

**Committee on House Administration**  
**Written Testimony**  
**Smithsonian Institution Secretary G. Wayne Clough**  
**1 April 2009**

Chairman Brady and members of the committee, thank you for this opportunity to testify on the important issue of asbestos and hazardous materials management at the Smithsonian Institution and to explain what happened, what we've done to address the problems, and how we will proceed in the future.

I want to assure the committee and the American people that our museums are safe, open and free as always. We have never had an indication of unacceptable levels of asbestos risk to the public in any of our museums. The safety of our employees and volunteers and visitors remains our highest priority. We have 6,000 employees and an equal number of volunteers working at the Smithsonian. More than 25 million visits are made to our museums annually.

The Smithsonian has an excellent and improving safety record and we work diligently to comply with Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) regulations and standards. Based on our calculations, the Smithsonian's total recordable injury rate for our combined Federal and trust work force is below the Bureau of Labor Statistics' national average of all museums, historical sites and similar institutions. For the past four years, we have been below that national average benchmark by 60%. And for the same time period, we are 45% below the Federal government average. (Note attached chart.) Even though there are reasons to be pleased with where we are, our goal is zero injuries and illnesses and we will continue to seek to improve.

We take the National Air and Space Museum (NASM) complaint about asbestos very seriously, and have conducted a thorough investigation. Any worker at the Smithsonian has the right to call attention to safety issues on the job and always will. We are certainly concerned about Mr. Pullman's health and well being. I assure you he has been and will continue to be treated fairly and equitably.

I know from personal experience what the working men and women of this country contribute to their families and communities. My dad never went to college; he was a construction worker and traveled the country installing industrial HVAC systems for York Air Conditioning. He broke his leg in a fall from a ladder. I worked my way through college as a surveyor for the railroad and also delivering furniture for Sears—it was heavy lifting. In my professional life as a civil engineer I am an expert at underground construction. I have spent time underground with the "sand hogs." I know what hard work is. I respect and value it.

I am a father and grandfather. My wife, my children, my grandson and I have all visited NASM over the last two months, and I would visit the Air and Space Museum with them again tomorrow – or any of our museums. They are all safe.

To respond to concerns about asbestos exposure and preclude problems in the future, I have taken the following steps.

- 1) I have directed a complete review of our asbestos safety policies and procedures, to include interviews with workers and oversight by an independent outside workplace safety expert to ensure that our program is being followed and is consistent with current best practices, and stipulated that the process be completed within 120 days of contract award. The independent expert will report directly to the Office of the Secretary, and, to ensure candor, our workers will be free to make comments anonymously.
- 2) We regularly conduct our own annual environmental safety assessments. In addition, I have directed an independent assessment of this process to doubly reassure the public that the museums are safe. Again, this independent expert will report directly to the Office of the Secretary.
- 3) For all members of the exhibition production group in which Mr. Pullman works as well as other current and former museum employees who believe they might have been exposed to asbestos-containing material in the performance of their work, we will offer free medical screening evaluations as well as consultation with an outside expert on asbestos related disease. The screenings and consultations will be done during normal duty hours.
- 4) All our safety coordinators meet bi-monthly; the topic of asbestos safety will be an agenda item at every meeting. Safety coordinators will keep museum directors apprised of safety issues and will work with each museum's safety committee to address concerns.
- 5) In addition to the carpenters, plumbers, welders, pipe fitters, electricians and others who have already received mandatory asbestos safety training, all exhibits production employees are now mandated to undergo similar training, and we are reviewing the entire staff to identify any other possible workers who may be exposed to asbestos during the course of their work.
- 6) Any current or former Smithsonian employee or volunteer concerned about asbestos related disease is welcome to visit Smithsonian Occupational Health Services, which is free of charge, to discuss any questions that he or she might have. Also, the Smithsonian will bring in a medical expert on asbestos related disease to provide an educational lecture for all employees followed by a question and answer session. This lecture will be recorded and made available on the Smithsonian's intranet.

