency of AS & SVE systems were 96.0 and 99.7 % respect. GW conc still exceed FDEP GCTLs. Mon to continue.
Qtrly Report	4/21/02	5/10/2002	
Annual Report	11/18/02	12/16/2002	
Qtrly Report	11/27/02		2nd Qtrly Rpt, O&M - 02 ***3rd Qtr 2002 Rpt AS/SVE O&M Sys - AS/SVE Sys to remain shut down. Continue gw monitoring for wells MAY-25-4, ...-9, ...-13, ...-15 for VOCs, PAHs, Metals, and TRPHs.
Qtrly Report	2/17/03		
Qtrly Report	6/20/03	10/13/2003	***4th Qtr 2002 Rpt - Naphthalene and benzene slightly exceed GCTLs in well MAY-25-9. Will petition FDEP for Site closure and evaluate potential risk associated with exposure to the contaminated media.
Annual Report	10/23/03	1/16/2004	*****Ann O&M Status Report.... Recommend AS/SVE Sys remain shutdown. Sporadic detections of petro hydrocarbons: benzene, ethylbenzene and naphthalene slightly above GCTLs in wells MAY-25-4 & MAY-25-9. CCI will evaluate potential risk assoc with exposure to contaminated media. Risk Eval will be documented in a Tech Memo. ...will petition FDEP for site closure.
Qtrly Report	11/3/03	1/16/2004	***2nd Qtrly 2003 Rpt AS & SVE Sys - AS /SVE was discontinued 12/4/01. Since shutdown, only parameters above GCTLs were benzene, ethylbenzene, indeno (1,2,3-cd) pyrene, naphthalene, and total lead. Naphtahlene was the only parameter above
Qtrly Report	3/19/04	6/4/2004	8-31-04..4th Qtrly O&M Rpt - continue monitoring on a semi-annual basis and preparation of RBCA evaluation.
Qtrly Report	4/16/04	6/4/2004	8-31-04..... 3rd Qtrly O&M Rpt - continue monitoring on a semi-annual basis.
Semi-An	9/29/04		***Ann O&M Status Rpt, 1 Jan - 30 Jun... Semi-Ann mon to continue, CCI will petition for Site Closure based on Global Risk-Based corrective Action.

UST 1343 (B0229) Site (NS Mayport- D. Lancaster) -- ACOE

Discovery Date: 4/1/1995

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Aval</u>	<u>Comment</u>
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CAR	2/12/98	6/4/1998	5-12-98 --- JAN BOVIER ---EXPECTED SUBMITTAL TO FDEP IS 11/15/97. ---10-22-98----- 10,000 gal fuel oil tank --- closed in place.....Additional assessment required. Anticipate field activity in Dec. '99. 3-31-99 Anticipate SARA to FDEP 4/29/99
SARA	7/15/99	7/20/1999	10-8-99 ---- Additional assessment required..... ..02-07-01.... Contract presently underway for additional SA..... 6-03-01.... Prec-construction conference 6-04-01.....12-8-01... SARA under Navy
SARA 2	3/4/02	3/27/2002	****FDEP approved SARA..... IRA for Vacuum extraction (by ACOE) to less than 0.01 ft thick ... Anticipate future Monitoring for Nat. Atten..... 10-7-02.... Vac truck extraction to be performed by ACOE..... 2-28-03.. Underway..... 05-05-03..... Monitoring Site for trend. 1st Report submitted 2-03-03..... Proposed well location document received 5/19/03, approved 5/19/03.
Qtrly Report	10/8/03	2/18/2004	3-2-04..... FDEP concurs with continued Monitoring & free product removal.... Additioanl Assessment and informal GW monitoring by ACOE at Site 1343.... Field work discussed at Partnering implemented: 2 additional wells installed. Free product still (0.5 feet thick) present in may-1343-MW-5. Need to consider RAP or installation of free product recovery pump.
Qtrly Report	6/8/04	7/13/2004	8-31-04..... Groundwater Investigation Addendum to Qtrly Mon.. Provide summary of gw investigation activities. All eight mon wells except MW-5 are clean. MW-5 contain free prod. Installation of free prod recovery pump recommended and approved... operate for one year or for two consecutive quarters with no prod observed.

UST 1363/1363-G (B0226) Site (NS Mayport - D. Lancaster)- CCI

Discovery Date: 4/1/1995

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Aval</u>	<u>Comment</u>
WP				3-2-04.....Work Plan Addendum # 01- UST Work Plan generally not submitted to FDEP, however, preliminary plans were presented and bought into by Partnering Team. Field activity to commence Mar 04.
CAR	10/2/97	10/6/1997		5-12-98 --- JAN BOVIER ---FUEL OIL & DIESEL FUEL -- IMPLEMENTING FDEP's COMMENTS. TWO ADDITIONAL WELLS & SAMPLING. FIELD ACTIVITY IS ANTICIPATED LATE JUN 98. ----- 10-2-98----- UST's in same location Additional assessment performed in July '98. Awaiting CAR Addendum. Expected submittal Dec. '98. 7-30-99 Anticipate SARA to FDEP 9/30/99..

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SARA	9/14/99	12/30/1999	..02-07-01 -- Presently under contract for RAP Design..... .8-2-01.... RAP design underway.0
RAP	10/30/01	1/31/2002	12-8-01..RAP recommends removal of contaminated soil. Area not conducive to successful remediation... 2-19-02.....RAP approved Jan 31, 2002..... 7-5-02..... MAYPORT to request FY 03 funds to implement RAP..... 2-28-03... In preliminary contract stage to excavate 357 cy of soils
WP	12/31/03	2/13/2004	3-2-04..... Work Plan Add 01 - FDEP approves soil excavation as described in RAP. Request Certification page.

UST 245 (B0225) Site (NS Mayport- D. Lancaster), #2 Fuel Oil/UST-- ACOE

Discovery Date: 4/1/1995

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Avail</u>	<u>Comment</u>
CAR	2/12/98	6/22/1998		5-12-98 --- DIANE LANCASTER ----2K gal FUEL OIL UST --
SARA	9/16/99	12/30/1999		...10-10-00.... Further study and RAP in FY 01..... 6-03-01.... Pre-construction conference held 6-04-01 to resample and implement discuss whether RAP is still necessary. Previous analyticals show a tendency for Nat. Att.....8-2-01..... Field activity commenced 30 - 31 July. ...12-8-01.... Draft report Navy review changes to be incorporated.
SARA 3	5/15/02	7/18/2002		7-5-02.....SARA Final submitted. Free Prod rmvl and MON recommended.....2-28-03.... ACOE installed 2" well & will begin extraction in well with product..... Site being monitored for trend.7-3-03..... From 10/6/02 to 2/24/03, product thickness in MW-8R ranged from 0.0 to 0.2 ft. Awaiting gw sample results to determine placement of new wells. Soils around well with free product will be sampled 2nd week in July 03. Propose well location document submittedand approved 5/19/03.
Qtrly Report	10/1/03			***** Informal GW monitoring to study trend by ACOE at Site 245 3-2-04....Field work accomplished: Confirmatory sample taken: awaiting lab results to finalize SAR Addendum.
Qtrly Report	6/8/04	7/13/2004		8-31-04.... Continue qrtly gw monitoring.

UST 250 Site (NS Mayport - PWC, Scott Dombrosky)

Discovery Date: 3/1/1999

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Avail</u>	<u>Comment</u>
SAR				8-31-04.... Received draft SAR ON 7/19/04. Recommends soil excavation to industrial and quarterly mon. Impacted soil adjacent to sewer shall be left in place. area shall be included in LUC Plan.
CA				3-2-04.... Contamination Assess Plan received from TtNUS for additional assess of Sites 250 & 1241. HASP also received. Soil contam, no gw contam. Site may only require limited soil excavation. Awaiting Draft SAR.

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CA

10-8-99 ----- A limited site assessment was performed Mar. 15, 1999. Contaminated soils present. OVA readings from 10 ppm to greater than 1000 ppm. Contaminants present in gw.....
..8-3-01... SCAPS crew, from 8/29/99 thru 9/8/99, showed site contaminated down to the gw table. Scott Dombrosky (PWC) will review package left by Chau Tran regarding intent to delay remedial action due to presence of operational UST in the vicinity (within 75 feet)..... 12-8-01.....Site walk by Jim and Scott on 12-10-01.....
7-5-02..... Contract to remove two ASTs is soon to be awarded....2-28-03.... One 12,500-gal waste oil and Two 30K-gal AST's removed.. . Started peiliminary contract stage for SA.

Base Site Management Plan

Completed Actions

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MAYPORT

(1587) BEQ Site (NS Mayport - Jan Bovier -B0232) -- CCI

Discovery Date: 4/27/1995

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Avail</u>	<u>Comment</u>	Project Completed 10/22/2001
CAR	11/1/95	2/1/1996			
SARA	7/15/98	10/22/1998		5-12-98 --- #2 Fuel Oil-- ABB performed SPLP on 1/28/98, TRPH abv SCTL. Considering: shoring to remove hot soils and over-development of mw MPT-BQ-MW0 to address benzene levels. 10-22-98 --- Evaluate site for LUC versus remedial action. SPLP showed potential to leach to gw. CAR Addendum anticipated mid Nv. 98. Design RAP for soils and implelement 2nd and 3rd qrtr FY	
Annual Report RAP	11/13/98 2/12/99	12/4/1998 5/6/1999		3-31-99 --- Reviewing NFA w/ restrictions while RAP is under FDEP review. RAP will excavate soils and monitor nat. atten. Soil, TRPH (14,000) and beno(a) anthracene (5.1 mg/kg). SCTLs are 350 and 1.4 mg/kg respect. GW --Leachability concentrations of ethylbenzene, total xylenes and TRPH form the vadose zone are 30, 25 and 41,000 ug/l respect. GCTLs are 30, 20, and 5,000 ug/l respect. ---- 2-8-00 --- Cont. soils excavated Dec 99. Levels abv target remain on walls adjacent to bldg (30,800 mg/kg) and adjacent to pump station (6,640 mg/kg) Will proceed to monitor and sample gw late April or early May.	
Qtrly Report	5/26/00	9/26/2000		10-10-00 --- SPLP sampling for leachability done on 4/27/00. TRPH exceeded Direct Exposure I (Res.) and leachability. However, SPLP TRPH anal were below Table V GCTL. Will cont gw mon.	
TECMEM	12/4/00	2/21/2001		2-07-01 Source Rmvl Rpt, Previously hot walls believed to be clean..... 3-2-01.... Report is acceptable.	
Qtrly Report	3/28/01	4/30/2001		...6-03-01....Correspondence via email ONLY, dated 4/30/01..... 2nd and 3rd Quarters 2000 Mon. Rpts are acceptable. Looking for last quarter report to recommend NFA as previously discussed.	
Qtrly Report	5/7/01	6/22/2001		8-3-01.....4th Qtr Report submitted 5/7/01. On 5/18/01 FDEP requested certification page, revision of recommendation to include reference to LUCIP MOA dated 31 August 98 and inclusion of a proposed LUCIP into Appednix C of MOA. Sealed 4th Qtr Rpt & and proposed LUCIP was submitted on 30 Jul 01. Awaiting FDEP concurrence.....	
LUC	7/31/01	8/29/2001		LUCIP was submitted on 30 Jul 01.12-8-01.....NFA with Conditions granted	

BALL FIELD

Discovery Date: 7/12/1993

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Avail</u>	<u>Comment</u>	Project Completed 6/26/1997
CAR	8/12/94	9/12/1994		NFA GRANTED 6/26/97.	

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BEQ Site 1586 (Mayport -J. Bovier) -- TtNUS(Mark Peterson)

Discovery Date: 9/6/1991

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt DERA Funds Avail</u>	<u>Comment</u>	<u>Project Completed</u>
PCAR	8/1/93	10/1/1993			2/21/2000
CAR	11/23/94	2/17/1995			
CAR ADD1	4/10/97	6/9/1997			
CAR ADD2	2/4/98	4/6/1998	90000	5-12-98 -----JAN BOVIER----Site has minimal gw contam. that seems to be decreasing with time.... GW: Benzene - 2.3 ug/l, Naphthalene - 24 ug/l: No presence of free product. May seek natuaral attenuation under Chap. 62-770.690, F.A.C. During last round of sampling, soil was contam. based on OVA data. Navy will consider Synthetic Precipitation Leaching Procedure (SPLP) whether to perform IM or NFA with restrictions.	
				10-22-98 ----- Evaluate site for LUC's. Due to elapse of time, mw may need to be resampled. Expect to: Resample soil in FY '99; Design RAP to remediate soil in FY 2000; and Implement RAP in FY 2001.	
Annual Report SARA 3	11/13/98 2/22/99	12/4/1998 5/14/1999		3-31-99 MOP is for natural attenuation is proposed. Anticipated to acheive NFA as a result of Natural Attenuation within 5 years. Last sampled data indicated benzene (2.3 ug/l) and naphthalene (24 ug/l)..... 5-28-99 --- FDEP has approved the	
Qtrly Report Qtrly Report	12/22/99 2/10/00			2-8-00 1st quarterly report submitted. 4-8-00..... Discussion with Jim (FDEP) and Rick (TtNUS) about increased levels of PAH compounds in mw MPT-BE-MW06S and ...-MW04S. Naphthalene concentrations were 1100 ug/l in ...-MW06S and 28 ug/l in ...-MW04S. Also in ...-MW06S, Benzene, Ethylbenzene Benzo(a) Anthracene, Acenaphthene and Phenanthrene were 32, 110, 8, 460 and 1000 ug/l, respectively (all above state levels). Steps to use a one time Vacuum Truck Extraction is underway for late April.	
Qtrly Report	5/18/00	9/28/2000		10-10-00.... 3rd Qtrly Rpt Results: ...MW06S - naphthalene-140, acenaphthene-34, benzo(a)anthracene-0.5, ethylbenzene- 57 and benzene - 7ug/l. NEW RELEASE of 1400 gals #2 fuel oil spill, 4-28-00, same tank pit. Temp wells installed to recover free prod. (0.75 ft thk in mw MPT-BE-MW06S).4th Qtr/Ann Draft Rpt results: No hits in ...MW10S, ...MW06S contained approx 3 ft free prod. Will continue monitoring all wells.	
Annual Report	11/9/00	2/21/2001		12/10/00...NFA for 1991 release; IRA additional site assessment for Feb 2000 release. 02-7-01.... Jim will discuss with FDEP counterpart about closing RAP officially. Will request closure of MOP Order from the state. New investigation will proceed under new SMP entry..... 4-2-01.... FDEP concurs with recommendation that existing monitoring efforts cease and that a new SA	

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BLDG 1376, LIFT STATION Site (PWC -- Chau Tran)

<u>Action:</u>	<u>Date to</u> <u>FDEP</u>	<u>Rev Date</u> <u>by FDEP</u>	<u>Amt Activity</u> <u>Funds Aval</u>	<u>Comment</u>	<u>Project Completed</u>
CA				5-12-98, Will produce inf. next update. ----- 10-22-98 ----- No inf. to report. 9-25-00..... NFA granted 6-16-00.	6/16/2000

Bldg 163 (B0241) Site (NS Mayport - Jan Bovier), Diese/AST

Discovery Date: 1/12/2001

<u>Action:</u>	<u>Date to</u> <u>FDEP</u>	<u>Rev Date</u> <u>by FDEP</u>	<u>Amt Activity</u> <u>Funds Aval</u>	<u>Comment</u>	<u>Project Completed</u>
CAR	3/21/03			7-5-02..... 500 Gal Diesel Fuel Marine (AST)...Installed in 1959, removed Mar 2000... Soils impacted.. no gw impact. Phase 1 of Site Assessment field activities -- 31 July - 2 Aug. Phase 2 field activities - week of 19 August.... 10-7-02..... Fixed lab results indicates no soil or gw contam.. ..2-28-03....SAR anticipated late Mar 03 - recommends NFA..... 5-5-03... NFA on 30 Apr 03. ****NFA APPROVED	4/30/2003
SAR	4/30/03				

BLDG 3 Site (NS Mayport -- Jan Bovier)

<u>Action:</u>	<u>Date to</u> <u>FDEP</u>	<u>Rev Date</u> <u>by FDEP</u>	<u>Amt DERA</u> <u>Funds Aval</u>	<u>Comment</u>	<u>Project Completed</u>
CA				5-12-98 ..Awaiting update from Activity. -----10-22-98 ----- No update to report. 3-31-99 Jan will review Data Package and provide sampling information to Jim Cason. 5-28-99 Data package shows no comtamination..10-10-00..... Awaiting FDEP review of package..... NFA GRANTED 19 DEC 00.	12/19/2000
TECMEM	6/1/00	12/19/2000		02-07-01.....Data file, submitted by NS Mayoport, in response to FDEP Discharge Reporting Form, dated 13 Apr 95, was reviewed by FDEP. FDEP concluded that based on constuction of the pond and water samples obtained, No Contamination	

BLDG 358-B (B0236) Site (NS Mayport -- Jan Bovier), TtNUS(Mark Peterson)

Discovery Date: 7/1/1999

<u>Action:</u>	<u>Date to</u> <u>FDEP</u>	<u>Rev Date</u> <u>by FDEP</u>	<u>Amt Activity</u> <u>Funds Aval</u>	<u>Comment</u>	<u>Project Completed</u>
SAR CAR	12/11/00	2/27/2001		02-07-01... Recommend NFA 2-8-00 Former location of 10,000 gals diesel UST and 500 gal gasoline AST, used to start fires in burn pits.10-10-00.... Field activity, mid May. No levels above State target for gw or soils..4-2-01.... NFA GRANTED 2-27-01.	2/27/2001

BLDG 436 (B0235) Site NS Maypor - (Jan Bovier), #2 Fuel Oil/AST- TtNUS(Mark

Discovery Date: 7/1/1999

<u>Action:</u>	<u>Date to</u> <u>FDEP</u>	<u>Rev Date</u> <u>by FDEP</u>	<u>Amt Activity</u> <u>Funds Aval</u>	<u>Comment</u>	<u>Project Completed</u>
CA				2-8-00 During installation of 1000 gal #2 Fuel oil AST in 1995, a pipe disconnection occurred. Some hot soils were removed.10-10-00..... SA, mid May. No COC hits above state target in soil or gw. Recom.	3/9/2001

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SAR	2/14/01	3/9/2001	Arsenic exceeded SCTL value of 0.8 mg/kg in two soil samples of 1.2 and 1.8 mg/kg. Aresenic levels believed to be representative of background values. NFA recommended.....6-03-01....NFA approved 3-9-01.
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Bldg Fire Sta. (B0243)..AKA G365 Site (NS Mayport - Jan Bovier)

Discovery Date: 1/12/2001

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Aval</u>	<u>Comment</u>	<u>Project Completed</u>
WP SAR	3/5/03			7-5-02..... (Also called Site G365) 300 gal Diesel fuel ASTremoved Mar 2000.... Phase 1 of SA field activities-- 31 July - 2 Aug. Phase 2 field activities-- week of 19 August.... 10-7-02....Well data invalid.... will resample. Also, why is EDB present?..... 1-6-03.... Confirmation ... no EDB, no gw or soil contamination. SAR will propose NFA. SAR anticipated early Mar 03....05-05-03..... NFA approved 4-30-03.	4/30/2003
SARA	3/26/03	4/30/2003			

BLDG G-23 Site (PWC -- Scott Dombrosky)

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Aval</u>	<u>Comment</u>	<u>Project Completed</u>
CA				5-12-98 .. Need update. ----- 10-22-98 ----- No update	
TECMEM	12/31/03	12/31/2003		8-3--01.....Update from Scott Dombrosky (904-542-4553, ext 8322). Scott will research documentation on additional Site Assessment performed including new samples and chemical analyses. He states an Addendum, dated 12 Jan 00, was submitted to FDEP..... 7-5-02.... Awaiting funds for soil screening along stormwater conveyance. SARA to be prepared following soil screening. Submittal date presently unknown.....05-05-03.... Funds now available to continue sampling site and complete SARA..... 1-06-04..... NFA approval from FDEP.	

BRAVO PIER Site (NS Mayport -- Randy Bishop) AvGas -- TtNUS

Discovery Date: 5/1/1992

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt DERA Funds Aval</u>	<u>Comment</u>	<u>Project Completed</u>
SAR	3/4/99	3/25/1999	101,000	5-12-98 -----RANDY BISHOP -----JP-5 - SA IS PROPOSED IN '98. EXPECTED CAR SUBMITTAL IS 8/28/98. ----- -----10-22-98----- SA was performed in Sept. 98. Awaiting lab results and SAR preparation. Expected SAR submittal from TtNus is 30 Nov. 98. Early lab results indicates little or no contamination. Level of benzene was 1.8 ppm in one monitoring well. Expect SAR in Dec. 98. Not funded for FY '99. 3-31-99 Subject to be included in Pier Management Program. Hits of isopropylbenzene will be further sampled with Site 1330.....5-28-99.... Wells with isopropylbenzene will be transfered to Site 1330 for further monitoring. Bravo site will be closed out.	1/10/2000

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SARA 7/6/99 1/10/2000

2-8-00... Conditional NFA approved. Site will be placed on Land Use Control list. Benzo(a) pyrene is 0.779 near BP-MW4..... 8-23-01... Modified LUCIP, dated 6July, submitted via email to Partnering Team.

Echo Pier Site (FISC JAX --Ralph Crist) -- ACOE

Discovery Date: 4/17/1996

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Avail</u>	<u>Comment</u>	<u>Project Completed 4/17/2002</u>
Qtrly Report	12/10/01			Qtrly Rpt dated May 2001	
Qtrly Report CAR	3/28/97	4/2/1997		Diesel Fuel -- Vinyl Chloride -- IR anticipates SA in FY 99.	
SARA	5/13/97	6/16/1997		5-12-98... .. Randy Bishop (IR)--- Ralph Crist (UST)-- FDEP approved MOP 6/16/97. --- Requested funds 31 July 98..Received funds Sept 98. ACOE will bail free prod if present and mon well Nov. '98.	
Qtrly Report	1/11/99	3/23/1999		5-28-99 ----- Free prod. present in well MP-EP-02. Will sample for semivolatiles end re-assess monitoring plan. Due to sample TAT, Report anticipated mid June. New sampling results reported 27 Aug. IR to perform Confirmatory Assess source of chlorinated solvents as a part of AOC "C", Bldg 191/Echo Pier (stated in C. Mitchel's letter, datd 19 May	
Qtrly Report	8/2/99	12/29/1999		10-8-99--- Free prod. Still present in mw MP-EP-02 (0.97ft in 2/15/99 & 0.02ft in	
Annual Report	12/27/99	12/29/1999		2-8-00 ---- Will continue free prod. Rmvl and method 602 on wwells MP-EP-02 and MP-EP-O3 for volatiles, ssmivolatiles and MTBE.	
Qtrly Report	3/7/00	6/14/2000		4-8-00----- On 12/18/99 and 1/10/00, 0.16 and 0.14 ft of free prod. Were remvd respect. TtNUS checked mw MP-EP-O2 for free prod 2/9/00. None present. Total of 26 gals removed	
Qtrly Report	8/18/00	12/19/2000		10-10-00--- FDEP says if mw MP-EP-02 is clean for two consecutive qtrs, consider terminating monitoring. July report shows free prodof 0.2 ft in ...EP-O2..... 02-07-01..... Last sampling event occurred in late Jan 01. Anticipate Report in mid to late Feb 01.	
Qtrly Report	12/14/00	2/22/2001		02-07-01.... Qtrly Rpt review of past five sampling events indicates a range of water level elevation in MP-EP-02 OF 3.12 to 5.62 feet (above MSL). A trend appears to exist between disappearance of product in the well , and higher water levels..... 4-2-01... Benzene is still a contaminant and intermittant free prod. in MW-02. Should consider semiannual monitoring in Ann Rpt.....	
				6-03-01.....Funding temporarily halted..... 8-3-01..... No free product in the past 10 months. Last sampling event was 5/11/01. Only contaminant found above det limts was methylnaphthalene in well MP-EP-02 at 2.0 ppb. Next sampling event is scheduled for Aug 2001.	
Qtrly Report	4/5/01	8/24/2001	12-8-01..... Benzene is still low-level contam in one well. Free product has not been observed in 8 months.	
Qtrly Report CSR	12/11/01 5/3/02	5/15/2002		Qtrly Rpt dated Sept 2001 Site Rehabilitation Completion Report..... NFA approved 5/15/02.	

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EXCHANGE Site 265 (NS Mayport -D Lancaster) -CCI/Halil

Discovery Date: 1/31/1992

Project Completed 1/16/2004

Project Completed 1/16/2004

<u>Action:</u>	<u>Date to</u>	<u>Rev Date</u>	<u>Amt DERA</u>	<u>Comment</u>
	<u>FDEP</u>	<u>by FDEP</u>	<u>Funds Avail</u>	
CAR	5/1/92	5/1/1992		UNLEADED GASOLINE
CAR ADD1	12/1/92	12/1/1992		
CAR ADD2	5/1/93	5/1/1993		
RAP	7/1/93	7/1/1993		
CAR ADD3	12/1/94	2/27/1995		Free product was discovered 9/1/95.
RAP ADD1	6/26/96	7/26/1996		
RAP ADD2	9/24/96	10/9/1996	600000	
				5-12-98 R. BISHOP -----Implementing 1st yr O&M. O&M start date was 12/2/97.-----
				----- 10-22-98----- SVE-GWT system is in place. State target levels have not been achieved by the system. 4th qtrly sampling is scheduled for Nov. '98. Annual report is anticipated in Dec. '98. 1st year LTO is
Qtrly Report	1/19/99	3/25/1999		Benzene/total VOAs appear to be trending downward except for Mar sampling.
Annual Report	3/9/99	5/18/1999		3-31-99 State target levels are not achieved. Will continue to operate system.....
				5-28-99..... FDEP examination of Table IX, vs Table V referred to in the annual report, in Chap. 62-770, FAC, indicated that this site will qualify for Monitoring Only for Natural Attenuation after another sampling
Qtrly Report	5/20/99	8/20/1999		
Annual Report	7/8/99	8/20/1999		7-30-99 -- O&M continuation in FY 2000. SVE sys. Ws recovering gw. Amended schedule is recommended. Well heads adjusted to no greater than 1 to 2 in. Hg.
Qtrly Report	9/23/99	10/11/1999		2-8-00 --- Jim Cason wants a deeper well for MAY-265-30. Will review and provide an improved monitoring schedule for both monitoring and recovery wells. Will provide analytical values of gw with next quarterly report. Transferring to CCI
Qtrly Report	12/22/99	12/23/1999		...4-8-00... Rec. system shutdown.
Annual Report	3/21/00		4-8-00.... Continual reduction of petro hydrocarbons to levels below Nat. Atten. Default Source concentrations as identified in Table V of FAC 62-777. Recommend the SVE/GWT Sys be shut down and monitoring work Plan addendum No.3, O&M of Treatment Sys at Bldg 265 and 25.
Qtrly Report	3/21/00			10-12-00 ... Certified Recommendation for Bypass of Catalytic Oxidizer.....
TECMEM	4/14/00	6/14/2000		6-03-01..... Looking to re-evaluate the present remedial technology. 8-2-01....
TECMEM	10/16/00			June 27 GW mon event indicated wells MAY265-11, 13, 14, and 30 remain below GCTLs; RW-1 still above GCTLs for ethylbenzene and xylenes; RW-2, 3 and 4 are below GCTLs..... 12-10-01... Update from
Qtrly Report	3/27/02			7-5-02..... Qtrly Rpt submitted.
Annual Report	11/15/02	12/16/2002		Annual Mon Rpt.. continued SVE/GEX shutdown and gw mon approved.
Qtrly Report	11/27/02			2nd Qtrly Rpt, SVE-GES

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Qtrly Report	1/31/03		**** 3rd Qtr 2002 Rpt - GW contam conc in wells MAY-265-11, ...265-13, ...265-14 and ...265-30 and in recovery wells RW-1, RW-2, RW-3 and RW-4 were below FDEP GCTLs..... Continue qtrly mon for MAY-265-11, ...265-13, 265-14 and GEX recovery wells RW-1, RW-2, RW-3 and RW-4 until 2 consecutive qtrs show no conc above GCTLs.
Qtrly Report	6/20/03	10/13/2003	8-31-04....4th Qtr O&M Rpt, SVE & GEX... intermittent low-level contam present. Upgradient source requires additional
Qtrly Report	6/30/03		**** 4th Qtr 2002 Rpt - Well MAY--265-11 contained PAH parameters (benzo(a)anthracene, benzo(a)pyrene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, and dibenz(a,h)anthracene) at concentrations slightly above GCTLs. Well ...265-11 is upgradient of plume. Recommend SVE & GEX remain shut down and qtrly mon. Will petition for site closure and evaluate potential risk associated with exposure to contaminated
Qtrly Report	9/30/03		2nd 2002 Qtr Rpt for SVE/GEX Sys - GEX was successful in removing BTEX from gw. SVE Sys was effective in removing VOCs from subsurface soils. No parameter was detected at conc above the GCTLs during 2nd qtr 2003. this is 2nd consecutive sampling event with no detects above GCTLs. NFA Situs per FAC 62-777.680(1) is recommended based on: NO product is present; Contam soil per FAC 62-777 Table II is not present; and No gw collected from GEX contained conc above GCTLs for 2 consecutive qtrs.
Qtrly Report	10/23/03	1/16/2004	****4th 2002 Qtr O&M Status Report.... No parameters at concentrations above GCTLs during first qtr 2003. Since the 2/27/02 shutdown of SVE/GEX sys, only sporadic detections of benzene, benzo(a)anthracene, benzo(a)pyrene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene have been above GCTLs. If concentrations remain below GCTLs during 2nd samp event, NFA will be recommended based on two consecutive qtrs of detected parameters GCTLs..... 3-2-04..... NAF APPROVED 1/16/04.
Qtrly Report	11/25/03	1/16/2004	8-31-04.... 2nd Qtr O&M Rpt: SVE/GEX NFA APPROVED.

GALLEY Site 338

Discovery Date: 3/31/1994

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt DERA Funds Avail</u>	<u>Comment</u>	<u>Project Completed</u>
CAR	9/1/92	9/1/1992			6/10/1996
CAR ADD1	9/1/93	9/1/1993			
CAR ADD2	2/1/96	2/1/1996			
NFA	6/1/96	6/10/1996		NFA GRANTED.	

INCINERATOR Site 1601 (NS Mayport - Randy Bishop)

Discovery Date: 7/14/1992

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt DERA Funds Avail</u>	<u>Comment</u>	<u>Project Completed</u>
Actions			25000		7/31/1999

Base Site Management Plan

12/14/2004

CAR	10/1/93	10/1/1993		12/11/00...Completion report recommends continued for MNA soil addressed in annual groundwater report
CAR ADD1	7/1/94	7/1/1994		
CAR ADD2	12/1/94	3/2/1995		
CAR ADD3	3/28/97	3/31/1997	25000	MOP APPROVED ... CAR ADD 3 (DATED 2/97), PWC TO PERFORM MOP. TANK WAS REMOVED 6/9/97.
Qtrly Report	4/7/98			5-12-98 RANDY BISHOP----- Report submittal was 4-7-98.
Qtrly Report	9/7/98			10-22-98 ----- 2nd qtrly monitoring (resampling ... detection limits were too high) shall commence in Nov. 98 or when '99 funds are available. COC levels are low. May be able to stop MOP after 4th quarterly sampling.
Annual Report	3/23/99	8/5/1999		NFA granted 8/5/99.
Annual Report	6/30/99			

SIMA Site 1490 (NS Mayport -- Jan Bovier) -- ACOE

Discovery Date: 4/23/1997

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt DERA Funds Aval</u>	<u>Comment</u>	<u>Project Completed</u>
CAR	5/1/92	6/1/1992		Waste oil -----	1/10/2000 Jan Bovier
CAR ADD1	9/1/93	12/17/1993			
CAR ADD2	8/1/94	10/25/1994	50000	CAR WILL BE RE-SUBMITTED UPON REMOVAL OF TANK. 50K IS AVAIL FOR '98.	
CAR ADD3	6/15/98			5-12-98 ----- RANDY BISHOP -----TANK WAS REMOVED 6/9/97. CONTAM. SOIL WILL BE ADDRESSED. RESAMPLING WILL BE DONE. CAR ADD3 ANTICIPATED 6/15/98. AIMING FOR NFA.	
				-----10-22-98----- Detection limits used for sampling are to high. Additional sampling required. Awaiting FDEP's review comments.	
SARA	7/16/99			10-8-99 ---- Seeking MOP.. but, need lower det. limits.	
SARA	10/1/99	1/10/2000		2-8-00 --- Resampled 10-1-99. NFA approved.	

TANK Site 191

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Aval</u>	<u>Comment</u>	<u>Project Completed</u>
NFA	8/1/94	6/16/1995		NFA GRANTED.	6/1/1995

TAXIWAY SPILL Site (NS Mayport -- Jan Bovier)

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Aval</u>	<u>Comment</u>	<u>Project Completed</u>
CAR	6/1/00	12/19/2000		Preliminary site investigation performed in past. Anticipate no contamination. Subject to Activity funding. ----- 10-22-98----- Not presently funded. 3-31-99.... Jan will submit data package to Jim.... NFA GRANTED 19 DEC 00.	12/19/2000

UST 1326 (B0233) Site NS Mayport -- Jan Bovier) --Bhate

Discovery Date: 4/1/1995

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Aval</u>	<u>Comment</u>	<u>Project Completed</u>
					4/30/2000

Base Site Management Plan

12/14/2004

CAR	2/6/98	6/5/1998	5-12-98 ----JAN BOVIER ----FUEL OIL, AST, New tank in same location -- AWAITNG FDEP's RESPONSE.
			10-22-98----- Additional assessment required. Anticipated Dec. '98.
SARA	9/8/99	10/15/1999	2-8-00 -- Analytical results from additional soil sample (ACOE) indicates no contamination. Will discuss with FDEP and submit SAR ADD requesting NFA.....4-8-00... Hot spot resampled by the COE. 10-10-00..... NFA granted 5-20-00.
SARA 2	4/28/00	5/20/2000	

UST 1388 (B0227) Site (NS Mayport - Jan Bovier)--ACOE

Discovery Date: 4/1/1997

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Aval</u>	<u>Comment</u>	<u>Project Completed 8/15/2004</u>
CAR	2/12/98	6/4/1998		5-12-98 ---- JAN BOVIER ----FUEL OIL -- AWAITING FDEP's RESPONSE. -----	
				10-22-98----- AST ----- Additional assessment required. Anticipate field activity Dec. '98.	
SARA	9/15/99	10/11/1999		10-8-99 --- Awaiting FDEP review. MOP recommended.	
MOP	12/14/99	1/10/2000		MOP for Natural attenuation approved. NS Mayport may handle in-house.....6-03-01.....Pre-con struction conference held 6-4-01..... 8-2-01..... Field activity commenced 30-31 Jul, first sampling Fisrt Qtrly Report submitted to FDEP..... 2nd Qtrly Report submitted to FDEP 3rd Qtrly Report submitted to FDEP..... 10-7-02..... Site gw mon reduced from qtrly to semi-annually - ACOE to implement..... 1-6-02..... 1st Semi-Annual Mon Rpt submitted be ACOE - Mon well MAY 1388-MW-2 was only well with FL PRO exceedence of 5.5mg/l. GCTL is 5 mg/l. All other wells sampled are are below state levels in all sampled constituents.	
Qtrly Report	11/28/01			4th Qtrly Report... Approval to reduce gw monitoring from quarterly to semi-annually..... ACOE implementing monitoring	
Qtrly Report	12/20/01			05-05-03.....1st Semi-Annual Report....Continue MNA.	
Qtrly Report	5/1/02			MNA approved via Site Rehab Order.	
Qtrly Report	6/26/02	8/13/2002			
Qtrly Report	1/10/03	3/31/2003			
Qtrly Report	8/11/03	10/17/2003			

UST 1552 Site (NS Mayport -- Jan Bovier) -- Bhate

Discovery Date: 4/1/1995

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Aval</u>	<u>Comment</u>	<u>Project Completed 10/1/1999</u>
CAR	2/4/98	4/6/1998		5-12-98 --- JAN BOVIER---- DIESEL FUEL -- AWAITING FDEP's REVIEW. ---	
				10-22-98----- UST in same location ---- Additional assesment required. Expected CAR Addendum in Feb. '99.	
SARA	9/15/99	10/1/1999		10-8-99 --- Awaiting FDEP review. MOP recommended. 2-8-00 ---- NFA approved 10-1-99.	

Base Site Management Plan

12/14/2004

UST 1556-B Site (NS Mayport - Jan Bovier)-- Bhate

Discovery Date: 4/1/1997

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Avail</u>	<u>Comment</u>	<u>Project Completed</u>
CAR	2/4/98	6/15/1998		5-12-98 --- JAN BOVIER ----WASTE OIL -- AWAITING FDEP's REVIEW.	10/1/1999
				10-22-98 ----- UST in same location ----- Additionl assessment required. Anticipate CAR Addendum in Feb. '99.	
SARA	9/14/99	10/1/1999		10-8-99 ----- Awaiting FDEP review. MOP recommended. 2-8-00 ----- NFA approved 10-1-99.	

UST 1864 Site (NS Mayport - Jan Bovier)-- Bhate

Discovery Date: 4/1/1995

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Avail</u>	<u>Comment</u>	<u>Project Completed</u>
CAR	2/4/98	3/17/1998		5-12-98 ---JAN BOVIER ----WASTE OIL -- AWAITING FDEP's REVIEW.	10/1/1999
				10-22-98 ----- UST .. same location ----- additional assessment required. Anticipate CAR Addendum in Feb. '99.	
SARA	9/14/99	10/1/1999		10-8-99 --- Awaiting FDEP review. MOP recommended..... 2-8-00 ---- NFA approved 10-1-99.	

UST 285 Site (PWC - Scott Dombrosky)

Discovery Date: 5/1/1997

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Avail</u>	<u>Comment</u>	<u>Project Completed</u>
TC	5/1/97	7/15/1999		FDEP's comments Perform a Site Assessment and submit a SAR	2/2/2002
SAR	2/10/00	3/8/2000		Additional investigation requested.	
SARA	7/26/00	3/9/2001		Additional information requested was not provided in SARA. Site may be candidate for NFA if the necessary samples are taken and substantial info is provided..... 4-2-01..... FDEP will accept installation of a down-gradient 2-inch direct push well as a permanent mon well. GW TRPH values were 7100ug/l well. GWCTL is 5000ug/l. Sample both wells for volatile and semi-vol constituents.....	
				12-8-01..... Scott Dombrosky will research package and determine steps to take towards dertermining gw gradient, extent of contamination, and respond to Jim Cason's comments.	
SARA 2	2/4/02	2/12/2002		6-7-02..... NFA GRANTED 2/2/02.	

UST 350 Site (NS Mayport -- Jan Bovier) -- Bhate

Discovery Date: 4/1/1998

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Avail</u>	<u>Comment</u>	<u>Project Completed</u>
CAR	2/4/98	6/4/1998		5-12-98 ---- JAN BOVIER ----FUEL OIL -- AWAITING FDEP's REVIEW.	7/16/1999
				10-22-98 ----- UST.. same location -----Additionall assessment required. Anticipate CAR Addendum in Feb. '99.	
SARA	7/15/99	7/16/1999		NFA approved.	

Base Site Management Plan

12/14/2004

UST 353 Site (NS Mayport -- Jan Bovier) -- Bhate

Discovery Date: 4/1/1995

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Avail</u>	<u>Comment</u>	<u>Project Completed</u>
CAR	2/4/98	6/4/1998		5-12-98 ---JAN BOVIER ----FUEL OIL -- AWAITING FDEP's REVIEW.	7/23/1999
				10-22-98 ----- UST .. different location ---- Additional assessment required. Anticipate CAR Addendum in Mar. '99.	
SARA	7/15/99	7/23/1999		7-30-99 --- NFA GRANTED.	

UST 365 (B0230) Site (NS Mayport - Jan Bovier) -- TtNUS

Discovery Date: 4/1/1995

<u>Action:</u>	<u>Date to FDEP</u>	<u>Rev Date by FDEP</u>	<u>Amt Activity Funds Avail</u>	<u>Comment</u>	<u>Project Completed</u>
CAR	2/4/98	6/15/1998		5-12-98 ---- JAN BOVIER -----FUEL OIL -- AWAITING FDEP's REVIEW.	4/14/2003
				10-22-98 ----- UST .. different location --- additional assessment required. Anticipate CAR Addendum in Mar. '99.	
SARA	9/15/99	9/29/1999		12-8-01... ..Interim Action of hot soil removal to soon take place....	
RA	2/21/02	4/11/2002		7-5-02..... Soil Excavation Plan approved by FDEP 11 Jan 02. Soils excavated 4 Jun. Excavation clean closed 7 Jun. Anticipate SARA to FDEP the week of 19 July.	
TECMEM	12/10/02	12/18/2002		1-6-02..... 365 Source Removal Rpt submitted to FDEP.... GW will be resampled and analyzed and SARA submitted. Anticipated mid Feb	
TECMEM	2/25/03			2-28-03..... NFA letter submitted to Jim. Awaiting concurrence	
SARA	2/27/03	4/14/2003		05-05-03.... NFA approved 4-14-03.	

