Aerosol Monitoring & Analysis, Inc.
Environmental Consultants

February 4, 2009

Mr. Jesse Cox, Jr., Branch Chief
OFEO-OFMR Life Safety
National Museum of Natural History
Smithsonian Institution-MRC-132
10th Street & Constitution Avenue, NW, RM #EG-7
Washington, D.C. 20004

RE: (Final) Smithsonian Institution Contract No. F08CC10441-Assessment of Asbestos Containing Materials in Smithsonian Buildings/Facilities/Museums

Bldg: **Quadrangle (Bldg #091)**

AMA Project #: 08375-13

Mr. Cox:

On January 13th, 14th and 15th, 2009 Aerosol Monitoring & Analysis, Inc. (AMA) representatives, Mr. Gary Urban, Ms. Brooke Wilt, and Mr. Ron Stallard, conducted an on site inspection of the above referenced building for the purpose of verifying the existing Client provided information regarding asbestos containing materials (ACM) within the building. The work was performed in accordance with the contract requirements, whereas, AMA was to:

1. Compile and Reconcile data and information in the Existing Asbestos Survey Reports and all abatement records, building by building and place into an electronic database;
2. Correlate all existing ACM into a geospatial database that interfaces with SI Facility Center, version 8i;
3. Perform and document a one-time ACM inspection for affected buildings, prioritizing inspected areas requiring abatement and post applicable ACM warning signs;
4. Perform assessments for any suspect ACM not identified under the existing reports or identified as previously abated.

Background Information

Quadrangle – 091
1000 Independence Avenue SW
Washington, D.C.

Original Construction Date – **1984-1986**

345,000 square feet

Below grade – First floor, Second floor, Third floor

Above Grade- Entrance to Ripley International Center, Entrance to Sackler Gallery, Entrance to National Museum of African Art

Existing Asbestos Documentation – **Versar 1993 (no other data made available)**

Pages of Documentation Copied/Scanned – **149**

EPA Inspector(s) –

Gary Urban (I/MP 98674, exp. 10/21/09)
Brooke Wilt (I/MP 95282, exp. 5/23/09)
Ron Stallard (I/MP 95269, exp. 5/23/09)

Summary

The initial data provided (Versar 1993) indicated that asbestos containing materials were limited to the original building in the form of:

Brown mastic on metal duct*
Vinyl Floor tile

*Versar indicated the presence of brown mastic on metal duct in the following areas: Mechanical room 3217, 3010, 3042, 3043, and 3195. AMA verified the presence of the material in those areas. The Versar '93 report states the brown mastic may also exist on the ductwork above administrative areas. Upon further investigation it was determined that the brown mastic exists throughout the entire building on various supply and return metal ductwork. This determination was made based upon the observation of brown mastic above ceiling decks where ceiling tiles had been removed. AMA employed the use of mechanical drawings provided by the Smithsonian Institution to locate supply and return ducts. It should be noted that the return/supply ductwork may not contain brown mastic in all locations.

The locations of these materials can be found on the attached spreadsheet.

Based on the inspection by AMA, no asbestos containing materials were removed.

AMA collected twenty-one (21) bulk samples of suspect materials in the Quadrangle. Original drywall and joint compound as well as textured ceiling compound were the materials sampled. On each level of the Quadrangle, three samples were collected from both the drywall and joint compound, totaling 18 samples. One sample of textured ceiling compound was collected from each level, totaling 3 samples. Samples were submitted to AMA Analytical Services, Inc. for three-day turn-around.

Samples of bulk material were analyzed using PLM following the EPA, "Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R-93-116). PLM is an optical microscopic technique used to distinguish the different types of asbestos fibers by their shape and unique optical properties. The technique is based on the refraction of light from the various crystalline asbestos structures and observing the corresponding color changes through the microscope.

AMA Analytical Services, Inc. is accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST) through the National Voluntary Laboratory Accreditation Program (NVLAP) for Bulk Asbestos Analysis, (NVLAP No. 101143).

Based on the laboratory results, no asbestos was detected in any of the twenty-one (21) samples collected.

Areas 1048, 2070, 2111, 2143, and 2179 were inaccessible at the time of the investigation. AMA representatives were informed security personnel did not have keys to these areas; they are restricted access.

When available, AMA will affix Warning Signs (labels) to the entrances of routine maintenance areas where ACM or PACM is documented in accordance with the Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1001-Asbestos in General Industry Standard, and the contract requirements.

Damaged Materials

During the inspection, no damaged materials were observed in the building.

If you have any questions regarding this summary or the attached data spreadsheet, please contact me at our office.

Sincerely,

Gary L. Urban, CHMM
Vice President-Consulting Services

Attachments:
ACM Data Spreadsheet
Building Drawings