We will be as thorough as possible in addressing the current issues as well as all safety concerns. As I mentioned, the Smithsonian has a long record of assuring the safety of all its workers, volunteers and visitors. The Smithsonian Institution (SI) works diligently to comply with all Federal regulatory requirements that pertain to worker safety and health. Over the past five years, we have improved our safety, health and environmental programs. I have attached details of our safety record for the Committee.

Today, the Smithsonian owns or leases hundreds of buildings and structures. Some of our buildings are new, the oldest is more than 150 years old, and more than half are over 25 years old. My office is in the Smithsonian Castle, a structure completed in 1855. The Smithsonian is unique in both the architectural variety and functional diversity of its buildings. The Smithsonian

is not unique in having to deal with asbestos; it is a challenge to many in the public and private sectors—including the Federal government. Since 1990, more than \$15.5 million has been spent from the Smithsonian’s capital program for asbestos abatement.

Now, I would like to address the allegations that have been made regarding the National Air and Space Museum.

There are roughly 250-300 workers across the Smithsonian, carpenters, plumbers, welders, pipe fitters, sheet metal workers, machine shop workers, electricians and others who work around asbestos-containing building materials. This group has regularly been identified and targeted with relevant asbestos training for such work. The audio visual department of the exhibits production staff at the National Air and Space Museum was not identified as a part of the group that received extensive training. This was an oversight. We have corrected it. In addition, we are conducting an internal review to ensure that no other staff may have been overlooked.

As recently as February 2009, the Smithsonian hired independent licensed asbestos inspectors to conduct tests at the museum. All tests showed levels well below the permissible exposure level set by OSHA and EPA, and there is no danger to the public and staff.

For the past year, the museum’s exhibition production staff has followed OSHA-approved work practices when cutting into walls that contain asbestos in the joint compound. Today, orientation of all new Smithsonian employees includes a session on OSHA regulations, including hazardous materials and asbestos. In addition, the Smithsonian safety office offers quarterly asbestos awareness training programs to all staff.

By way of background...

- In 1992, an asbestos survey and hazard assessment of 22 Smithsonian buildings (including NASM) was conducted by Versar Inc., an environmental risk management firm. The report identified asbestos containing materials (ACMs) in a number of Smithsonian buildings. At the National Air and Space Museum, ACMs were found in several areas, including vinyl floor tiles and joint compound in drywall. The report’s recommended response action regarding the compound was to monitor it for a change in composition, which may occur during construction work and cause the fibers to become airborne. The report was shared with building managers, directors and safety officers at the time. Training was conducted at NASM in 1997 for Building Management Division (BMD) staff. Attendees included 17 members of BMD for a two-hour asbestos awareness training session conducted by the certified asbestos inspectors from the Smithsonian’s central safety, health and environmental management office. Asbestos awareness training has been conducted throughout the SI annually, including NASM, with more than 1,300 staff trained since 1993.
- All air-sampling done by independent contractors (2006, 2007, 2008, February 2009) and the Smithsonian’s certified asbestos inspectors (April 2008 through February 2009) has yielded results significantly below the permissible exposure limit standards set by OSHA for asbestos.