SWMU EXIT STRATEGY TABLE

SITE-SPECIFIC EXIT STRATEGIES

NS Mayport

Updated November 22, 2004

						Projected Site Progress		
G R O U P	SITE SWMU UST AOC PSC UXO	Site Name	In Progress (Status - Phase/ Document)	NFA Date	ROD/SB Date (a=actual)	RIP/ I-RACR/ OPS Date (a=actual)	Projected NFA Date	Exit Strategy (include remedy & media)
3	SWMU 1	Landfill A	D CMS		10/29/2003(Draft)	12/20/00	2035	MNA for groundwater Land use controls (LUC) on soil & groundwater
1	SWMU 2	Landfill B	D CMS		10/17/2004 (Draft)	11/16/07	2035	Soil LUC, GW MNA (model-LUC 30 yrs) SB approval expected 11/05
1	SWMU 3	Landfill D	D CMS		10/17/2004 (Draft)	12/20/00	2035	Soil LUC, GW MNA (model-LUC 30 yrs) SB approval expected 11/05
1	SWMU 4	Landfill E	D CMS		10/17/2004 (Draft)	12/20/00	2035	Soil LUC, GW MNA (model-LUC 30 yrs) SB approval expected 11/05
1	SWMU 5	Landfill E	D CMS		10/17/2004 (Draft)	7/1/05	2035	Soil LUC, GW MNA (model-LUC 30 yrs) SB approval expected 11/05
2	SWMU 6	Waste oil Pit	CMS		11/20/2004 (Draft)	1/15/02	10/01/42	Soil LUC, GW MNA (model-LUC 30 yrs)
2	SWMU 7	Oily Waste Treatment Plant(OWTP)Sludge beds	CMS		11/20/2004 (Draft)	9/26/12	11/30/40	Soil LUC, GW MNA (model-LUC 30 yrs)
2	SWMU 8	OWTP Percolation Pond	RFI		2/15/2006 (Draft)	4/15/05	11/29/38	Soil LUC, GW MNA (model-LUC 30 yrs)
2	SWMU 9	OWTP	RFI		2/15/2006 (Draft)	4/15/02	11/29/39	Soil LUC, GW MNA (model-LUC 30 yrs)
2	SWMU 10	Haz waste storage area	RFI		2/15/2006 (Draft)	4/15/02	11/29/39	Soil LUC, GW MNA (model-LUC 30 yrs)
2	SWMU 11	Fuel Spill Area	RFI		2/15/2006 (Draft)	4/15/02	11/29/39	Soil LUC, GW MNA (model-LUC 30 yrs)
2	SWMU 12	Neutralization Basin	F SB		9/30/2004 (DF)	9/8/05	12/12/35	Soil LUC GW-NFA (30 yr LUC) Final SB approval 9/04
1	SWMU 13	Old FFTA	CMS		4/15/2005 (Draft)	5/1/02	11/28/04	NFA
3	SWMU 14	Mercury & Oily waste spill area	LUC		06/20/02	3/31/03	8/139/2033	soil LUC, concrete cap to be maintained, GW-MNA model-30 yrs
2	SWMU 15	Old pesticide handling area	CMI		09/04/02	2/28/05	02/28/35	Soil LUC (asphalt cap to be maintained) & GW LUC (water usage prohibited)
2	SWMU 16	Old Transformer Storage Area	SB		05/19/04	5/1/02	09/30/04	NFA
3	SWMU 17	Carbonaceous Fuel Boiler	F SB		5/20/2004a (F)	6/15/06	07/29/22	soil LUC GW NFA
3	SWMU 18	Fleet Training Center	D CMS		10/15/2004 (DF)	10/15/14	10/15/35	soil LUC, GW NFA
2	SWMU 19	NADEP Blasting Area	RFI		4/15/2005 (Draft)	4/15/14	4/15/36	soil LUC
3	SWMU 20	Hobby Shop Drain	D CMS		10/15/2004 (DF)	10/15/14	10/15/35	Soil LUC, GW NFA
3	SWMU 21	Hobby Shop Scrap Storage	D CMS		10/15/2004 (DF)	10/15/14	10/15/35	Soil Luc, GW NFA
1	SWMU 22	Bldg 1600 Blasting Area	D CMS		10/17/2004 (Draft)	9/2/05	04/30/35	Soil LUC, GW MNA (LUC 30 yrs) SB approval expected 11/05
3	SWMU 23	JSI (ship yard)	D CMS		10/29/2003(Draft) a	4/15/02	10/30/24	excavation completed, Soil LUC
3	SWMU 24	NF (Ship yard)	D CMS		10/29/2003(Draft) a	12/20/00	01/28/35	excavation completed, Soil LUC, GW MNA
3	SWMU 25	AMI (Ship Yard)	D CMS		10/29/2003(Draft)a	12/20/00	07/28/25	cap, soil LUC, GW MNA
1	SWMU 26	Landfill C	RFI		4/15/2005 (Draft)	4/15/14	04/15/36	soil LUC
	SWMU 27	Former Haz Wasre storage AREA	NFA	May-93	NFA			NFA in1993 permit
2	SWMU 28	DRMO Yard	RFI		4/15/2005 (Draft)	4/15/14	04/15/36	soil LUC
3	SWMU 29	Oily Waste Pipeline Break	NFA	May-93	NFA			NFA
	SWMU 30	NEX Batter Corral	NFA	May-93	NFA			NFA
	SWMU 31	FTC OBA Accumulation Area	NFA	May-93	NFA			NFA
	SWMU 32	FTC Mercuric Waste Accumualtion Area	NFA	May-93	NFA			NFA
	SWMU 33	SIMA Accumulation Area	NFA	May-93	NFA			NFA
	SWMU 34	Hobby Shop Accumulation Area	NFA	May-93	NFA			NFA
	SWMU 35	NADEP Accumulation Area	NFA	May-93	NFA			NFA
	SWMU 36	Carrier Pier Accumulation Area	NFA	May-93	NFA			NFA
	SWMU 37	Carier Pier Accumulation Area	NFA	May-93	NFA			NFA
	SWMU 38	Carrier Pier Accumulation Area	NFA	May-93	NFA			NFA
	SWMU 39	PWD Paint Shop Accumulation Area	NFA	May-93	NFA			NFA

SITE-SPECIFIC EXIT STRATEGIES
NS Mayport
Updated November 22, 2004

							Projected Site Progress	
G O U P	SITE SWMU UST AOC PSC UXO	Site Name	In Progress (Status - Phase/ Document)	NFA Date	ROD/SB Date (a=actual)	RIP/ I-RACR/ OPS Date (a=actual)	Projected NFA Date	Exit Strategy (include remedy & media)
	SWMU 40	B1343 Accumulation Area	NFA	May-93	NFA			NFA
	SWMU 41	B 1600 Accumulation Area	NFA	May-93	NFA			NFA
	SWMU 42	AIMD B 1533 Accumulation Area	NFA	May-93	NFA			NFA
	SWMU 43	Waste water Treatment Facility Clarifiers	NFA	May-93	NFA			NFA
3	SWMU 44	Waste water Treatment Facility Clarifiers	RFI		11/17/04	11/17/14	11/17/35	soil LUC
	SWMU 45	Waste water Treatment sludge beds	RFI		11/17/04	11/17/14	11/17/35	soil LUC
3	SWMU 46	SIMA engine drain sump	NFA	May-93	NFA			NFA
4	SWMU 47	Oily WasteCollection System	D RFI		12/17/2004 (Draft)	5/2/07	08/29/37	soil LUC, GW MNA 30 yrs (model)
2	SWMU 48	Former Chem lab	NFA	May-93	NFA			NFA
1	SWMU 49	Flight line retention pond	NFA	May-93	NFA			NFA
1	SWMU 50	Dredge Disposal Area	RFI		12/14/2006 (Draft)	12/14/14	12/14/38	operational seek to remove as a SWMU- no other dredge material areas are SWMUs
2	SWMU 51	Waste Oil Tanks	NFA	May-93	NFA			NFA
3	SWMU 52	PWD Service Station Storage Area	D CMS		10/15/2004 (DF)	10/15/14		Soil Luc, GW NFA
4	SWMU 53	Sewer System	D RFI		12/17/2004 (Draft)	4/25/10	08/31/38	Soil LUC, GW MNA 30 yrs (model)
	SWMU 54	Oil/ Water separators	NFA	May-93	NFA			NFA
4	SWMU 55	Storm Sewer System	D RFI		12/17/2004 (Draft)	4/15/10	12/30/37	
1	SWMU 56	Bldg 1552 Accumulation Area	NFA??		4/14/2005 (Draft)	4/15/14		Soil LUC, GW ?
	AOC C SWMU	B191/Echo Pier	D RFI		10/01/2004 (Draft)	1/1/11	12/30/37	Sediment removal IM in ditch
	AOC D	Airfield AOC	CMS					Soil LUC
	UST 01	Bldg 265		1/6/2004				
	UST 03	Bldg 25	LTO				11/30/06	MNA for gw until NFA
	UST 05	Alpha/Delta Pier	LTO				12/30/06	Skimmer Pump installation for sporadic product removal, Land use controls on gw and soil, Monitor Site
	UST 06	Bldg 1586 - BEQ	NFA	12/10/00				
	UST 07	Bldg 283 - PWTP	RAP				01/30/07	MNA for groundwater until NFA Hot spot soil removal
	UST 12	Site 1330 - Bldg 46	RAP				5/30/08	Insitu groundwater treatment Hot spot soil removal

All soil LUCs are until base land use is changed

OPTIONAL FORM 99 (7-80)

FAX TRANSMITTAL

of pages 2

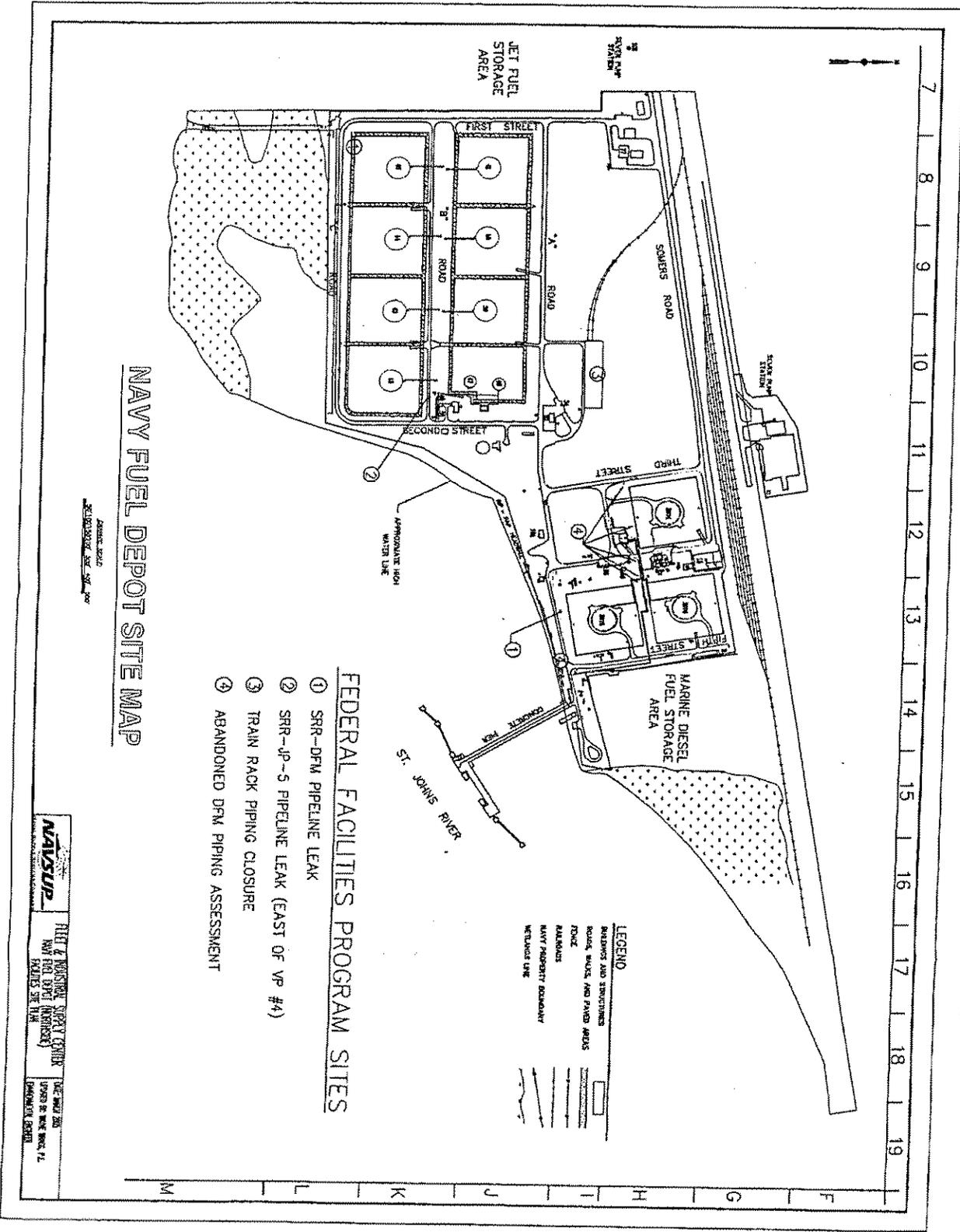
To: Michael Greenham From: Navy Base

Dept/Agency: PR Phone #: 904-870-4730x208

Fax #: 904-270-7398

NSN 7540-01-317-7388 5098-101 GENERAL SERVICES ADMINISTRATION

*Mayport from US located
March 2005 -
Thank you
David*



MARCH 2005 UPDATE
 FEDERAL FACILITIES PROGRAM SITES
 NAVY FUEL DEPOT
 JACKSONVILLE, FLORIDA
 FAC # 1619502577

Project Name/Designation	Project Number	Activity Performed	Comments	Proposed Activities FY 2005
SRR - DFM Pipeline Leak @ "A" Road	# Jax 03-08	Performed soil and groundwater sampling between March and July 2004. Supplemental Assessment & Limited Scope Remedial Action Plan was approved by FDEP in July 2004. LSRAP was implemented in February 2005. Remediation trenches installed. Baseline sampling performed. First phase of bioremediation implemented week of March 14, 2005.	TRPH and PAHs exceeded Ch. 62-770, FAC Soil criteria. Benzene found at concentrations in excess of Ch. 62-770, FAC GW criteria.	Continue phases of bioremediation and monitor groundwater throughout 2005.
SRR - JP-5 Pipeline Leak - East of Valve Pit #4 (West of PS #2)	# Jax 99-10	Performed soil and groundwater sampling between March and July 2004. Supplemental Assessment & Limited Scope Remedial Action Plan was approved by FDEP in July 2004. LSRAP was implemented in February 2005. Remediation wells installed. Baseline sampling performed. First phase of bioremediation implemented week of March 14, 2005.	TRPH found at concentrations in excess of Ch. 62-770, FAC Soil and GW criteria.	Continue phases of bioremediation and monitor groundwater throughout 2005.
Train Rack Piping Closure Assessment (Fac 54)	# NAVSUP 04-01	Piping closure assessment was performed following the train rack demolition in March 2004. Piping Closure Assessment Report submitted to FDEP in April 2004.	Benzene and/or PAHs and/or TRPH found at concentrations in excess of Ch. 62-770, FAC, Soil & GW criteria.	Site Assessment to occur week of April 4, 2005.
Abandoned Piping Assessment (Bell Constructors)	# NAVSUP 03-01	Completed piping closure assessment activities in July - August 2003. Follow-on assessment completed. Oil discovered south of Tank 2074 from improperly abandoned underground pipe. Initial Remedial Action performed week of February 14, 2005 in area - piping has been temporarily capped. Assessment of old piping network is complete.	Benzene and/or PAHs and/or TRPH found at concentrations in excess of Ch. 62-770, FAC, Soil & GW criteria at 5 locations.	Funding to remove/properly abandon old underground piping in DFM area to be pursued.

PCB-RELATED DOCUMENTS



DEPARTMENT OF THE NAVY

NAVAL STATION

MAYPORT, FLORIDA 32228-0112

IN REPLY REFER TO:

5090.1

5090.11

Ser N4E9/ 00090

01 APR 1996

From: Commanding Officer, Naval Station, Mayport
To: Commanding Officer, Naval Facilities Engineering Service Center (ESC 424TJ)

Subj: CALENDAR YEAR 1995 POLYCHLORINATED BIPHENYLS INVENTORY UPDATE FOR NAVAL STATION MAYPORT

Ref: (a) NFESC ltr 5090 Ser 423/3002 of 2 Jan 96

Encl: (1) PCB-Free Activity Report form - NAVSTA Mayport of Jan 96
(2) PWC Jacksonville ltr 5090 Ser 300/1541 of 29 Jan 96

1. Enclosures (1) and (2) are forwarded in response to reference (a).

2. Naval Station Mayport's point of contact for PCBs is Bob Tierney, N4E9, at DSN 960-6730, commercial 904-270-6730.

A handwritten signature in cursive script, appearing to read "Michael Davenport", is written above the typed name.

MICHAEL DAVENPORT
By direction

Copy to:
PWC Jacksonville (Code 300)
COMNAVBASE Jacksonville (N3)

INSTRUCTIONS FOR PCB-FREE ACTIVITY REPORT

DATE JAN 96

ACTIVITY NAME: NAVSTA MAYPORT FL

Use Plain Language Address Directory (PLAD) Short title (see Guide).

ACTIVITY UIC: N60201

List your Unit Identification Code. Precede Navy activities with a N and Marine Corps activities with a M.

MAILING ADDRESS: NAVAL STATION MAYPORT N4E

Use SNDL address listing full activity name, street address, box or code, city, state and seven digit zip code.

PO BOX 280067

MAYPORT FL 32228 0067

MAJOR CLAIMANT: CINCLANTFLT NORFOLK VA N00060

Enter you major claimant in this space. For the purposes of this form Marine Corps activities should enter CMC. Following is a list of the 23 major claimants with their UICs.

COA BUPERS Washington DC (N00002)	COMNAVSUPSYSCOM Washington DC (N00023)	CNET Pensacola FL (N00062)
CNO Washington DC (N00011)	COMNAVSEASYSYSCOM Washington DC (N00024)	COMNAVCOMTELCOM Washington DC (N00063)
ASMIN SECNAV Washington DC (N00012)	COMNAVFACENGCOCM Alexandria VA (N00025)	COMNAVMETOCCOM Stennis Space Center MS (N00065)
CNR Arlington VA (N00014)	OSD Washington DC (N00029)	COMNAVSECGRU Washington DC (N00069)
ONI Washington DC (N00015)	DIRSSP Washington DC (N00030)	CINCPACFLT Pearl Harbor HI (N00070)
BUMED Washington DC (N00018)	COMSPAWARSYSCOM Washington DC (N00039)	COMNAVSPESWARCOM Coronado CA (N00074)
COMNAVAIRSYSCOM Washington DC (N00019)	CINCLANTFLT Norfolk VA (N00060)	COMNAVRESFOR New Orleans LA (N00072)
CHNAVPERs Washington DC (N00022)	CINCUSNAVEUR London UK (N00061)	

ENVIRONMENTAL MANAGER POC: MICHAEL DAVENPORT

List name Environmental Manager or Environmental POC that has been designated by the Commanding Officer to represent the command for environmental matters.

POC TITLE: ENVIRONMENTAL DIRECTOR

POC CODE: N4E

List title and code of environmental POC.

TELEPHONE: DSN: 960-6730 COM: 904-270-6730

List Defense Switched Network (DSN) [old AUTOVON] and Commercial phone number for POC.

FAX: DSN: 960-6884 COM: 904-270-6884

List DSN and commercial phone number for your facsimile (FAX) machine.

NOTE: PWC JACKSONVILLE FL (UIC N68931) reports for NAVSTA MAYPORT.

Michael Davenport
(Signature of POC)

Note: untested transformers are to be listed as PCB until tested.

Complete form, make photocopy for your records (to show to auditors) and to mail to your major claimant, with a copy to Commanding Officer: Naval Facilities Engineering Service Center, ATTN: ESC 424, 560 Center Drive, Port Hueneme, CA 93043-4328.

ENCLOSURE (1)

5090
Ser 300/1541
29 Jan 96

From: Commanding Officer, Navy Public Works Center Jacksonville
To: Commander, Naval Facilities Engineering Command
(Code 40E1)

Subj: CY95 POLYCHLORINATED BIPHENYL (PCB) INVENTORY STATUS

Ref: (a) NFESC ltr 5090 Ser 423/3002 of 2 Jan 96

Encl: (1) PWC JAX CY95 PCB Inventory

1. Per reference (a), Navy Public Works Center Jacksonville (PWC JAX) submits enclosure (1) report. All contaminated equipment is located at Naval Air Station (NAS) Cecil Field; there is no PWC JAX PCB contaminated equipment at either NAS Jacksonville or Naval Station Mayport. Our point of contact is Mr. David Kohler at (904)772-4548, ext. 8304 or DSN 942-4548.

J. H. SCHROEDER
By direction

Copy to:
NAS Jacksonville (Code 184)
NAS Cecil Field (Code 184)
✓ NAVSTA Mayport (N4) *dep.*

ASBESTOS DOCUMENTS

**Asbestos-Containing Material Survey
Ribault Bay Housing Phase II
Mayport Naval Station
Mayport, Florida**

Prepared for:

Department of the Navy
Southern Division
Naval Facilities Engineering Command
P.O. Box 190010
2155 Eagle Drive
North Charleston, SC 29419-9010

Prepared by:

BAT Associates, Inc.
5151 Brook Hollow Parkway, Suite 250
Norcross, GA 30071

and

Cape Environmental Management Inc
2302 Parklake Drive
Suite 200
Atlanta, GA 30345

Contact Person:
Scott Bryant, 770/908-7200

November 1999

ASBESTOS SURVEY REPORT

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1.0 Executive Summary

BAT Associates, Inc. contracted Cape Environmental Management Inc (CAPE), to perform an asbestos-containing material (ACM) survey for the Southern Division, Naval Facilities Engineering Command (SouthDiv NAVFACENGCOM) at Ribault Bay Housing Phase II located in the Mayport Naval Station, Florida. The field investigation was conducted by CAPE staff industrial hygienists Mr. Mike Spradling (EPA/AHERA Building Inspector #5875), Mr. Kevin Bailey (EPA/AHERA Building Inspector #5984), and Mr. David Bratley (EPA/AHERA Building Inspector #2519) between the dates of August 23, 1999 and October 1, 1999.

The purpose of this ACM survey is to provide a detailed inventory of suspect ACM, an assessment of the condition of each identified ACM, the quantities of the identified ACM, and an assessment of the friability of each identified ACM.

The Ribault Bay Housing Phase II at Mayport Naval Station consists of two, three, four, and five bedroom housing units. The scope of work required that ACM surveys be conducted on 200 of the housing units targeted for Phase II renovation. CAPE performed building material surveys of these units to determine the materials (interior and exterior) that were suspected of containing asbestos.

For the purposes of this survey, typical housing units were separated into the following four groups: two bedroom units, three bedroom units, four bedroom units, and five bedroom units. Based on the sampling criteria outlined in 40 CFR Part 763, Asbestos Hazard Emergency Response Act (AHERA), and modified by the scope of work, one typical housing unit of each group was sampled in detail. Additional suspect- ACMs were sampled in the remaining housing units as they were discovered during the survey of each individual unit.

The following ACMs were identified:

2 Bedroom Units

Friable ACM:

- Light fixture insulation

The friable light fixture insulation was significantly damaged.

Non-Friable ACM:

- Resilient sheet flooring, white with orange and brown pattern
- Resilient sheet flooring, cream, white, and gray mosaic pattern
- Resilient sheet flooring, brown brick pattern
- Resilient sheet flooring, cream with gold and mustard designs

- Sink mastic, black
- 12” x 12” floor tile cream with tan streaks, and mastic

All non-friable materials were observed to be in good condition on the days of the field investigation.

3 Bedroom Units

Friable ACM:

- Light fixture insulation

The friable light fixture insulation was significantly damaged.

Non-Friable ACM:

- Resilient sheet flooring, white with orange and brown pattern
- Resilient sheet flooring, cream, white, and gray mosaic pattern
- Resilient sheet flooring, brown brick pattern
- Resilient sheet flooring, cream with gold and mustard designs
- Sink mastic, black
- 12” x 12” floor tile cream with tan streaks, and mastic

All non-friable materials were observed to be in good condition on the days of the field investigation

.

4 Bedroom Units

Friable ACM:

- Light fixture insulation

The friable light fixture insulation was significantly damaged.

Non-Friable ACM:

- Resilient sheet flooring, white with orange and brown pattern
- Sink mastic, black

- 12" x 12" floor tile cream with tan streaks, and mastic
- Mastic associated with 12" x 12" floor tile white with brown smudges
- Mastic associated with white resilient sheet flooring,

All non-friable materials were observed to be in good condition on the days of the field investigation.

5 Bedroom Units

Friable ACM:

- Light fixture insulation

The friable light fixture insulation was significantly damaged.

Non-Friable ACM:

- Resilient sheet flooring, white with orange and brown pattern
- Sink mastic, black
- 12" x 12" floor tile cream with tan streaks, and mastic

All non-friable materials were observed to be in good condition on the days of the field investigation.

The following floor tiles were identified as patches in various locations of two bedroom, three bedroom, four bedroom, and five bedroom units. These tiles were reported to be non-asbestos containing by PLM analysis, however, **the mastic associated with these tiles is asbestos-containing.**

- 12" x 12" gray with white and dark gray smudges floor tile
- 12" x 12" gray with brown and yellow streaks floor tile
- 12" x 12" beige with brown and gray spots floor tile
- 12" x 12" tan with white and brown streaks floor tile
- 12" x 12" white with brown and gray streaks floor tile
- 12" x 12" beige with brown and white streaks floor tile

The following units were included in the scope of work for this project.

2 Bedroom Units		
1004A	1039C	1071A
1004B	1039D	1071B*
1004C	1039E	1071C
1004D*	1039F	1071D*
1016A*	1047A	1071E
1016B	1047B*	1071F*
1016E*	1047C	1071G
1016F*	1047D*	1071H
1020A	1047E	1073A
1020B	1047F	1073B*
1020C	1062A	1073C
1020D	1062B	1073D
1020E	1062C	1073E
1020F	1062D	1073F
1039A*	1062E	
1039B*	1062F	

3 Bedroom Units		
1000A	1059B	1068C
1000B	1059C	1068D
1000C	1059D	1068E
1000D	1060A	1068F
1000E	1060B*	1070A
1000F	1060C	1070B
1013A	1060D	1070C
1013B	1066A	1070D
1013C	1066B	1070E
1013D	1066C	1070F*
1037A	1066D	1072A
1037B	1067A	1072B
1037C	1067B*	1072C
1037D	1067C*	1072D
1037E	1067D	1072E
1037F	1068A	1072F
1059A*	1068B	

4 Bedroom Units		
1011A	1038C	1053B
1011B	1038D	1053C
1011C	1040A	1053D
1011D	1040B*	1053E*
1011E	1040C	1057A
1011F	1040D	1057B
1027A	1040E	1057C
1027B	1040F	1057D
1027C	1044B	1058B
1027D	1044C	1058C
1027E	1044D	1058D
1027F	1044E	1058E
1028B	1045A	1061A
1028C	1045B	1061B
1028D	1045C	1061C
1028E	1045D	1061D
1029B	1045E	1063A
1029C	1045F	1063B
1029D	1049A	1063C
1029E	1049B	1063D
1029F	1049C	1065B*
1031A	1049D	1065C
1031B	1049E	1069B
1031C	1049F	1069C
1031D	1050B	1069D
1031E*	1050C	1069E
1031F	1050D	1069F*
1038A	1050E	
1038B	1050F	

5 Bedroom Units
1001B
1001C
1002F
1028A
1029A
1032A*
1036A
1044A
1046A*
1046B
1046C
1050A
1053A
1057E
1057F
1058A
1064E
1064F
1065A
1069A*

Notes: Unit numbers that are **bold** indicate the units that could not be accessed.

* Bulk samples were collected from these units.

2.0 Asbestos Survey Methodology

2.1 Field Investigation

The scope of work established for this project consisted of the following:

1. Conducting a visual survey of interior and exterior areas of each building to identify accessible, suspect-ACM and determine:
 - Material type
 - Location
 - Quantity
 - Friability
 - Physical condition
2. Developing a suspect-ACM bulk sampling strategy based on the sampling collection criteria outlined in the AHERA regulation and the scope of work. The scope of work required one typical unit in each group of buildings to be sampled in detail.
3. Providing an asbestos inventory and survey report.

The field investigation required identification and classification of suspect-ACM as (1) *thermal system insulation*, (2) *surfacing materials*, or (3) *miscellaneous materials*. Once these materials were identified, homogeneous sampling areas (areas that are uniform in color, texture, construction/application date, and general appearance) were delineated. Homogeneous areas (HAs) were then assigned unique HA numbers and the appropriate number of bulk samples were collected from each HA. (Note: HA number assignments for this project are not intended to be representative of the sequence in which the HAs were identified within the units or the order in which HAs were sampled).

The sampling criteria for this project required detailed sampling of the suspect- ACMs in one housing unit from each group of similar dwellings. These units were:

2 bedroom unit 1016A

3 bedroom unit 1059A

4 bedroom unit 1031E

5 bedroom unit 1032A

Based on written documentation and visual evidence, all units included in the scope of work at Ribault Bay Housing were determined to be of typical design and common construction history. The housing complex contains four different types of design: two bedroom, three bedroom, four

bedroom, and five bedroom units. Therefore, in accordance with the scope of work, one individual housing unit representative of the whole group was sampled. In addition, CAPE conducted a walk through of all accessible units to identify HAs that were present throughout the group type. Similar HAs that were identified in the units were considered to have the same asbestos content of the HAs identified in the housing unit that was sampled. All non-similar suspect-ACMs identified during the walk through were sampled as they were discovered in each remaining unit (please see page 4 for a complete list of housing units sampled).

CAPE personnel collected samples as required by AHERA regulations. These regulations stipulate, at a minimum, that three bulk samples be collected from materials identified as *thermal system insulation* (e.g., pipe and pipe fitting insulation, boiler insulation, duct insulation, etc.). For materials identified as *miscellaneous material* (e.g., cement board, ceiling tile, gypsum wallboard, etc.) AHERA requires that these materials be sampled “in a manner sufficient to determine whether a material is ACM or not ACM.” CAPE personnel collected a minimum of two bulk samples from each friable miscellaneous material. Finally, for materials identified as *surfacing materials* (e.g., fire proofing, plaster, spray applied acoustical ceiling material, etc.) AHERA requires three bulk samples be collected if the total quantity of the material is less than 1,000 square feet, five bulk samples be collected if the total quantity of the material is between 1,000 square feet but less than or equal to 5,000 square feet, and seven bulk samples be collected if the total material quantity is greater than 5,000 square feet. In situations when suspect materials cannot be sampled (because sampling would damage the integrity or functionality of the material), they are assumed to contain asbestos.

The suspect-ACM bulk sample identification numbering scheme for this survey was based on the following pattern:

MRBH-1016A-1-01

MRBH	=	Project identifier (e.g., Mayport – Ribault Bay Housing)
1016A	=	Unit number
1	=	Suspect-ACM homogeneous area number
01	=	Sequential sample ID number

CAPE’s field personnel included Industrial Hygienists accredited as Building Inspectors in accordance with EPA’s revised Asbestos Model Accreditation Plan (MAP) mandated by the Asbestos School Hazard Abatement Reauthorization Act (ASHARA).

During the inspection, CAPE’s inspectors physically assessed the friability of each suspect-ACM and placed them into the appropriate friability category: (1) *regulated friable suspect-ACM*, or (2) *Category I or Category II, non-friable suspect-ACM*. Friable suspect-ACM is defined by AHERA as a material that when dry, can be crushed, pulverized, or reduced to powder by normal hand pressure; non-friable suspect-ACM is defined by AHERA as a material that when dry cannot be crushed, pulverized, or reduced to powder by normal hand pressure.

Suspect- ACMs were then placed into one of three condition categories as part of the physical assessment: (1) *good*, (2) *damaged*, or (3) *significantly damaged*.

Although an ACM HA cannot be absolutely determined to have no degree of damage, materials with no visible damage or deterioration, as well as those materials showing only very limited damage or deterioration, were categorized as being in good condition for the purpose of this survey.

2.2 Bulk Sample Analysis

Collected samples were analyzed by Polarized Light Microscopy (PLM) in accordance with EPA Method 600/R-93/116 of July 1993. Analytical Environmental Services, Inc. (AES) in Atlanta, Georgia (NVLAP Lab Code 102033), served as the primary laboratory for asbestos analysis. CAPE's laboratory in Atlanta, Georgia (NVLAP Lab Code 102111), performed the quality control of bulk sample analysis. In accordance with EPA's 1994 clarification for analysis of multi-layered systems, suspect materials were treated as asbestos containing if one or more layers of the material was determined to contain greater than 1% asbestos.

In accordance with Federal and state regulations, suspect-ACM that was determined by initial PLM analysis to have an asbestos content of greater than 1% (or assumed to have an asbestos content greater than 1%), was considered to be ACM. Suspect-ACM that was determined by initial PLM analysis to contain no detectable asbestos was considered non-ACM.

Point counting of materials found to have an asbestos content of less than 1% was not included in the scope of work for this project. Any material determined to have an asbestos content between "Trace" and 1% was assumed to be an asbestos-containing material.

Limitations of Asbestos Analysis:

Transmission electron microscopy (TEM) analysis to confirm negative PLM analysis results of floor tile and/or other resinously bound materials was not included in the analytical criteria established for this project.

3.0 Asbestos Survey Findings

This section includes a summary of the findings from the asbestos-containing materials survey of the 200 housing units at Ribault Bay Housing targeted for Phase II renovation.

A summary of the identified ACM is given in Tables 1 through 4. The tables list the typical location, appropriate NESHAP category in accordance with EPA regulations, and the appropriate OSHA category in accordance with the OSHA Classes of Work. (See Section 4.0, *Overview of Asbestos Regulatory Requirements* for definitions of NESHAP Categories and OSHA Classes of Work).

For NESHAP compliance purposes, each Category I, Non-friable ACM and each Category II, Non-friable ACM should be evaluated prior to building demolition/renovation to determine if forces acting on the material during the demolition/renovation process will render the material friable, and therefore require that it be re-categorized as Regulated ACM.

Refer to Appendices of this report for the following additional building survey data:

- Summary of Suspect Asbestos-Containing Materials (By Unit-Type)
- Summary of Suspect Asbestos-Containing Materials (Individual Unit Material Summary)
- Extent of Asbestos-Containing Material and Bulk Sample Locations (Typical Housing Unit Floor Plan)
- Laboratory Analysis Reports: of Suspect ACM Bulk Samples

Housing Units surveyed consist of multi-family buildings with four to eight units per building. Buildings are two-story wood-framed structures on concrete slabs. Exterior walls have vinyl siding and roofing has asphalt shingles. Interior flooring consists of floor tile, resilient sheet flooring, and carpet. Interior walls are gypsum drywall. Ceilings finishes are gypsum drywall with a smooth finish or a textured finish.

Refer to Appendix A for a complete inventory of suspect materials identified in each unit.

Table 1

Summary of ACM Identified in 2-Bedroom Units

HA No.	Material Description	Typical Location	Physical Assessment	NESHAP Category	OSHA
1	12" x 12" floor tile cream with tan streaks, and mastic	<i>1st floor units</i> - Master bedroom, bedroom 2, utility, entry, family room, living/dining room	Good	Category I Non-Friable	Class II
3	Mastic associated with 12"x12" gray with white and dark gray smudges floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
7	Sink mastic, black	Kitchen	Good	Category I Non-Friable	Class II
11	Resilient sheet flooring, white with orange and brown pattern	Kitchen	Good	Category I Non-Friable	Class II
12	Light fixture insulation	Fixtures in entry and utility	Significantly damaged	Regulated ACM	Class I
14	Resilient sheet flooring, cream, white, and gray mosaic pattern	<i>2nd floor units</i> - Bathroom	Good	Category I Non-Friable	Class II
15	Resilient sheet flooring flooring, brown brick pattern	<i>2nd floor units</i> - Utility	Good	Category I Non-Friable	Class II
18	Mastic associated with 12"x12" gray with brown and yellow streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
23	Mastic associated with 12"x12" beige with brown and gray spots floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
24	Resilient sheet flooring, cream with gold and mustard designs	<i>2nd floor units</i> - Bathroom	Good	Category I Non-Friable	Class II

Table 2**Summary of ACM Identified in 3-Bedroom Units**

HA No.	Material Description	Typical Location	Physical Assessment	NESHAP Category	OSHA
2	12" x 12" floor tile cream with tan streaks, and mastic	Living/dining room, utility, family room, entry, master bedroom, bedroom 2, bedroom 3, hall, storage	Good	Category I Non-Friable	Class II
7	Sink mastic, black	Kitchen	Good	Category I Non-Friable	Class II
8	Mastic associated with 12"x12" tan with brown and white streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
10	Mastic associated with 12"x12" gray with white and dark gray smudges floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
12	Mastic associated with 12"x12" white with brown and gray streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
13	Mastic associated with 12"x12" gray with brown and yellow streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
15	Resilient sheet flooring, white with orange and brown pattern	Kitchen	Good	Category I Non-Friable	Class II
16	Mastic associated with 12"x12" beige with brown and white streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
17	Light fixture insulation	Fixtures in entry, utility, and hall	Significantly damaged	Regulated ACM	Class I
18	Mastic associated with 12"x12" beige with brown and gray spots floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II

Table 3**Summary of ACM Identified in 4-Bedroom Units**

HA No.	Material Description	Typical Location	Physical Assessment	NESHAP Category	OSHA
6	12" x 12" floor tile cream with tan streaks, and mastic	Living/dining room, utility, family room, entry, master bedroom, bedroom 2, bedroom 3, bedroom 4, hall, storage	Good	Category I Non-Friable	Class II
7	Mastic associated with 12"x12" gray with white and dark gray smudges floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
8	Mastic associated with 12"x12" tan with brown and white streaks floor tile,	Various locations (patches)	Good	Category I Non-Friable	Class II
11	Resilient sheet flooring, white with orange and brown pattern	Kitchen	Good	Category I Non-Friable	Class II
12	Light fixture insulation	Fixtures in entry, utility, master bedroom, and hall	Significantly damaged	Regulated ACM	Class I
17	Sink mastic, black	Kitchen	Good	Category I Non-Friable	Class II
18	Mastic associated with 12"x12" white with brown smudges floor tile	Various throughout (unit 1045B)	Good	Category I Non-Friable	Class II
19	Mastic associated with white resilient sheet flooring,	Kitchen (unit 1045B)	Good	Category I Non-Friable	Class II

Table 4**Summary of ACM Identified in 5-Bedroom Units**

HA No.	Material Description	Typical Location	Physical Assessment	NESHAP Category	OSHA
1	12" x 12" floor tile cream with tan streaks, and mastic,	Living/dining room, utility, family room, entry, master bedroom, bedroom 2, bedroom 3, bedroom 4, bedroom 5, hall, storage	Good	Category I Non-Friable	Class II
3	Mastic associated with 12"x12" white with brown and gray streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
9	Mastic associated with 12"x12" gray with white and dark gray smudges floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
11	Resilient sheet flooring, white with orange and brown pattern	Kitchen	Good	Category I Non-Friable	Class II
12	Light fixture insulation	Fixtures in entry, utility, and hall	Significantly damaged	Regulated ACM	Class I
14	Mastic associated with 12"x12" beige with brown and white streaks floor tile	Various locations (patches)	Good	Category I Non-Friable	Class II
15	Sink mastic, black	Kitchen	Good	Category I Non-Friable	Class II

Appendix A

Suspect Asbestos-Containing Materials

(By Unit Type)

**Table A-1
Suspect ACM Identified in 2-Bedroom Units**

HA #	Supect ACM	Description*	Location(s)	Unit sampled	ACM (Yes or No)
1	12" x 12" floor tile and mastic	Cream with tan streaks	Various throughout	1016A	Tile (+), Mastic (+)
2	12" x 12" floor tile and mastic	Gray with white and dark gray spots	Kitchens	1016A	Tile (-), Mastic (-)
3	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Various (patches)	1016A	Tile (-), Mastic (+)
4	Gypsum wallboard and associated joint compound	Walls	Throughout	1016A	No
5	Gypsum ceiling and associated joint compound	Ceilings	Restroom, Kitchen, Utility	1016A	No
6	Spray-applied decorative ceiling	Ceilings	Various throughout	1016A	No
7	Sink mastic	Black	Kitchen	1016A	Yes
8	Basecove and mastic	Black	Kitchen	1016A	Basecove (-), Mastic (-)
9	Asphalt shingle roof	Gray	Roof	1016A	No
10	Flat membrane roof	Rubber with caulk	Roof (carport)	1016A	No
11	Resilient sheet flooring	White with orange and brown pattern	Kitchen	1016A	Yes
12	Light fixture insulation	White	Hall and Utility fixtures	1039A	Yes
13	12" x 12" floor tile and mastic	Beige with tan, white, and gray spots	Kitchen	1004D	Tile (-), Mastic (-)
14	Resilient sheet flooring	Cream, white, and gray mosaic pattern	Restroom (2 nd floor units)	1004D	Yes
15	Resilient sheet flooring	Brown brick pattern	Utility (2 nd floor units)	1004D	Yes
16	Resilient sheet flooring	Blue with peach, white, and gray spots	Lanai (2 nd floor units)	1004D	No
17	Vapor barrier, tar paper	Black	Interior of exterior walls	1004D	No
18	12" x 12" floor tile and mastic	Gray with brown and yellow streaks	Various (patches)	1016E	Tile (-), Mastic (assumed)
19	Basecove and mastic	White	Restroom (2 nd floor units)	1016F	No
20	Carpet mastic	Black	Under Carpet (2 nd floor units)	1016F	No
21	12" x 12" floor tile and mastic	Beige with brown and white streaks	Bathroom (2 nd floor units)	1039B	Tile (-), Mastic (-)
22	Resilient sheet flooring	Cream and brown faux pattern	Utility (2 nd floor units)	1039B	No
23	12" x 12" floor tile and mastic	Beige with brown and gray spots	Various (patches)	1047B	Tile (-), Mastic (Assumed)
24	Resilient sheet flooring	Cream with gold and mustard designs	Bathroom (2 nd floor units)	1047B	Yes
25	12" x 12" floor tile and mastic	Gray with tan and white spots	Kitchen	1071B	Tile (-), Mastic (-)

*Description refers to the suspect ACM exposed to view not the mastic underneath. When the material exposed to view is not a suspect ACM (such as carpet) the description refers to the mastic underneath.

