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ASBESTOS CONTAINING MATERIAL RE INSPECTION BUILDING 1879 VOLUME 21 CNC CHARLESTON SC

1/15/2000

BAT ASSOCIATES, INC.

Volume 21

Asbestos-Containing Material Re-inspection For Building 1879 Charleston Naval Shipyard Charleston, South Carolina

Contract No. N2467-96-D-0998
Delivery Order No. 0013

Prepared for:

Department of the Navy
Southern Division
NAVFACENGCOM
245 Eagle Drive
North Charleston, SC 29419

Prepared by:

BAT Associates, Inc.
541 Brook Hollow Parkway
Suite 250
Norcross, Georgia 30071
(770) 242-3908

January 15, 2000

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

BAT Associates, Inc. (BAT) was retained by the U.S. Department of the Navy, Southern Division (SouthDiv), Naval Facilities Engineering Command (NAVFACENGCOM) to perform an asbestos-containing material (ACM) re-inspection of Building 1879 located at the Charleston Naval Shipyard in Charleston, South Carolina.

No suspect asbestos-containing materials were identified in this building.

2.0 BUILDING INSPECTION INFORMATION FORM

Building Name:	Equipment Building
Building Number:	1879
Facility:	Charleston Naval Shipyard
Building Area (square footage):	960
Year Built:	1983
Building Type:	Storage
No. of Floors in Building:	One
Purpose of ACM Survey:	Re-Inspection
Facility Unit Identification Code (UIC):	N/A

Building Contact:	Mr. William A. Drawdy
Contact's Telephone No.:	(843) 743-9985
Building Survey Date(s):	November 25, 1999

Asbestos Inspector's Name:	Mr. Jason McGlashan
Asbestos Inspector's Accreditation No:	GA2594
Inspection Company:	BAT Associates, Inc.
Company Telephone No.	(770) 242-3908

3.0 INTRODUCTION

BAT Associates, Inc. (BAT) was retained by the U.S. Department of the Navy, Southern Division (SouthDiv), Naval Facilities Engineering Command (NAVFACENGCOM) to perform an asbestos-containing material (ACM) re-inspection of all buildings located at the Charleston Naval Shipyard in Charleston, South Carolina. The purpose of this re-inspection was to:

1. Perform a comprehensive ACM re-inspection of 34 buildings in accordance with Federal and U.S. Navy requirements;
2. Assess the condition of previously identified friable and non-friable ACM; and
3. Provide a preliminary cost estimate for the removal of identified ACM.

The re-inspection was performed in accordance with the Navy's Asbestos Facility Inventory/Assessment Protocol (NEESA 70.2-010) and the U.S. Environmental Protection Agency's (USEPA) Asbestos Hazard Emergency Response Act (AHERA) and the Asbestos School Hazard Abatement Reauthorization Act (ASHARA).

The results of the re-inspection survey are presented in 23 separate volume reports. This report describes the results for Building 1879.

This re-inspection survey was performed by Mr. Jason McGlashan, under the direct supervision of Mr. Douglas J. Milton, CIH, on November 25, 1999. Mr. McGlashan is an accredited asbestos building inspector. Mr. Milton, a Certified Industrial Hygienist, is an accredited asbestos inspector, management planner, and project designer.

This report discusses the sampling methodology used during the re-inspection and assessment (Section 4.0); a list of all identified suspect materials (Section 5.0); a summary of the bulk sample analysis results (Section 6.0); results of quality control sampling; (Section 7.0); physical assessments of the identified ACM (Section 8.0); a hazard assessment of the identified ACM (Section 9.0); and conclusions (Section 10.0). Appendix A contains personnel accreditations.