- When the museum’s exhibits chief learned of potential hazards in drywall joint compound in late February 2008, he took immediate, proactive steps—calling the museum’s safety officer and the Smithsonian’s safety office. Asbestos awareness training sessions for all employees in the Division of Exhibits Production and Maintenance were held on March 7<sup>th</sup> and 26<sup>th</sup>, 2008. In addition, staff members took an intensive two-day program (April 2 and 3, 2008) qualifying them to perform Class III asbestos work which covers relatively low-risk operations and maintenance work, not demolition. Higher level (Class I and II) asbestos projects are done by contractors. To be clear, our exhibits chief had begun arranging for the two-day training session prior to Mr. Pullman’s first complaint.
- On April 9 and 10, 2008, OSHA conducted an inspection (no air sampling) that determined Class III asbestos work in the museum’s Gallery 113 in February 2008 was conducted without 1) initial exposure assessment; 2) informing employees; and 3) training before work was conducted. The report noted all three violations were grouped together and categorized as “other” than serious because OSHA found no evidence of overexposures. Each violation was noted “Corrected During Inspection.” While OSHA cannot fine other Federal organizations, if this same citation had been issued to a private employer, there probably would not have been any penalty assessed.
- Beginning in the fall of 2008, orientation of all new Smithsonian employees has included a session on OSHA regulations, including internal communication regarding hazardous materials.
- KEM (Kynoch Environmental Management) was brought into the building in October 2008 by Mr. Pullman. KEM analyzed samples collected from undisclosed locations by Mr. Pullman. KEM also collected its own samples of dust. They found asbestos in the joint drywall compound (as we already knew) and in dust. The KEM report alleged that its dust and drywall samples indicated that the air in NASM is or has been unsafe. The allegation is speculative because KEM did not perform air sampling.
- Ambient air monitoring was conducted by Aerosol Monitoring and Analysis (AMA) throughout NASM on December 9<sup>th</sup> and 11<sup>th</sup> of 2008 to determine if airborne asbestos hazards existed. Based upon laboratory analyses of the samples taken, levels were below the permissible exposure level.
- Mr. Pullman conducted his testing in secret. The Smithsonian took a more open and inclusive approach. The Smithsonian invited Mr. Pullman to send a representative of KEM to observe its December 2008 air monitoring. We again invited Mr. Pullman to send a representative of KEM to observe the February 2009 clean up of the dust found by KEM in undisclosed locations, whose location had to be pinpointed and which was cleaned by a licensed contractor. We made those invitations to him through his counsel. He declined each invitation.
- Although Mr. Pullman had identified to KEM certain “areas of concern” within the museum by October 2, 2008, he did not inform the Smithsonian of these areas. The

- A 7-day dust cleaning project (HEPA vacuuming and wet wiping) was completed on March 5<sup>th</sup> 2009 in four museum galleries at NASM. Air monitoring was done throughout the week. Results were reported as less than or equal to the EPA's safe occupancy limit of 0.01 fibers per cubic centimeter and below OSHA's permissible exposure level of 0.1 fibers per cubic centimeter of air over eight hours.
- In 2007 we began to plan for an updated asbestos assessment by another contractor. This survey is currently underway in 17 Smithsonian buildings (including all museums); the study began at NASM Tuesday, March 10, 2009; and the survey will conclude in November 2009.
- Beginning in 2009, the Smithsonian's Office of Safety, Health and Environmental Management is offering quarterly asbestos awareness training programs to all staff.

I know that exposure to asbestos is a legitimate health concern. But, again, I want to assure you and the public that our museums are safe. Independent tests are under way; the results of these tests will be made accessible and we are confident they will confirm our point. As I mentioned, we have more than 6,000 employees and 6,000 volunteers working at the Smithsonian, and more than 25 million visitors annually. The safety of each and every one of them is our highest priority.

Again, thank you for this opportunity. I would be pleased to answer any questions you may have. General John Dailey, USMC Ret., Director of the National Air and Space Museum is also here to answer your questions.

###

## Smithsonian Institution Safety Record

Today, the Smithsonian owns or leases more than 700 buildings and other structures in the District of Columbia, nine states, Panama, Belize, and Chile, about 12 million square feet of space. This includes 19 museums, many research laboratories, and the National Zoo. Some of these buildings are new, the oldest is more than 150 years old, and more than half are over 25 years old. Six buildings are designated as National Historic Landmarks, and about 24 are listed on the National Register of Historic Places or are eligible for special consideration under Federal guidelines for historic buildings. The Smithsonian is unique in both the architectural variety and functional diversity of its buildings. The Smithsonian is not unique in having to deal with asbestos; it is a challenge to many in the public and private sectors—including the Federal government.