Suspect ACM Identified in 2-Bedroom Units(continued)

HA #	Supect ACM	Description*	Location(s)	Unit sampled	ACM (Yes or No)
26	Resilient sheet flooring	Cream and gold square pattern	Bathroom (2 nd floor units)	1071F	No
27	Resilient sheet flooring	Cream square pattern	Bathroom (2 nd floor units)	1073B	No
28	Resilient sheet flooring	Cream with brown spots	Kitchen, Bathroom, Utility (2 nd floor units)	1047D	No
29	Basecove and mastic	Brown	Bathroom (2 nd floor units)	1071D	Basecove (-), Mastic (-)

*Description refers to the suspect ACM exposed to view not the mastic underneath. When the material exposed to view is not a suspect ACM (such as carpet) the description refers to the mastic underneath.

**Table A-2
Suspect ACM Identified in 3-Bedroom Units**

HA #	Supect ACM	Description*	Location(s)	Unit sampled	ACM (Yes or No)
1	12" x 12" floor tile and mastic	Gray with white and dark gray spots	Kitchens	1059A	Tile (-), Mastic (-)
2	12" x 12" floor tile and mastic	Cream with tan streaks	Various throughout	1059A	Tile (+), Mastic (+)
3	Gypsum wallboard and associated joint compound	Walls	Throughout	1059A	No
4	Gypsum ceiling and associated joint compound	Ceilings	Restrooms, Kitchen, Utility	1059A	No
5	Spray-applied decorative ceiling	Ceilings	Various throughout	1059A	No
6	Basecove and mastic	Black	Kitchen	1059A	Basecove (-), Mastic (-)
7	Sink mastic	Black	Kitchen	1059A	Yes
8	12" x 12" floor tile and mastic	Tan with brown and white streaks	Various (patches)	1059A	Tile (-), Mastic (+)
9	Stair tread and mastic	Dark brown	Stairs	1059A	Stair tread (-), Mastic (-)
10	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Various (patches)	1059A	Tile (-), Mastic (+)
11	Asphalt shingle roof	Gray	Roof	1059A	No
12	12" x 12" floor tile and mastic	White with brown and gray streaks	Various (patches)	1060B	Tile (-), Mastic (+)
13	12" x 12" floor tile and mastic	Gray with yellow and brown streaks	Various (patches)	1060B	Tile (-), Mastic (+)
14	12" x 12" floor tile and mastic	Beige with tan, white, and gray spots	Kitchen	1067B	Tile (-), Mastic (-)
15	Resilient sheet flooring	White with orange and brown pattern	Kitchen	1067B	Yes
16	12" x 12" floor tile and mastic	Beige with brown and white streaks	Various (patches)	1067C	Tile (-), Mastic (+)
17	Light fixture insulation	White	Hall and Utility fixtures	1070F	Yes
18	12" x 12" floor tile and mastic	Beige with brown and white spots	Various (patches)	1070F	Tile (-), Mastic (+)

*Description refers to the suspect ACM exposed to view not the mastic underneath. When the material exposed to view is not a suspect ACM (such as carpet) the description refers to the mastic underneath.

**Table A-3
Suspect ACM Identified in 4-Bedroom Units**

HA #	Supect ACM	Description*	Location(s)	Unit sampled	ACM (Yes or No)
1	Gypsum wallboard and associated joint compound	Walls	Throughout	1031E	No
2	Gypsum ceiling and associated joint compound	Ceilings	Restrooms, Kitchen, Utility	1031E	No
3	Spray-applied decorative ceiling	Ceilings	Various throughout	1031E	No
4	Basecove and mastic	Black	Kitchen	1031E	Basecove (-), Mastic (-)
5	Stair tread and mastic	Dark brown	Stairs	1031E	Stair tread (-), Mastic (-)
6	12" x 12" floor tile and mastic	Cream with tan streaks	Various throughout	1031E	Tile (+), Mastic (+)
7	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Various (patches)	1031E	Tile (-), Mastic (+)
8	12" x 12" floor tile and mastic	Tan with brown and white streaks	Various (patches)	1031E	Tile (+), Mastic (+)
9	12" x 12" floor tile and mastic	Gray with white and dark gray spots	Kitchens	1031E	Tile (-), Mastic (-)
10	12" x 12" floor tile and mastic	Beige with brown and white streaks	Various (patches)	1031E	Tile (-), Mastic (-)
11	Resilient sheet flooring	White with orange and brown pattern	Kitchen	1031E	Yes
12	Light fixture insulation	White	Hall and Utility fixtures	1031E	Yes
13	Asphalt shingle roof	Gray	Roof	1031E	No
14	Vapor barrier, tar paper	Black	Interior of exterior walls	1040B	No
15	12" x 12" floor tile and mastic	Wood parquet pattern	Kitchen	1040B	Tile (-), Mastic (-)
16	12" x 12" floor tile and mastic	Beige with tan, white, and gray spots	Kitchen	1053E	No
17	Sink mastic	Black	Kitchen	1053E	Yes
18	12" x 12" floor tile and mastic	White with brown smudges	Various throughout (unit 1045B)	1045B	Tile (-), Mastic (+)
19	Resilient sheet flooring	White	Kitchen (unit 1045B)	1045B	Flooring (-), Mastic (+)
20	Sink mastic	White	Kitchen (unit 1045B)	1045B	Tile (-), Mastic (-)
21	Resilient sheet flooring	Gray with brown swirl	Kitchen	1069F	No

*Description refers to the suspect ACM exposed to view not the mastic underneath. When the material exposed to view is not a suspect ACM (such as carpet) the description refers to the mastic underneath.

**Table A-4
Suspect ACM Identified in 5-Bedroom Units**

HA #	Supect ACM	Description*	Location(s)	Unit sampled	ACM (Yes or No)
1	12" x 12" floor tile and mastic	Cream with tan streaks	Various throughout	1032A	Tile (+), Mastic (+)
2	12" x 12" floor tile and mastic	Beige with tan, white, and gray spots	Kitchens	1032A	Tile (-), Mastic (-)
3	12" x 12" floor tile and mastic	White with brown streaks	Various (patches)	1032A	Tile (-), Mastic (Assumed)
4	Gypsum wallboard and associated joint compound	Walls	Throughout	1032A	No
5	Gypsum ceiling and associated joint compound	Ceilings	Restrooms, Kitchen, Utility	1032A	No
6	Spray-applied decorative ceiling	Ceilings	Various throughout	1032A	No
7	Basecove and mastic	Black	Kitchen	1032A	Basecove (-), Mastic (-)
8	Stair tread and mastic	Dark brown	Stairs	1032A	Stair tread (-), Mastic (-)
9	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Various (patches)	1032A	Tile (-), Mastic (+)
10	Asphalt shingle roof	Gray	Roof	1032A	No
11	Resilient sheet flooring	White with orange and brown pattern	Kitchen	1032A	Yes
12	Light fixture insulation	White	Hall and Utility fixtures	1032A	Yes
13	12" x 12" floor tile and mastic	Gray with white and dark gray spots	Kitchens	1069A	Tile (-), Mastic (-)
14	12" x 12" floor tile and mastic	Beige with brown and white streaks	Various (patches)	1069A	Tile (-), Mastic (+)
15	Sink mastic	Black	Kitchen	1069A	Yes
16	Vapor barrier, tar paper	Black	Interior of exterior walls	1069A	No
17	Mastic on fiberglass insulated duct	White	Utility	1046A	No

*Description refers to the suspect ACM exposed to view not the mastic underneath. When the material exposed to view is not a suspect ACM (such as carpet) the description refers to the mastic underneath.

Appendix B

Suspect Asbestos-Containing Materials

(Individual Unit Material Summary)

RIBAUT BAY HOUSING PHASE II - MAYPORT NAVAL STATION

Unit Surveyed: 1065B - (Four Bedroom Unit)

Inspector: Mike Spradling

Date of Survey: August 23 - October 1, 1995

H.A.	Material	Description	Location	Quantity	Condition	Comments
<u>IDENTIFIED ASBESTOS-CONTAINING MATERIALS</u>						
6	12" x 12" floor tile and mastic	Cream with tan streaks	Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4	720 S.F.	Potential Damage	Various patches of floor tile are included with this quantity
7	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Hall, Master Bedroom, Bedroom 4	N/A	Potential Damage	This floor tile was used as a patch in various areas
8	12" x 12" floor tile and mastic	Tan with brown and white streaks	Bedroom 2, Bedroom 4	N/A	Potential Damage	This floor tile was used as a patch in various areas
10	12" x 12" floor tile and mastic	Beige with brown and white streaks	Master Bedroom	N/A	Potential Damage	This floor tile was used as a patch in various areas
11	Resilient sheet flooring	White with orange and brown pattern	Kitchen	40 S.F.	Potential Damage	Underneath cabinets
12	Light fixture insulation	White	Hall, Master Bedroom	2 Each	Potential Damage	
17	Sink mastic	Black	Kitchen	1 Each	Potential Damage	

IDENTIFIED NON-ASBESTOS-CONTAINING MATERIALS

1	Gypsum wallboard and associated joint compound	Walls	Kitchen, Family room, Utility, Garage, Living/Dining room, Entry, Bathroom 1, Bathroom 2, Bathroom 3, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4	N/A	N/A	
2	Gypsum ceiling and associated joint compound	Ceilings	Kitchen, Utility, Garage, Bathroom 1, Bathroom 2, Bathroom 3	N/A	N/A	
3	Spray-applied decorative ceiling	Ceilings	Family room, Living/Dining room, Entry, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4	N/A	N/A	
4	Basecove and mastic	Black	Kitchen	N/A	N/A	
5	Stair tread and mastic	Dark brown	Entry	N/A	N/A	
9	12" x 12" floor tile and mastic	Gray with white and dark gray spots	Family room, Utility, Living/Dining room, Entry	N/A	N/A	

S.F = Square foot

N/A = Not Applicable

H.A. = Homogeneous Area

RIBAUT BAY HOUSING PHASE II - MAYPORT NAVAL STATION

Unit Surveyed: 1065B - (Four Bedroom Unit)

Inspector: Mike Spradling

Date of Survey: August 23 - October 1, 1995

H.A.	Material	Description	Location	Quantity	Condition	Comments
13	Asphalt shingle roof	Gray	Roof	N/A	N/A	
14	Vapor barrier, tar paper	Black	Interior of exterior walls	N/A	N/A	
15	12" x 12" floor tile and mastic	Wood parquet pattern	Kitchen	N/A	N/A	

S.F = Square foot

N/A = Not Applicable

H.A. = Homogeneous Area

RIBAULT BAY HOUSING PHASE II - MAYPORT NAVAL STATION

Unit Surveyed: 1065C - (Four Bedroom Unit)

Inspector: David Bratley

Date of Survey: August 23 - October 1, 1995

H.A.	Material	Description	Location	Quantity	Condition	Comments
<u>IDENTIFIED ASBESTOS-CONTAINING MATERIALS</u>						
6	12" x 12" floor tile and mastic	Cream with tan streaks	Family room, Utility, Living/Dining room, Entry, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4	135 S.F.	Potential Damage	Various patches of floor tile are included with this quantity
7	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Family room, Utility, Living/Dining room, Hall, Bedroom 2, Bedroom 3, Bedroom 4	N/A	Potential Damage	This floor tile was used as a patch in various areas
8	12" x 12" floor tile and mastic	Tan with brown and white streaks	Utility	N/A	Potential Damage	This floor tile was used as a patch in various areas
10	12" x 12" floor tile and mastic	Beige with brown and white streaks	Family room, Living/Dining room, Hall, Master Bedroom	N/A	Potential Damage	This floor tile was used as a patch in various areas
11	Resilient sheet flooring	White with orange and brown pattern	Kitchen	40 S.F.	Potential Damage	Underneath cabinets
12	Light fixture insulation	White	Utility, Entry, Hall, Master Bedroom	5 Each	Significant Damage	
17	Sink mastic	Black	Kitchen	0 Each	Potential Damage	

IDENTIFIED NON-ASBESTOS-CONTAINING MATERIALS

1	Gypsum wallboard and associated joint compound	Walls	Kitchen, Family room, Utility, Garage, Living/Dining room, Entry, Bathroom 1, Bathroom 2, Bathroom 3, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4	N/A	N/A	
2	Gypsum ceiling and associated joint compound	Ceilings	Kitchen, Utility, Garage, Bathroom 1, Bathroom 2, Bathroom 3	N/A	N/A	
3	Spray-applied decorative ceiling	Ceilings	Family room, Utility, Living/Dining room, Entry, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4	N/A	N/A	
4	Basecove and mastic	Black	Kitchen	N/A	N/A	
5	Stair tread and mastic	Dark brown	Entry	N/A	N/A	
13	Asphalt shingle roof	Gray	Roof	N/A	N/A	

S.F = Square foot

N/A = Not Applicable

H.A. = Homogeneous Area

RIBAUT BAY HOUSING PHASE II - MAYPORT NAVAL STATION

Unit Surveyed: 1065C - (Four Bedroom Unit)

Inspector: David Bratley

Date of Survey: August 23 - October 1, 1995

H.A.	Material	Description	Location	Quantity	Condition	Comments
14	Vapor barrier, tar paper	Black	Interior of exterior walls	N/A	N/A	
16	12" x 12" floor tile and mastic	Beige with tan, white, and gray spots	Kitchen	N/A	N/A	

S.F = Square foot

N/A = Not Applicable

H.A. = Homogeneous Area

RIBAUT BAY HOUSING PHASE II - MAYPORT NAVAL STATION

Unit Surveyed: 1032A - (Five Bedroom Unit)

Inspector: Mike Spradling

Date of Survey: August 23 - October 1, 1995

H.A. Material	Description	Location	Quantity	Condition	Comments	
<u>IDENTIFIED ASBESTOS-CONTAINING MATERIALS</u>						
1	12" x 12" floor tile and mastic	Cream with tan streaks	Family room, Utility, Living/Dining room, Entry, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, Bedroom 5	155 S.F.	Potential Damage	Various patches of floor tile are included with this quantity
3	12" x 12" floor tile and mastic	White with brown and gray streaks	Utility, Entry, Hall, Bedroom 4	N/A	Potential Damage	This floor tile was used as a patch in various areas
9	12" x 12" floor tile and mastic	Gray with white and dark gray smudges	Utility, Entry, Bedroom 5	N/A	Potential Damage	This floor tile was used as a patch in various areas
11	Resilient sheet flooring	White with orange and brown pattern	Kitchen	40 S.F.	Potential Damage	Underneath cabinets
12	Light fixture insulation	White	Entry, Hall	3 Each	Potential Damage	
<u>IDENTIFIED NON-ASBESTOS-CONTAINING MATERIALS</u>						
2	12" x 12" floor tile and mastic	Beige with tan, white, and gray spots	Kitchen	N/A	N/A	
4	Gypsum wallboard and associated joint compound	Walls	Kitchen, Family room, Utility, Garage, Living/Dining room, Entry, Bathroom 1, Bathroom 2, Bathroom 3, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, Bedroom 5	N/A	N/A	
5	Gypsum ceiling and associated joint compound	Ceilings	Kitchen, Utility, Bathroom 1, Bathroom 2, Bathroom 3	N/A	N/A	
6	Spray-applied decorative ceiling	Ceilings	Family room, Living/Dining room, Hall, Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, Bedroom 5	N/A	N/A	
7	Basecove and mastic	Black	Kitchen	N/A	N/A	
8	Stair tread and mastic	Dark brown	Entry	N/A	N/A	
10	Asphalt shingle roof	Gray	Roof	N/A	N/A	
16	Vapor barrier, tar paper	Black	Interior of exterior walls	N/A	N/A	

S.F = Square foot

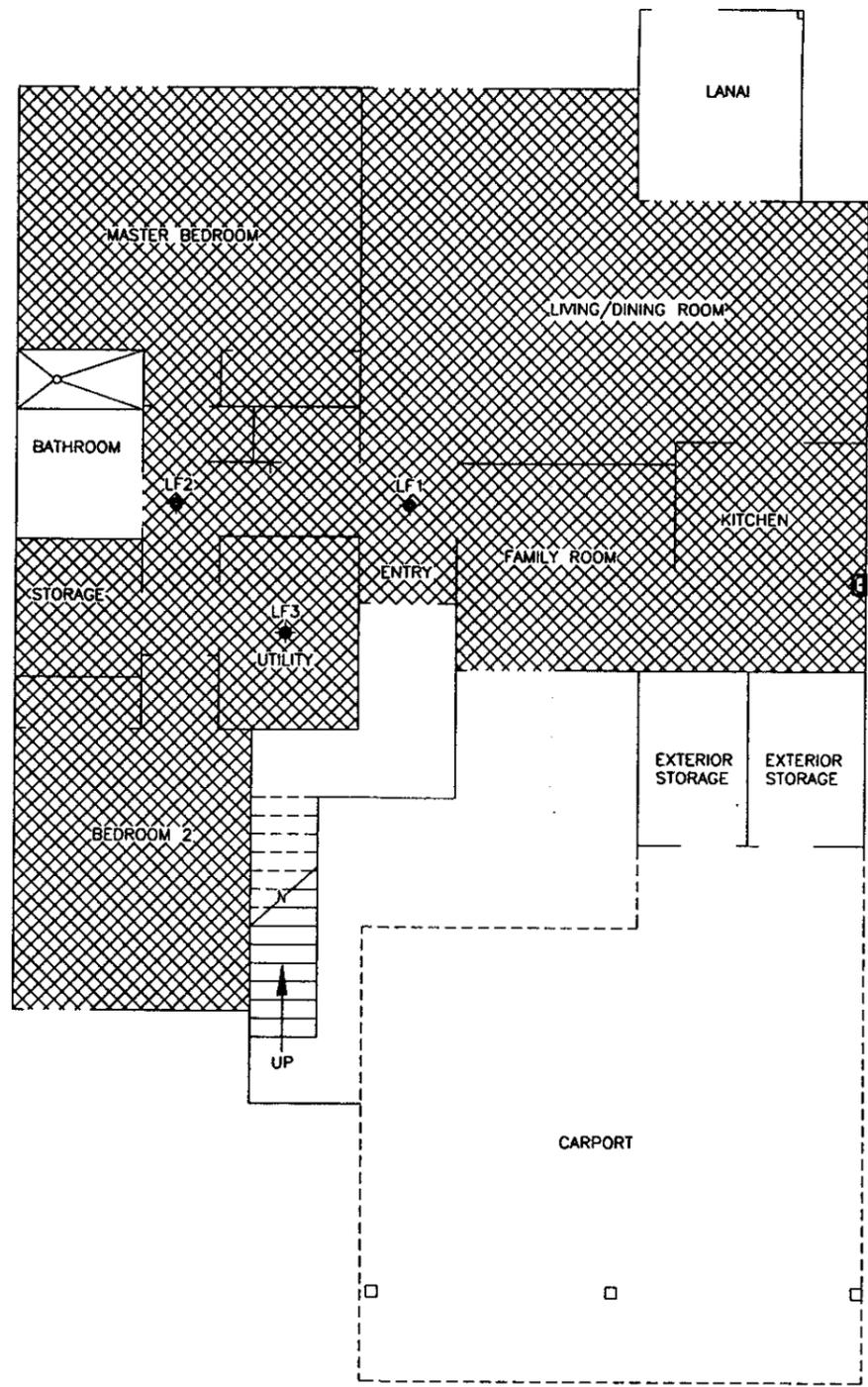
N/A = Not Applicable

H.A. = Homogeneous Area

Appendix C

Extent of Asbestos-Containing Material and Bulk Sample Locations

(Typical Housing Unit Floor Plans)



LEGEND

ASBESTOS-CONTAINING MATERIALS (ACM)
IDENTIFIED - FLOORS AND WALLS

FLOOR COVERING AND MASTIC (+)

ASBESTOS-CONTAINING MATERIALS (ACM)
IDENTIFIED - CEILING AND MISCELLANEOUS

BLACK MASTIC UNDER SINK

LIGHT FIXTURE INSULATION

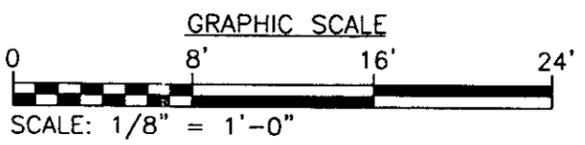
NOTE
NO ASBESTOS-CONTAINING WALL MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE
NO ASBESTOS-CONTAINING CEILING MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

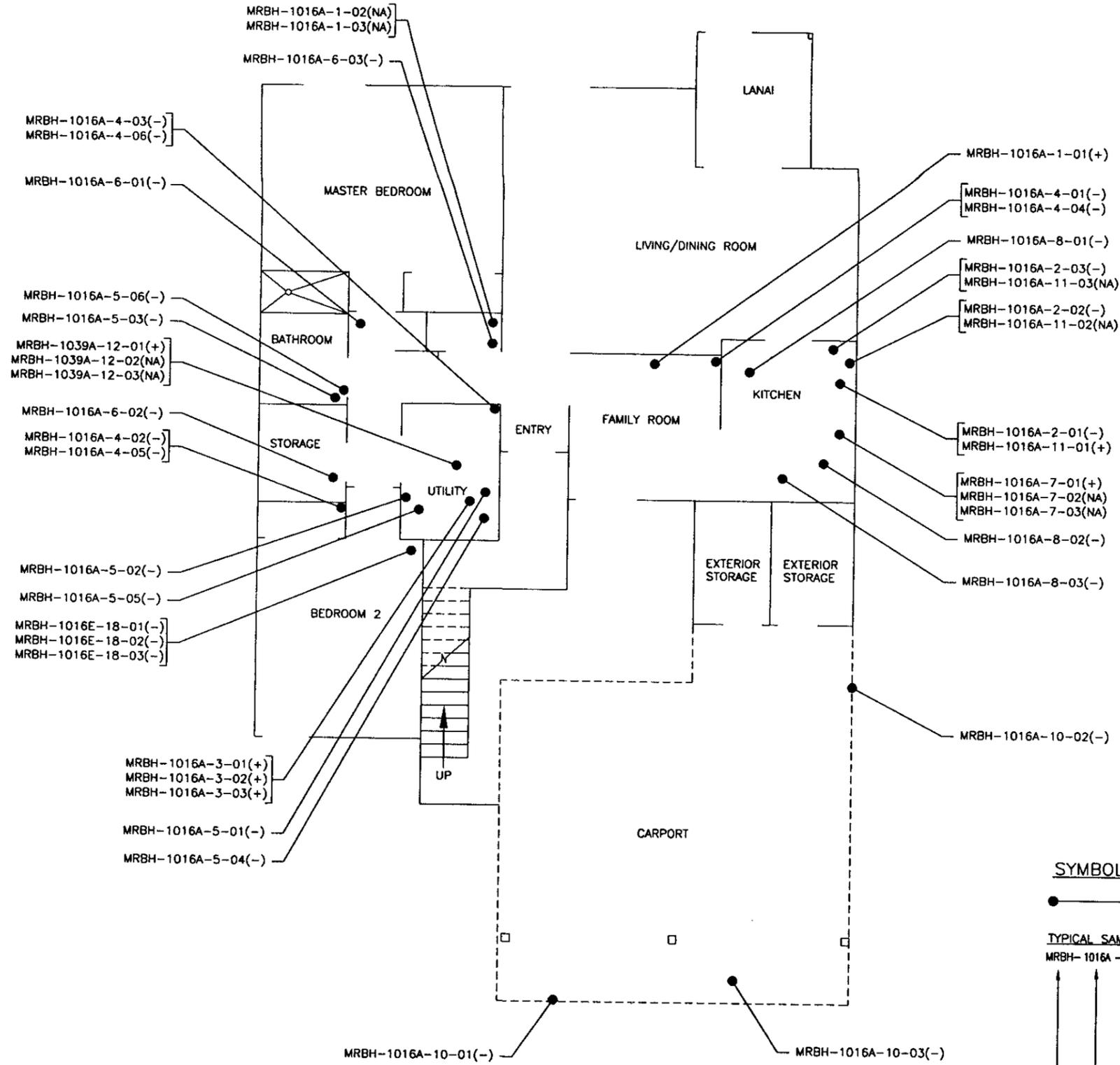
NOTE
NO ASBESTOS-CONTAINING THERMAL SYSTEM INSULATION MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

THIS DRAWING ILLUSTRATES ALL LOCATIONS OF ACM IDENTIFIED IN THIS UNIT TYPE. FOR SPECIFIC UNIT INFORMATION REFER TO APPENDIX B SUSPECT ASBESTOS-CONTAINING MATERIALS (INDIVIDUAL UNIT MATERIAL SUMMARY).

2 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"



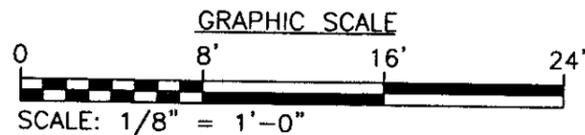
REV. DESCRIPTION	PREP BY	DATE APPROV	CAPE ENVIRONMENTAL MANAGEMENT INC. ATLANTA
			ATLANTA
			USDA
			DR. C. RIOS
			SUPV. RIOS, CH ENGR
			DATE
			EC
			BR NO
			DIR
			OFFICER IN CHARGE
			APPROVED
DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	SOUTHERN DIVISION	CHARLESTON, S.C.
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY AT MAYPORT NAVAL STATION, JACKSONVILLE, FL			DATE
2 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - FIRST FLOOR PLAN (ASBESTOS-CONTAINING MATERIALS)			EDD FOR COMMANDER, NAVFAC
APPROVED			DATE
SCALE AREA			
CODE NO.	SIZE		
FED DRAWING NO.			
STA. PROJ. NO.			
CAPE PROJ. No. 90032.001.000			
SPEC. NO.	N/A		
CONSTR. CNTR. NO.	N/A		
NAVFAC DRAWING NO.	N/A		
SHEET 1	OF 6		
2BRASB-1			



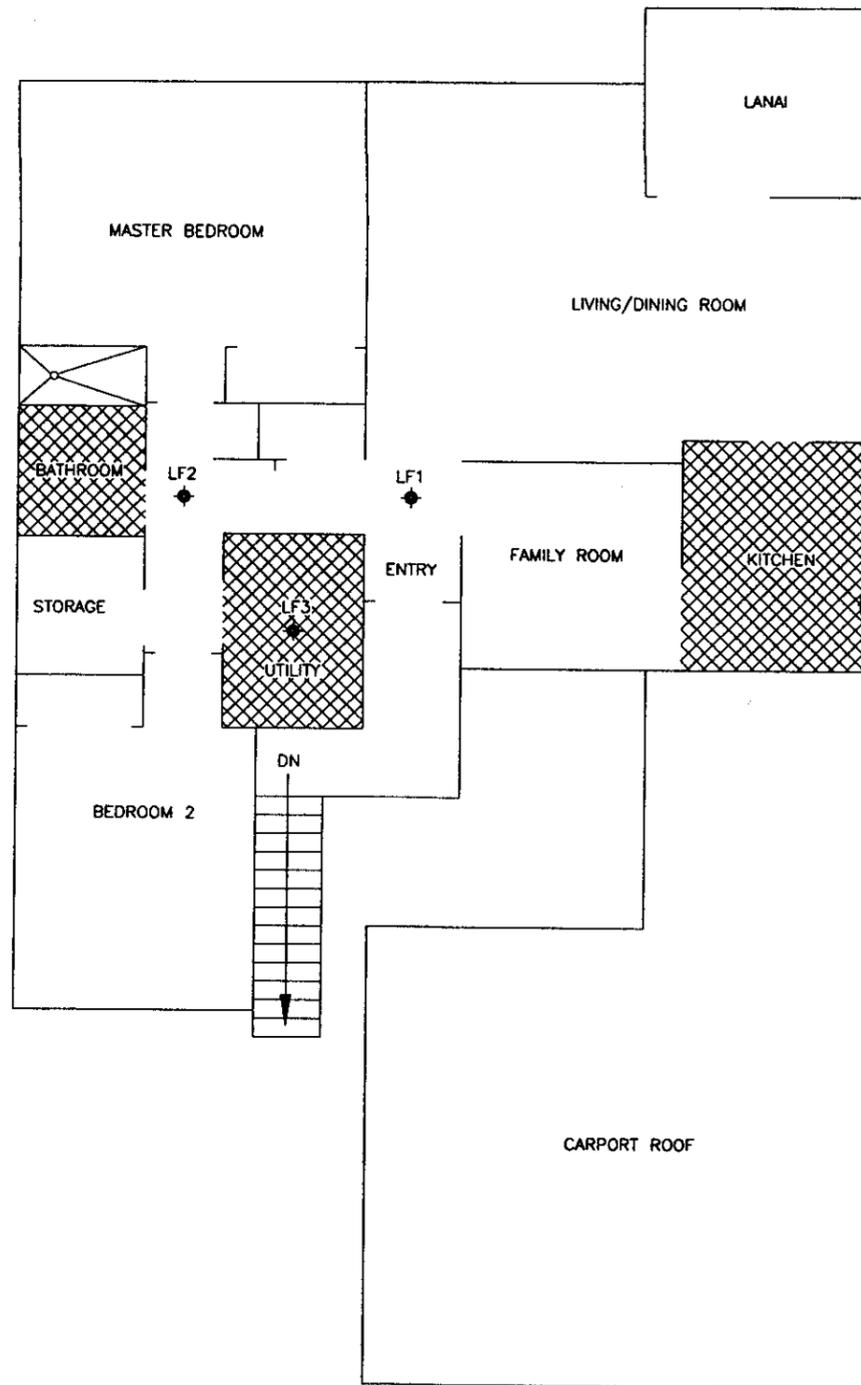
SYMBOLS

- LOCATION OF SAMPLES COLLECTED
- TYPICAL SAMPLE I.D. No.
MRBH-1016A-1-01(+)
- ↑ POSITIVE (+) OR NEGATIVE (-) FOR THE PRESENCE OF ASBESTOS OR (NA) FOR NOT ANALYZED
 - ↑ SAMPLE I.D. No.
 - ↑ HOMOGENEOUS AREA No.
 - ↑ UNIT NUMBER
 - ↑ MAYPORT-RIBAULT BAY HOUSING

2 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING
FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"



DEPARTMENT OF THE NAVY	NAVY FACILITIES ENGINEERING COMMAND	ATLANTA	CAPE ENVIRONMENTAL MANAGEMENT INC
SOUTHERN DIVISION	CHARLESTON, S.C.	DESIGN	GEORGIA
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY		SUPV./H.RIOS	DR
AT MAYPORT NAVAL STATION, JACKSONVILLE, FL		CH ENGR	DATE
2 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING - FIRST FLOOR PLAN		DATE	DATE
(BULK SAMPLES)		DATE	DATE
APPROVED	EFTD FOR COMMANDER, NAVFAC	DATE	OFFICER IN CHARGE
SCALE AREA			
CODE ID.No.	SIZE		
FED DRAWING NO.			
STA. PROJ. NO.			
CAPE PROJ. No. 90032.001.000			
SPEC. NO. N/A			
CONSTR. CNTR. NO. N/A			
NAVFAC DRAWING NO. N/A			
SHEET 1 OF 6			
2BRASB-2			



LEGEND

ASBESTOS-CONTAINING MATERIALS (ACM)
IDENTIFIED - FLOORS AND WALLS

FLOOR COVERING AND MASTIC (+)

ASBESTOS-CONTAINING MATERIALS (ACM)
IDENTIFIED - CEILING AND MISCELLANEOUS

B BLACK MASTIC UNDER SINK

LIGHT FIXTURE INSULATION

NOTE
NO ASBESTOS-CONTAINING WALL MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE
NO ASBESTOS-CONTAINING CEILING MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

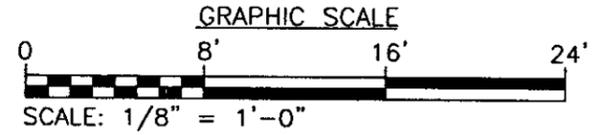
NOTE
NO ASBESTOS-CONTAINING THERMAL SYSTEM INSULATION MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE
NO ASBESTOS-CONTAINING ROOFING MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

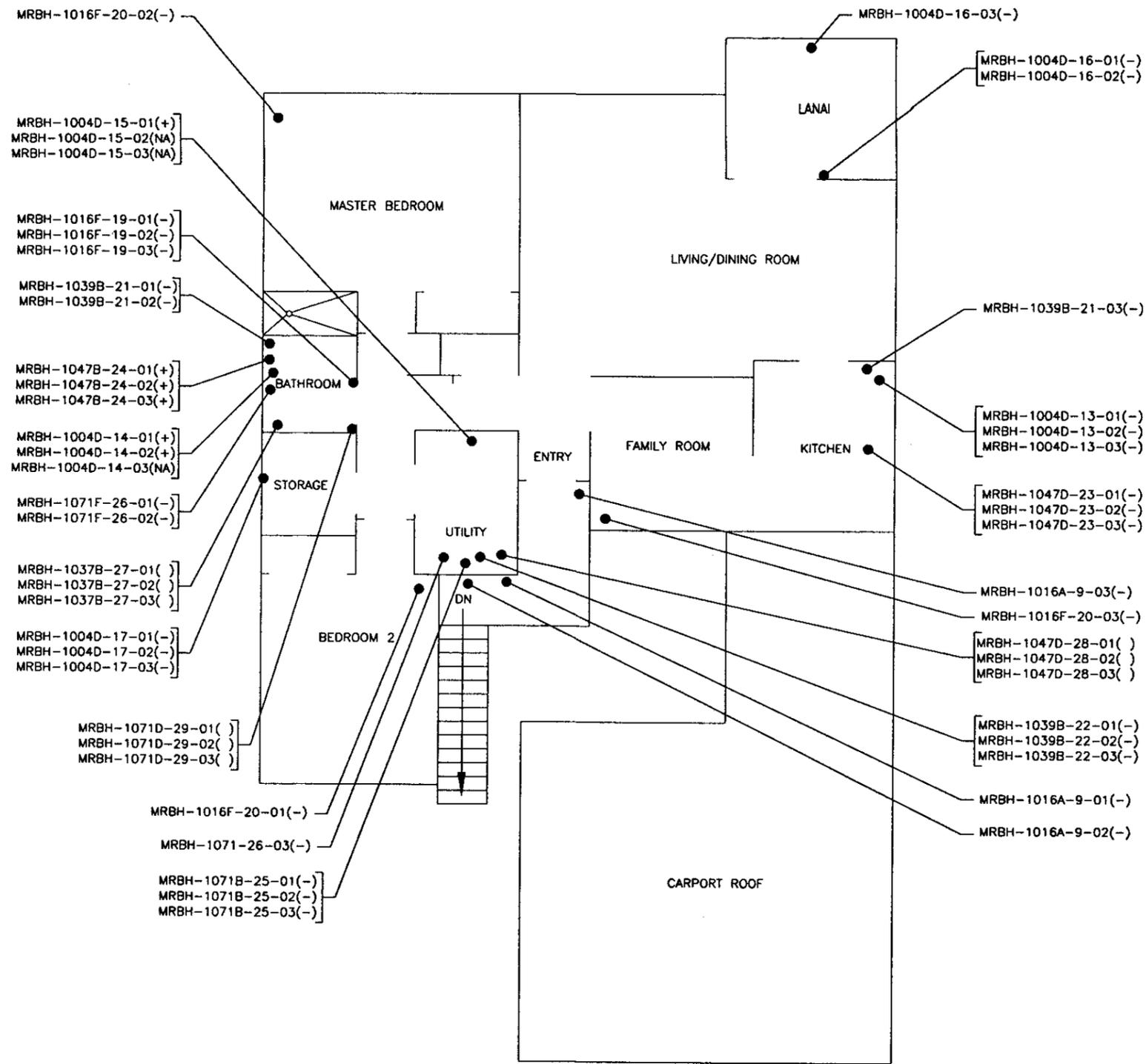
2 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"



THIS DRAWING ILLUSTRATES ALL LOCATIONS OF ACM IDENTIFIED IN THIS UNIT TYPE. FOR SPECIFIC UNIT INFORMATION REFER TO APPENDIX B SUSPECT ASBESTOS-CONTAINING MATERIALS (INDIVIDUAL UNIT MATERIAL SUMMARY).