The assessment protocol for ACM involved three distinct steps:

1. Performed preliminary walk-though of the building to identify suspect ACM and to determine the amount of suspect ACM, to define the number of samples to be collected, to identify access problems (e.g., collection of samples in a limited access pipe chase below the building), and to determine the degree of personal protection necessary for the bulk sample collection.
2. Visually inspected the building for ACM to identify the location of the suspect ACM and to determine if the material was friable or non-friable. Suspect materials were then categorized according to the EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) for asbestos as: Category I non-friable

materials, Category II non-friable materials, and Regulated (friable) Asbestos-Containing Materials (RACM).

3. Collected bulk samples for the analysis for asbestos content (see Section 4.0, *Sampling Methodology*, for details).

4.0 SAMPLE METHODOLOGY

Representative, randomly selected bulk samples were collected in accordance with the Navy's and AHERA sampling protocol, as described in 40 CFR 763.86, and in accordance with BAT's contract requirements.

The minimum number of samples collected from each homogeneous area was as follows:

1. *Friable Spray-Applied or Trowel-Applied Material* (including plaster)

   a. Less than or equal to 1,000 Square Feet (S.F.) = 3 samples
   b. Greater than 1,000 S.F and less than or equal to 5,000 S.F. = 5 samples
   c. Greater than 5,000 = 7 samples

2. *Pipe and Duct Insulation*

   a. Three samples per homogeneous area of insulation.

3. *Elbows, Valves, Fittings and Connection Mud*

   Three representative samples from each type of insulated elbow, valve, fitting, and connection mud.

4. *Boiler, Tanks and Furnaces*

   A minimum of 3 samples per unit.

5. *Patchwork*

   Patchwork is defined as a patch or repair to existing material based on the following quantities:

   a. Surfacing material patches are limited to a maximum of 6 S.F.
   b. Pipe and duct insulation patches are limited to a maximum of 6 Linear Feet (L.F.) or 6 S.F.
   c. Boiler, tank, and furnace patches are limited to 6 S.F.

   If the patchwork exceeded the limits prescribed above, it was sampled

according to the homogeneous area protocol in items 1 to 4 above. If a material qualifies as patchwork, a single sample was collected per patch.

6. *Ceiling or Acoustical Tile*

   3 samples

7. *Miscellaneous Friable Material*

   3 samples

8. *Non-Friable Material*

   Non-friable materials for purpose of this survey included Transite-type panels, floor tiles, floor tile mastic, and other miscellaneous materials.

   Minimum of 3 samples.

The procedures followed for collection of each bulk sample is outlined briefly below:

1. The accredited inspector collecting the sample was equipped with the appropriate personal protective equipment. This included a half-mask air-purifying respirator, protective gloves and protective eyewear.

2. The surface of the material being sampled was wetted with amended water (containing a surfactant to aid penetration) mist to lessen the risk of fiber release during sampling.

3. Each sample was extracted using the appropriate equipment, (e.g., a sample container, knife, core borer). Care was taken to insure that all layers of the suspect materials, down to the substrate, were included in the sample.

4. Each sample was placed in an individual container which was then sealed and labeled with a unique identification number which was also recorded on the sample data log-in sheet.

5. After each sample was collected, the area immediately surrounding the sampling location was inspected for debris and wet-cleaned as necessary to lessen the risk of an airborne fiber release.

6. All necessary data were recorded on the BAT Suspect Material Inventory Form including sample number, sample location, type of suspect material, name of inspector collecting the sample and other relevant information.

5.0 ASBESTOS INVENTORY AND ASSESSMENT

Table 1.0 describes the suspect ACM identified in and around Building 1879.

Table 1.0
Summary of Identified Suspect ACM

No suspect asbestos-containing materials were identified in this building.

6.0 SUMMARY OF SAMPLE ANALYSIS RESULTS

Table 2.0 contains a summary of the bulk sample analysis results for suspect ACM identified in this building.

According to AHERA protocol, all samples within a homogeneous area must have an asbestos content of one percent or less by weight using Polarized Light Microscopy (PLM) analysis before the material can be categorized as non-asbestos-containing. If one sample is determined as asbestos-containing using PLM analysis, the entire homogeneous area must be classified asbestos-containing.

