

PLAINTIFF'S

EXHIBIT

AL-786

*Your invitation
to join
The
National
Asbestos
Council*

— Individual —
Membership Application

**THE NATIONAL ASBESTOS
COUNCIL**

P.O. BOX 77285 • ATLANTA, GA 30357

Please complete this application for individual membership in The National Asbestos Council and submit it with your Annual Dues payment to the address shown above.

Applicant's Full Name (Last, First MI)

Company or Organization (if appropriate)

Preferred Mailing Address (P.O. Box or Street)

City State Zip

Telephone Number Date

()

Please check areas of special interest:

- ☐ Buildings and Structures
- ☐ Testing Procedures and Equipment
- ☐ Removal and Disposal Techniques and Equipment
- ☐ Legal Aspects
- ☐ Medical Aspects
- ☐ Other Areas of Interest
(Please be as specific as possible)

Would you serve on a committee in the field(s) of interest you have checked?

☐ Yes ☐ No

Signature

Please note: This application will be presented to the board of directors for approval. Membership will be annual, from date of acceptance.

Thank You.

*Thank you for your interest in
membership in The National
Asbestos Council.*

Please select the most appropriate membership application form - individual or corporate - and submit it at your earliest convenience.

INDIVIDUAL: Individual members in good standing enjoy all the rights and privileges of membership in the National Asbestos Council. A member may serve on committees, vote and be elected to any office of the Council. Annual dues \$60.

CORPORATE: Corporate members enjoy the same rights and privileges as individual members. Corporate members will receive an additional listing in the National Asbestos Council Directory. Corporate membership is open to all corporations, companies, individuals, or other entities. Additional Corporate representatives may join as individual members at a reduced rate. Corporate annual dues are \$200. Additional representatives annual dues are \$40.

SPONSOR: Sponsors enjoy all the rights and privileges of corporate members. In addition a sponsor may attend Executive Board meetings to serve in an advisory capacity. Initial sponsorship is \$2,000 and may be renewed annually at the corporate member rate. For further information regarding sponsorship, please contact any officer of the Council.

**Effective November 1, mail to:
2786 North Decatur Road, Suite 220
Decatur, Georgia 30033**

— Corporate —
Membership Application

**THE NATIONAL ASBESTOS
COUNCIL**

P.O. BOX 77285 • ATLANTA, GA 30357

Please complete this application for corporate membership in The National Asbestos Council and submit it with your Annual Dues payment to the address shown above.

Company or Organization Name

Representative's Full Name (Last, First, MI)

Preferred Mailing Address (P.O. Box or Street)

City State Zip

Telephone Number Date

()

Please check areas of special interest:

- ☐ Buildings and Structures
- ☐ Testing Procedures and Equipment
- ☐ Removal and Disposal Techniques and Equipment
- ☐ Legal Aspects
- ☐ Medical Aspects
- ☐ Other Areas of Interest
(Please be as specific as possible)

Would the representative serve on a committee in the area(s) of interest checked?

☐ Yes ☐ No

Signature

Would additional representative from your company be interested in membership at reduced rates? ☐ Yes - Please call me.

Please note: This application will be presented to the board of directors for approval. Membership will be annual, from date of acceptance.

***The purpose of The National
Asbestos Council is . . .***

. . . to collect, generate and disseminate information to building owners, interested professionals, and the public concerning asbestos in buildings.

Its objectives are . . .

. . . to gather and maintain information regarding asbestos-related projects

. . . to serve as an educational resource on asbestos-related projects.

. . . to promote the highest standards of professionalism among its members.

NATIONAL ASBESTOS COUNCIL NEWSLETTER

SUMMER, 1983

VOL. 1 No.2

CLEARANCE SAMPLING AND THE FIBER COUNTING METHOD

Perhaps the toughest decision for a project manager during any asbestos abatement or control project is determining what level or concentration of fibers is acceptable after work is completed. It is always the goal to achieve the minimum level attainable. A review of numerous asbestos removal contracts have indicated "clean air" is achieved anywhere from "no asbestos" to 2 fibers per cubic centimeter of air sampled (fibers/cc). The latter being the current Occupational Safety and Health Administration (OSHA) Asbestos Standard (29 CFR 1910.1001). The OSHA level is clearly not adequate to be used for this purpose. Likewise, "no asbestos" cannot be measured accurately, and asbestos fibers are normally present in the ambient air, although at very low concentrations.

Many contracts specify the contractor must attain a cleanliness level in a range from 0.01 to 0.05 fiber/cc. Studies conducted by Georgia Tech and others have found the "typical" fiber concentration in most buildings containing sprayed-on asbestos-containing materials is 0.02 fibers/cc or less. Accordingly, "clean air" specifications should not be higher than the level prior to the abatement project. Therefore, the clearance air sampling results should be less than 0.01 fibers/cc. If 0.01 fibers/cc is specified, the air sampling scheme should reflect this and provide reliable results.