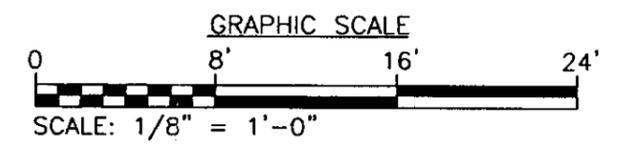
DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	CAPE ENVIRONMENTAL MANAGEMENT INC.
SOUTHERN DIVISION	ATLANTA	GEORGIA
CHARLESTON, S.C.	DISCR	DIR
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY	DISCR	DIR
AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	SUPV, RICS	CH ENGR
2 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - SECOND FLOOR PLAN	SUBMITTED BY (FIRM MEMBER-TITLE)	DATE
(ASBESTOS-CONTAINING MATERIALS)	EDC	BR HO
APPROVED	DATE	OFFICER IN CHARGE
EDC FOR COMMANDER, NAVFAC	DATE	OFFICER IN CHARGE
APPROVED	DATE	OFFICER IN CHARGE
SCALE AREA		
CODE ID No.	SIZE	B
FDD DRAWING NO.		
STA. PROJ. NO.		
CAPE PROJ. No. 90032.001.000		
SPEC. NO.	N/A	
CONSTR. CNTR. NO.	N/A	
NAVFAC DRAWING NO.	N/A	
SHEET #	OF #	
2BRASB-3		



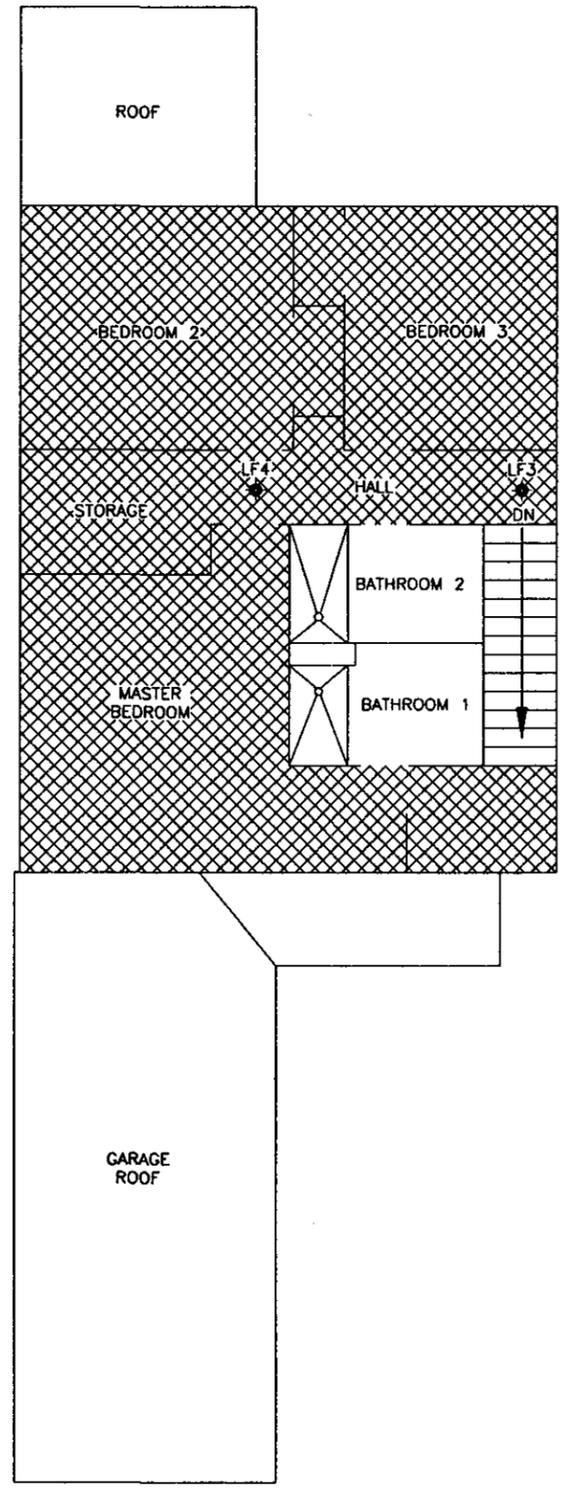
SYMBOLS

- LOCATION OF SAMPLES COLLECTED
- TYPICAL SAMPLE I.D. No.
MRBH-1016A-1-01(+)
- ↑ POSITIVE (+) OR NEGATIVE (-) FOR THE PRESENCE OF ASBESTOS OR (NA) FOR NOT ANALYZED
- ↑ SAMPLE I.D. No.
- ↑ HOMOGENEOUS AREA No.
- ↑ UNIT NUMBER
- ↑ MAYPORT-RIBAULT BAY HOUSING

2 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING
SECOND FLOOR PLAN
 SCALE: 1/8" = 1'-0"



CAPE ENVIRONMENTAL MANAGEMENT INC. GEORGIA		DATE APPROV'D	
ATLANTA	ATLANTA	DATE	OFFICER IN CHARGE
USBY	DR	DATE	DATE
SUPV	CH ENGR	DATE	DATE
CH ENGR	CH ENGR	DATE	DATE
EC	BR HO	DATE	DATE
FPE	DIR	DATE	DATE
REV. DESCRIPTION		APPROVED	
NAVAL FACILITIES ENGINEERING COMMAND		ETD FOR COMMANDER, NAVFAC	
SOUTHERN DIVISION		DATE	
CHARLESTON, S.C.		DATE	
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY		APPROVED	
AT MAYPORT NAVAL STATION, JACKSONVILLE, FL		DATE	
2 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING - SECOND FLOOR PLAN		DATE	
(BULK SAMPLES)		DATE	
CODE ID No.	SIZE 8	SHEET 3 OF 6	
FED DRAWING NO.		2BRASB-4	
STA. PROJ. NO.			
CAPE PROJ. No. 90032.001.000			
SPEC. NO. N/A			
CONSTR. CNTR. NO.			
NAVFAC DRAWING NO.			
N/A			



LEGEND

ASBESTOS-CONTAINING MATERIALS (ACM)
IDENTIFIED - FLOORS AND WALLS

FLOOR COVERING AND MASTIC (+)

ASBESTOS-CONTAINING MATERIALS (ACM)
IDENTIFIED - CEILING AND MISCELLANEOUS

LIGHT FIXTURE INSULATION

NOTE
NO ASBESTOS-CONTAINING WALL MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

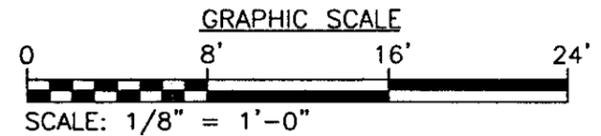
NOTE
NO ASBESTOS-CONTAINING CEILING MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE
NO ASBESTOS-CONTAINING THERMAL SYSTEM INSULATION MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

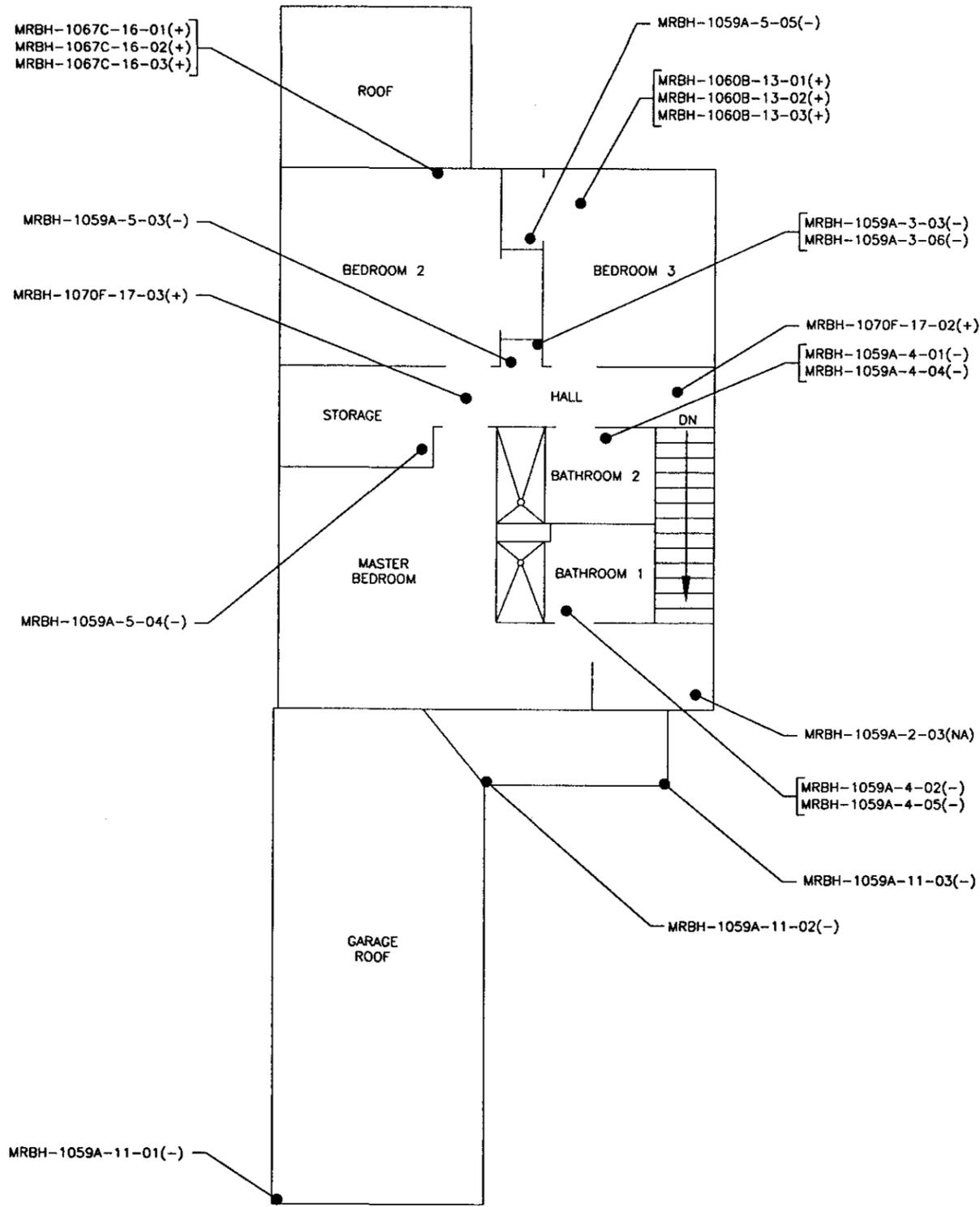
NOTE
NO ASBESTOS-CONTAINING ROOFING MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

THIS DRAWING ILLUSTRATES ALL LOCATIONS OF ACM IDENTIFIED IN THIS UNIT TYPE. FOR SPECIFIC UNIT INFORMATION REFER TO APPENDIX B SUSPECT ASBESTOS-CONTAINING MATERIALS (INDIVIDUAL UNIT MATERIAL SUMMARY).

3 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"



DEPARTMENT OF THE NAVY	SOUTHERN DIVISION CHARLESTON, S.C.	NAVAL FACILITIES ENGINEERING COMMAND	CAPE ENVIRONMENTAL MANAGEMENT INC. ATLANTA	GEORGIA
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY AT MAYPORT NAVAL STATION, JACKSONVILLE, FL			DR C. RIOS CH ENGR	DR S. BELZANT
3 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - SECOND FLOOR PLAN (ASBESTOS-CONTAINING MATERIALS)			SUBMITTED BY (PRN MEMBER-TITLE) EC	DATE
APPROVED	DATE	ED FOR COMMANDER, NAVFAC	DATE	OFFICER IN CHARGE
SEAL AREA				
CODE ID.No.	SIZE			
FED DRAWING NO.				
STA. PROJ. NO.				
CAPE PROJ. No. 900332.001.000				
SPEC. NO. N/A				
CONSTR. CNTR. NO. N/A				
NAVFAC DRAWING NO. N/A				
SHEET 4 OF 6				
JBRASB-3				



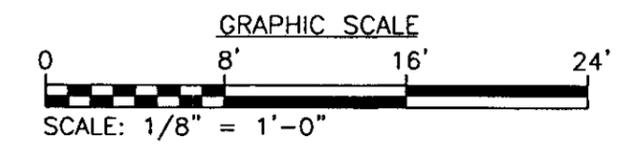
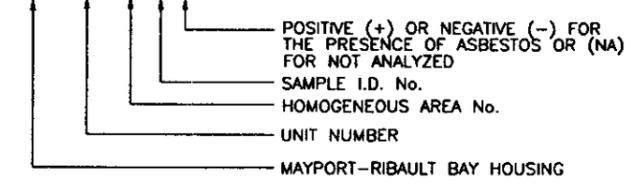
3 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
SECOND FLOOR PLAN
 SCALE: 1/8" = 1'-0"



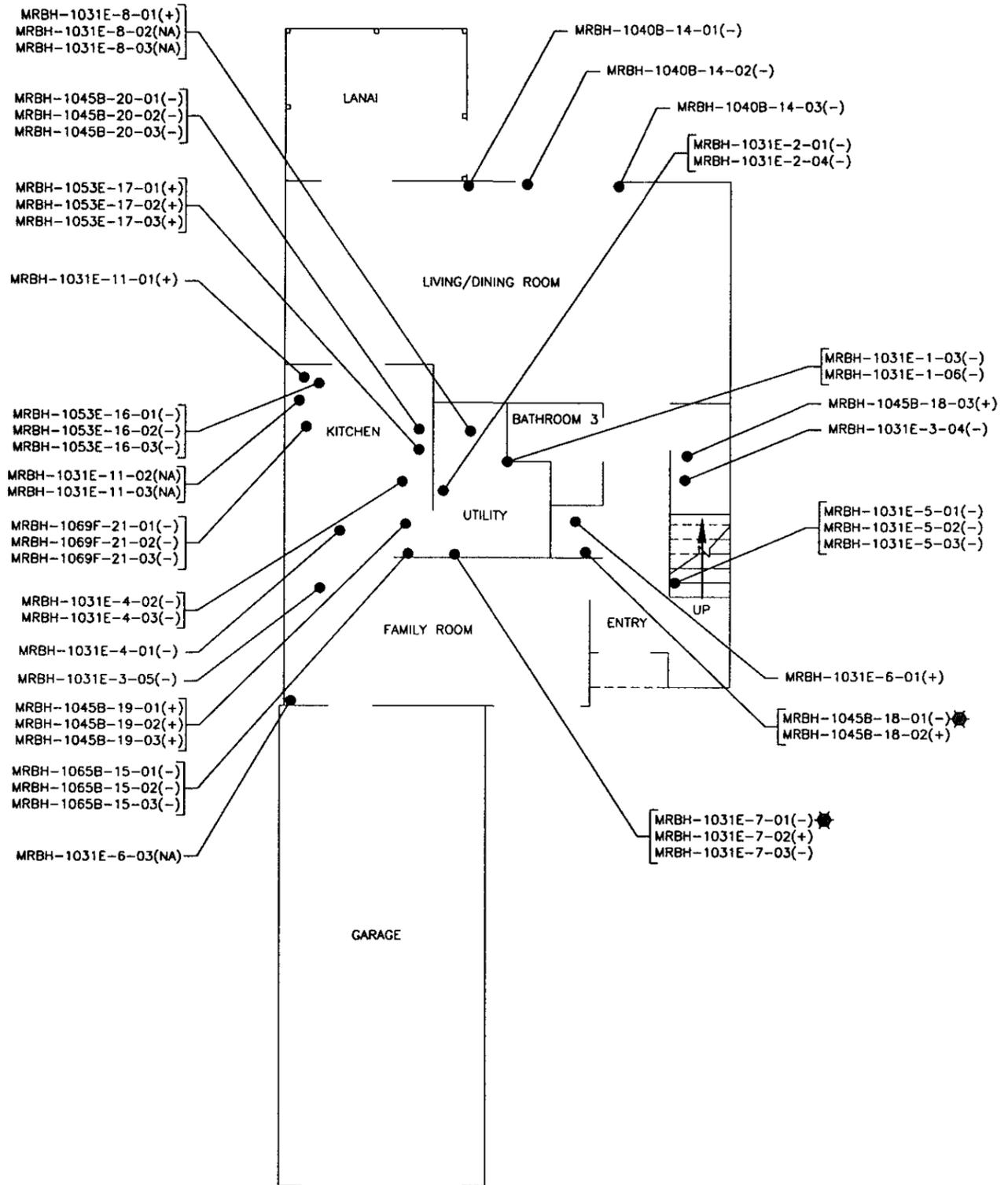
SYMBOLS

● LOCATION OF SAMPLES COLLECTED

TYPICAL SAMPLE I.D. No.
 MRBH-1016A-1-01(+)



DEPARTMENT OF THE NAVY		NAVAL FACILITIES ENGINEERING COMMAND		CAPE ENVIRONMENTAL MANAGEMENT INC.	
SOUTHERN DIVISION		CHARLESTON, S.C.		ATLANTA	
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY		AT MAYPORT NAVAL STATION, JACKSONVILLE, FL		DR C. RIOS	
3 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - SECOND FLOOR PLAN		(BULK SAMPLES)		DR S. BRYANT	
DATE	DATE	DATE	DATE	DATE	DATE
APPROVED	ETD FOR COMMANDER, NAVFAC	APPROVED	OFFICER IN CHARGE	DATE	DR
SCALE AREA	CODE ID No.	SIZE	B		
	FED DRAWING NO.				
	STA. PROJ. NO.				
	CAPE PRL No. 90032.001.000				
	SPEC. NO. N/A				
	CONSTR. CNTR. NO. N/A				
	NAVFAC DRAWING NO. N/A				
	SHEET 3	OF 4			
	3BRASB-4				

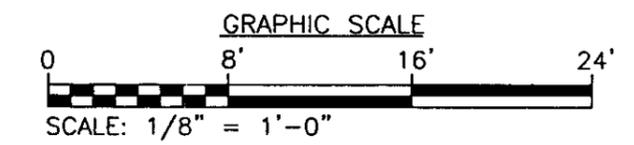
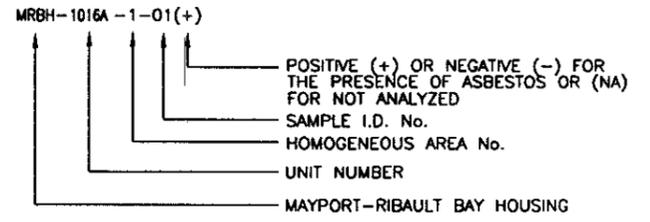


4 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"

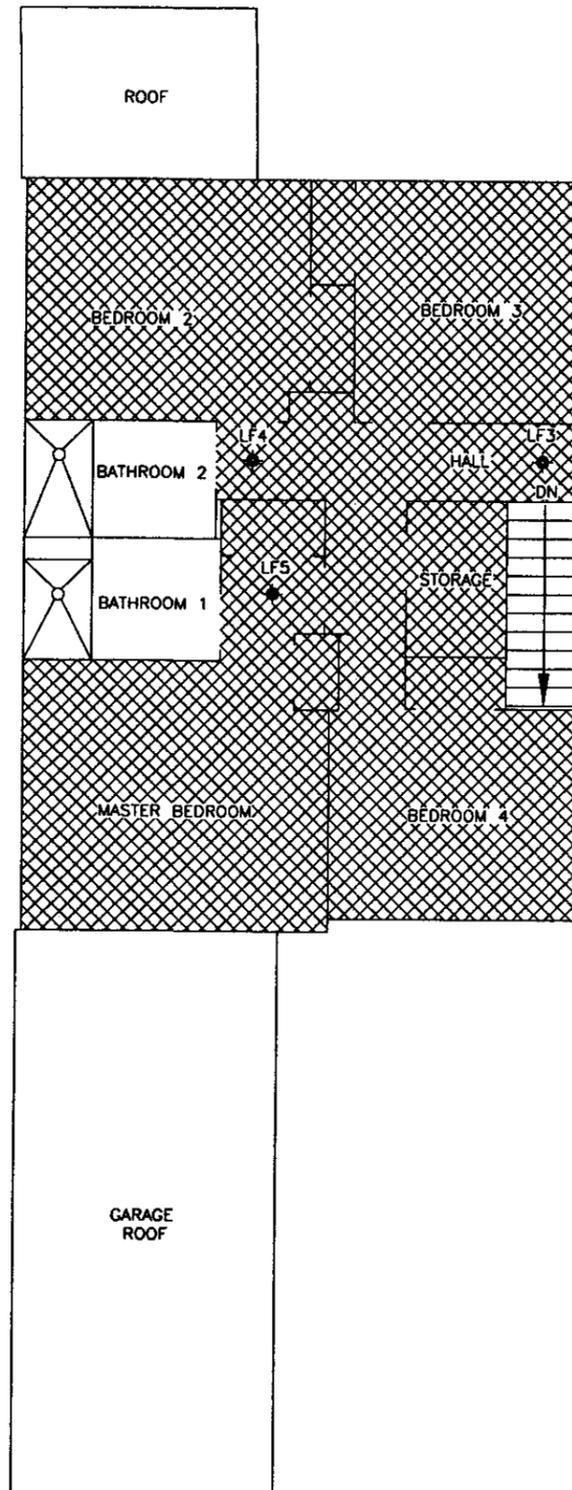
SYMBOLS

- LOCATION OF SAMPLES COLLECTED
- ★ THIS SAMPLE'S ANALYSIS RESULT IS NEGATIVE; HOWEVER, AT LEAST ONE OTHER SAMPLE'S ANALYSIS RESULT OF SAME HOMOGENEOUS MATERIAL IS POSITIVE. THEREFORE ENTIRE HOMOGENEOUS MATERIAL IS CONSIDERED POSITIVE FOR ASBESTOS CONTENT.

TYPICAL SAMPLE I.D. No.



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	REV. DESCRIPTION	PREP BY	DATE APPROV	CAPE ENVIRONMENTAL MANAGEMENT INC.
SOUTHERN DIVISION	CHARLESTON, S.C.				ATLANTA
					USCN
					DR C. RIOS
					SUPV. RIOS
					CH ENGR
					SUBMITTED BY (FIRM NUMBER-TITLE)
					DATE
					BR 10
					DIR
					OFFICER IN CHARGE
					DATE
					APPROVED
					ETD FOR COMMANDER, NAVFAC
					DATE
					APPROVED
					SEAL AREA
					CODE ID No.
					SIZE 8
					FED DRAWING NO.
					STA. PROJ. NO.
					CAPE PROJ. No. 90032.001.000
					SPEC. NO. N/A
					CONSTR. CNTR. NO. N/A
					NAVFAC DRAWING NO. N/A
					SHEET 2 OF 8
					4BRASB-2



LEGEND

ASBESTOS-CONTAINING MATERIALS (ACM)
IDENTIFIED - FLOORS AND WALLS

FLOOR COVERING AND MASTIC (+)

ASBESTOS-CONTAINING MATERIALS (ACM)
IDENTIFIED - CEILING AND MISCELLANEOUS

LIGHT FIXTURE INSULATION

NOTE
NO ASBESTOS-CONTAINING WALL MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

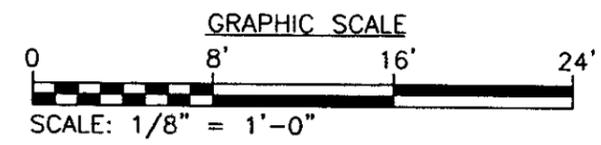
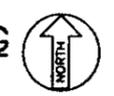
NOTE
NO ASBESTOS-CONTAINING CEILING MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE
NO ASBESTOS-CONTAINING THERMAL SYSTEM INSULATION MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

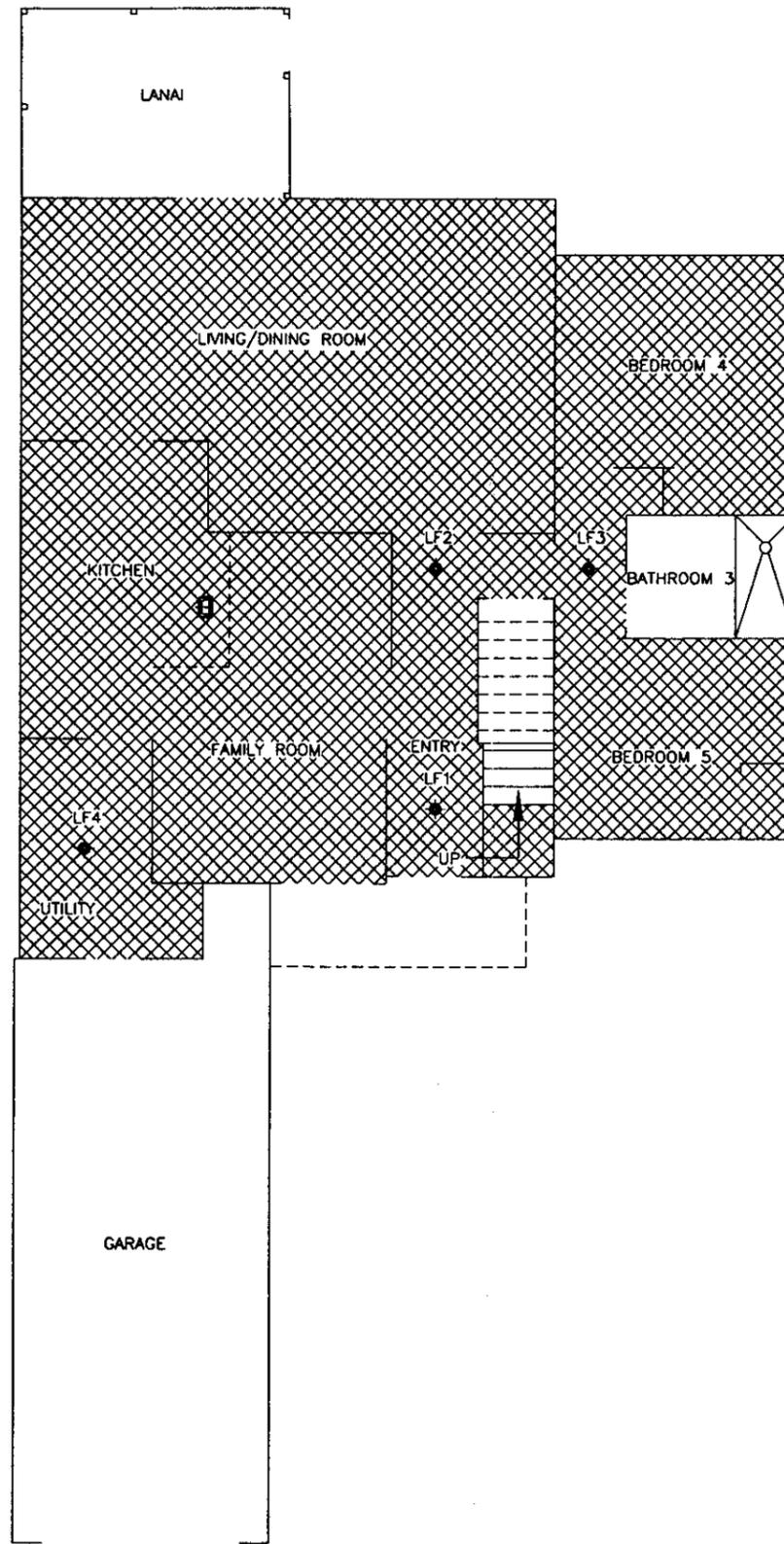
NOTE
NO ASBESTOS-CONTAINING ROOFING MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

THIS DRAWING ILLUSTRATES ALL LOCATIONS OF ACM IDENTIFIED IN THIS UNIT TYPE. FOR SPECIFIC UNIT INFORMATION REFER TO APPENDIX B SUSPECT ASBESTOS-CONTAINING MATERIALS (INDIVIDUAL UNIT MATERIAL SUMMARY).

4 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"



CAPE ENVIRONMENTAL MANAGEMENT INC. ATLANTA	DATE APPROV'D	REV. DESCRIPTION	DEPARTMENT OF THE NAVY SOUTHERN DIVISION COMMISSION, S.C.	APPROVED
DR. CARLOS S. BRYANT			A-E SERVICES FOR ASBESTOS AND LEAD SURVEY AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	ED FOR COMMANDER, NAVFAC
SUPV. H. RIOS			4 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - SECOND FLOOR PLAN (ASBESTOS-CONTAINING MATERIALS)	DATE
ETC				DATE
OFFICER IN CHARGE				DATE
DR				DATE
SEAL AREA				
CODE ID No.	SIZE B			
FED DRAWING NO.				
STA. PROJ. NO.				
CAPE PRL No. 80032.001.000				
SPEC. NO. N/A				
CONSTR. CONTR. NO.				
NAVFAC DRAWING NO.				
N/A				
SHEET 4	OF 6			
4BRASB-3				



5 BEDROOM UNIT TYPE - RIBAUT BAY HOUSING
FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"



THIS DRAWING ILLUSTRATES ALL LOCATIONS OF ACM IDENTIFIED IN THIS UNIT TYPE. FOR SPECIFIC UNIT INFORMATION REFER TO APPENDIX B SUSPECT ASBESTOS-CONTAINING MATERIALS (INDIVIDUAL UNIT MATERIAL SUMMARY).

LEGEND

ASBESTOS-CONTAINING MATERIALS (ACM) IDENTIFIED - FLOORS AND WALLS

FLOOR COVERING AND MASTIC (+)

ASBESTOS-CONTAINING MATERIALS (ACM) IDENTIFIED - CEILING AND MISCELLANEOUS

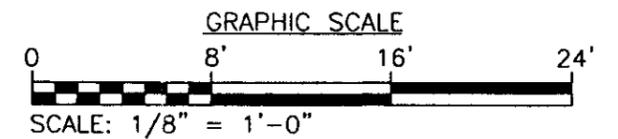
BLACK MASTIC UNDER SINK

LIGHT FIXTURE INSULATION

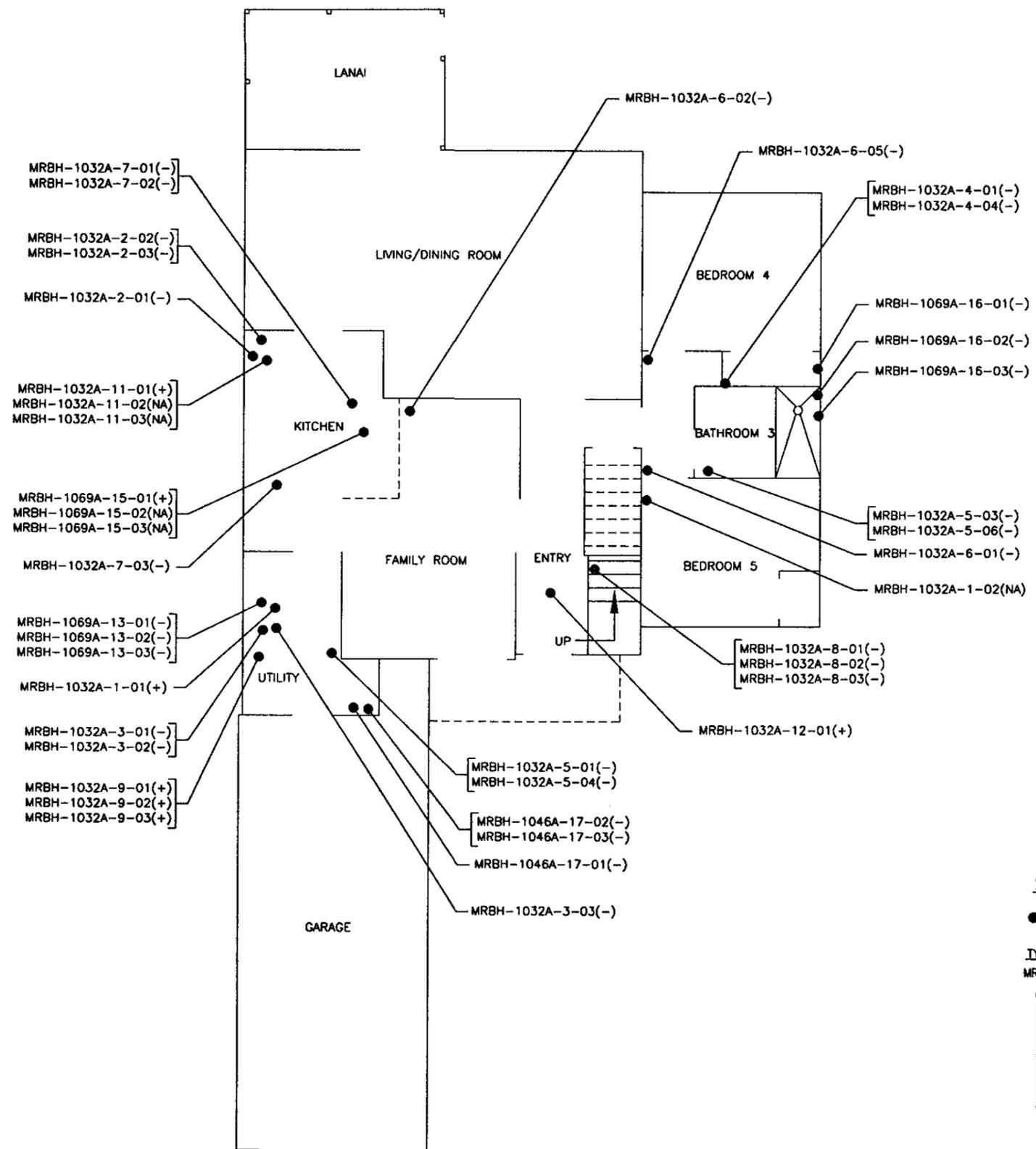
NOTE
 NO ASBESTOS-CONTAINING WALL MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE
 NO ASBESTOS-CONTAINING CEILING MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE
 NO ASBESTOS-CONTAINING THERMAL SYSTEM INSULATION MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	CAPE ENVIRONMENTAL MANAGEMENT INC.
SOUTHERN DIVISION	ATLANTA	ATLANTA
CHARLESTON, S.C.	DR	DR
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	DR	DR
5 BEDROOM UNIT TYPE - RIBAUT BAY HOUSING - FIRST FLOOR PLAN (ASBESTOS-CONTAINING MATERIALS)	DR	DR
DATE	DATE	DATE
APPROVED	OFFICER IN CHARGE	DR
SCALE AREA		
CODE ID.No.	SIZE	B
FED DRAWING NO.		
STA. PROJ. NO.		
CAPE PROJ. No. 80032.001.000		
SPEC. NO.	N/A	
CONSTR. CNTR. NO.	N/A	
NAVFAC DRAWING NO.	N/A	
SHEET 1	OF 8	
5BRASB-1		



MRBH-1032A-7-01(-)
MRBH-1032A-7-02(-)

MRBH-1032A-2-02(-)
MRBH-1032A-2-03(-)

MRBH-1032A-2-01(-)

MRBH-1032A-11-01(+)
MRBH-1032A-11-02(NA)
MRBH-1032A-11-03(NA)

MRBH-1069A-15-01(+)
MRBH-1069A-15-02(NA)
MRBH-1069A-15-03(NA)

MRBH-1032A-7-03(-)

MRBH-1069A-13-01(-)
MRBH-1069A-13-02(-)
MRBH-1069A-13-03(-)

MRBH-1032A-1-01(+)

MRBH-1032A-3-01(-)
MRBH-1032A-3-02(-)

MRBH-1032A-9-01(+)
MRBH-1032A-9-02(+)
MRBH-1032A-9-03(+)

MRBH-1032A-5-01(-)
MRBH-1032A-5-04(-)

MRBH-1046A-17-02(-)
MRBH-1046A-17-03(-)

MRBH-1046A-17-01(-)

MRBH-1032A-3-03(-)

MRBH-1032A-6-02(-)

MRBH-1032A-6-05(-)

MRBH-1032A-4-01(-)
MRBH-1032A-4-04(-)

MRBH-1069A-16-01(-)

MRBH-1069A-16-02(-)

MRBH-1069A-16-03(-)

MRBH-1032A-5-03(-)
MRBH-1032A-5-06(-)

MRBH-1032A-6-01(-)

MRBH-1032A-1-02(NA)

MRBH-1032A-8-01(-)
MRBH-1032A-8-02(-)
MRBH-1032A-8-03(-)

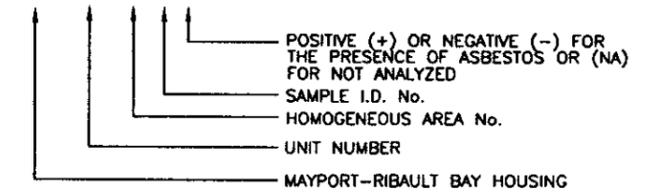
MRBH-1032A-12-01(+)

SYMBOLS

● LOCATION OF SAMPLES COLLECTED

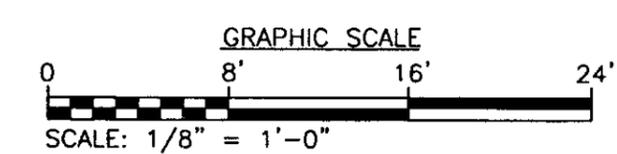
TYPICAL SAMPLE I.D. No.

MRBH-1016A-1-01(+)

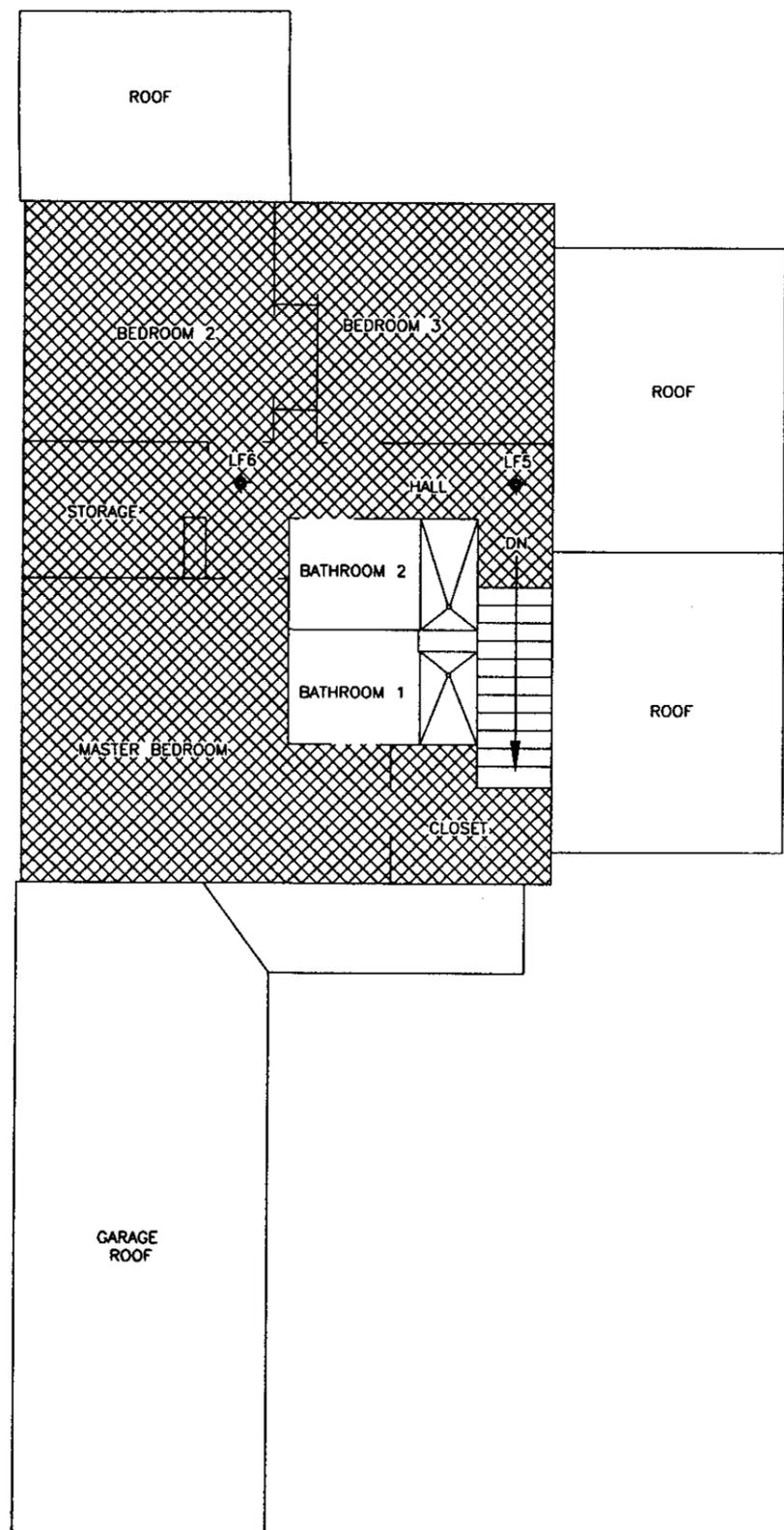


5 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING
FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	REV. DESCRIPTION	PREP BY	DATE	OFFICER IN CHARGE
SOUTHERN DIVISION	CHARLESTON, S.C.				
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY AT MAYPORT NAVAL STATION, JACKSONVILLE, FL					
5 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING - FIRST FLOOR PLAN (BULK SAMPLES)					
SEAL AREA					
CODE ID No.	SIZE				
FED DRAWING NO.					
STA. PROJ. NO.					
CAPE PROJ. No. 90032.001.000					
SPEC. NO. N/A					
CONSTR. CNTR. NO. N/A					
NAVFAC DRAWING NO. N/A					
SHEET 2 OF 6					
SBRASB-2					



THIS DRAWING ILLUSTRATES ALL LOCATIONS OF ACM IDENTIFIED IN THIS UNIT TYPE. FOR SPECIFIC UNIT INFORMATION REFER TO APPENDIX B SUSPECT ASBESTOS-CONTAINING MATERIALS (INDIVIDUAL UNIT MATERIAL SUMMARY).