The Smithsonian Institution (SI) works diligently to comply with all Federal regulatory requirements that pertain to worker safety and health. Over the past five years we have improved our safety, health and environmental programs by adopting a risk-based management approach, revising our Safety and Laboratory Safety Manuals, and developing fully automated accident, injury, and illness reporting and analysis. Consequently, we have an exemplary record, as indicated by statistics from our *FY 2008 Annual Occupational Safety and Health Report to the Secretary of Labor*.

### Office of Workers' Compensation Programs (OWCP) Statistics

- Injury and Illness Trends — Compared to last year:
  - OWCP Lost Time Cases are down almost 29%
  - Continuation of Pay is down 23%
  - Lost Work Day Rate is down over 14%

### Occupational Safety and Health (OSH) Initiatives

- The Safety, Health and Return-to-Employment (SHARE) Initiative sets safety challenge goals for each Federal agency to meet. In that regard---
  - Exceeded SHARE/SI goal for the Lost Time Case Rate by more than 28%
  - Exceeded SHARE/SI goal for the Total Case Rate by more than 33%
  - Exceeded SHARE/SI goal for Lost Production Day Rate by 5.7%.

The Smithsonian promotes a full spectrum of safety, health, and environmental awareness activities and functions through its National Safety Month (NSM) initiative, Fire Prevention Week, an exercise physiology and “free” pedometer program, blood drives, active involvement with SI employee wellness and fitness projects and an extensive influenza-vaccination program. In addition, many SI units and Museums conduct focused programs to promote employee involvement and engagement in safety, and health and environmental functionality.

Over the past five years, overall injury and illness rates have shown a progressive downward trend. This is illustrated by the Smithsonian's performance exceeding three of the President's four SHARE goals. Results with respect to the Timeliness Goal for occupational injuries and illnesses, though below our SHARE goal standard, have shown improvement over the past few

quarters. This is the result of implementing a recently developed and fielded automated reporting system for injuries and worker's compensation claims.

By our calculations, the Smithsonian's total recordable injury rate for our combined Federal and trust work force is below the Bureau of Labor Statistics' national average of all museums, historical sites and similar institutions. In fact, for the past four years we have been below that national average benchmark by 60%. And for the same period, we are 45% below the Federal government average.

During FY 2009, the SI will continue to build upon the overall goal of "Zero Injuries." Increased emphasis is being placed on the Health Risk Management Program which is directed at improving occupational health and employee productivity through the examination and identification of job related hazards, risk factors, and their mitigation.

We have achieved this success through the following on-going initiatives and policies:

1. A targeted training program. Worker training is provided to SI staff and volunteers working with hazardous materials and/or in hazardous areas to ensure the safe conduct of their tasks, the safety of the visiting public and our collections pursuant to regulatory requirements mandated by OSHA. An asbestos awareness training program implemented in 1990 targeted workers who might disturb asbestos-containing materials (ACM) as part of their routine duties. Crafts and trades workers were identified as the segment of the SI workforce who would need this type of training.

OSHA regulations promulgated in October 11, 1994 mandated training for all employees who may be exposed to asbestos during the course of their work. Two-hour asbestos awareness training is required for staff conducting maintenance and custodial activities during which ACM may be contacted or where clean up of ACM debris and waste is necessary. A program to train Smithsonian crafts/trades staff that may disturb ACM was implemented in 1990 and is ongoing. Since 1993, more than 1,300 employees SI-wide have received asbestos awareness training. In addition, quarterly asbestos awareness training is now being offered to any SI employee who wishes to learn more about ACM that may be in their facility, precautions to safeguard against accidental disturbance of the materials and actions to be taken in the event of an accidental release.