Table 2.0
Summary of Sample Analysis Results

No suspect asbestos-containing materials were identified in this building.

7.0 RESULTS OF QUALITY CONTROL SAMPLING

The purpose of quality control (QC) sampling was to ensure reproducibility of the primary laboratory analysis results. Duplicate samples were collected for ten percent of the total building samples for QC purposes.

Table 3.0
Validation of Quality Control Sampling

No suspect asbestos-containing materials were identified in this building.

8.0 PHYSICAL ASSESSMENT OF IDENTIFIED ACM

No physical assessments are required since no suspect asbestos-containing materials were identified in this building.

9.0 HAZARD ASSESSMENT OF IDENTIFIED ACM

No hazard assessments are required since no suspect asbestos-containing materials were identified in this building.

10.0 CONCLUSIONS

Inspection of Building 1879 and confirmatory laboratory bulk sample analysis of selected samples identified the following materials with asbestos concentrations greater than one percent.

Identified ACM	Quantity	NESHAP Category
None.		

The following materials were not sampled in order to avoid disrupting their integrity, and they were assumed to contain asbestos:

Assumed ACM	Quantity	NESHAP Category
None.		

The Environmental Institute

Jason McGlashan

Social Security Number - 137-62-0377

Has completed coursework and satisfactorily passed

an examination that meets all criteria required for

EPA/AHERA/ASHARA (TSCA Title II) Approved Accreditation

and NESHAP Regulations Training

Asbestos in Buildings: Inspection and Assessment

June 21-23, 1999
Course Date

2594
Certificate Number

June 23, 1999
Examination Date

June 22, 2000
Expiration Date

R. A. Short
Ronald A. Short - Course Director

Rachel G. McCain - Exam Administrator

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

The Environmental Institute

Douglas J. Milton

Social Security Number - 266-55-7179

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

December 15, 1999
Course Date

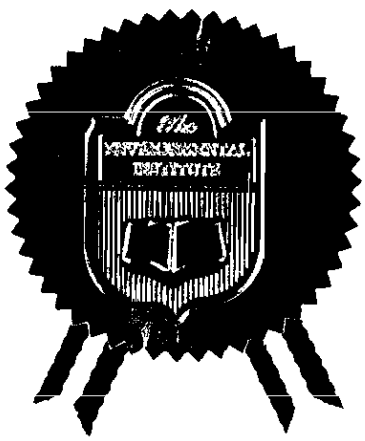
6398
Certificate Number

December 15, 1999
Examination Date

December 14, 2000
Expiration Date

Tod A. Dawson - Course Director

Rachel G. McCain - Exam Administrator



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proclaims that

Douglas J. Milton

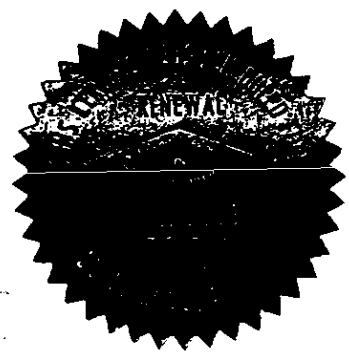
having met all requirements through
education, experience and examination,
is hereby certified in the

COMPREHENSIVE PRACTICE
of
INDUSTRIAL HYGIENE

and has the right to use the designations

CERTIFIED INDUSTRIAL HYGIENIST

CIH



November 12, 1997
date

J. Kenneth Crowe
Chair ABIH

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United States Department of Commerce
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BULK ASBESTOS FIBER ANALYSIS

June 30, 2000
Effective through

For the National Institute of Standards and Technology

NVLAP Lab Code: 102111-0

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BULK ASBESTOS FIBER ANALYSIS

September 30, 2000
Effective through

For the National Institute of Standards and Technology

NVLAP Lab Code: 102033-0