5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
SECOND FLOOR PLAN
 SCALE: 1/8" = 1'-0"



LEGEND
 ASBESTOS-CONTAINING MATERIALS (ACM) IDENTIFIED - FLOORS AND WALLS

☒ FLOOR COVERING AND MASTIC (+)

LEGEND
 ASBESTOS-CONTAINING MATERIALS (ACM) IDENTIFIED - CEILING AND MISCELLANEOUS

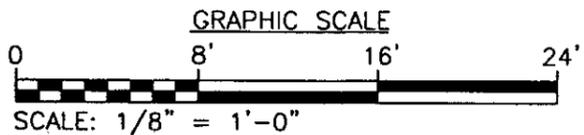
◆ LIGHT FIXTURE INSULATION

NOTE
 NO ASBESTOS-CONTAINING WALL MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

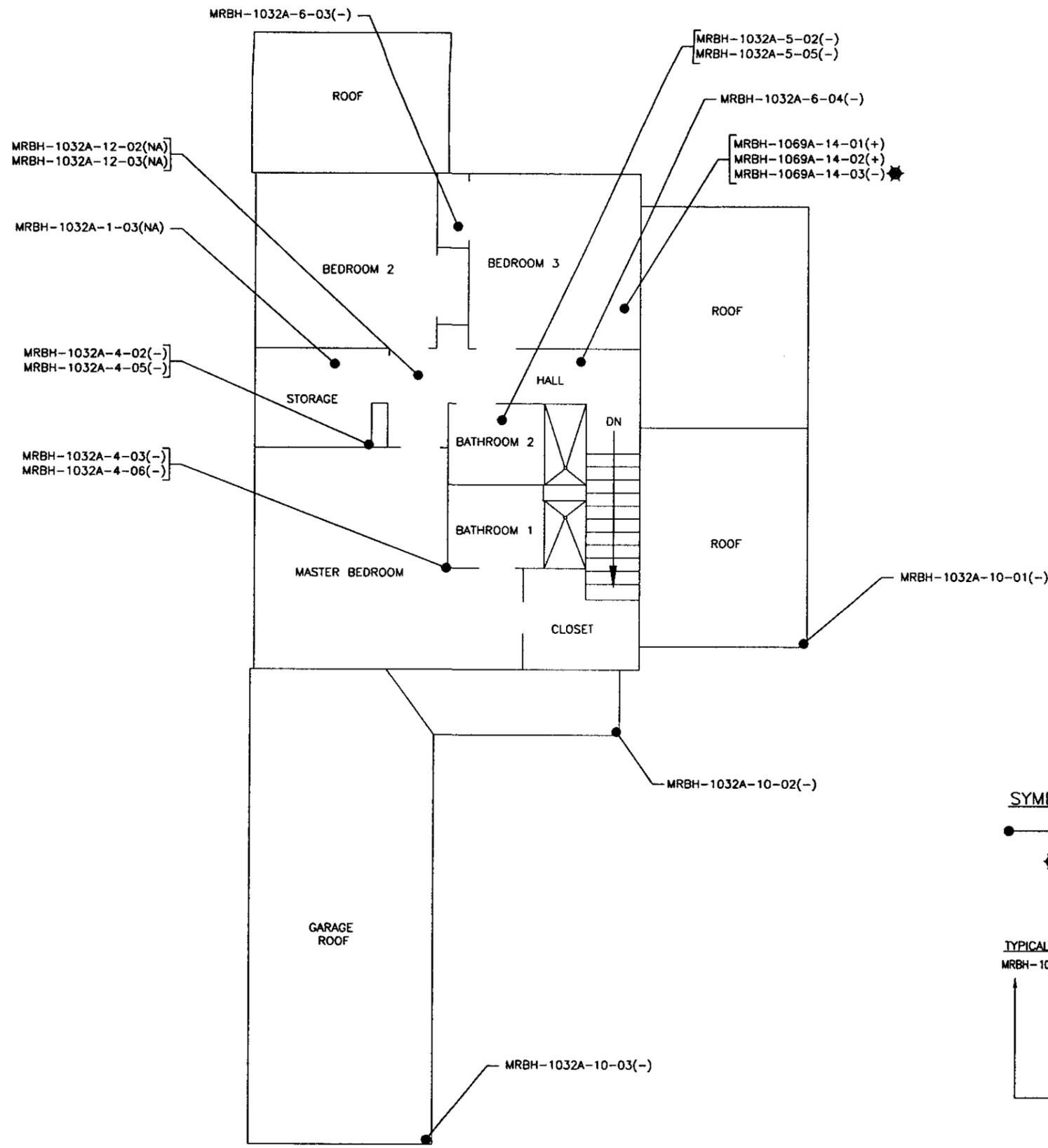
NOTE
 NO ASBESTOS-CONTAINING CEILING MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE
 NO ASBESTOS-CONTAINING THERMAL SYSTEM INSULATION MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.

NOTE
 NO ASBESTOS-CONTAINING ROOFING MATERIALS WERE IDENTIFIED IN THIS UNIT TYPE.



REV. DESCRIPTION	DATE	APPROVED
PREP BY	DATE	OFFICER IN CHARGE
DATE APPROV'D		
ATLANTA	GEORGIA	
CAPE ENVIRONMENTAL MANAGEMENT INC.		
DR C. BROS	DR S. BRYANT	
SUPV. H. MOS	CH ENGR	
SUBMITTED BY (PRINT MEMBER-TITLE)	DATE	
EC	BR NO	
	DR	
	PFE	
DEPARTMENT OF THE NAVY SOUTHERN DIVISION NAVAL FACILITIES ENGINEERING COMMAND CHARLESTON, S.C. A-E SERVICES FOR ASBESTOS AND LEAD SURVEY AT MAYPORT NAVAL STATION, JACKSONVILLE, FL 5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - SECOND FLOOR PLAN (ASBESTOS-CONTAINING MATERIALS) ETD FOR COMMANDER NAVFAC APPROVED		
SEAL AREA		
CODE NO.	SIZE	
FED. DRAWING NO.		
STA. PROJ. NO.		
CAPE PROJ. No. 90032.001.000		
SPEC. NO.	N/A	
CONSTRN. CNTR. NO.	N/A	
NAVFAC DRAWING NO.	N/A	
SHEET 4	OF 8	
SBRASB-3		



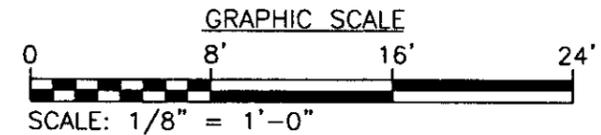
5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
SECOND FLOOR PLAN
 SCALE: 1/8" = 1'-0"

SYMBOLS

- LOCATION OF SAMPLES COLLECTED
- ★ THIS SAMPLE'S ANALYSIS RESULT IS NEGATIVE; HOWEVER, AT LEAST ONE OTHER SAMPLE'S ANALYSIS RESULT OF SAME HOMOGENEOUS MATERIAL IS POSITIVE. THEREFORE ENTIRE HOMOGENEOUS MATERIAL IS CONSIDERED POSITIVE FOR ASBESTOS CONTENT.

TYPICAL SAMPLE I.D. No.
 MRBH-1016A-1-01(+)

↑ POSITIVE (+) OR NEGATIVE (-) FOR THE PRESENCE OF ASBESTOS OR (NA) FOR NOT ANALYZED
 ↑ SAMPLE I.D. No.
 ↑ HOMOGENEOUS AREA No.
 ↑ UNIT NUMBER
 ↑ MAYPORT-RIBAUTL BAY HOUSING



CAPE ENVIRONMENTAL MANAGEMENT INC. GEORGIA	
ATLANTA	OR C. BROS. CH ENGR
USER	DATE SUBMITTED
SUPP. NO.	SUBMITTED BY (PRINT MEMBER-TITLE)
DATE	DATE
EC	BR NO
FPE	DR
DATE	OFFICER IN CHARGE
APPROVED	APPROVED
REV. DESCRIPTION	PREP BY
DATE APPROVD	DATE
NAVAL FACILITIES ENGINEERING COMMAND CHARLESTON, S.C.	EDD FOR COMMANDER, NAVFAC
SOUTHERN DIVISION	DATE
DEPARTMENT OF THE NAVY	APPROVED
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	
5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - SECOND FLOOR PLAN (BULK SAMPLES)	
SEAL AREA	
CODE ID No.	SIZE 8
FED DRAWING NO.	
STA. PROJ. NO.	
CAPE PROJ. No. 90032.D01.000	
SPEC. NO. N/A	
CONSTR. CNTR. NO. N/A	
NAVFAC DRAWING NO. N/A	
SHEET 4 OF 4	
5BRASB-4	

Appendix D

Laboratory Analysis Reports of Suspect ACM Bulk Samples

CIT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1065B-15-01 AES LAB NO : 135643 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : DARK GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, GLUE & LATEX

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	40
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	10
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	46
ANTIGORITE			

COMMENTS : LATEX INCLUDED AS RESILIENT.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :


 ARKADIY GENDLIN

QUALITY CONTROL BY :


 SVETLANA ARKHIPOV

CITY NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1065B-15-02 AES LAB NO : 135644 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : DARK GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, GLUE & LATEX

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	40
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	10
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	46
ANTIGORITE			

COMMENTS : LATEX INCLUDED AS RESILIENT.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MI ANALYST :


 ARKADIY GENDLIN

QUALITY CONTROL BY :


 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CY NT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1065B-15-03 AES LAB NO : 135645 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : DARK GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, GLUE & LATEX

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	40
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	10
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	46
ANTIGORITE			

COMMENTS : LATEX INCLUDED AS RESILIENT.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MI ANALYST :


 ARKADIY BENDLIN

QUALITY CONTROL BY :


 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. **DATE :** 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-1-01 **AES LAB NO :** 135646 **AES JOB NO :** B9080

SAMPLE LOCATION :

SAMPLE - DESCRIPTION - BEIGE HARD COMPACT PARTLY GRANULAR WITH FIBERS & BLACK MASTIC.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE	5	VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	40
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	
ANIMAL HAIR		BINDERS	52
ANTIGORITE			

COMMENTS : FLOOR TILE CONTAINS 5% CHRYSOTILE.
 BITUMEN CONTAINS 3% CHRYSOTILE.

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ANALYST :


 ARKADIY GENDLIN

QUALITY CONTROL BY :


 SVETLANA ARKHIPOV

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-2-01 AES LAB NO : 135649 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : BEIGE HARD COMPACT PARTLY GRANULAR WITH FIBERS & GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	51
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST : *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *S. Arkhipov*
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-2-02 AES LAB NO : 135650 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - BEIGE HARD COMPACT PARTLY GRANULAR WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	51
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MICROANALYST:


QUALITY CONTROL BY:


ARKADIY GENDLIN

SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-2-03 AES LAB NO : 135651 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - BEIGE HARD COMPACT PARTLY GRANULAR WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	51
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MI ANALYST :

A. Gendlin

ARKADIY GENDLIN

QUALITY CONTROL BY :

S. Arkhipov

SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-3-01 AES LAB NO : 135652 AES JOB NO : B9080

SAMPLE LOCATION :

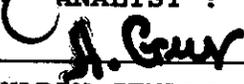
SAMPLE - GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, BLACK MASTIC &
 DESCRIPTION GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	< 1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	51
ANTIGORITE			

COMMENTS : BITUMEN IS NOT ENOUGH TO BE ANALYZED.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-3-02 AES LAB NO : 135653 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, BLACK MASTIC &
 DESCRIPTION GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	< 1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	51
ANTIGORITE			

COMMENTS : BITUMEN IS NOT ENOUGH TO BE ANALYZED.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST : *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *S. Arkhipov*
 SVETLANA ARKHIPOV

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-3-03 AES LAB NO : 135654 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, BLACK MASTIC &
 DESCRIPTION GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	< 1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	51
ANTIGORITE			

COMMENTS : BITUMEN IS NOT ENOUGH TO BE ANALYZED.

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-4-01 AES LAB NO : 135655 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST : 
 ARKADIY GENDLIN

QUALITY CONTROL BY : 
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-4-02 AES LAB NO : 135656 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST BY : 
 ARKADIY GENDLIN

QUALITY CONTROL BY : 
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-4-03 AES LAB NO : 135657 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MICROANALYST :

Arkadiy Gendlin
 ARKADIY GENDLIN

QUALITY CONTROL BY :

Svetlana Arkhipov
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99
 PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000
 SAMPLE ID : MRBH-1032A-4-04 AES LAB NO : 135658 AES JOB NO : B9080
 SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT BROWN SOFT FIBROUS WITH PAINT;
 DESCRIPTION 2) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	75
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MIT ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-4-05 AES LAB NO : 135659 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTOLE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	2
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	73
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MICROANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-4-06 AES LAB NO : 135660 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	2
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	73
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST : *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *S. Arkhipov*
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-5-01 AES LAB NO : 135661 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	15	GLUE	
ANIMAL HAIR		BINDERS	82
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST


 ARKADIY GENDLIN

QUALITY CONTROL BY :


 SVETLANA ARKHIPOV

CUSTOMER NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-5-02 AES LAB NO : 135662 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST


 ARKADIY GENDLIN

QUALITY CONTROL BY :


 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CUSTOMER NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-5-03 AES LAB NO : 135663 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MI ANALYST : 
 ARKADIY GENDLIN

QUALITY CONTROL BY : 
 SVETLANA ARKHIPOV

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-5-04 AES LAB NO : 135664 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
WINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ME ANALYST : *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *S. Arkhipov*
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME : MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-5-05 AES LAB NO : 135665 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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MI ANALYST : *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *S. Arkhipov*
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-5-06 AES LAB NO : 135666 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST : *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *S. Arkhipov*
 SVETLANA ARKHIPOV

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-6-01 AES LAB NO : 135667 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS & MICA.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	10
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
WINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS	5	RESILIENT MATERIAL	
CELLULOSE	20	GLUE	
ANIMAL HAIR		BINDERS	65
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ME ANALYST :


 ARKADIY GENDLIN

QUALITY CONTROL BY :


 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CUSTOMER NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-6-02 AES LAB NO : 135668 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE DESCRIPTION - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
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 TEL: (770)457-8177 FAX: (770)457-8188

CUSTOMER NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-6-03 AES LAB NO : 135669 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE DESCRIPTION - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA & PAINT
 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST: *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY: *S. Arkhipov*
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-6-04 AES LAB NO : 135670 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA,
 DESCRIPTION STYROFOAM & PAINT; 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	5
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	20	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST : A. Gendlin
 ARKADIY GENDLIN

QUALITY CONTROL BY : S. Arkhipov
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-6-05 AES LAB NO : 135671 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS, MICA,
 DESCRIPTION STYROFOAM & PAINT; 2) LIGHT BROWN SOFT FIBROUS;
 3) GRAY SEMI-HARD SILTY WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	3
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	5
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	20	GLUE	
ANIMAL HAIR		BINDERS	72
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

A. Gendlin
 ARKADIY GENDLIN

QUALITY CONTROL BY :

S. Arkhipov
 SVETLANA ARKHIPOV

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-7-01 AES LAB NO : 135672 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : BLACK SEMI-HARD RESILIENT WITH FIBERS & GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	95
CELLULOSE	1	GLUE	2
ANIMAL HAIR		BINDERS	1
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST : *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *S. Arkhipov*
 SVETLANA ARKHIPOV

CITY NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-7-02 AES LAB NO : 135673 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - BLACK SEMI-HARD RESILIENT WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	95
CELLULOSE	1	GLUE	1
ANIMAL HAIR		BINDERS	2
ANTIGORITE			

COMMENTS :

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-7-03 AES LAB NO : 135674 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - DESCRIPTION BLACK SEMI-HARD RESILIENT WITH FIBERS & GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
WINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	95
CELLULOSE	1	GLUE	1
ANIMAL HAIR		BINDERS	2
ANTIGORITE			

COMMENTS :

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ANALYST


 ARKADIY GENDLIN

QUALITY CONTROL BY


 SVETLANA ARKHIPOV

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-8-01 AES LAB NO : 135675 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : DARK BROWN SEMI-HARD RESILIENT WITH FIBERS & GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	95
CELLULOSE	1	GLUE	< 1
ANIMAL HAIR		BINDERS	3
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST : *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *S. Arkhipov*
 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CUSTOMER NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-8-02 AES LAB NO : 135676 AES JOB NO : B9080

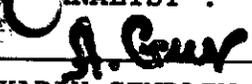
SAMPLE LOCATION :

SAMPLE - DARK BROWN SEMI-HARD RESILIENT WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	95
CELLULOSE	1	GLUE	< 1
ANIMAL HAIR		BINDERS	3
ANTIGORITE			

COMMENTS :

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ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-8-03 AES LAB NO : 135677 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - DARK BROWN SEMI-HARD RESILIENT WITH FIBERS & GLUE.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	95
CELLULOSE	1	GLUE	1
ANIMAL HAIR		BINDERS	2
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-9-01 AES LAB NO : 135678 AES JOB NO : B9080

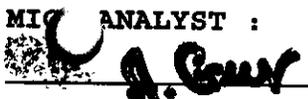
SAMPLE LOCATION :

SAMPLE - GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, BLACK MASTIC &
 DESCRIPTION GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE	< 1	VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
WINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	3
ANIMAL HAIR		BINDERS	49
ANTIGORITE			

COMMENTS : BITUMEN CONTAINS 3% CHRYSTILE.
 FLOOR TILE & GLUE DO NOT CONTAIN ASBESTOS.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY:

 SVETLANA ARKHIPOV

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-9-02 AES LAB NO : 135679 AES JOB NO : B9080

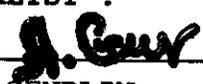
SAMPLE LOCATION :

SAMPLE - GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS, BLACK MASTIC &
 DESCRIPTION GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE	< 1	VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	3
ANIMAL HAIR		BINDERS	49
ANTIGORITE			

COMMENTS : BITUMEN CONTAINS 3% CHRYSOTILE.
 FLOOR TILE & GLUE DO NOT CONTAIN ASBESTOS.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-9-03 AES LAB NO : 135680 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) GRAY HARD COMPACT PARTLY GRANULAR WITH FIBERS,
 DESCRIPTION BLACK MASTIC & GLUE;
 2) GRAY SEMI-HARD PARTLY GRANULAR WITH FIBERS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE	< 1	VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	1
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	5
ANIMAL HAIR		BINDERS	47
ANTIGORITE			

COMMENTS : LAYERS #1: BITUMEN CONTAINS 3% CHYSOTILE. FLOOR TILE & GLUE DO NOT CONTAIN ASBESTOS. LAYER #2 DOES NOT CONTAIN ASBESTOS.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST : *A. Gendlin*
 ARKADIY GENDLIN

QUALITY CONTROL BY : *S. Arkhipov*
 SVETLANA ARKHIPOV

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-10-01 AES LAB NO : 135681 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) GRAY SEMI-HARD PARTLY GRANULAR TO BITUMENOUS;
 DESCRIPTION 2) BLACK SEMI-HARD BITUMENOUS TO FIBROUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	15
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	55
FIBERGLASS	25	RESILIENT MATERIAL	
CELLULOSE		GLUE	
ANIMAL HAIR		BINDERS	5
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MICROANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-10-02 AES LAB NO : 135682 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) GRAY SEMI-HARD PARTLY GRANULAR TO BITUMENOUS;
 DESCRIPTION 2) BLACK SEMI-HARD BITUMENOUS TO FIBROUS;
 3) BLACK SEMI-HARD FIBROUS TO BITUMENOUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	15
CINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	50
FIBERGLASS	25	RESILIENT MATERIAL	
CELLULOSE	5	GLUE	
ANIMAL HAIR		BINDERS	5
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST : Arkadiy Gendlin
 ARKADIY GENDLIN

QUALITY CONTROL BY : Svetlana Arkhipov
 SVETLANA ARKHIPOV

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-10-03 AES LAB NO : 135683 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) GRAY SEMI-HARD PARTLY GRANULAR TO BITUMENOUS;
 DESCRIPTION 2) BLACK SEMI-HARD BITUMENOUS TO FIBROUS;
 3) BLACK SEMI-HARD FIBROUS TO BITUMENOUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	10
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	50
FIBERGLASS	20	RESILIENT MATERIAL	
CELLULOSE	15	GLUE	
ANIMAL HAIR		BINDERS	5
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :


 ARKADIY GENDLIN

QUALITY CONTROL BY :


 SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 9/9/99

PROJECT NAME: MAYPORT NS - R.B. HOUSING / 90032.001.000

SAMPLE ID : MRBH-1032A-11-01 AES LAB NO : 135684 AES JOB NO : B9080

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) BEIGE SEMI-HARD RESILIENT;
 DESCRIPTION 2) GRAY SOFT FIBROUS TO SILTY WITH GLUE.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE	25	VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
INOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	50
CELLULOSE		GLUE	5
ANIMAL HAIR		BINDERS	20
ANTIGORITE			

COMMENTS : LAYER #2 CONTAINS 50% CHRYBOTILE.
 GLUE & LAYER #1 DO NOT CONTAIN ASBESTOS.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ANALYST :

 ARKADIY GENDLIN

QUALITY CONTROL BY :

 SVETLANA ARKHIPOV

CAPE ENVIRONMENTAL MANAGEMENT INC

2302 Parklake Drive, Suite 200, Atlanta, GA 30345

770/908-7200 Fax 770/908-7219

CHAIN OF CUSTODY

LABORATORY NAME: Analytical Environmental Services, Inc. (AES)			
CLIENT NAME	Southern Division NAVY	PROJECT MANAGER:	Scott Bryant
PROJECT NAME:	Mayport NS - R.B. Housin	PROJECT NUMBER:	90032.001.000
ANALYSIS REQUESTED:	PLM <input checked="" type="checkbox"/>	OTHER:	
TURNAROUND TIME REQUESTED:	SAME DAY <input type="checkbox"/>	NEXT DAY <input type="checkbox"/>	3 DAYS <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/>
INSTRUCTIONS:	ANALYZE ALL <input type="checkbox"/>	STOP POSITIVE <input checked="" type="checkbox"/>	

SAMPLE ID		SAMPLE ID	
1	MRBH-1032A-1-01	16	MRBH-1032A-5-01
2	MRBH-1032A-1-02	17	MRBH-1032A-5-02
3	MRBH-1032A-1-03	18	MRBH-1032A-5-03
4	MRBH-1032A-2-01	19	MRBH-1032A-5-04
5	MRBH-1032A-2-02	20	MRBH-1032A-5-05
6	MRBH-1032A-2-03	21	MRBH-1032A-5-06
7	MRBH-1032A-3-01	22	MRBH-1032A-6-01
	MRBH-1032A-3-02	23	MRBH-1032A-6-02
9	MRBH-1032A-3-03	24	MRBH-1032A-6-03
10	MRBH-1032A-4-01	25	MRBH-1032A-6-04
11	MRBH-1032A-4-02	26	MRBH-1032A-6-05
12	MRBH-1032A-4-03	27	MRBH-1032A-7-01
13	MRBH-1032A-4-04	28	MRBH-1032A-7-02
14	MRBH-1032A-4-05	29	MRBH-1032A-7-03
15	MRBH-1032A-4-06	30	MRBH-1032A-8-01

SPECIAL INSTRUCTIONS:

RELINQUISHED BY: <i>M. S. ...</i>	RECEIVED BY:
DATE: 30-Aug-99 TIME: 1900	DATE: TIME:
RELINQUISHED BY:	RECEIVED BY:
DATE: TIME:	DATE: TIME:
RELINQUISHED BY:	RECEIVED BY: <i>S. ...</i>
DATE: TIME:	DATE: 8/31/99 TIME: 9:00am

CAPE ENVIRONMENTAL MANAGEMENT INC

2302 Parklake Drive, Suite 200, Atlanta, GA 30345

770/908-7200 Fax 770/908-7219

CHAIN OF CUSTODY

LABORATORY NAME: Analytical Environmental Services, Inc. (AES)	
CLIENT NAME: Southern Division NAVY	PROJECT MANAGER: Scott Bryant
PROJECT NAME: Mayport NS - R.B. Housing	PROJECT NUMBER: 90032.001.000
ANALYSIS REQUESTED: PLM <input checked="" type="checkbox"/> OTHER:	
TURNAROUND TIME SAME DAY NEXT DAY 3 DAYS 5 DAYS	
REQUESTED: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	
INSTRUCTIONS:	ANALYZE ALL <input type="checkbox"/> STOP POSITIVE <input checked="" type="checkbox"/>

SAMPLE ID		SAMPLE ID	
1	MRBH-1032A-8-02	16	MRBH-1069A-13-02
2	MRBH-1032A-8-03	17	MRBH-1069A-13-03
3	MRBH-1032A-9-01	18	MRBH-1069A-14-01
4	MRBH-1032A-9-02	19	MRBH-1069A-14-02
5	MRBH-1032A-9-03	20	MRBH-1069A-14-03
6	MRBH-1032A-10-01	21	MRBH-1069A-15-01
7	MRBH-1032A-10-02	22	MRBH-1069A-15-02
	MRBH-1032A-10-03	23	MRBH-1069A-15-03
9	MRBH-1032A-11-01	24	MRBH-1069A-16-01
10	MRBH-1032A-11-02	25	MRBH-1069A-16-02
11	MRBH-1032A-11-03	26	MRBH-1069A-16-03
12	MRBH-1032A-12-01	27	
13	MRBH-1032A-12-02	28	
14	MRBH-1032A-12-03	29	
15	MRBH-1069A-13-01	30	

SPECIAL INSTRUCTIONS:

RELINQUISHED BY: <i>[Signature]</i>	RECEIVED BY:
DATE: 30-Aug-99 TIME: 1900	DATE: TIME:
RELINQUISHED BY:	RECEIVED BY:
DATE: TIME:	DATE: TIME:
RELINQUISHED BY:	RECEIVED BY: <i>[Signature]</i>
DATE: TIME:	DATE: 8/21/99 TIME: 9:00am

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B9232
PROJECT NAME: MAYPORT NS - R.B. HOUSING DATE RECEIVED: 9/1/99
PROJECT NO: 90032.001.000 REPORT ISSUED: 9/7/99
SAMPLE FIELD ID: QC-MRBH-1032A-2-01 LAB ID: 916403
SAMPLE INFO: - DATE ANALYZED: 9/3/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: GRAY HARD RESILIENT TO GRANULAR WITH GLUE

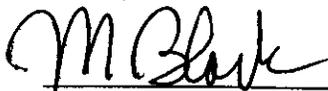
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSHOTILE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	35
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	1
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	64

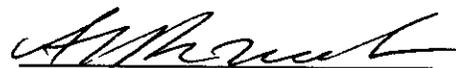
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 9/3/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


MICHAEL BLACK

QUALITY CONTROL


ALEKSEY REZNIK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B9232
PROJECT NAME: MAYPORT NS - R.B. HOUSING DATE RECEIVED: 9/1/99
PROJECT NO: 90032.001.000 REPORT ISSUED: 9/7/99
SAMPLE FIELD ID: QC-MRBH-1032A-5-01 LAB ID: 916404
SAMPLE INFO: - DATE ANALYZED: 9/3/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 1+2+3 NO. OF LAYERS: 3
APPEARANCE: 1. WHITE HARD SILTY WITH MICA (J/C) AND PAINT; 2. GRAY SOFT FIBROUS; 3. LIGHT GRAY HARD SILTY WITH FIBERS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYCOTILE		CELLULOSE	15	VERMICULITE/MICA	2	BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	83

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-82) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 9/3/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST

M Black

MICHAEL BLACK

QUALITY CONTROL

Aleksey Reznik

ALEKSEY REZNIK

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B9232
PROJECT NAME: MAYPORT NS - R.B. HOUSING DATE RECEIVED: 9/1/99
PROJECT NO: 90032.001.000 REPORT ISSUED: 9/7/99
SAMPLE FIELD ID: QC-MRBH-1032A-6-01 LAB ID: 916405
SAMPLE INFO: - DATE ANALYZED: 9/3/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 1+2+3 NO. OF LAYERS: 3
APPEARANCE: 1. WHITE HARD SILTY WITH MICA (J/C); 2. GRAY SOFT FIBROUS; 3. LIGHT GRAY HARD SILTY WITH FIBERS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE		CELLULOSE	15	VERMICULITE/MICA	3	BITUMEN/TAR	
AMOSITE		GLASS FIBERS	1	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	81

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 9/3/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST

M Black

MICHAEL BLACK

QUALITY CONTROL

Aleksey Reznik

ALEKSEY REZNIK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B9232
PROJECT NAME: MAYPORT NS - R.B. HOUSING DATE RECEIVED: 9/1/99
PROJECT NO: 90032.001.000 REPORT ISSUED: 9/7/99
SAMPLE FIELD ID: QC-MRBH-1032A-9-01 LAB ID: 916406-1
SAMPLE INFO: - DATE ANALYZED: 9/3/99

SAMPLE DESCRIPTION

LAYERED: YES	LAYER NO: 1	NO. OF LAYERS: 2
APPEARANCE: WHITE HARD RESILIENT TO GRANULAR		

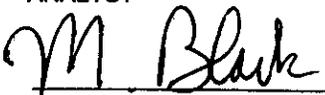
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYCOTILE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	70

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 9/3/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST


MICHAEL BLACK

QUALITY CONTROL


ALEKSEY REZNIK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B9232
PROJECT NAME: MAYPORT NS - R.B. HOUSING DATE RECEIVED: 9/1/99
PROJECT NO: 90032.001.000 REPORT ISSUED: 9/7/99
SAMPLE FIELD ID: QC-MRBH-1032A-9-01 LAB ID: 916406-2
SAMPLE INFO: - DATE ANALYZED: 9/3/99

SAMPLE DESCRIPTION

LAYERED: YES	LAYER NO: 2	NO. OF LAYERS: 2
APPEARANCE: MIX OF BLACK MASTIC AND GLUE		

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	<1	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	10
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	80
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	10

COMMENTS: **2% CHRYSTOLE IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 9/3/99
FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST


MICHAEL BLACK

QUALITY CONTROL


ALEKSEY REZNIK

CAPE ENVIRONMENTAL MANAGEMENT INC

2302 Parklake Drive, Suite 200, Atlanta, GA 30345

770/908-7200 Fax 770/908-7219

CHAIN OF CUSTODY

LABORATORY NAME: Cape Environmental Management, Inc.			
CLIENT NAME: Southern Division NAVY		PROJECT MANAGER: Scott Bryant	
PROJECT NAME: Mayport NS - R.B. Housing		PROJECT NUMBER: 90032.001.000	
ANALYSIS REQUESTED: PLM <input checked="" type="checkbox"/> OTHER: _____			
TURNAROUND TIME SAME DAY NEXT DAY 3 DAYS 5 DAYS			
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INSTRUCTIONS: ANALYZE ALL <input type="checkbox"/> STOP POSITIVE <input type="checkbox"/>			
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2	QC-MRBH-1016A-5-01	17	QC-MRBH-1040B-14-01
3	QC-MRBH-1016A-7-01	18	QC-MRBH-1032A-2-01
4	QC-MRBH-1004D-14-01	19	QC-MRBH-1032A-5-01
5	QC-MRBH-1004D-17-01	20	QC-MRBH-1032A-6-01
6	QC-MRBH-1016F-20-01	21	QC-MRBH-1032A-9-01
7	QC-MRBH-1059A-1-01	22	QC-MRBH-1069A-13-01
8	QC-MRBH-1059A-4-01	23	QC-MRBH-1069A-16-01
9	QC-MRBH-1059A-7-01	24	
10	QC-MRBH-1059A-9-01	25	
11	QC-MRBH-1059A-10-01	26	
12	QC-MRBH-1067B-15-01	27	
13	QC-MRBH-1031E-1-01	28	
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SPECIAL INSTRUCTIONS:			
RELINQUISHED BY: <i>MQ [Signature]</i>		RECEIVED BY: <i>[Signature]</i>	
DATE: 1-Sep-99	TIME: 800	DATE: 9-1-99	TIME: 0900
RELINQUISHED BY:		RECEIVED BY:	
DATE:	TIME:	DATE:	TIME:
RELINQUISHED BY:		RECEIVED BY:	
DATE:	TIME:	DATE:	TIME:

Appendix E

Certifications and Accreditations

The Environmental Institute

Mike Spradling

Social Security Number - 259-98-7159

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA/AHERA (TSCA Title II) Approved Reaccreditation
and NESHAPs Regulations Training*

*Asbestos in Buildings: Inspector & Management
Planner Refresher*

September 1, 1998

Course Date

5875

Certificate Number

September 1, 1998

Examination Date

August 31, 1999

Expiration Date

William H. Spain

William H. Spain - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

The Environmental Institute

Michael Spradling

Social Security Number - 259-98-7159

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA/AHERA/ASHARA (TSCA Title II) Approved Reaccreditation
and NESHAP Regulations Training*

*Asbestos in Buildings: Inspector & Management
Planner Refresher*

August 31, 1999

Course Date

6308

Certificate Number

August 31, 1999

Examination Date

August 30, 2000

Expiration Date

Thomas G. Laubenthal

Thomas G. Laubenthal - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

The Environmental Institute

W. David Bratley

Social Security Number - 594-44-4358

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA/AHERA (TSCA Title II) Approved Accreditation
and NESHAPs Regulations Training*

Asbestos in Buildings: Inspection and Assessment

December 7-9, 1998

Course Date

2519

Certificate Number

December 9, 1998

Examination Date

December 8, 1999

Expiration Date

R. A. Short

Ronald A. Short - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

The Environmental Institute

Kevin Bailey

Social Security Number - 406-11-6964

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA/AHERA (TSCA Title II) Approved Reaccreditation
and NESHAPs Regulations Training*

*Asbestos in Buildings: Inspector & Management
Planner Refresher*

December 15, 1998

Course Date

5984

Certificate Number

December 15, 1998

Examination Date

December 14, 1999

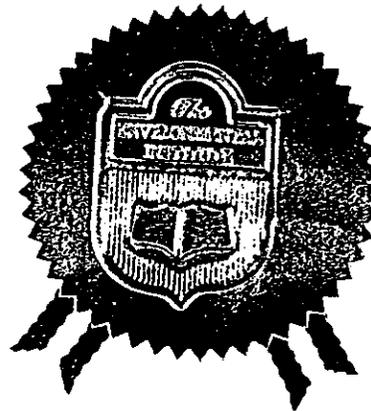
Expiration Date

R. A. Short

Ronald A. Short - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

The Environmental Institute

Mike Spradling

Social Security Number - 259-98-7159

Has completed a three-day course and satisfactorily passed an examination that meets the criteria listed for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities as regulated by Georgia DNR/EPD Chapter 371-3-24 and U.S. EPA TSCA 40 CFR Part 745 for the course titled

Lead Inspector: EPA

(Target Housing & Child-Occupied Facilities)

April 13-15, 1998

Course Date

1166

Certificate Number

April 15, 1998

Examination Date

Jeffrey Maurras
Jeffrey Maurras - Course Director

Rachel G. McCain
Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

The Environmental Institute

Mike Spradling

Social Security Number - 259-98-7159

Has completed coursework and satisfactorily passed an examination that meets all criteria in accordance with requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities as regulated by Georgia DNR/EPD Chapter 371-3-24 and U.S. EPA TSCA 40 CFR Part 745 for the course titled

Lead Risk Assessor: EPA
(Target Housing & Child-Occupied Facilities)

April 16-17, 1998

Course Date

1141

Certificate Number

April 17, 1998

Examination Date

Bonnie Maurras

Bonnie Maurras - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator



Certificate of Achievement

This is to certify that

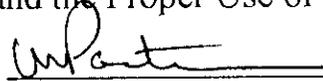
Michael J. Spradling

Cape Environmental Management, Inc.

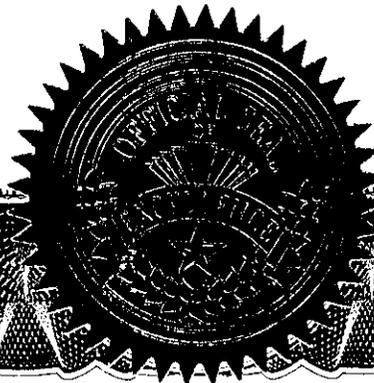
on the 26th day of February 1998 successfully completed the factory training for

RMD's LPA-1 Lead Paint Inspection System

including, but not limited to, the topics of Radiation Safety
and the Proper Use of the Instrument.



Jacob H. Paster, Vice President, RMD, Inc.
44 Hunt St., Watertown, Massachusetts



United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation



ANALYTICAL ENVIRONMENTAL SERVICES, INC.
ATLANTA, GA

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

BULK ASBESTOS FIBER ANALYSIS

September 30, 2000

Effective through

For the National Institute of Standards and Technology

NVLAP Lab Code: 102033-0

United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation



CAPE ENVIRONMENTAL MANAGEMENT, INC.
ATLANTA, GA

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

BULK ASBESTOS FIBER ANALYSIS

June 30, 2000

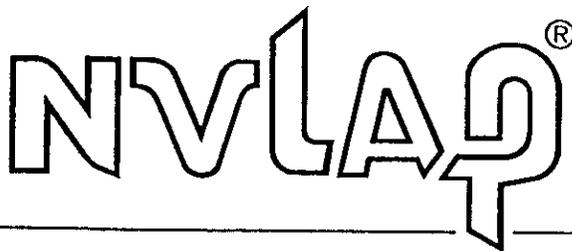
Effective through

A handwritten signature in black ink, appearing to read "James L. Galt".

For the National Institute of Standards and Technology

NVLAP Lab Code: 102111-0

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Scope of Accreditation



Page: 1 of 1

BULK ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 102111-0

CAPE ENVIRONMENTAL MANAGEMENT, INC.

2302 Parklake Drive, Suite 200

Atlanta, GA 30345-2907

Mr. Aleksey Reznik

Phone: 770-908-7200 Fax: 770-908-7219

NVLAP Code

18/A01

Designation

U.S. EPA's "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" as found in 40 CFR, Part 763, Subpart F, App. A, or the current U.S. EPA method for the analysis of asbestos in building material.

June 30, 2000

Effective through

A handwritten signature in black ink, appearing to read 'Jan L. G...'. The signature is written over a horizontal line.

For the National Institute of Standards and Technology

ATTACHMENT #8

Lead Based Paint Survey

Lead-Based Paint Survey Ribault Bay Housing Phase II Mayport Naval Station Mayport, Florida

Prepared for:

Department of the Navy
Southern Division
Naval Facilities Engineering Command
P.O. Box 190010
2155 Eagle Drive
North Charleston, SC 29419-9010

Prepared by:

BAT Associates, Inc.
5151 Brook Hollow Parkway, Suite 250
Norcross, GA 30071

and

Cape Environmental Management Inc
2302 Parklake Drive
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Atlanta, GA 30345

Contact Person:
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November 1999

LEAD-BASED PAINT SURVEY REPORT

Table of Contents

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Appendix A --- Summary Report of XRF Inspection Results (Component Type Report)

Appendix B --- Individual Unit LBP Inspection Reports

Appendix C --- Laboratory Report for Paint Chip Sample Analysis

Appendix D --- Floor Plans Illustrating Extent of LBP (Typical Housing Unit Floor Plans)

Appendix E --- Multifamily Decision Flowchart

Appendix F --- Accreditations and Certifications

1.0 Executive Summary

Cape Environmental Management Inc (CAPE) was contracted by BAT Associates, Inc. to perform a lead-based paint (LBP) inspection for the Southern Division, Naval Facilities Engineering Command (SouthDiv NAVFACENGCOM) at the Ribault Bay Housing Phase II located in the Mayport Naval Station, Florida. The survey was conducted in accordance with the Housing and Urban Development (HUD), Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (1997 revision). This survey was conducted by CAPE staff industrial hygienist Mr. Mike Spradling between August 23, 1999 and October 1, 1999.

The purpose of this LBP survey was to identify the types and locations of components determined to contain lead above the HUD defined threshold of 1.0 milligrams per square centimeter (mg/cm²).

The Ribault Bay Housing Phase II at Mayport Naval Station consists of two, three, four, and five bedroom housing units. The scope of work required that LBP inspections be conducted on a representative number of housing units as specified by BAT Associates, Inc. CAPE performed comprehensive LBP inspections of 21 2-bedroom units, 10 3-bedroom units, 8 4-bedroom units, and 8 5-bedroom units. CAPE additionally visually inspected 11 2-bedroom units, 24 3-bedroom units, 64 4-bedroom units, and 11 5-bedroom units to ensure units were similar in construction, materials, and paint history (please see page 2 for a complete list of units tested).

CAPE performed the testing for LBP using an x-ray fluorescence (XRF) analyzer in accordance with the multi-family inspection criteria outlined in the HUD Guidelines. Paint chip samples were collected for laboratory analysis to confirm XRF results when overall results were inconclusive.

After completing the comprehensive LBP surveys and additional visual inspections, the following painted components were identified as having LBP.