2. Design and Construction Projects. Since 1990, more than \$15.5 million has been spent from the Smithsonian's capital program for asbestos abatement. All SI asbestos abatement projects adhere to strict OSHA and EPA regulatory requirements, which are also incorporated in comprehensive SI asbestos abatement specifications. In addition, all abatement projects are reviewed by in-house SI staff to ensure the adequacy of all health, fire protection and environmental management controls and compliance with applicable regulatory requirements. All asbestos-related work is completed by licensed asbestos abatement contractors. Contractor work practices are monitored by an independent environmental contractor and air monitoring is conducted for the duration of the work to ensure that all non-work areas are free of asbestos contamination. All SI abatement projects have met or exceeded standard

3. Management Evaluations and Technical Reviews (METRs). Comprehensive METRs are conducted annually in each SI facility to assess fire, occupational safety, industrial hygiene, radiation safety and environmental management compliance requirements. Recommendations to correct cited deficiencies and programmatic failures identified in each facility are made based on regulatory requirements and best management practices. Visual inspections of asbestos-containing materials are made during the METR process to assess the condition and accessibility of the materials. Materials demonstrating evidence of deterioration or that are subject to disturbance by staff or contractors are targeted for abatement (encapsulation, enclosure, or removal). Additionally, all museum safety coordinators and safety committees conduct annual independent inspections of their entire facilities.
4. Health hazard assessments/exposure monitoring program. The SI developed a comprehensive health hazard assessment and exposure monitoring program in 1987 that is fully compliant with all applicable occupational safety and health regulations mandated by OSHA, EPA, the Nuclear Regulatory Commission, etc. Staff who are exposed to hazardous materials are enrolled in applicable medical surveillance programs.
5. Routine safety coordinator meetings. Bi-monthly safety coordinator meetings are held to ensure that all coordinators are fully apprised of mandated regulatory requirements affecting their respective facilities. Adherence to asbestos-related regulatory requirements is a standing topic of discussion at the meetings.
6. Competent, trained safety and health staff. The SI has an office entirely dedicated to the safety and health of SI staff, volunteers and the visiting public. This staff has eight industrial hygienists who are trained and certified as asbestos inspectors, supervisors and management planners. The industrial hygiene staff routinely inspects and assesses ACM throughout the SI and conducts air monitoring to ensure the safety of the indoor environment and workers performing a wide variety of asbestos-related tasks. Extensive monitoring has been conducted while NASM exhibits staff performed various tasks that impacted ACM, all with results well below occupational and environmental exposure limits established by OSHA and EPA.
7. SI Safety Manual. The SI published a completely updated comprehensive safety manual in 2007. This document details all actions needed to ensure that our employees work in and maintain safe and healthful working environments. The manual addresses fire protection, occupational safety and health, industrial hygiene and environmental management requirements. An entire chapter in the manual is dedicated to asbestos, to include hazard identification and control, waste disposal, training and recordkeeping requirements.

As you all well know, we live in a post 9/11 world where security is a major concern. In June 2004, the Smithsonian received a safety award from the Protecting People First Foundation for “the investment made by the Smithsonian Institution in lifesaving technology for the benefit of



its employees, the visiting public and our treasured National Collections.” The Foundation was created by Aren Almon-Kok, mother of one-year-old Oklahoma City bombing victim Baylee Almon, one of 19 children killed in the Oklahoma City bombing. Almon-Kok created the Foundation to honor the memory of her daughter and other bombing victims by promoting the lessons learned in the Oklahoma City bombing through a national education campaign.

Specifically, we installed safety film and window systems that would mitigate the impact of a bomb blast (or potentially another extreme event) at many of our facilities. The various technologies prevent “flying shards of glass” which are the leading cause of death and injury during bomb blasts. We are still in the process of planning, designing, and installing more systems throughout SI. The systems are either part of regular facility renovations and/or specific projects on the SI Capital Program (several projects in various years).

###