- Glazing on ceramic tile basecove (blue) located in unit 1002F (5 bedroom unit-type). CAPE collected 85 XRF readings for LBP on ceramic tilebasecoves in the 47 units that were tested. Only unit 1002F yielded a positive XRF result. CAPE recommends testing all ceramic tilebasecoves in untested units before renovation or demolition.
- Metal handrails (black) located on the second floor of the 2 bedroom unit-types. Only the second floor of the 2-bedroom units had metal handrails, and all but 1 XRF reading from this metal handrails yielded positive XRF results. Therefore all the metal handrails on the second floor of the 2-bedroom units are considered LBP

A discussion of the Lead Survey Methodology is presented in Section 2.0. A discussion of the LBP Survey Findings is presented in Section 3.0.

The following units were included in the scope of work for this project:

2 Bedroom Units		
1004A	1039C*	1071A*
1004B	1039D*	1071B*
1004C	1039E	1071C*
1004D*	1039F	1071D
1016A*	1047A*	1071E
1016B	1047B*	1071F*
1016E*	1047C	1071G
1016F*	1047D	1071H
1020A	1047E	1073A*
1020B*	1047F	1073B*
1020C	1062A	1073C
1020D	1062B	1073D
1020E*	1062C	1073E
1020F	1062D*	1073F*
1039A*	1062E*	
1039B*	1062F	

3 Bedroom Units		
1000A	1059B	1068C
1000B	1059C*	1068D
1000C	1059D	1068E
1000D	1060A	1068F
1000E*	1060B*	1070A
1000F	1060C	1070B
1013A	1060D	1070C
1013B	1066A	1070D
1013C	1066B	1070E
1013D	1066C	1070F*
1037A*	1066D	1072A
1037B	1067A	1072B
1037C	1067B*	1072C
1037D	1067C*	1072D
1037E	1067D*	1072E
1037F	1068A	1072F*
1059A*	1068B	

4 Bedroom Units		
1011A	1038C	1053B
1011B	1038D	1053C
1011C	1040A	1053D
1011D	1040B*	1053E*
1011E	1040C	1057A
1011F	1040D	1057B
1027A	1040E	1057C
1027B	1040F	1057D
1027C	1044B	1058B
1027D	1044C	1058C
1027E	1044D	1058D
1027F	1044E	1058E
1028B	1045A	1061A
1028C	1045B	1061B
1028D	1045C	1061C*
1028E	1045D	1061D
1029B	1045E	1063A
1029C	1045F	1063B
1029D	1049A	1063C*
1029E	1049B	1063D
1029F	1049C	1065B*
1031A	1049D	1065C
1031B	1049E	1069B
1031C	1049F	1069C
1031D	1050B	1069D
1031E*	1050C	1069E
1031F	1050D	1069F
1038A	1050E*	
1038B*	1050F	

5 Bedroom Units
1001B
1001C
1002F*
1028A
1029A
1032A*
1036A
1044A
1046A*
1046B
1046C*
1050A
1053A*
1057E
1057F
1058A
1064E*
1064F
1065A*
1069A*

Note: Unit numbers that are **bold** indicate the units that could not be accessed.

* Comprehensive LBP survey performed in these units.

2.0 Field Investigation Methodology

Cape Environmental Management Inc (CAPE) was contracted by BAT Associates, Inc. to perform a lead-based paint (LBP) inspection for Southern Division, Naval Facilities Engineering Command (SouthDiv NAVFACENGCOM) at the Ribault Bay Housing Phase II located in the Mayport Naval Station, Florida. CAPE conducted the LBP inspections in accordance with the Department of Housing and Urban Development (HUD), Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (1997 revision). The HUD Guidelines currently set the standard for technical protocols, practices and procedures on testing, abatement, worker protection, cleaning, and disposal of LBP in residential structures.

The HUD Guidelines define *Lead-based paint* as “any paint, varnish, stain, or other applied coating that has 1.0 mg/cm² (or 0.5% by weight) or more of lead.” Furthermore the HUD Guidelines specify that the use of x-ray fluorescent (XRF) lead paint analyzer to identify LBP is acceptable. The XRF lead paint analyzer used on this project was a battery powered Radiation Monitoring Device (RMD), LPA-1 XRF Spectrum Analyzer, re-sourced and serviced after March 1, 1998. The XRF instrument performed spectrometric analysis of K-shell X-ray fluorescence and displayed a lead concentration reading in milligrams per square centimeter (mg/cm²).

2.1 Lead-Based Paint Survey

The lead-based-paint (LBP) survey strategy established for this project consisted of the following:

1. Reviewing written documentation for the purpose of grouping housing units for inspections based on similarity of construction, materials, and common painting histories.
2. Identifying all “testing combinations” in each unit type. HUD defines a testing combination as a unique surface characterized by the “room equivalent”, building component type, and substrate. A room equivalent is defined as rooms/areas that are similar in size and function within the same unit such as a bedroom, a house exterior side, or and exterior area. The substrate is the material underneath the paint.
3. Developing a suspect-LBP testing strategy based on HUD Guidelines for multi-family housing, including developing a strategy for the confirmation of LBP.
4. Utilizing an XRF lead-in-paint analyzer to measure the lead concentration of all identified testing combinations within the selected units that had paint, shellac, or varnish
5. Providing a LBP survey report describing the location and types of LBP components identified.

Based on written documentation and visual evidence, all of the housing units included in the scope of work at Ribault Bay Housing Phase II were determined to have common construction and painting history. The number of units tested was determined in the scope of work by BAT Associates, Inc. and provides results that were statistically representative of the Ribault Bay Housing Phase II.

2.1.1 XRF Testing

CAPE tested painted building components for the presence of LBP. Typical components include:

Baseboard/crown molding, beam, cabinet, ceiling, column, counter, door, door casing, shelf/shelf support, trim, wall, window casing/sill

In accordance with the HUD Guidelines and the XRF Performance Characteristic Sheet for the instrument used in this survey, the following decision criteria was used for the determination of XRF inspection results:

- Components with brick, concrete, drywall, plaster, or wood substrates and XRF values greater than or equal to 1.0 mg/cm^2 were considered LBP. Components with brick, concrete, drywall, plaster, or wood substrates and XRF values less than 1.0 mg/cm^2 indicated no lead was present at or above the regulatory level of 1.0 mg/cm^2 . For the purposes of this report, glazing used in the production of ceramic tile that contains lead in concentrations greater than or equal to 1.0 mg/cm^2 was considered lead-based paint.
- Components with a metal substrate and XRF values greater than or equal to 1.3 mg/cm^2 were considered LBP. Components with metal substrate and XRF values less than or equal to 0.9 mg/cm^2 indicated that no lead was present at or above the regulatory level of 1.0 mg/cm^2 . Components with a metal substrate and XRF values greater than 0.9 mg/cm^2 and less than 1.3 mg/cm^2 required confirmatory testing.

Pre/post inspection calibration readings of the XRF instrument were taken using nominal 30-second standard mode readings of an unpainted wood block (0.0 mg/cm^2) and the red National Institute of Standards and Technology (NIST) standard reference material (SRM # 2579) paint film (1.02 mg/cm^2). If the average of three calibration measurements were to fall outside the established acceptable range (based on the XRF Performance Characteristic Sheet), further inspection would be discontinued until proper corrective actions were taken and/or acceptable measurements obtained. During this project, no calibration measurements fell outside the established acceptable range.

2.1.2 Classification of XRF Results

A summary report that aggregates the XRF results for each “component type ” tested was prepared. A component type is a group of like components constructed of the same substrate. For each component type, the aggregate percentage of positive, negative and inconclusive classifications was recorded. The “Multifamily Decision Flowchart” (Figure 7.11 in the HUD Guidelines included in Appendix E) was used to interpret results. The flowchart was applied separately to each component type to determine either a positive result or a negative result.

The “Multifamily Decision Flowchart” leads to a positive result when 15 percent or more of the components of a particular component type are positive. The decision flowchart leads to a negative result when (a) 100 percent of the tested components are negative, or (b) less than 15% of XRF readings are initially positive and subsequent confirmatory paint chip analysis of all positive and inconclusive readings yields no positive results. If any confirmatory paint chip samples for a particular component type yields positive results, the component type is classified as positive.

Confirmatory testing was accomplished by collecting and submitting bulk paint film samples for laboratory analysis by Atomic Absorption Spectroscopy (AAS). Samples were sent to and analyzed by Hygeia Laboratories, Inc. in Marietta, Georgia. Hygeia Laboratories, Inc. is accredited by the American Industrial Hygiene Association (AIHA) and successfully participates in the Environmental Lead Proficiency Testing Program (ELPAT) administered by EPA’s National Lead Laboratory Accreditation Program (NLLAP). The transfer of bulk paint film samples for laboratory analysis was documented on Chain-of-Custody forms (copies of all Chain-of-Custody Forms are provided in **Appendix C** of this report).

Once all laboratory results were obtained, the aggregate summary was updated to include laboratory results and make final classification decisions for each component type. In accordance with HUD, paint was defined as LBP when it contained lead in concentrations equal to or greater than 5,000 mg per Kg (0.5% of lead by weight) or when XRF readings were equal to or greater than 1.0 mg of lead per cm² of surface area by laboratory analysis.

3.0 Discussion of Findings

Suspect-LBP components were classified as “positive” or “negative” based on the “Multifamily Decision Flowchart” outlined in the HUD Guidelines (refer to section 2.1.2 and Appendix E). The flowchart was applied separately to each component type to determine one of the following results:

Positive: Lead was present at or above the HUD standard of 1.0 mg/cm² on *one or more* of the components sampled.

Negative: Lead was not present at or above the HUD standard of 1.0 mg/cm² on any of the components sampled. (Note: Lead may still be present in concentrations below 1.0 mg/cm² and hazardous dust may be generated during disturbance of painted surfaces containing low levels of lead).

For this report, 47 of the 198 units were extensively tested for the presence of lead-based paint. An additional 109 units were visually observed and confirmed to be of similar construction and paint history as the 47 units that were tested. There were 42 units that were not accessible.

An inventory of components tested for lead-based paint is provided in Section 3.1. A summary of the component types determined to contain lead above the HUD defined threshold is provided in Section 3.2. A summary of confirmatory sample results is provided in Section 3.3.

The *Summary Report of XRF Inspection Results (Component Type Report)* utilized in classifying XRF results is presented as Appendix A. This report aggregates the results of XRF testing across the housing units by component type and makes final classifications based on the percentages of positive, negative and inconclusive XRF readings, and on the subsequent confirmatory tests as performed.

Individual LBP Inspection Reports for each unit inspected are provided in Appendix B. Appendix C contains bulk sample laboratory reports for paint chip analysis. Floor plans illustrating the extent of LBP in housing units (typical housing unit floor plans) including bulk paint film sample locations are provided in Appendix D.

3.1 Inventory of Components Tested for Lead-Based Paint

The following tables list the components tested for LBP, including the location and the condition of the painted component:

Table 1
2 Bedroom Units

Component	Location	Paint Condition
A/C Box	Utility	Good
Attic Hatch	Entry/Storage (2 nd floor units only)	Good
Baseboard	Family Room, Kitchen, Living/Dining Room, Entry/Storage, Utility, Master Bedroom, and Bedroom 2	Good
Basecove	Bathroom (1 st floor units only)	Good
Cabinet	Kitchen and Bathroom	Good
Ceiling	Family Room, Kitchen, Living/Dining Room, Entry/Storage, Utility, Bathroom, Master Bedroom, and Bedroom 2	Good
Column	Exterior	Good
Door	Entry/Storage, Utility, Bathroom, Master Bedroom, Bedroom 2, Exterior Storage, and Exterior	Good
Door Casing	Entry/Storage, Lanai (1 st floor units only), Bathroom, Master Bedroom, Bedroom 2, Exterior Storage, and Exterior	Good
Downspout	Exterior	Good
Electric Box	Exterior	Good
Floor	Bathroom (1 st floor units only)	Good
Foundation	Exterior	Fair – Poor
Fuse Box	Exterior	Good
Overhang	Exterior	Good

2 Bedroom Units (continued)

Component	Location	Paint Condition
Railing	Exterior	Good
Shelf	Entry/Storage, Master Bedroom, and Bedroom 2	Good
Stair	Exterior	Good
Threshold	Lanai (1 st floor units only) and Exterior	Good - Fair
Wall	Family Room, Kitchen, Living/Dining Room, Lanai, Entry/Storage, Utility, Bathroom, Master Bedroom, and Bedroom 2	Good
Window Sill	Family Room (2 nd floor units only), Kitchen (2 nd floor units only), Living/Dining Room (2 nd floor units only), Utility, Master Bedroom, and Bedroom 2	Good

Table 2

3 Bedrooms Units

Component	Location	Paint Condition
A/C Box	Entry	Good
Attic Hatch	Hall/Storage	Good
Baseboard	Family Room, Kitchen, Utility, Living/Dining Room, Entry, Hall/Storage, Master Bedroom, Bedroom 2, and Bedroom 3	Good
Basecove	Bathroom 1, Bathroom 2, and Bathroom 3	Good
Cabinet	Kitchen, Bathroom 1, Bathroom 2, and Bathroom 3	Good

3 Bedroom Units (continued)

Component	Location	Paint Condition
Ceiling	Family Room, Kitchen, Utility, Living/Dining Room, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, and Bedroom 3	Good
Column	Exterior	Good
Door	Family Room, Garage, Entry/Storage, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, and Exterior	Good
Door Casing	Family Room, Garage, Lanai, Entry/Storage, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, and Exterior	Good
Downspout	Exterior	Good
Electric Box	Exterior	Good
Floor	Bathroom 1, Bathroom 2, and Bathroom 3	Good
Foundation	Exterior	Fair – Poor
Fuse Box	Exterior	Good
Garage Door	Garage and Exterior	Good
Post	Exterior	Good - Fair
Railing	Entry	Good
Shelf	Entry, Hall/Storage, Master Bedroom, Bedroom 2, and Bedroom 3	Good
Stair	Entry	Good
Stringer	Entry	Good
Threshold	Lanai and Exterior	Good – Fair

3 Bedroom Units (continued)

Component	Location	Paint Condition
Wall	Family Room, Garage, Kitchen, Utility, Living/Dining Room, Lanai, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, and Bedroom 3	Good
Window Sill	Entry, Hall/Storage, Master Bedroom, Bedroom 2, and Bedroom 3	Good

Table 3

4 Bedrooms Units

Component	Location	Paint Condition
A/C Box	Entry	Good
Attic Hatch	Hall/Storage	Good
Baseboard	Family Room, Kitchen, Utility, Living/Dining Room, Entry, Hall/Storage, Master Bedroom, Bedroom 2, Bedroom 3, and Bedroom 4	Good
Basecove	Bathroom 1, Bathroom 2, and Bathroom 3	Good
Cabinet	Kitchen, Bathroom 1, Bathroom 2, and Bathroom 3	Good
Ceiling	Family Room, Garage, Kitchen, Utility, Living/Dining Room, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, and Bedroom 4	Good
Column	Exterior	Good
Door	Family Room, Garage, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, and Exterior	Good

4 Bedroom Units (continued)

Component	Location	Paint Condition
Door Casing	Family Room, Garage, Lanai, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, and Exterior	Good
Downspout	Exterior	Good
Electric Box	Exterior	Good
Floor	Bathroom 1, Bathroom 2, and Bathroom 3	Good
Foundation	Exterior	Fair – Poor
Fuse Box	Exterior	Good
Garage Door	Garage and Exterior	Good
Post	Exterior	Good - Fair
Railing	Entry	Good
Shelf	Entry, Hall/Storage, Master Bedroom, Bedroom 2, Bedroom 3, and Bedroom 4	Good
Stair	Entry	Good
Stringer	Entry	Good
Threshold	Lanai and Exterior	Good – Fair
Wall	Family Room, Garage, Kitchen, Utility, Living/Dining Room, Lanai, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, and Bedroom 4	Good
Window Sill	Entry, Hall/Storage, Master Bedroom, Bedroom 2, Bedroom 3, and Bedroom 4	Good

Table 4
5 Bedrooms Units

Component	Location	Paint Condition
A/C Box	Utility	Good
Attic Hatch	Hall/Storage and Bedroom 4	Good
Baseboard	Family Room, Kitchen, Utility, Living/Dining Room, Entry, Hall/Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, and Bedroom 5	Good
Basecove	Bathroom 1, Bathroom 2, and Bathroom 3	Good
Cabinet	Kitchen, Bathroom 1, Bathroom 2, and Bathroom 3	Good
Ceiling	Family Room, Kitchen, Utility, Living/Dining Room, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, and Bedroom 5	Good
Column	Exterior	Good
Door	Utility, Garage, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, Bedroom 5, and Exterior	Good
Door Casing	Utility, Garage, Lanai, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, Bedroom 5, and Exterior	Good
Downspout	Exterior	Good
Electric Box	Exterior	Good
Floor	Bathroom 1, Bathroom 2, and Bathroom 3	Good

5 Bedroom Units (continued)

Component	Location	Paint Condition
Foundation	Exterior	Fair – Poor
Fuse Box	Exterior	Good
Garage Door	Garage and Exterior	Good
Post	Exterior	Good - Fair
Railing	Entry	Good
Shelf	Entry, Hall/Storage, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, and Bedroom 5	Good
Stair	Entry	Good
Step	Entry	Good
Stringer	Entry	Good
Threshold	Lanai and Exterior	Good
Wall	Family Room, Garage, Kitchen, Utility, Living/Dining Room, Lanai, Entry, Hall/Storage, Bathroom 1, Bathroom 2, Bathroom 3, Master Bedroom, Bedroom 2, Bedroom 3, Bedroom 4, and Bedroom 5	Good
Window Sill	Hall/Storage, Master Bedroom, Bedroom 2, Bedroom	Good

3.2 Summary of Component Types Determined to Contain Lead-Based Paint

The following component types were determined to contain lead-based paint:

2 Bedroom unit	
Component Type:	Metal Handrail (black)
Typical Location:	Handrail associated with stairs leading to 2 nd floor two bedroom units
Percent above 1.0 mg/cm²:	87.5%
Condition:	Good

5 Bedroom unit	
Component Type:	Ceramic tile basecove
Typical Location:	1002F – Bathroom 3
Percent above 1.0 mg/cm²:	1%*
Condition:	Good

Notes:

* The percentage of positive ceramic tile basecove fell below 15% requiring confirmatory sampling. Since lead in ceramic tile is in the glazing, confirmatory samples could not be collected. Therefore, the lead containing ceramic tile basecove is considered localized within unit 1002F (Bathroom 3). **Ceramic tile basecove may also contain lead in units not tested.**

3.3 Summary of Confirmatory Sample Results

XRF Readings from the foundations of units 1053A and 1070F yielded positive results. Bulk paint film samples were collected from the foundations of the two units and analysis results were below the HUD level (0.5% lead by weight) for lead-based paint

XRF results of the metal stairs associated with the two bedroom units were inconclusive in four units. Confirmatory sampling determined this component type to be below the HUD regulatory limit for lead-based paint. The following table summarizes all confirmatory samples collected:

Sample ID Number	Component	Result (% by weight)	LBP (Yes/No)
Pb-MRBH-1016A-85	Metal stairs (black)	0.13%	No
Pb-MRBH-1047-1	Metal stairs (black)	0.023%	No
Pb-MRBH-1062-2	Metal stairs (black)	0.027%	No
Pb-MRBH-1071-3	Metal stairs (black)	0.023%	No
Pb-MRBH-1053-4	Concrete foundation (white)	Below reporting limit	No
Pb-MRBH-1070-5	Concrete foundation (white)	Below reporting limit	No

Conclusions

- The metal handrails (black) associated with the exterior stairs of the two bedroom units contained lead-based paint.
- Ceramic tile basecove (blue) located in Bathroom 3 of unit 1002F contained lead. **Ceramic tile basecove may also contain lead in units not tested.**
- Confirmatory sampling results confirmed that the concentrations of lead in the concrete foundation (white) and the metal stairs (black) were below the HUD regulatory limit for lead-based paint.

***Appendix A --- Summary Report of XRF Inspection Results
(Component Type Report)***

Component Type Report

Upon the completion of the XRF testing, results of each component type with positive readings were tabulated in a Multi-Family Housing Component Type Report. The following table illustrates the total number of each component tested and the percentage of positive and negative results.

Table A-1

Multi-Family Housing Component Type Report (Ceramic tile basecove)					
Unit	total #	# pos	% pos	# neg	% neg
1000E	3	0	0.00%	3	100.00%
1002F	2	1	50.00%	1	50.00%
1004D	0	0	0.00%	0	0.00%
1016A	1	0	0.00%	1	100.00%
1016E	1	0	0.00%	1	100.00%
1016F	0	0	0.00%	0	0.00%
1020B	0	0	0.00%	0	0.00%
1020E	1	0	0.00%	1	100.00%
1031E	3	0	0.00%	3	100.00%
1032A	3	0	0.00%	3	100.00%
1037A	3	0	0.00%	3	100.00%
1038B	3	0	0.00%	3	100.00%
1039A	1	0	0.00%	1	100.00%
1039B	0	0	0.00%	0	0.00%
1039C	1	0	0.00%	1	100.00%
1039D	0	0	0.00%	0	0.00%
1040B	3	0	0.00%	3	100.00%
1046A	3	0	0.00%	3	100.00%
1046C	3	0	0.00%	3	100.00%
1047A	1	0	0.00%	1	100.00%
1047B	0	0	0.00%	0	0.00%
1050E	1	0	0.00%	1	100.00%
1053A	3	0	0.00%	3	100.00%
1053E	3	0	0.00%	3	100.00%
1059A	3	0	0.00%	3	100.00%
1059C	3	0	0.00%	3	100.00%
1060B	3	0	0.00%	3	100.00%
1061C	3	0	0.00%	3	100.00%
1062D	0	0	0.00%	0	0.00%
1062E	1	0	0.00%	1	100.00%
1063C	3	0	0.00%	3	100.00%
1064E	3	0	0.00%	3	100.00%
1065A	3	0	0.00%	3	100.00%
1065B	3	0	0.00%	3	100.00%
1067B	3	0	0.00%	3	100.00%

Table A-1 (cont)					
Multi-Family Housing Component Type Report (continued)					
Ceramic tile basecove					
Unit	total #	# pos	% pos	# neg	% neg
1067C	3	0	0.00%	3	100.00%
1067D	3	0	0.00%	3	100.00%
1069A	3	0	0.00%	3	100.00%
1070F	3	0	0.00%	3	100.00%
1071A	1	0	0.00%	1	100.00%
1071B	0	0	0.00%	0	0.00%
1071C	1	0	0.00%	1	100.00%
1071F	0	0	0.00%	0	0.00%
1072F	3	0	0.00%	3	100.00%
1073A	1	0	0.00%	1	100.00%
1073B	0	0	0.00%	0	0.00%
1073F	0	0	0.00%	0	0.00%
Total	85	1	1.18%	84	98.82%

Appendix B --- Individual Unit LBP Inspection Reports

Lead-Based Paint Inspection Report
Mayport Naval Station - Ribault Bay Housing
Mayport, Florida
Unit: 1032A (5 bedroom)

Date: 08/24/99

Shot	Room Name	Substrate	Component	Color	Wall *	Condition	Result
1	Calibration			Red			1.1
2	Calibration			Red			1.2
3	Calibration			Red			1.1
4	Calibration			Wood			0.0
5	Calibration			Wood			0.0
6	Calibration			Wood			0.0
7	Family Room	Gypsum	Wall	White	A	Good	-0.2
8	Family Room	Gypsum	Wall	White	B	Good	-0.2
9	Family Room	Gypsum	Wall	White	C	Good	-0.1
10	Family Room	Gypsum	Wall	White	D	Good	0.0
11	Family Room	Gypsum	Ceiling	White	-	Good	0.2
12	Family Room	Wood	Baseboard	White	C	Good	0.1
13	Utility	Gypsum	Wall	White	A	Good	-0.1
14	Utility	Gypsum	Wall	White	B	Good	-0.1
15	Utility	Gypsum	Wall	White	C	Good	-0.1
16	Utility	Gypsum	Wall	White	D	Good	-0.3
17	Utility	Gypsum	Ceiling	White	-	Good	-0.1
18	Utility	Wood	Baseboard	White	B	Good	-0.1
19	Utility	Wood	Door	White	A	Good	-0.2
20	Utility	Wood	Door Casing	White	A	Good	-0.1
21	Utility	Wood	A/C Box	White	B	Good	-0.1
22	Garage	Metal	Garage Door	White	A	Good	0.0
23	Garage	Gypsum	Wall	White	C	Good	-0.1
24	Garage	Wood	Door	White	C	Good	-0.1
25	Garage	Wood	Door Casing	White	C	Good	-0.1
26	Kitchen	Gypsum	Wall	White	A	Good	-0.1
27	Kitchen	Gypsum	Wall	White	B	Good	-0.3
28	Kitchen	Gypsum	Wall	White	C	Good	-0.1
29	Kitchen	Gypsum	Wall	White	D	Good	-0.1
30	Kitchen	Gypsum	Ceiling	White	-	Good	-0.2
31	Kitchen	Wood	Baseboard	White	B	Good	0.1
32	Kitchen	Wood	Cabinet	Stain	B	Good	-0.1
33	Living/Dining	Gypsum	Wall	White	A	Good	-0.1
34	Living/Dining	Gypsum	Wall	White	B	Good	-0.1
35	Living/Dining	Gypsum	Wall	White	C	Good	-0.2
36	Living/Dining	Gypsum	Wall	White	D	Good	-0.1
37	Living/Dining	Gypsum	Ceiling	White	-	Good	0.0
38	Living/Dining	Wood	Baseboard	White	A	Good	0.3

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
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* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
					*		
39	Lanai	Wood	Wall	White	B	Good	0.0
40	Lanai	Wood	Wall	White	C	Good	0.0
41	Lanai	Wood	Wall	White	D	Good	0.0
42	Lanai	Wood	Door Casing	White	B	Good	0.0
43	Lanai	Wood	Threshold	Blue	A	Good	0.1
44	Entry	Gypsum	Wall	White	A	Good	-0.1
45	Entry	Gypsum	Wall	White	B	Good	0.0
46	Entry	Gypsum	Wall	White	C	Good	-0.1
47	Entry	Gypsum	Wall	White	D	Good	-0.1
48	Entry	Gypsum	Ceiling	White	-	Good	0.4
49	Entry	Wood	Baseboard	White	B	Good	-0.2
50	Entry	Wood	Door	White	A	Good	-0.1
51	Entry	Wood	Door Casing	White	A	Good	-0.1
52	Entry	Wood	Stair	White	B	Good	0.1
53	Entry	Wood	Railing	White	-	Good	-0.1
54	Entry	Wood	Stair Railing	Stain	-	Good	-0.2
55	Entry	Wood	Stair	Stain	-	Good	0.2
56	Entry	Wood	Stringer	Stain	-	Good	-0.1
57	Entry	Wood	Shelf	White	A	Good	0.0
58	Entry	Metal	Door	White	B	Good	0.0
59	Bedroom 5	Gypsum	Wall	White	A	Good	0.0
60	Bedroom 5	Gypsum	Wall	White	B	Good	0.0
61	Bedroom 5	Gypsum	Wall	White	C	Good	-0.2
62	Bedroom 5	Gypsum	Wall	White	D	Good	-0.2
63	Bedroom 5	Gypsum	Ceiling	White	-	Good	0.0
64	Bedroom 5	Wood	Baseboard	White	D	Good	0.0
65	Bedroom 5	Metal	Door	White	B	Good	0.2
66	Bedroom 5	Wood	Door	White	C	Good	-0.3
67	Bedroom 5	Wood	Door Casing	White	C	Good	0.0
68	Bedroom 5	Wood	Window Sill	White	A	Good	0.2
69	Bedroom 5	Wood	Shelf	White	B	Good	0.0
70	Bathroom 3	Gypsum	Wall	White	A	Good	0.0
71	Bathroom 3	Gypsum	Wall	White	B	Good	-0.1
72	Bathroom 3	Gypsum	Wall	White	C	Good	-0.1
73	Bathroom 3	Gypsum	Wall	White	D	Good	-0.1
74	Bathroom 3	Gypsum	Ceiling	White	-	Good	-0.2
75	Bathroom 3	Ceramic Tile	Floor	Blue	-	Good	0.0
76	Bathroom 3	Ceramic Tile	Basecove	Blue	A	Good	-0.3
77	Bathroom 3	Wood	Door	White	D	Good	-0.3
78	Bathroom 3	Wood	Door Casing	White	D	Good	-0.1
79	Bathroom 3	Wood	Cabinet	Stain	C	Good	0.0
80	Bedroom 4	Gypsum	Wall	White	A	Good	-0.2
81	Bedroom 4	Gypsum	Wall	White	B	Good	-0.2
82	Bedroom 4	Gypsum	Wall	White	C	Good	-0.2

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
83	Bedroom 4	Gypsum	Wall	White	D	Good	-0.1
84	Bedroom 4	Gypsum	Ceiling	White	-	Good	0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
85	Bedroom 4	Wood	Baseboard	White	A	Good	0.3
86	Bedroom 4	Wood	Door	White	A	Good	-0.2
87	Bedroom 4	Wood	Door Casing	White	A	Good	0.0
88	Bedroom 4	Metal	Door	White	A	Good	0.0
89	Bedroom 4	Wood	Window Sill	White	C	Good	-0.3
90	Bedroom 4	Wood	Shelf	White	A	Good	0.0
91	Bedroom 4	Wood	Attic Hatch	White	-	Good	-0.1
92	Hall/Storage	Gypsum	Wall	White	A	Good	0.0
93	Hall/Storage	Gypsum	Wall	White	B	Good	-0.1
94	Hall/Storage	Gypsum	Wall	White	C	Good	-0.1
95	Hall/Storage	Gypsum	Wall	White	D	Good	-0.1
96	Hall/Storage	Gypsum	Ceiling	White	-	Good	0.0
97	Hall/Storage	Wood	Baseboard	White	A	Good	0.1
98	Hall/Storage	Metal	Door	White	C	Good	-0.2
99	Hall/Storage	Wood	Door	White	A	Good	-0.2
100	Hall/Storage	Wood	Door Casing	White	A	Good	0.0
101	Hall/Storage	Wood	Window Sill	White	B	Good	-0.1
102	Hall/Storage	Wood	Shelf	White	A	Good	0.2
103	Hall/Storage	Wood	Attic Hatch	White	-	Good	-0.2
104	Bedroom 3	Gypsum	Wall	White	A	Good	-0.1
105	Bedroom 3	Gypsum	Wall	White	B	Good	-0.1
106	Bedroom 3	Gypsum	Wall	White	C	Good	0.0
107	Bedroom 3	Gypsum	Wall	White	D	Good	-0.2
108	Bedroom 3	Gypsum	Ceiling	White	-	Good	0.0
109	Bedroom 3	Wood	Baseboard	White	B	Good	-0.1
110	Bedroom 3	Metal	Door	White	D	Good	-0.1
111	Bedroom 3	Wood	Door	White	A	Good	-0.3
112	Bedroom 3	Wood	Door Casing	White	A	Good	0.0
113	Bedroom 3	Wood	Window Sill	White	C	Good	-0.1
114	Bedroom 3	Wood	Shelf	White	D	Good	0.0
115	Bedroom 2	Gypsum	Wall	White	A	Good	-0.1
116	Bedroom 2	Gypsum	Wall	White	B	Good	-0.1
117	Bedroom 2	Gypsum	Wall	White	C	Good	-0.1
118	Bedroom 2	Gypsum	Wall	White	D	Good	-0.1
119	Bedroom 2	Gypsum	Ceiling	White	-	Good	0.0
120	Bedroom 2	Wood	Baseboard	White	D	Good	0.1
121	Bedroom 2	Metal	Door	White	B	Good	0.1
122	Bedroom 2	Wood	Door	White	A	Good	-0.1
123	Bedroom 2	Wood	Door Casing	White	A	Good	0.0
124	Bedroom 2	Wood	Window Sill	White	C	Good	0.0
125	Bedroom 2	Wood	Shelf	White	B	Good	-0.1
126	Bathroom 2	Gypsum	Wall	White	A	Good	-0.1
127	Bathroom 2	Gypsum	Wall	White	B	Good	-0.1
128	Bathroom 2	Gypsum	Wall	White	C	Good	-0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
129	Bathroom 2	Gypsum	Wall	White	D	Good	0.0
130	Bathroom 2	Gypsum	Ceiling	White	-	Good	-0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
131	Bathroom 2	Ceramic Tile	Floor	White	-	Good	-0.1
132	Bathroom 2	Ceramic Tile	Basecove	White	C	Good	0.0
133	Bathroom 2	Wood	Door	White	C	Good	0.0
134	Bathroom 2	Wood	Door Casing	White	C	Good	-0.1
135	Bathroom 2	Wood	Cabinet	Stain	A	Good	0.0
136	Master Bedroom	Gypsum	Wall	White	A	Good	-0.2
137	Master Bedroom	Gypsum	Wall	White	B	Good	-0.1
138	Master Bedroom	Gypsum	Wall	White	C	Good	0.0
139	Master Bedroom	Gypsum	Wall	White	D	Good	-0.1
140	Master Bedroom	Gypsum	Ceiling	White	-	Good	0.2
141	Master Bedroom	Wood	Baseboard	White	B	Good	0.1
142	Master Bedroom	Metal	Door	White	B	Good	-0.2
143	Master Bedroom	Wood	Door	White	C	Good	-0.2
144	Master Bedroom	Wood	Door Casing	White	C	Good	0.2
145	Master Bedroom	Wood	Window Sill	White	A	Good	-0.2
146	Master Bedroom	Wood	Shelf	White	A	Good	0.0
147	Bathroom 1	Gypsum	Wall	White	A	Good	-0.1
148	Bathroom 1	Gypsum	Wall	White	B	Good	-0.1
149	Bathroom 1	Gypsum	Wall	White	C	Good	-0.1
150	Bathroom 1	Gypsum	Wall	White	D	Good	-0.1
151	Bathroom 1	Gypsum	Ceiling	White	-	Good	-0.1
152	Bathroom 1	Ceramic Tile	Floor	Yellow	-	Good	-0.4
153	Bathroom 1	Ceramic Tile	Basecove	Yellow	A	Good	0.0
154	Bathroom 1	Wood	Cabinet	Stain	C	Good	0.0
155	Bathroom 1	Wood	Door	White	A	Good	-0.2
156	Bathroom 1	Wood	Door Casing	White	A	Good	0.2
157	Exterior	Wood	Threshold	Blue	A	Good	0.2
158	Exterior	Metal	Column	Black	A	Good	-0.1
159	Exterior	Metal	Downspout	White	A	Good	0.2
160	Exterior	Metal	Garage Door	Blue	A	Good	-0.1
161	Exterior	Concrete	Foundation	White	A	Good	0.4
162	Exterior	Metal	Electric Box	White	A	Good	0.0
163	Exterior	Metal	Electric Box	White	B	Good	0.0
164	Exterior	Concrete	Foundation	White	B	Good	0.1
165	Exterior	Metal	Downspout	White	C	Good	0.3
166	Exterior	Wood	Threshold	Blue	C	Good	0.0
167	Exterior	Concrete	Foundation	White	C	Good	0.0
168	Exterior	Metal	Downspout	White	D	Good	-0.1
169	Exterior	Metal	Electric Box	White	D	Good	-0.1
170	Exterior	Concrete	Foundation	White	D	Good	0.6
171	Calibration			Red			1.0
172	Calibration			Red			0.9
173	Calibration			Red			0.9
174	Calibration			Wood			0.0

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
175	Calibration			Wood	*		0.0
176	Calibration			Wood			0.0

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
40	Bedroom 4	Gypsum	Ceiling	White	-	Good	0.2
41	Bedroom 4	Wood	Baseboard	White	A	Good	-0.1
42	Bedroom 4	Metal	Door	White	A	Good	-0.2
43	Bedroom 4	Wood	Door	White	A	Good	-0.2
44	Bedroom 4	Wood	Door Casing	White	A	Good	-0.1
45	Bedroom 4	Wood	Window Sill	White	C	Good	0.1
46	Bedroom 4	Wood	Shelf	White	A	Good	-0.1
47	Bedroom 4	Wood	Attic Hatch	White	-	Good	-0.1
48	Family Room	Gypsum	Wall	White	A	Good	0.0
49	Family Room	Gypsum	Wall	White	B	Good	-0.2
50	Family Room	Gypsum	Wall	White	C	Good	-0.1
51	Family Room	Gypsum	Wall	White	D	Good	-0.2
52	Family Room	Gypsum	Ceiling	White	-	Good	0.0
53	Family Room	Wood	Baseboard	White	D	Good	0.1
54	Kitchen	Gypsum	Wall	White	A	Good	0.0
55	Kitchen	Gypsum	Wall	White	B	Good	-0.1
56	Kitchen	Gypsum	Wall	White	C	Good	-0.2
57	Kitchen	Gypsum	Wall	White	D	Good	-0.1
58	Kitchen	Gypsum	Ceiling	White	-	Good	-0.1
59	Kitchen	Wood	Baseboard	White	A	Good	0.0
60	Kitchen	Wood	Cabinet	Stain	B	Good	0.0
61	Hall/Storage	Gypsum	Wall	White	A	Good	-0.1
62	Hall/Storage	Gypsum	Wall	White	B	Good	-0.2
63	Hall/Storage	Gypsum	Wall	White	C	Good	-0.3
64	Hall/Storage	Gypsum	Wall	White	D	Good	0.0
65	Hall/Storage	Gypsum	Ceiling	White	-	Good	0.0
66	Hall/Storage	Wood	Baseboard	White	C	Good	0.2
67	Hall/Storage	Metal	Door	White	C	Good	-0.1
68	Hall/Storage	Wood	Door	White	A	Good	-0.3
69	Hall/Storage	Wood	Door Casing	White	A	Good	0.0
70	Hall/Storage	Wood	Window Sill	White	B	Good	0.0
71	Hall/Storage	Wood	Shelf	White	C	Good	-0.4
72	Hall/Storage	Wood	Attic Hatch	White	-	Good	-0.1
73	Bedroom 3	Gypsum	Wall	White	A	Good	-0.2
74	Bedroom 3	Gypsum	Wall	White	B	Good	0.0
75	Bedroom 3	Gypsum	Wall	White	C	Good	-0.2
76	Bedroom 3	Gypsum	Wall	White	D	Good	0.0
77	Bedroom 3	Gypsum	Ceiling	White	-	Good	0.0
78	Bedroom 3	Wood	Baseboard	White	A	Good	0.0
79	Bedroom 3	Metal	Door	White	D	Good	-0.1
80	Bedroom 3	Wood	Door	White	A	Good	-0.1
81	Bedroom 3	Wood	Door Casing	White	A	Good	-0.1
82	Bedroom 3	Wood	Window Sill	White	C	Good	-0.1
83	Bedroom 3	Wood	Shelf	White	D	Good	-0.2

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
84	Bedroom 2	Gypsum	Wall	White	A	Good	-0.3
85	Bedroom 2	Gypsum	Wall	White	B	Good	-0.1
86	Bedroom 2	Gypsum	Wall	White	C	Good	-0.1
87	Bedroom 2	Gypsum	Wall	White	D	Good	-0.1
88	Bedroom 2	Gypsum	Ceiling	White	-	Good	0.0
89	Bedroom 2	Wood	Baseboard	White	C	Good	-0.2
90	Bedroom 2	Metal	Door	White	B	Good	-0.1
91	Bedroom 2	Wood	Door	White	A	Good	0.0
92	Bedroom 2	Wood	Door Casing	White	A	Good	0.0
93	Bedroom 2	Wood	Window Sill	White	C	Good	0.0
94	Bedroom 2	Wood	Shelf	White	B	Good	-0.1
95	Bathroom 2	Gypsum	Wall	White	A	Good	0.0
96	Bathroom 2	Gypsum	Wall	White	B	Good	-0.1
97	Bathroom 2	Gypsum	Wall	White	C	Good	0.0
98	Bathroom 2	Gypsum	Wall	White	D	Good	0.0
99	Bathroom 2	Gypsum	Ceiling	White	-	Good	0.0
100	Bathroom 2	Ceramic Tile	Floor	Green/gray	-	Good	-0.2
101	Bathroom 2	Ceramic Tile	Basecove	Green	C	Good	-0.1
102	Bathroom 2	Wood	Door	White	C	Good	-0.2
103	Bathroom 2	Wood	Door Casing	White	C	Good	-0.1
104	Bathroom 2	Wood	Cabinet	Stain	A	Good	-0.1
105	Master Bedroom	Gypsum	Wall	White	A	Good	0.0
106	Master Bedroom	Gypsum	Wall	White	B	Good	-0.4
107	Master Bedroom	Gypsum	Wall	White	C	Good	-0.1
108	Master Bedroom	Gypsum	Wall	White	D	Good	0.2
109	Master Bedroom	Gypsum	Ceiling	White	-	Good	0.2
110	Master Bedroom	Wood	Baseboard	White	B	Good	-0.1
111	Master Bedroom	Metal	Door	White	B	Good	-0.1
112	Master Bedroom	Wood	Door	White	C	Good	-0.1
113	Master Bedroom	Wood	Door Casing	White	C	Good	0.0
114	Master Bedroom	Wood	Window Sill	White	A	Good	0.0
115	Master Bedroom	Wood	Shelf	White	C	Good	0.0
116	Bathroom 1	Gypsum	Wall	White	A	Good	0.0
117	Bathroom 1	Gypsum	Wall	White	B	Good	-0.1
118	Bathroom 1	Gypsum	Wall	White	C	Good	0.0
119	Bathroom 1	Gypsum	Wall	White	D	Good	-0.2
120	Bathroom 1	Gypsum	Ceiling	White	-	Good	-0.2
121	Bathroom 1	Ceramic Tile	Floor	Yellow	-	Good	-0.4
122	Bathroom 1	Ceramic Tile	Basecove	Yellow	C	Good	-0.1
123	Bathroom 1	Wood	Door	White	A	Good	-0.2
124	Bathroom 1	Wood	Door Casing	White	A	Good	0.0
125	Bathroom 1	Wood	Cabinet	Stain	D	Good	-0.2
126	Utility	Gypsum	Wall	White	A	Good	-0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
					*		
127	Utility	Gypsum	Wall	White	B	Good	-0.1
128	Utility	Gypsum	Wall	White	C	Good	-0.1
129	Utility	Gypsum	Wall	White	D	Good	-0.2
130	Utility	Gypsum	Ceiling	White	-	Good	-0.1
131	Utility	Wood	Baseboard	White	B	Good	0.0
132	Utility	Wood	Door	White	A	Good	-0.2
133	Utility	Wood	Door Casing	White	A	Good	0.0
134	Utility	Wood	A/C Box	White	B	Good	0.2
135	Garage	Metal	Garage Door	White	A	Good	0.2
136	Garage	Gypsum	Wall	White	C	Good	-0.2
137	Garage	Wood	Door	White	C	Good	0.2
138	Garage	Wood	Door Casing	White	C	Good	-0.1
139	Bedroom 5	Gypsum	Wall	White	A	Good	0.0
140	Bedroom 5	Gypsum	Wall	White	B	Good	0.0
141	Bedroom 5	Gypsum	Wall	White	C	Good	-0.1
142	Bedroom 5	Gypsum	Wall	White	D	Good	-0.1
143	Bedroom 5	Gypsum	Ceiling	White	-	Good	0.0
144	Bedroom 5	Wood	Baseboard	White	B	Good	0.2
145	Bedroom 5	Metal	Door	White	B	Good	-0.1
146	Bedroom 5	Wood	Door	White	C	Good	-0.1
147	Bedroom 5	Wood	Door Casing	White	C	Good	0.0
148	Bedroom 5	Wood	Window Sill	White	A	Good	-0.1
149	Bedroom 5	Wood	Shelf	White	B	Good	-0.3
150	Bathroom 3	Gypsum	Wall	White	A	Good	-0.1
151	Bathroom 3	Gypsum	Wall	White	B	Good	-0.3
152	Bathroom 3	Gypsum	Wall	White	C	Good	-0.1
153	Bathroom 3	Gypsum	Wall	White	D	Good	-0.2
154	Bathroom 3	Gypsum	Ceiling	White	-	Good	0.0
155	Bathroom 3	Ceramic Tile	Floor	Blue	-	Good	-0.2
156	Bathroom 3	Ceramic Tile	Basecove	Blue	D	Good	-0.2
157	Bathroom 3	Wood	Door	White	D	Good	0.0
158	Bathroom 3	Wood	Door Casing	White	D	Good	0.0
159	Bathroom 3	Wood	Cabinet	Stain	C	Good	-0.2
160	Exterior	Metal	Column	Black	A	Good	-0.1
161	Exterior	Wood	Door	Blue	A	Good	-0.1
162	Exterior	Wood	Threshold	Blue	A	Good	-0.1
163	Exterior	Wood	Door Casing	Blue	A	Good	-0.1
164	Exterior	Concrete	Foundation	White	A	Fair	0.0
165	Exterior	Metal	Downspout	White	A	Good	0.3
166	Exterior	Wood	Post	White	A	Fair	-0.2
167	Exterior	Metal	Electric Box	White	A	Good	0.0
168	Exterior	Metal	Electric Box	White	B	Good	0.1
169	Exterior	Concrete	Foundation	White	B	Fair	0.4
170	Exterior	Concrete	Foundation	White	C	Fair	-0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
171	Exterior	Wood	Threshold	Blue	C	Good	0.0
172	Exterior	Metal	Downspout	White	C	Good	-0.1
173	Exterior	Metal	Electric Box	Green	C	Good	0.0
174	Exterior	Metal	Downspout	White	D	Good	0.1
175	Exterior	Metal	Electric Box	White	D	Good	-0.1
176	Exterior	Concrete	Foundation	White	D	Fair	0.1
177	Exterior	Metal	Garage Door	Blue	A	Good	-0.1
178	Calibration			Red			1.1
179	Calibration			Red			1.2
180	Calibration			Red			1.1
181	Calibration			Wood			-0.1
182	Calibration			Wood			0.0
183	Calibration			Wood			0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Lead-Based Paint Inspection Report
Mayport Naval Station - Ribault Bay Housing
Mayport, Florida
Unit: 1065B (4 bedroom)

Date: 08/26/99

Shot	Room Name	Substrate	Component	Color	Wall *	Condition	Result
1	Calibration			Red			1.2
2	Calibration			Red			1.0
3	Calibration			Red			1.0
4	Calibration			Wood			-0.1
5	Calibration			Wood			0.1
6	Calibration			Wood			0.1
7	Family Room	Gypsum	Wall	White	A	Good	-0.2
8	Family Room	Gypsum	Wall	White	B	Good	-0.1
9	Family Room	Gypsum	Wall	White	C	Good	-0.2
10	Family Room	Gypsum	Wall	White	D	Good	0.1
11	Family Room	Gypsum	Ceiling	White	-	Good	0.0
12	Family Room	Wood	Baseboard	White	C	Good	0.0
13	Family Room	Wood	Door	White	A	Good	0.0
14	Family Room	Wood	Door Casing	White	A	Good	-0.1
15	Garage	Metal	Garage Door	White	A	Good	0.0
16	Garage	Gypsum	Wall	White	C	Good	-0.2
17	Garage	Wood	Door	White	C	Good	0.0
18	Garage	Wood	Door Casing	White	C	Good	-0.1
19	Garage	Gypsum	Ceiling	White	-	Good	-0.1
20	Kitchen	Gypsum	Wall	White	A	Good	-0.3
21	Kitchen	Gypsum	Wall	White	B	Good	0.0
22	Kitchen	Gypsum	Wall	White	C	Good	0.0
23	Kitchen	Gypsum	Wall	White	D	Good	0.0
24	Kitchen	Gypsum	Ceiling	White	-	Good	-0.2
25	Kitchen	Wood	Baseboard	White	A	Good	0.0
26	Kitchen	Wood	Cabinet	Stain	B	Good	0.0
27	Utility	Gypsum	Wall	White	A	Good	-0.1
28	Utility	Gypsum	Wall	White	B	Good	0.0
29	Utility	Gypsum	Wall	White	C	Good	0.1
30	Utility	Gypsum	Wall	White	D	Good	-0.2
31	Utility	Gypsum	Ceiling	White	-	Good	-0.2
32	Utility	Wood	Baseboard	White	A	Good	0.1
33	Living/Dining	Gypsum	Wall	White	A	Good	-0.2
34	Living/Dining	Gypsum	Wall	White	B	Good	-0.2
35	Living/Dining	Gypsum	Wall	White	C	Good	-0.2
36	Living/Dining	Gypsum	Wall	White	D	Good	-0.3
37	Living/Dining	Gypsum	Ceiling	White	-	Good	0.0
38	Living/Dining	Wood	Baseboard	White	A	Good	0.2

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
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* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
39	Lanai	Wood	Wall	White	B	Good	0.0
40	Lanai	Wood	Wall	White	C	Good	0.0
41	Lanai	Wood	Wall	White	D	Good	-0.1
42	Lanai	Wood	Door Casing	White	B	Good	-0.1
43	Lanai	Wood	Threshold	Blue	A	Good	0.0
44	Entry	Gypsum	Wall	White	A	Good	-0.1
45	Entry	Gypsum	Wall	White	B	Good	0.0
46	Entry	Gypsum	Wall	White	C	Good	0.0
47	Entry	Gypsum	Wall	White	D	Good	-0.3
48	Entry	Gypsum	Ceiling	White	-	Good	0.0
49	Entry	Wood	Baseboard	White	B	Good	-0.4
50	Entry	Metal	Door	White	D	Good	-0.2
51	Entry	Wood	Door	White	A	Good	-0.1
52	Entry	Wood	Door Casing	White	A	Good	-0.1
53	Entry	Wood	Shelf	White	A	Good	-0.2
54	Entry	Wood	Stair	Stain	-	Good	0.0
55	Entry	Wood	Stringer	White	-	Good	0.0
56	Entry	Wood	Railing	White	-	Good	0.0
57	Entry	Wood	Railing	Stain	-	Good	0.0
58	Entry	Wood	A/C Box	White	D	Good	-0.1
59	Bathroom 3	Gypsum	Wall	White	A	Good	-0.2
60	Bathroom 3	Gypsum	Wall	White	B	Good	0.0
61	Bathroom 3	Gypsum	Wall	White	C	Good	-0.1
62	Bathroom 3	Gypsum	Wall	White	D	Good	-0.1
63	Bathroom 3	Gypsum	Ceiling	White	-	Good	-0.1
64	Bathroom 3	Ceramic Tile	Floor	Blue	-	Good	-0.2
65	Bathroom 3	Ceramic Tile	Basecove	White	B	Good	-0.3
66	Bathroom 3	Wood	Door	White	B	Good	-0.2
67	Bathroom 3	Wood	Door Casing	White	B	Good	-0.1
68	Bathroom 3	Wood	Cabinet	Stain	D	Good	-0.1
69	Hall/Storage	Gypsum	Wall	White	A	Good	-0.2
70	Hall/Storage	Gypsum	Wall	White	B	Good	-0.2
71	Hall/Storage	Gypsum	Wall	White	C	Good	0.0
72	Hall/Storage	Gypsum	Wall	White	D	Good	-0.1
73	Hall/Storage	Gypsum	Ceiling	White	-	Good	0.1
74	Hall/Storage	Wood	Baseboard	White	D	Good	-0.1
75	Hall/Storage	Metal	Door	White	B	Good	-0.1
76	Hall/Storage	Wood	Door	White	D	Good	-0.2
77	Hall/Storage	Wood	Door Casing	White	D	Good	0.0
78	Hall/Storage	Wood	Shelf	White	C	Good	-0.1
79	Hall/Storage	Wood	Attic Hatch	White	-	Good	-0.1
80	Bedroom 4	Gypsum	Wall	White	A	Good	0.0
81	Bedroom 4	Gypsum	Wall	White	B	Good	-0.1
82	Bedroom 4	Gypsum	Wall	White	C	Good	-0.2

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall *	Condition	Result
83	Bedroom 4	Gypsum	Wall	White	D	Good	-0.3
84	Bedroom 4	Gypsum	Ceiling	White	-	Good	0.2
85	Bedroom 4	Wood	Baseboard	White	A	Good	0.0
86	Bedroom 4	Metal	Door	White	C	Good	-0.1
87	Bedroom 4	Wood	Door	White	C	Good	-0.3
88	Bedroom 4	Wood	Door Casing	White	C	Good	0.2
89	Bedroom 4	Wood	Window Sill	White	A	Good	0.0
90	Bedroom 4	Wood	Shelf	White	C	Good	0.0
91	Master Bedroom	Gypsum	Wall	White	A	Good	-0.2
92	Master Bedroom	Gypsum	Wall	White	B	Good	-0.2
93	Master Bedroom	Gypsum	Wall	White	C	Good	-0.1
94	Master Bedroom	Gypsum	Wall	White	D	Good	-0.1
95	Master Bedroom	Gypsum	Ceiling	White	-	Good	-0.2
96	Master Bedroom	Wood	Baseboard	White	B	Good	0.0
97	Master Bedroom	Metal	Door	White	B	Good	-0.1
98	Master Bedroom	Wood	Door	White	B	Good	-0.1
99	Master Bedroom	Wood	Door Casing	White	B	Good	0.0
100	Master Bedroom	Wood	Window Sill	White	A	Good	-0.1
101	Master Bedroom	Wood	Shelf	White	C	Good	0.0
102	Bathroom 1	Gypsum	Wall	White	A	Good	-0.2
103	Bathroom 1	Gypsum	Wall	White	B	Good	-0.2
104	Bathroom 1	Gypsum	Wall	White	C	Good	-0.1
105	Bathroom 1	Gypsum	Wall	White	D	Good	-0.1
106	Bathroom 1	Gypsum	Ceiling	White	-	Good	-0.1
107	Bathroom 1	Ceramic Tile	Floor	Yellow	-	Good	-0.2
108	Bathroom 1	Ceramic Tile	Basecove	Yellow	A	Good	-0.1
109	Bathroom 1	Wood	Door	White	B	Good	-0.1
110	Bathroom 1	Wood	Door Casing	White	B	Good	-0.1
111	Bathroom 1	Wood	Cabinet	Stain	C	Good	-0.2
112	Bathroom 2	Gypsum	Wall	White	A	Good	-0.2
113	Bathroom 2	Gypsum	Wall	White	B	Good	-0.1
114	Bathroom 2	Gypsum	Wall	White	C	Good	-0.1
115	Bathroom 2	Gypsum	Wall	White	D	Good	-0.1
116	Bathroom 2	Gypsum	Ceiling	White	-	Good	-0.1
117	Bathroom 2	Ceramic Tile	Floor	Green	-	Good	0.0
118	Bathroom 2	Ceramic Tile	Basecove	Green	C	Good	-0.2
119	Bathroom 2	Wood	Door	White	B	Good	0.0
120	Bathroom 2	Wood	Door Casing	White	B	Good	0.0
121	Bathroom 2	Wood	Cabinet	Stain	A	Good	0.0
122	Bedroom 2	Gypsum	Wall	White	A	Good	-0.2
123	Bedroom 2	Gypsum	Wall	White	B	Good	-0.1
124	Bedroom 2	Gypsum	Wall	White	C	Good	-0.1
125	Bedroom 2	Gypsum	Wall	White	D	Good	-0.2
126	Bedroom 2	Gypsum	Ceiling	White	-	Good	0.1

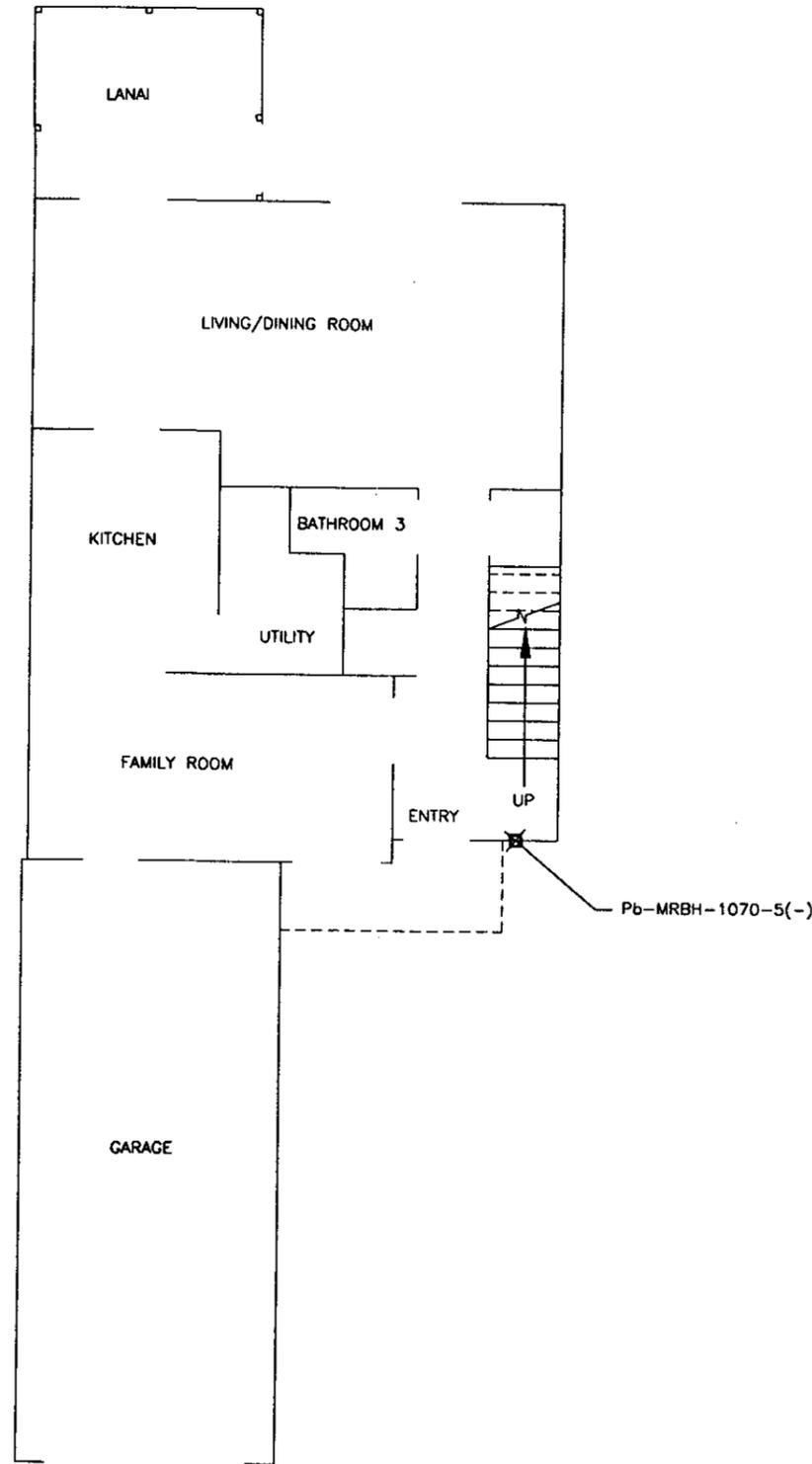
* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

Shot	Room Name	Substrate	Component	Color	Wall	Condition	Result
127	Bedroom 2	Wood	Baseboard	White	C	Good	-0.1
128	Bedroom 2	Metal	Door	White	B	Good	0.0
129	Bedroom 2	Wood	Door	White	A	Good	-0.1
130	Bedroom 2	Wood	Door Casing	White	A	Good	0.0
131	Bedroom 2	Wood	Window Sill	White	C	Good	0.0
132	Bedroom 2	Wood	Shelf	White	B	Good	-0.1
133	Bedroom 3	Gypsum	Wall	White	A	Good	0.0
134	Bedroom 3	Gypsum	Wall	White	B	Good	-0.1
135	Bedroom 3	Gypsum	Wall	White	C	Good	-0.2
136	Bedroom 3	Gypsum	Wall	White	D	Good	-0.1
137	Bedroom 3	Gypsum	Ceiling	White	-	Good	0.1
138	Bedroom 3	Wood	Baseboard	White	A	Good	0.1
139	Bedroom 3	Metal	Door	White	D	Good	-0.1
140	Bedroom 3	Wood	Door	White	A	Good	-0.3
141	Bedroom 3	Wood	Door Casing	White	A	Good	0.0
142	Bedroom 3	Wood	Window Sill	White	C	Good	-0.3
143	Bedroom 3	Wood	Shelf	White	D	Good	0.0
144	Calibration			Red			1.1
145	Calibration			Red			1.2
146	Calibration			Red			1.0
147	Calibration			Wood			0.2
148	Calibration			Wood			0.1
149	Calibration			Wood			0.1

* Wall A = Street side of the unit (subsequent walls are labeled in a clockwise fashion)

***Appendix C --- Laboratory Report for Paint Chip Sample
Analysis***

***Appendix D --- Floor Plans Illustrating Extent of LBP (Typical
Housing Unit Floor Plans)***



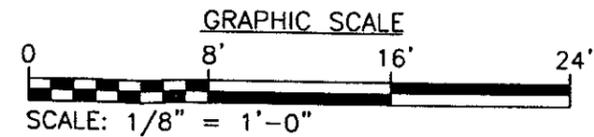
NOTE
NO LEAD-BASED PAINT WAS IDENTIFIED IN THIS UNIT TYPE.

SYMBOLS
 ◆ LOCATION OF BULK FILM SAMPLES COLLECTED
 (-) >0.5% LEAD BY WEIGHT

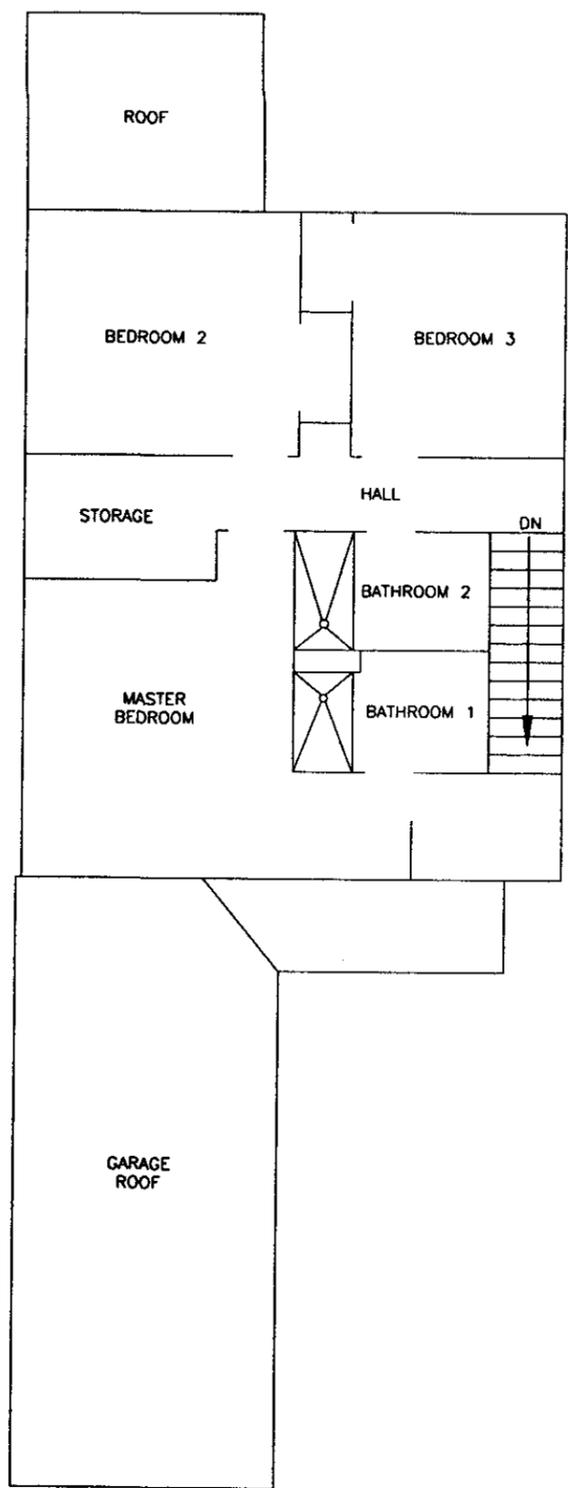
TYPICAL LEAD SAMPLE I.D. No.
 Pb-MRBH-1070-1(+)

- ↑ POSITIVE (+) OR NEGATIVE (-) FOR THE PRESENCE OF LEAD-BASED PAINT
- ↑ SAMPLE DESIGNATION
- ↑ UNIT NUMBER
- ↑ MAYPORT-RIBAULT BAY HOUSING
- ↑ LEAD

3 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING
FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"



DATE APPROV	DATE	OFFICER IN CHARGE	APPROVED
PREP BY	DATE	OFFICER IN CHARGE	APPROVED
REV. DESCRIPTION	DATE	OFFICER IN CHARGE	APPROVED
CAPE ENVIRONMENTAL MANAGEMENT INC. ATLANTA TSGM	ATLANTA TSGM	OFFICER IN CHARGE	APPROVED
SUPV. RIOS	DATE	OFFICER IN CHARGE	APPROVED
CH ENGR	DATE	OFFICER IN CHARGE	APPROVED
CRK	DATE	OFFICER IN CHARGE	APPROVED
S. BRYANT	DATE	OFFICER IN CHARGE	APPROVED
EC	DATE	OFFICER IN CHARGE	APPROVED
BR NO	DATE	OFFICER IN CHARGE	APPROVED
DIR	DATE	OFFICER IN CHARGE	APPROVED
DEPARTMENT OF THE NAVY SOUTHERN DIVISION CHARLESTON, S.C. NAVAL FACILITIES ENGINEERING COMMAND A-E SERVICES FOR ASBESTOS AND LEAD SURVEY AT MAYPORT NAVAL STATION, JACKSONVILLE, FL 3 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING - FIRST FLOOR PLAN (LEAD-BASED PAINT)			
SEAL AREA CODE ID No. SIZE B FED DRAWING NO. STA. PROJ. NO. CAPE PROJ. No. 90032.001.000 SPEC. NO. N/A CONSTR. CNTR. NO. N/A NAVFAC DRAWING NO. N/A SHEET 3 OF 6 38RLBP-1			

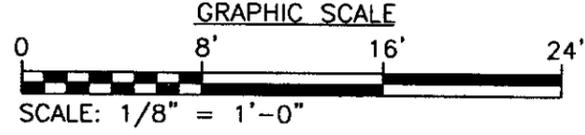


3 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
SECOND FLOOR PLAN
 SCALE: 1/8" = 1'-0"

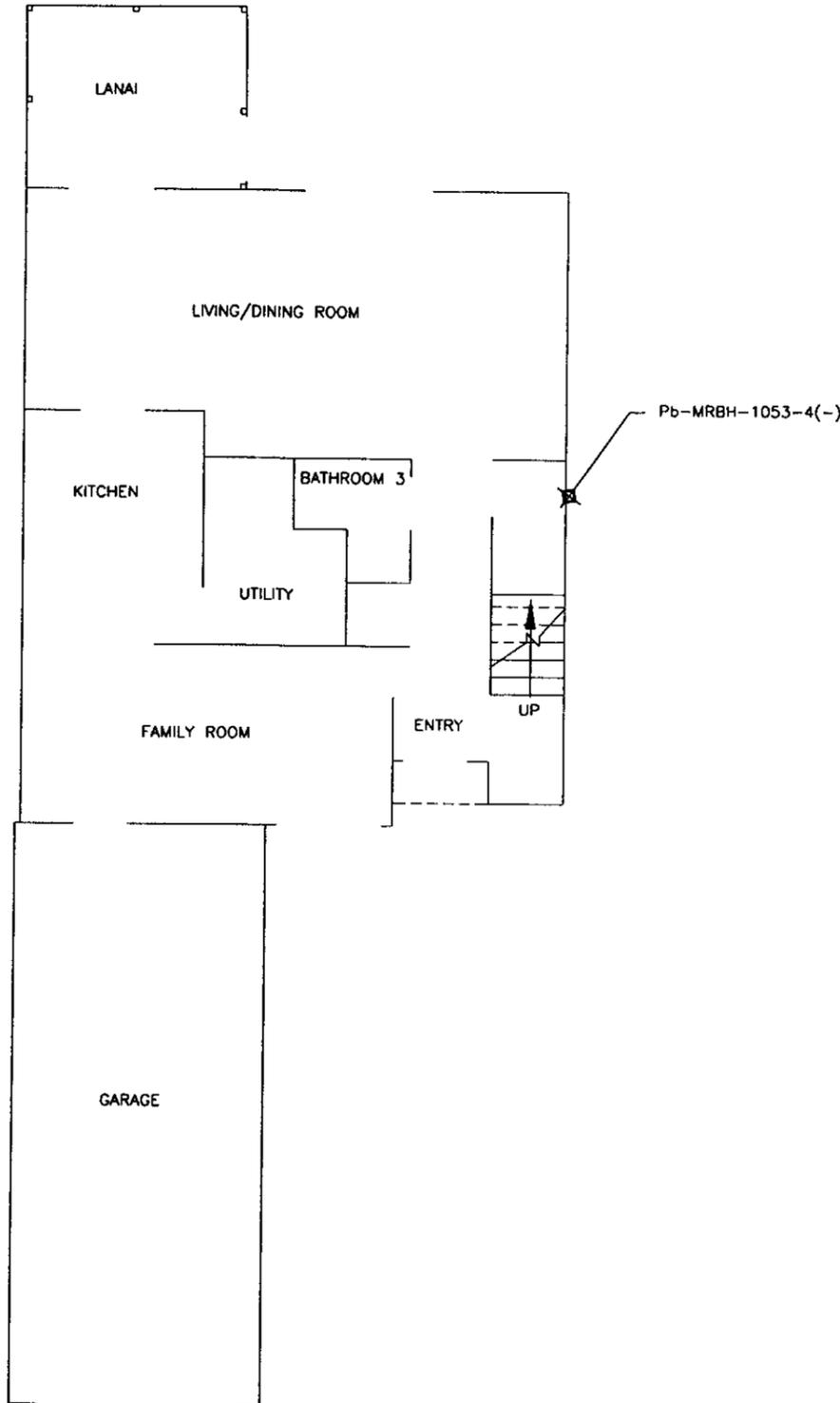


NOTE
 NO LEAD-BASED PAINT WAS IDENTIFIED IN THIS UNIT TYPE.

NOTE
 NO INCONCLUSIVE XRF READING IN THIS UNIT TYPE.
 BULK PAINT FILM SAMPLES NOT REQUIRED.



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	CAPE ENVIRONMENTAL MANAGEMENT INC.	GEORGIA
SOUTHERN DIVISION	CHARLESTON, S.C.	ATLANTA	FLORIDA
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY	AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	USOR	DR
3 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - SECOND FLOOR PLAN	(LEAD-BASED PAINT)	SUPH, RIOS	CH ENGR
DATE	ETD FOR COMMANDER, NAVFAC	EC	BR NO
APPROVED	DATE	OFFICER IN CHARGE	DATE
SEAL AREA		FPE	DR
CODE ID No.	SIZE B		
FED DRAWING NO.			
STA PROJ. NO.			
CAPE BILL No. 80032.001.000			
SPEC. NO.	N/A		
CONSTR. CONTR. NO.	N/A		
NAVFAC DRAWING NO.	N/A		
SHEET #	OF #		
38RLBP-2			



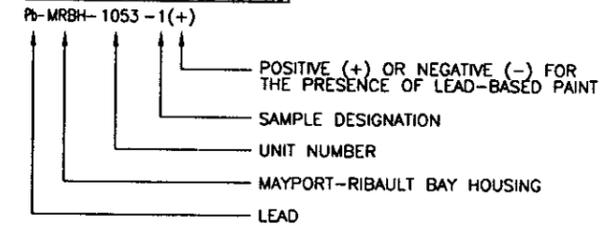
SYMBOLS

- ◆ LOCATION OF BULK FILM SAMPLES COLLECTED
- (-) >0.5% LEAD BY WEIGHT

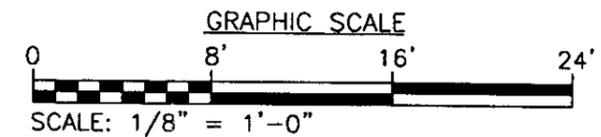
NOTE

NO LEAD-BASED PAINT WAS IDENTIFIED IN THIS UNIT TYPE.

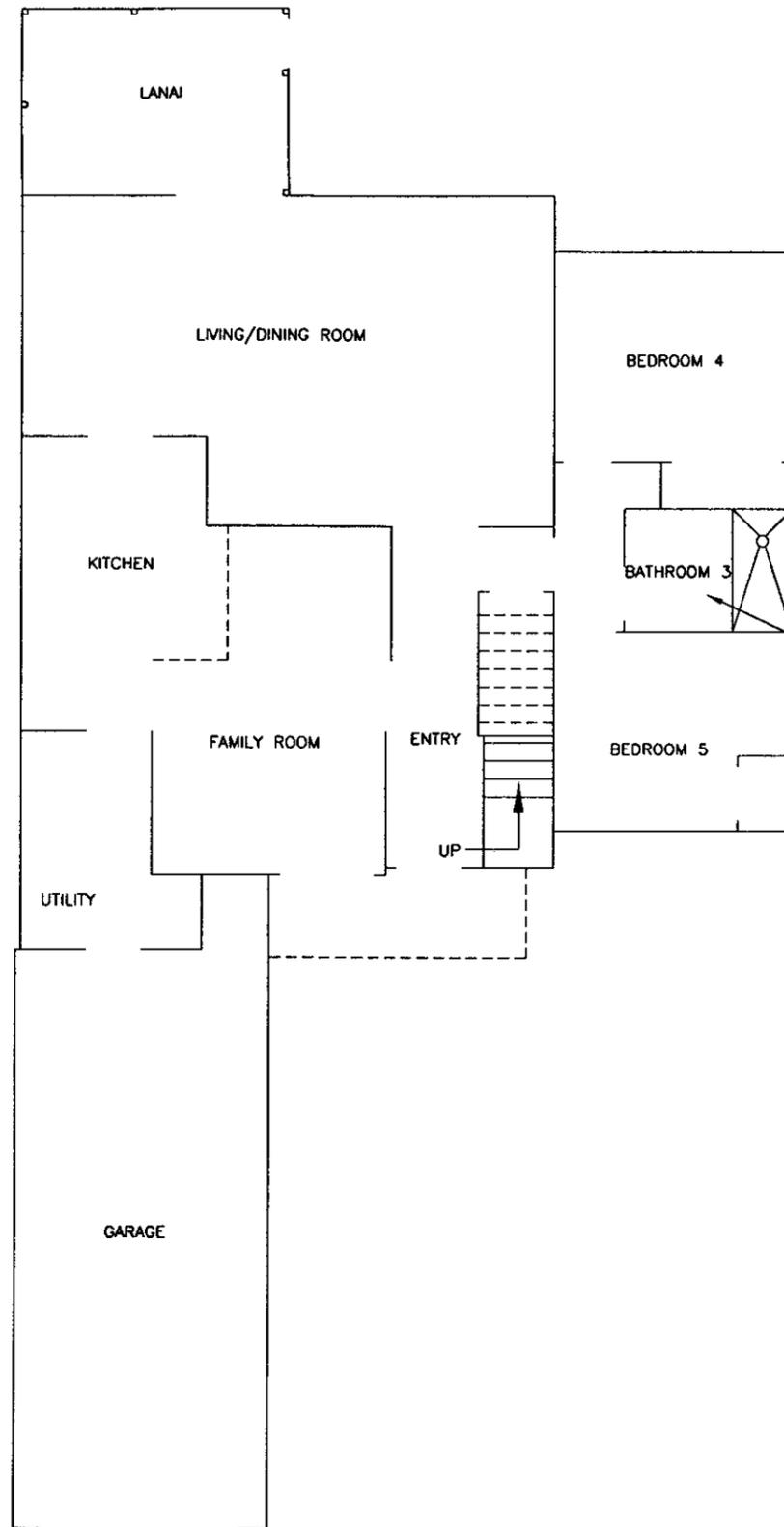
TYPICAL LEAD SAMPLE I.D. No.



4 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING
FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	CAPE ENVIRONMENTAL MANAGEMENT INC.
SOUTHERN DIVISION	ATLANTA	GEORGIA
CHARLESTON, S.C.	USNA	CRK
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY	SUPV. BROS. CH ENGR	S. BRYANT
AT MAYPORT NAVAL STATION, JACKSONVILLE, FL	DATE	DATE
4 BEDROOM UNIT TYPE - RIBAULT BAY HOUSING - FIRST FLOOR PLAN	PREP BY	DATE
(LEAD-BASED PAINT)	DATE	DATE
APPROVED	OFFICER IN CHARGE	DATE
EDD FOR COMMANDER, NAVFAC	DATE	DATE
SCALE AREA		
CODE ID No.	SIZE	B
FED DRAWING NO.		
STA. PROJ. NO.		
CAPE FILE No. 90032.001.000		
SPEC. NO.	N/A	
CONSTR. CNTR. NO.	N/A	
NAVFAC DRAWING NO.	N/A	
SHEET 3	OF 6	
48RLBP-1		

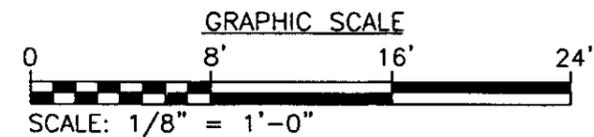


UNIT 1002F HAS CERAMIC TILE BASECOVE GLAZING THAT IS CONSIDERED LBP. CERAMIC TILE BASECOVE MAY CONTAIN LEAD IN UNITS NOT TESTED.

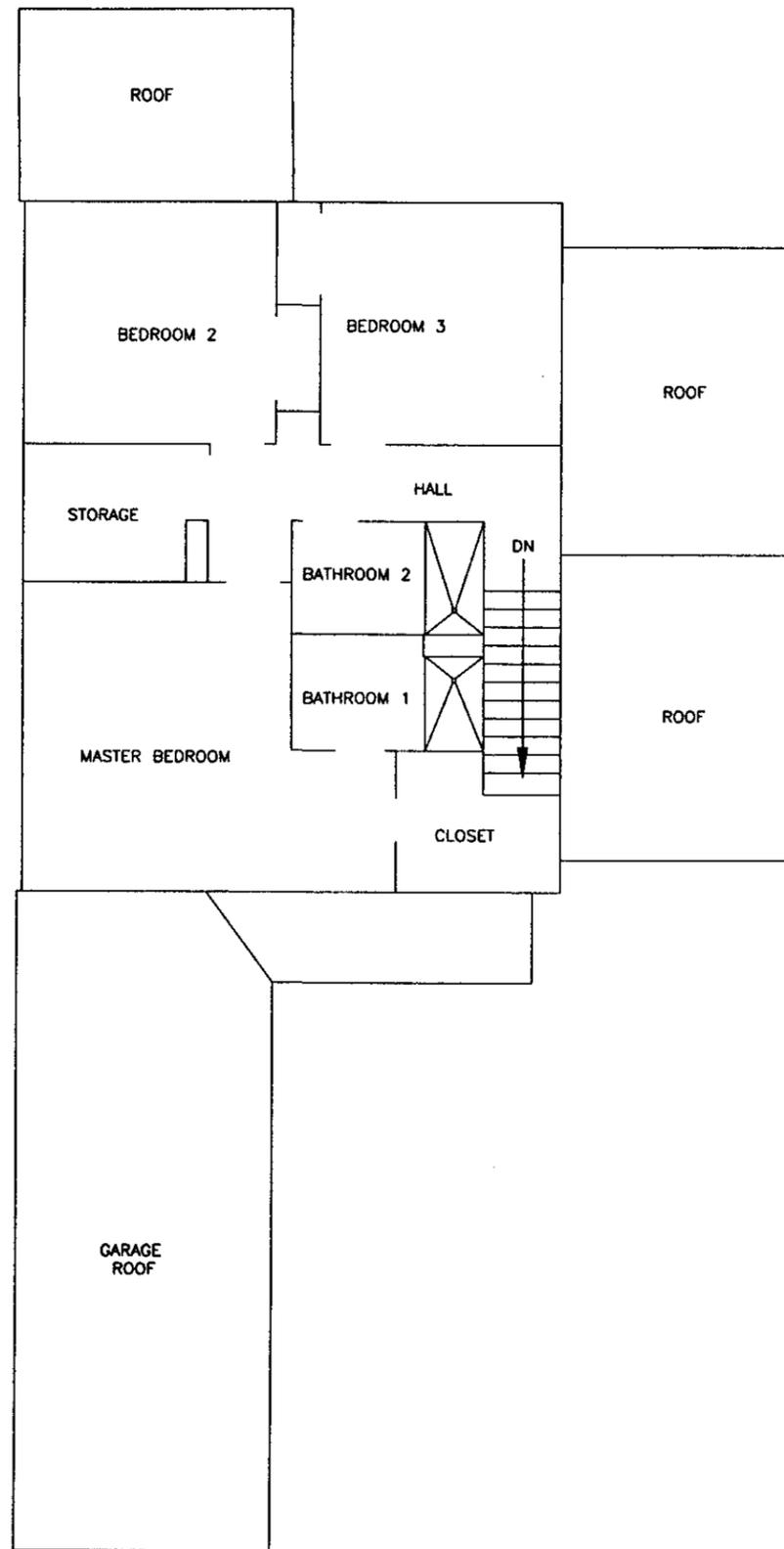
NOTE
NO LEAD-BASED PAINT WAS IDENTIFIED IN THIS UNIT TYPE.

NOTE
NO INCONCLUSIVE XRF READING IN THIS UNIT TYPE. BULK PAINT FILM SAMPLES NOT REQUIRED.

5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"



DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	REV. DESCRIPTION	PREP BY	DATE APPROV	CAPE ENVIRONMENTAL MANAGEMENT INC.
SOUTHERN DIVISION	CHARLESTON, S.C.				ATLANTA
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY					DRY
AT MAYPORT NAVAL STATION, JACKSONVILLE, FL					DR C.BROS
5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - FIRST FLOOR PLAN					SUBVANT
(LEAD-BASED PAINT)					CH ENGR
					SUBMITTED BY (FIRM MEMBER-TITLE)
					EC
					BR 140
					DR
APPROVED	DATE	ED FOR COMMANDER, NAVFAC	DATE	OFFICER IN CHARGE	PPE
SCALE AREA					
CODE ID.No.	SIZE				
FED DRAWING NO.					
STA PROJ. NO.					
CAPE PROJ. No. 00032.001.000					
SPEC. NO.	N/A				
CONSTR. CNTR. NO.	N/A				
NAVFAC DRAWING NO.	N/A				
SHEET 3	OF 6				
SBRLBP-1					

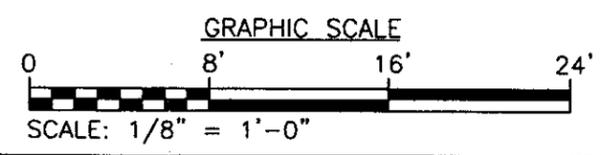


5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING
SECOND FLOOR PLAN
 SCALE: 1/8" = 1'-0"



NOTE
 NO LEAD-BASED PAINT WAS IDENTIFIED IN THIS UNIT TYPE.

NOTE
 NO INCONCLUSIVE XRF READING IN THIS UNIT TYPE.
 BULK PAINT FILM SAMPLES NOT REQUIRED.

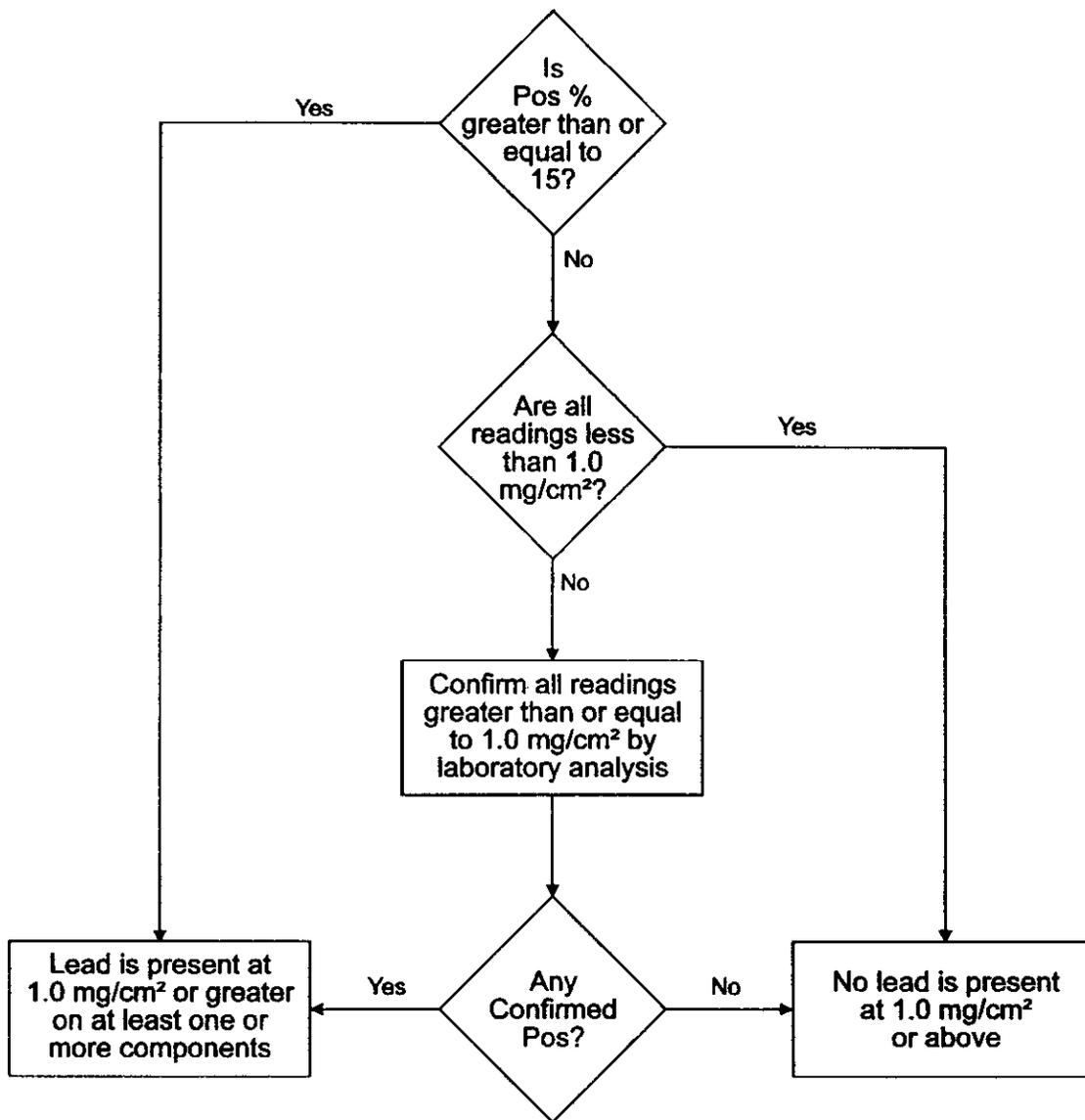


DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	REVISION	DATE	APPROVED
SOUTHERN DIVISION	CHARLESTON, S.C.	REV. DESCRIPTION	PREP BY	DATE APPROVD
A-E SERVICES FOR ASBESTOS AND LEAD SURVEY AT MAYPORT NAVAL STATION, JACKSONVILLE, FL		ATLANTA	CAPE ENVIRONMENTAL MANAGEMENT INC.	GEORGIA
5 BEDROOM UNIT TYPE - RIBAUTL BAY HOUSING - SECOND FLOOR PLAN (LEAD-BASED PAINT)		USCR	DR	CR
APPROVED	DATE	OFFICER IN CHARGE	DATE	DR
EFD FOR COMMANDER, NAVFAC		FPE		
SCALE AREA				
CODE ID.No.	SIZE			
FED DRAWING NO.				
STA. PROJ. NO.				
CAPE PROJ. No. 90032.001.000				
SPEC. NO.	N/A			
CONSTRM. CNTRL. NO.	N/A			
NAVFAC DRAWING NO.	N/A			
SHEET #	OF #			
SBRLBP-2				

Appendix E --- Multifamily Decision Flowchart

Multifamily Decision Flowchart

Purpose: to determine the presence of lead on a component type.



- Pos is the positive classification of a testing combination relative to the HUD standard as specified in the *XRF Performance Characteristics Sheet* for each XRF instrument.

Figure 7.11 Multifamily Decision Flowchart.

Appendix F --- Accreditations and Certifications

The Environmental Institute

Mike Spradling

Social Security Number - 259-98-7159

Has completed a three-day course and satisfactorily passed an examination that meets the criteria listed for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities as regulated by Georgia DNR/EPD Chapter 371-3-24 and U.S. EPA TSCA 40 CFR Part 745 for the course titled

Lead Inspector: EPA

(Target Housing & Child-Occupied Facilities)

April 13-15, 1998

Course Date

1166

Certificate Number

April 15, 1998

Examination Date

Jeffrey B. Maurras

Jeffrey Maurras - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator





Certificate of Achievement

This is to certify that

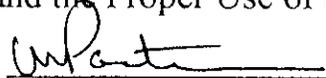
Michael J. Spradling

Cape Environmental Management, Inc.

on the 26th day of February 1998 successfully completed the factory training for

RMD's LPA-1 Lead Paint Inspection System

including, but not limited to, the topics of Radiation Safety
and the Proper Use of the Instrument.



Jacob H. Paster, Vice President, RMD, Inc.
44 Hunt St., Watertown, Massachusetts



The American Industrial Hygiene Association



is proud to acknowledge that

Hygeia Laboratories, Inc.
Marietta, GA
Laboratory ID# 9072

*has fulfilled the requirements for Environmental Lead
Laboratory Accreditation Program and has earned
distinguished recognition as an*

AIHA Accredited Laboratory

*Current certificate effective October 1, 1997 to October 1, 2000, subject to continued
compliance with AIHA accreditation criteria.*

The above named laboratory participates in the following:

ELLAP - ELPAT matrices: Paint, Soil, Dust

*The ELLAP program is recognized by the EPA as meeting the requirements of the National Lead Laboratory
Accreditation Program established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of
1992 and includes paint, soil and dust wipe analysis. Air analysis is not included as part of the ELLAP.*

James C. Rock, Ph.D., PE, CIH
President, American Industrial Hygiene Association

Mark A. Puskar, Ph.D.
Chair, Analytical Accreditation Board

583
Certificate Number

PROGRAM INFORMATION AND PROTOCOL

PROGRAM HISTORY

Naval Facilities Engineering Command (NAVFACENGCOM) has retained Public Works Center (PWC) - Norfolk, Virginia to develop and manage the environmental assessment. The assessment provides strategies to ensure the safety of residents and workers.

The Navy Family Housing Lead Based Paint/Asbestos Inventory Program is outlined in a 9 November 1992 letter from Commander, Naval Facilities Engineering Command.

The National Emission Standards for Hazardous Air Pollutants (NESHAPS [40 CFR 61 PART M]) and the Asbestos Hazard Emergency Response Act (AHERA [40 CFR 763]) specify the legislative and statutory requirements for this assessment.

United States Environmental Protection Agency (USEPA) Certified Inspectors performed comprehensive inspections to locate and assess the condition of asbestos containing materials (ACM). The inspection follows USEPA and Naval Facilities Engineering Service Center (NFESC) methodology and procedures. These guidelines predicate testing of the entire community as a homogenous area to allow for statistical sampling.

BACKGROUND

Asbestos is a natural silicate mineral that occurs in a fibrous form. It is mined from the earth in rock form then crushed and milled to extract the asbestos fibers.

The most common asbestos types are chrysotile, amosite, and crocidolite. Asbestos fibers possess a high tensile strength, light weight, excellent resistance to heat and chemicals, and are low in conductivity. Due to these properties, asbestos was a common additive in insulation and building materials.

The presence of asbestos containing material does not automatically constitute a health hazard. A hazard only exists if the material is friable (able to be pulverized by hand pressure) and damaged or deteriorated to the point of releasing asbestos fibers.

Inhalation and ingestion are the two routes for asbestos fibers to enter the body. Asbestos fibers are extremely small, as small as thousandths of a micron (1 micron is approximately 1/25,000 of an inch), and become airborne quite easily. By way of inhalation, airborne asbestos fibers are the largest threat of exposure. The body is not capable of destroying the asbestos fibers, which pose the risk of contributing to the development of asbestos, cancer, and other disease. It is important to note that no known safe exposure limit to asbestos exists, as studies indicate wide variations in the correlation between exposure and development of disease.

TESTING PROCEDURES

Sampling Objectives

The inspection process focuses on identifying suspect asbestos containing materials by homogeneous area, and assessing the physical condition of the material. A homogeneous area is an area containing material that is uniform in color and texture, installed around the same time, and appears to be identical in every respect. Inspectors identify homogeneous areas and generate floor plans depicting the location and size of each. Refer to Appendix I of the individual Asbestos Management Plan for the floor plans of that community.

The inspection includes materials that are open and/or accessible, and generally does not include materials within sealed areas, such as electrical components or piping inside walls. The following are some of the common materials inspected. Refer to Appendix II for a more complete listing of suspect materials.

- Ceilings; spray-on acoustic, tiles
- Flooring; asphalt/vinyl tiles, mastic/sealer
- Insulation; HVAC, surfacing, piping/plumbing
- Roofing; felt, flashing, mastic/waterproofing
- Walls; plaster, sheeting, cement board, sealant

Bulk samples of each suspect asbestos containing material are collected. USEPA guidelines specify the number of samples required to properly represent a homogenous area. The following table indicates the number of samples required to maximize the chance of detecting and identifying ACM based on amount of material present. The recommended numbers of asbestos samples for each homogeneous area within each community were routinely collected during the survey. An accredited laboratory analyzes the bulk samples to determine if the homogeneous area is an ACM.

NUMBER OF ASBESTOS SAMPLES TO BE TAKEN	
SAMPLING SPECIFICS	MINIMUM SAMPLE NO.
Surfacing ACM	
Less than 1,000 square feet	3
1,000 to 5,000 square feet	5
Greater than 5,000 square feet	7
TSI ACM	
per homogeneous area	3
per patch (<6 ft or <6 ft ²)	1
valve or fitting (i.e., tees elbows, etc.) mud, and cement	1
Miscellaneous ACM	
per homogeneous area	3

Data Analysis

The method utilized for laboratory analysis of suspect asbestos containing material samples is Polarized Light Microscopy (PLM), as recommended by EPA. A sample tested and shown to have greater than or equal to one percent (1%) asbestos is ACM. Consequently, the confirmed material's entire homogeneous area is ACM.

A ranking system developed by Naval Facilities Engineering Service Center (NFESC/NEESA) determines the appropriate action response for the ACM. In the ranking system algorithm, the material condition and location of each ACM homogeneous area aids in deriving the hazard potential of the ACM.

REFERENCE DOCUMENTS

Appendix III contains a list of reference material regarding the policy of the Navy Family Housing Lead Based Paint/Asbestos Inventory Program and regulations for asbestos control. Also listed are various documents concerning the inspection, control, and abatement of asbestos. Provided to each activity is a document package that contains applicable federal/state regulations and guidance documents that support all survey information and recommendations.

All aspects of this management plan utilize the respective governing regulatory documents as a basis for action. Although these documents sometime contradict one another, this Action Summary combined with the accompanying Asbestos Management Plans provide guidance for a safe and cost effective means to resolve environmental issues related to asbestos hazards.

ASBESTOS ACTIVITY SUMMARY

NAVAL STATION MAYPORT

ACTIVITY DESCRIPTION

A summary of Naval Station Mayport inspection is in Table 1. Provided in each individual community management plan for this activity are vicinity and community maps along with a listing of the housing units inspected.

- Activity UIC Number: N60201 ¹
- Inspection Dates: September - December 1994

Table 1 - Inspection Parameters			
Housing Type	Total # of Units	# of Units Inspected for Asbestos	Year(s) of Construction
Field Grade Officer (3013)			
3 Bedroom	1	1	19??
Ribault Village (3014)			
2 Bedroom	100	4	1978-79
3 Bedroom	90	4	1978-79
4 Bedroom	170	8	1978-79
5 Bedroom	40	2	1978-79
Junior Officer (3015)			
3 Bedroom	10	10	1963
4 Bedroom	2	2	1963
Capehart Field Grade Officer (3016)			
3 Bedroom	39	26	1964
4 Bedroom	5	5	1964
Milcon Enlisted (3017)			
2 Bedroom	12	2	1964
3 Bedroom	98	39	1964
4 Bedroom	16	6	1964
Capehart Enlisted (3018)			
2 Bedroom	40	4	1963
3 Bedroom	298	38	1963
4 Bedroom	64	13	1963
Senior Officer (3019)			
4 Bedroom	2	2	1964

Table 1 - Inspection Parameters

Housing Type	Total # of Units	# of Units Inspected for Asbestos	Year(s) of Construction
Capehart Junior Officer (3020)			
2 Bedroom	8	4	1962
3 Bedroom	66	30	1962
4 Bedroom	14	8	1962
Capehart Senior Officer (3021)			
4 Bedroom	6	6	1962
Johnson Housing (3023)			
2 Bedroom	200	10	1987
Totals	1281	224	

¹ See Definitions - Appendix I.

² See Floor Plans provided as Appendix I in each community's individual Asbestos Management Plan.

ASBESTOS SURVEY SUMMARY

FINDINGS AND ANALYSIS

- 3013 - *Field Grade Officer (212)* - Four homogeneous areas are ACM.
- A1 - Built Up Roof, Exterior over Den and Living Room Areas
Hazard Priority Level 5, O&M until abatement.
 - A6 - Sink Undercoating, Kitchen
Hazard Priority Level 5, O&M until abatement.
 - A10 - Linoleum, Under vinyl in kitchen
Hazard Priority Level 5, O&M until abatement.
 - A11 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.
- 3014 - *Ribault Village* - Three homogeneous areas are ACM.
- A6 - Sink Undercoating, Kitchen
Hazard Priority Level 5, O&M until abatement.
 - A12 - Built Up Roof, Carports of 2 Bedroom units
Hazard Priority Level 5, O&M until abatement.
 - A13 - Linoleum, Under floor tile in kitchen
Hazard Priority Level 5, O&M until abatement.
- 3015 - *Junior Officer* - Two homogeneous areas are ACM.
- A10 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.
 - A11 - Built Up Roof, Carport of only unit 657
Hazard Priority Level 5, O&M until abatement.
- 3016 - *Capehart Field Grade Officer* - Three homogeneous areas are ACM.
- A5 - Built Up Roof, Exterior
Hazard Priority Level 5, O&M until abatement.
 - A8 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.
 - A10 - Floor Tile and Mastic, Interior Storage Area
Hazard Priority Level 5, O&M until abatement.
- 3017 - *Milcon Enlisted* - Three homogeneous areas are ACM.
- A3 - Window Caulk, Exterior
Hazard Priority Level 5, O&M until abatement.
 - A10 - Built Up Roof, Exterior
Hazard Priority Level 5, O&M until abatement.
 - A14 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.

3018 - *Capehart Enlisted* - Four homogeneous areas are ACM.

- A3 - Window Caulk, Exterior
Hazard Priority Level 5, O&M until abatement.
- A7 - Floor Tile and Mastic, Interior Storage Area
Hazard Priority Level 5, O&M until abatement.
- A13 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.
- A14 - Built Up Roof, Exterior
Hazard Priority Level 5, O&M until abatement.

3019 - *Senior Officer* - Two homogeneous areas are ACM.

- A5 - Floor Tile and Mastic, Interior Storage Area
Hazard Priority Level 5, O&M until abatement.
- A7 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.

3020 - *Capehart Junior Officer*, Four homogeneous areas are ACM.

- A3 - Window Caulk, Exterior
Hazard Priority Level 5, O&M until abatement.
- A7 - Floor Tile and Mastic, Interior Storage Area
Hazard Priority Level 5, O&M until abatement.
- A10 - Built Up Roof, Exterior
Hazard Priority Level 5, O&M until abatement.
- A11 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.

3021 - *Capehart Senior Officer* - Four homogeneous areas are ACM.

- A1 - Built Up Roof, Exterior
Hazard Priority Level 5, O&M until abatement.
- A8 - Window Caulk, Exterior
Hazard Priority Level 5, O&M until abatement.
- A11 - Floor Tile and Mastic, Interior Storage Area
Hazard Priority Level 5, O&M until abatement.
- A11 - Electrical Wiring Insulation, Attic and Walls
Hazard Priority Level 5, O&M until abatement.

3023 - *Johnson Housing* - ACM was not identified in this community.

RECOMMENDATIONS

Response actions are sorted by four time frames: short-term, interim control, renovation, and demolition. Refer to Appendix II for further clarification of these time frames.

Short-Term (6 - 12 months)

No short term response actions are required.

Interim Control

In place management of ACM to safeguard the health of residents and maintenance workers can be achieved by use of interim control measures. An operations and maintenance (O&M) program is a plan that includes training, cleaning, work practices, and surveillance to maintain ACM in good condition. The following elements recommended by the National Institute of Building Sciences (NIBS) publication, Asbestos Operations and Maintenance Work Practices are essential for the development of an O&M program.

- *Asbestos Program Manager appointment and training*
- *Copies of applicable regulations and guidance documents*
- *Occupant notification/communication program*
- *O&M worker, supervisor, and competent person assignments and training program*
- *Work control/inspection/permit system*
- *Periodic surveillance program*
- *Recordkeeping program*
- *Hazard communication program*
- *Worker protection program (personal protective equipment)*
- *Respiratory protection program*
- *Medical surveillance program*
- *Asbestos fiber release episode response program*
- *Air monitoring program*
- *Waste disposal program*
- *Confined space program*
- *Safety program for other hazards*

O&M work practices, including removal techniques, vary according to the type of ACM and the conditions of the specific task. The following steps outline general O&M practices to manage ACM in place and reduce potential hazards:

1. Visually inspect confirmed ACM at convenient times such as occupant turn-over for signs of damage or deterioration.
2. Repair/replace damaged or deteriorated ACM, utilizing appropriate O&M work practices and procedures. Reduce or contain materials, dust, or fiber release resulting from work performed on or near asbestos containing materials.
3. Inform and educate occupants and maintenance workers regarding the presence of ACM. When occupants observe damaged or deteriorated ACM, they should notify the Housing Manager or an appointed Asbestos Program Manager.
4. Maintenance workers need to adhere to appropriate work practices and procedures when performing maintenance activities around ACM. Organize work practices to minimize the extent and impact of any releases which do occur.

Renovation and Demolition

National Emission Standards for Hazardous Air Pollutants (NESHAPS [40 CFR 61]) emphasize procedures for minimizing emissions of asbestos fibers into the environment. With respect to demolition and renovation activities, the important NESHAP areas for consideration are applicability, notification requirements, asbestos emission control procedures, and ACM waste disposal practices and records. In some areas the administration of NESHAP has been delegated to the state level, in which case the regulation may be more stringent or the interpretation and enforcement may vary from the federal authorities. In any case, the NESHAP administrator is a federal or state authority with primary responsibility for regulation of asbestos abatement associated with building demolition or renovation.

LEAD-BASED PAINT DOCUMENTS

PROGRAM INFORMATION AND PROTOCOL

PROGRAM HISTORY

Naval Facilities Engineering Command (NAVFACENGCOM) has retained Public Works Center (PWC) -- Norfolk, Virginia as a consultant to develop and manage the environmental assessment. The assessment will provide strategies to ensure safe living environments for residents and workers.

The Navy Family Housing Lead Based Paint/Asbestos Inventory Program is outlined in a 9 November 1992 letter from Commander, Naval Facilities Engineering Command. The Department of Housing and Urban Development (HUD) guidelines, the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X), and Requirements for Lead-Based Paint Activities: Proposed Rule (40 CFR Part 74) were generally adopted as assessment protocol.

Certified inspectors performed comprehensive inspections of the interior and exterior of residences, yards, common buildings, and grounds. The inspection determined the presence and location of **lead-based paint (LBP)**, **lead-contaminated dust** and **lead-contaminated soil**. In addition, the inspectors evaluated the physical condition of LBP substrates to assist in determining the **hazard potential** for each lead-based paint, lead-contaminated dust and/or lead-contaminated soil item. Basic protocol and procedures followed during the assessment are similar to those established by HUD for inspection of public and urban housing. HUD guidelines predicate random testing/sampling of the entire community as a **homogeneous area** to provide a statistical confidence level of 95%.

BACKGROUND

Lead-Based Paint

Lead-based paint can be a serious source of lead exposure to children and adults. Chipped or peeling lead-based paint creates a high risk to children via ingestion and to adults if improper cleaning or **abatement** techniques occur. When high levels of lead build up in a person's body, lead poisoning can occur. Children are very susceptible to lead poisoning due to their high growth-rate pattern. Banned from residential use in 1978, **lead containing paint** is evident in millions of homes due to its extensive use prior to that time. Following identification and confirmation of lead paint on a

component, only **mitigation** through **interim controls** or abatement will ensure the safety of both adults and children.

Lead in Dust

Current studies show the greatest hazard posed to children is dust generated from deteriorated lead-based paint and lead-contaminated soil. Small children's exposure to the lead hazard is primarily attributable to dust ingestion through normal hand to mouth behavior. Adults' exposure occurs through inhalation and ingestion of dust. Testing for lead in dust determines potential hazardous areas.

Lead in Soil

High levels of lead-contaminated soil can pose a human health hazard both directly and indirectly. Children expose themselves directly to lead in soil by hand to mouth behavior. Children or pets can also track this soil into residences and increase the dust lead levels. PWC Norfolk defines the areas around a particular unit as **subareas**. Those subareas sampled pose the greatest hazard to the occupants and possess at least one of the three following characteristics:

1. The area potentially has an elevated lead content.
2. The area is a source of dust.
3. The area has a particular use causing increased human exposure.

Refer to the document "Preventing Lead Poisoning in Young Children" by the Centers for Disease Control for a detailed history of high blood lead levels and its adverse health effects. Additionally, the document provides supplemental information on the sources and pathways of lead exposure.

TESTING PROCEDURES

Lead in Paint

Sampling Objectives

The objective of the inspection is to determine if potential **lead-based paint hazards** exist in the community and recommend methods to minimize confirmed hazards. The Department of Housing and Urban

Development (HUD) Interim Guidelines outline the general scheme applied for the units tested.

Sampling and results are provided per community group to coincide with NAVFAC Housing management practices. A homogeneous housing community consists of units with similar age and construction history. PWC Norfolk inspects a statistical representation, based on HUD guidelines, of the total number of units in each community. Although inspectors do not sample each unit, conclusions and recommendations apply to all housing within a community. This method provides the needed information for the best value. The HUD Interim Guidelines provide a suggested list of components or surfaces to sample in an inspection. Selection of sample locations is random, but all architectural components are tested.

Data Analysis

The lead-based paint analysis category of each component is either positive or negative based upon the percentage of positive XRF assay measurements taken for that component community-wide. If the community-wide percentage of a component is zero, the lead-based paint category for the component is negative. A community-wide percentage of ten or greater for a particular component categorizes that component as positive. A community-wide percentage of greater than zero and less than ten, requires further analysis to determine the lead-based paint category for that component. This analysis encompasses statistical comparison of that component with the same and similar components at different levels. The first level of analysis compares the component to similar components in the same functional area. The second level of analysis compares the component to the same component but within all other functional areas. The third and last level compare the component to similar components in all other functional areas.

Lead In Dust

Due to the correlation that exists between lead-contaminated soil and dust, the units randomly chosen for lead in dust inspection are also inspected for lead in soil.

Sampling Objectives

Inspectors collect dust samples from four rooms within each randomly chosen unit. HUD protocol dictates the minimum number of randomly selected units within a housing community and the number of dust

samples. The sampled rooms are the living room, kitchen, and two bedrooms. Children's bedrooms have sampling priority. Two component areas within these rooms are sampled (floor and window well/sill).

Data Analysis

HUD's Interim Guidelines for Hazard Identification and Abatement was the standard adopted for dust analysis. All dust samples require laboratory analysis. Atomic Absorption Spectrometry (AAS) and Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) methods produce data expressed as total mass of lead per surface area sampled. There are no Federal standards governing the **action level** of lead in dust at the present time. At present, HUD recommends the following guidelines for specific surfaces:

Floors:	100 micrograms per square foot
Window Sills:	500 micrograms per square foot
Window Wells:	800 micrograms per square foot

From HUD Technical Bulletin for the Evaluation of Lead-based Paint Hazards in H

Lead In Soil

Due to the correlation that exist between lead-contaminated soil and dust, the units randomly chosen for lead in dust inspection are also inspected for lead in soil.

Sampling Objectives

Inspectors collected soil samples from subareas around randomly selected units. HUD protocol dictates the minimum number of randomly selected units within a housing community. The following are examples of soil sample subareas:

- Base of a building foundation
- Downspout drop areas
- Garden areas
- Household pet play/sleeping areas
- Painted fence-rows
- Pathways created by pedestrian/vehicular traffic
- Along paved areas, alleys, parking lots, roadways, etc.
- Play/recreation areas

Data Analysis

Atomic Absorption Spectrometry (AAS) or Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) laboratory analysis methods determine the lead concentration in the soil samples. Following the Environmental Protection Agency's Guidance on Residential Lead-Based Paint, Lead-Contaminated Dust, and Lead-Contaminated Soil, the soil

lead concentration determines the action level. The lead in soil action levels begin at soil lead concentration of 400 parts per million (ppm); refer to Appendix I for further details.

ACTIVITY DESCRIPTION

A summary of Naval Station Mayport inspection is in Table 1 below. Provided in each community management plan are vicinity and community maps along with the list of the homes inspected.

- Activity UIC Number: N60201¹
- Inspection Dates: September - December 1994

Table 1 - Inspection Parameters

Housing Type	Total # of Units	# of Units Inspected			Year(s) of Construction
		Paint	Dust	Soil	
Field Grade Officer (3013)					
3 Bedroom	1	1	1	1	19??
Ribault Village (3014)					
2 Bedroom	100	4	4	4	1978-79
3 Bedroom	90	4	3	3	1978-79
4 Bedroom	170	8	9	9	1978-79
5 Bedroom	40	2	2	2	1978-79
Junior Officer (3015)					
3 Bedroom	10	10	5	5	1963
4 Bedroom	2	2	0	0	1963
Capehart Field Grade Officer (3016)					
3 Bedroom	39	26	7	7	1964
4 Bedroom	5	5	0	0	1964
Milcon Enlisted (3017)					
2 Bedroom	12	2	0	0	1964
3 Bedroom	98	39	6	6	1964
4 Bedroom	16	6	1	1	1964
Capehart Enlisted (3018)					
2 Bedroom	40	4	3	3	1963
3 Bedroom	298	38	11	10	1963
4 Bedroom	64	13	6	5	1963

Table 1 - Inspection Parameters

Housing Type	Total # of Units	# of Units Inspected			Year(s) of Construct:
		Paint	Dust	Soil	
Senior Officer (3019)					
4 Bedroom	2	2	2	2	1964
Capehart Junior Officer (3020)					
2 Bedroom	8	4	0	0	1962
3 Bedroom	66	30	5	5	1962
4 Bedroom	14	8	1	1	1962
Capehart Senior Officer (3021)					
4 Bedroom	6	6	6	6	1962
Johnson Housing (3023)					
2 Bedroom	200	0	10	10	1987
Playgrounds (3025)					
Playgrounds	37	0	N/A	37	Unknown
Totals	1318	214	82	117	

¹See Definitions - Appendix I.

REFERENCE DOCUMENTS

Appendix III contains a list of reference material regarding the policy of the Navy Family Housing Lead Based Paint/Asbestos Inventory Program and regulations for lead control. Also listed are the various documents concerning the inspection, control, and abatement of lead. The provided Document Package contains applicable federal regulations and guidance documents that apply to lead-based paint, lead in dust, and lead in soil inspections.

All aspects of the individual community management plans utilize the respective governing regulatory documents as a basis for action. Although these documents often contradict one another, this Action Summary combined with the accompanying management plans provides a safe and cost effective means to resolve environmental issues related to lead hazards.

LEAD SURVEY SUMMARY

FINDINGS AND ANALYSIS

Lead in Paint

Field Grade Officer; 212 (3013) - Lead based paint test results indicate that levels of lead above the action limit are evident on the wood trim throughout the interior of the unit. The paint and the wood are in good condition.

Ribault Village (3014) - The exterior soffits are painted with paint which contains lead above the HUD action level. The soffits are in poor condition and the paint has major damage.

Junior Officer (3015) - Various interior components are painted with lead based paint in this community. Nineteen of the one hundred and eight components tested in the community are positive for lead. The bathroom doors and trim, the baseboards throughout, and the hallway closet doors, shelves and trim have damaged painted surfaces and require short term action. The remaining positive components require monitoring in an Operations and Maintenance (O&M) Plan.

Capehart Field Grade Officer (3016) - Thirty two percent (40/124) of the components tested are positive for lead based paint. Several painted components are in a damaged condition. These require short term action. An O&M plan is needed to monitor the remaining components.

Milcon Enlisted (3017) - Of the one hundred and thirty three components tested, forty eight are painted with lead based paint. Some of the positive interior components are assessed as damaged. Damaged lead paint is a potential hazard to the occupants of the dwellings and must be corrected in a short term time frame.

Capehart Enlisted (3018) - Sixty two of the one hundred and thirty four components tested are painted with lead based paint. The paint on many of the components is damaged. These components require restoration. All positive components require O&M until abated.

Senior Officer (3019) - Twenty four percent (20/84) of the components tested in these two homes are painted with lead based paint. All of the interior components are intact and require O&M until abated. The

exterior carport beam has some damage and requires repair within six months.

Capehart Junior Officer (3020) - One hundred and twenty components in each of the homes were tested for the presence of lead based paint. Forty five components are painted with paint which contains lead above the action level of 1.0 mg/cm². Paint exists in a damaged condition on eleven of the forty five positive components. The short term response to these eleven components is restoration. Restore the painted surfaces on the damaged components and maintain all of the components under an Operations and Maintenance Program.

Capehart Senior Officer (3021) - One hundred and twenty six of the painted components in the homes of this community were tested for lead based paint. Thirty four of these components are painted with lead based paint. Paint that is damaged, i.e. chipped, cracked, flaking or chalking, requires restoration. Eight of the positive components in these homes have damaged painted surfaces and require restoration within six months.

Johnson Housing (3023) - This community was constructed after FY-83, there fore, the inspection was performed under a modified protocol as directed by Naval Facilities Engineering Command. This protocol dictates that asbestos, dust and soil will be inspected in accordance with the dust and soil table published by HUD. Paint inspections are not performed.

Playgrounds (3025) - Thirty seven playgrounds were assessed for lead in soil. (See Soil Section for findings.) The playground equipment consisted of unpainted materials and was not tested for lead based paint.

Lead in Dust

Field Grade Officer;212 (3013) - One of the four samples taken at this house contains lead above the HUD action limit.

Ribault Village (3014) - Dust samples were collected from nine homes within the community. Analyses of the results reveal that lead in dust poses no health hazard. All of the sample results are below the HUD action level.

Junior Officer (3015) - Dust samples were collected from five of the twelve homes in this community. The results are below the action level.

Capehart Field Grade Officer (3016) - Although the presence of lead-based paint creates the potential for lead in dust contamination none exists at this time. All of the sample results are below the corresponding action limit for floors, window sills, and window wells.

Milcon Enlisted (3017) - Seven randomly selected units were inspected for lead in dust contamination. All of the sample results are well below the action limits set forth by HUD.

Capehart Enlisted (3018) - Dust samples were collected from twenty units in this community. The analysis results are well below the corresponding action levels of 100 $\mu\text{g}/\text{ft}^2$ for floors, 500 $\mu\text{g}/\text{ft}^2$ for window sills and 800 $\mu\text{g}/\text{ft}^2$ for window wells.

Senior Officer (3019) - Both of the units in this community were sampled for lead in dust. No hazard exists at this time. The presence of lead based paint creates the potential for lead in dust contamination.

Capehart Junior Officer (3020) - A lead in dust hazard is not present in this community. Advise residents to keep up periodic cleaning to minimize the potential for a lead in dust hazard.

Capehart Senior Officer (3021) - Dust samples taken throughout the six units in this community do not contain lead above the HUD action limit.

Johnson Housing (3023) - A hazard associated with lead in dust does not exist in this community. The apartments are 1987 construction; therefore were not tested for lead based paint according to guidelines established by NAVFAC.

Playgrounds (3025) - The playgrounds were only sampled for soil.

Lead in Soil

Field Grade Officer;212 (3013) - Lead above the HUD action limits of 400 ppm for exposed areas and 5000 ppm for areas covered with vegetation were not found in the soil around this home.

Ribault Village (3014) - Although the soffit is painted with LBP lead above the action limits is not present in the soil.

Junior Officer (3015) - Lead above the action limits is not present in the soil of this community.

Capehart Field Grade Officer (3016) - Lead in soil poses no hazard in this community. The soffit, door jambs, beam, fascia, and some exterior walls are painted with lead based paint.

Milcon Enlisted (3017) - The carport ceilings, fascia and soffit in this community are painted with LBP but hazardous levels of lead were not found in the soil.

Capehart Enlisted (3018) - Levels of lead in soil requiring action are not present in the soil surrounding the homes in this community. A few of the exterior components are painted with lead based paint.

Senior Officer (3019) - The soil in this community does not contain lead above the action levels specified by HUD.

Capehart Junior Officer (3020) - Analyses of soil samples taken from the areas around the homes in this community reveal that lead from soil does not pose a health hazard at this time.

Capehart Senior Officer (3021) - Lead above the action limits is not present in the soil of this community.

Johnson Housing (3023) - The soil in this community does not contain lead above the action levels.

Playgrounds (3025) - The playgrounds at NS Mayport do not contain levels lead in the soil that pose a health hazard to children.

RECOMMENDATIONS

Short-term

Prepare all surfaces for restoration by wet scraping and cleaning with a **tri-sodium phosphate (TSP)** solution. Repaint damaged surfaces with an approved elastomeric sealant within a **short-term response time-frame**. Clean surrounding areas and minimize the elevated risk/hazard. The Occupational Safety and Health Administration (OSHA) regulate the occupational exposure to inorganic lead. OSHA standards define the airborne lead exposure limits for workers.

All replacement material must meet the basic requirements of NAVFAC/EFD housing guidelines.

Develop and implement an **Operations and Maintenance (O&M)** Program to minimize and maintain existing hazard potentials under control.

Interim Control (Present to Abatement)

Implementation of an O&M Program will enable Naval Station Mayport housing to keep the potential lead hazards in a non-hazardous condition through awareness, cleaning, paint restoration, and dust/soil monitoring.

The following measures form the basis for a feasible and cost effective in-place management strategy for lead-based paint components.

1. Inform/educate the unit occupants, housing manager, and maintenance workers of the lead hazards within the community. The occupants and maintenance workers need to know where the lead-contaminated components are and what to do to protect themselves from its adverse effects. The education process begins with the town meeting (outbrief) concerning results from the inspections and continues until removal of all the lead paint hazards from the community.
2. As part of the education of the occupants, they should be encouraged to participate in DOD **blood lead level screening**.
3. Inspect components with a lead hazard annually and during unit turn-over for signs of any damaged or deteriorated surfaces.
4. Clean-up all lead-based paint components with **TSP** or a high phosphate detergent solution at the earliest possible time. All surfaces containing lead-based paint should be in good condition with no flaking, cracking, or peeling paint.
5. Maintain mulching/vegetation to cover lead contaminated soil areas.
6. Paint damaged or deteriorated surfaces.
7. Perform dust and soil sampling during change of occupancy, renovation/demolition actions, when findings of a visual inspection warrant it, or when elevated blood-lead levels in a child exist. Utilize the results to inform the housing occupants of any possible hazards, coupled with information that explains mitigation responses.

Lead in Paint: A Management Guide by Navy Public Works Center - Norfolk, Virginia, Environmental Engineering Branch, Code 414, provides guidance for in-place management work practices, procedures, and additional component testing protocol. This guide also provides detailed information on abatement of lead-based paint, clean-up and maintenance of lead in dust and lead in soil contamination, along with information to establish and run an Operations and Maintenance Program. The provided Document Package contains this guide and a generic O&M lead plan.

Renovation

During upcoming renovation projects, incorporate the recommended abatement action response for all lead-based paint components present in the proposed renovation area. Refer to the ranking scheme provided for the recommended abatement action response and priority for each lead based component. OSHA regulates the occupational exposure to inorganic lead. OSHA standards define the airborne lead exposure limits for workers.

Demolition

During a demolition phase, OSHA standards regulate the occupational lead exposure and define the airborne lead exposure limits for workers. The Resource Conservation and Recovery Act (RCRA), the basic Federal law governing waste disposal, distinguishes between solid waste and hazardous waste.

In determining whether a waste is hazardous or non-hazardous, RCRA allows generators of the waste to rely on the results of prior testing or experience, or knowledge of the waste or process generating the waste. Specific waste streams from lead abatement projects such as LBP chips and residue from chemical paint stripping processes are hazardous. RCRA has specific disposal requirements for these hazardous waste streams. If the RCRA "user knowledge" allowance can not be applied to the solid waste construction debris identified as containing lead, then testing prior to disposal is required to determine whether the debris is hazardous or non-hazardous. This pre-disposal test for waste is the Toxic Characteristic Leachate Procedure (TCLP).