If the National Institute for Occupational Safety and Health (NIOSH) method P & CAM 239 is followed exactly the sampling volume should be increased to 960 liters. If no fibers are found by the analyst, the resulting concentration reported (95% confidence limits for most microscopes) should be less than 0.003 ± 0.007 fibers/cc. If only 240 liters are sampled (minimum volume stated in many contracts and the EPA Guidance Documents), the resulting limit of detection would be less than 0.02 ± 0.08 fibers/cc. This should not be considered adequate for clearance sampling.

Currently, several alternative methods of extending the limit of detection to lower levels

are being evaluated. These include examining a larger area of each filter, using a filter of smaller size (diameter) and an increased flowrate. Until these modifications to the NIOSH method have been validated their use should be with reservation.

Submitted to the NAC NEWSLETTER by William M. Ewing, Industrial Hygienist, Georgia Institute of Technology, Engineering Experiment Station, Environmental Health and Safety Division, Atlanta, GA 30332.

NEW YORK LEGISLATURE CONSIDERS ASBESTOS BILL

On March 1, bills relating to asbestos safety in public buildings were introduced in the New York State Senate and the Assembly. The legislation (S. 3645, A. 4727) is before the Committee on Government Operations in both houses.

If passed, the bills would amend New York State's public buildings law by requiring the Commissioner of General Services to:

- inform users of public buildings of health hazards of all asbestos materials, especially those in a damaged, deteriorated or disturbed state;
- provide information of a scientific and technical nature to persons responsible for maintenance of buildings suspected of containing asbestos and constituting an imminent health hazard;
- require persons responsible for maintenance to inspect all public buildings and report the existence of damaged, deteriorated or disturbed asbestos materials;
- maintain records regarding asbestos materials in public buildings;
- establish work guidelines;
- establish training programs for contractors;
- adopt minimum levels of asbestos air concentration in such buildings; and,
- explore other activities to eliminate health hazards caused by asbestos.

BOMA/New York will be following the legislation closely to determine whether it could effect privately owned office buildings.

(Reprinted from BOMA International Skylines, May 1983)

OPERATIONS & MAINTENANCE PLANNING FOR ASBESTOS IN BUILDINGS

Given discovery of asbestos-containing materials in a building, operations and maintenance (O&M) planning must begin immediately.

An O&M plan should be:

- Definitive with respect to inspection results (and adequate testing) specific to each building.

Where are the asbestos-containing materials located? Provide building plans and testing results.

- Specific with respect to warning systems. What are the alert signals utilized in the building? Do all persons utilizing the building understand the signs being used? Can warnings be restricted to certain class of employees, such as maintenance men? Adequate warning is the issue.

- Notification oriented.

Timely programmed instruction for relevant parties, with periodic testing for its adequacy, is essential with regard to:

1. Orientation to the building and the location of hazards.
2. Provision of safety equipment adequate for anticipated work.
3. Professional training regarding work practices and worker protection procedures.
4. Supervision requirements, emphasizing building owner policies and legal liabilities.
5. Medical surveillance, given evidence of exposure to hazards.

- Remedial Measure Oriented.

A plan of action should be provided to delineate the building owner's policies (strategy, objectives, schedules) regarding the specific engineering measures to be undertaken to provide a remedy for hazards in the building. Tasks for building owner employees should be clarified with respect to those tasks that are to be left for outside specialist support. Further, decision-making guidelines should be provided for unanticipated circumstances.

- Couched in a Managerial Control Context.

Policies can be as hazardous as any material contained in a building, therefore, managerial control concepts are essential from both financial and legal viewpoints. Cost recovery and tort claim defense are vital aspects of the O&M plan. Competent professional (specialist) advice and

guidance can be appropriate in both the formulation and implementation of an O&M plan. Competent legal advice is by far the most important aspect of managerial control, given the need for an asbestos hazards program.

Contacts for additional information:

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Marietta, Georgia 30065
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NAC Technical Assistance Report 83-2

NAC NEWS BRIEFS

- Association Services/Atlanta, Inc. has contracted with the National Asbestos Council to provide association management for the Council. Mr. Stewart Huey assumed the role of Executive Director following the Steering Committee meeting on June 1, 1983.
- The NAC will be conducting a 3-month trial project to communicate up-to-date information regarding asbestos in buildings to its members. The NAC will contract with a national clipping service to provide copies of published articles of interest. This information will be sent to the members periodically.
- The National Asbestos Council takes great pleasure in welcoming two Founding Sponsors, Southern Fiber Control Technologies, Inc. (Fibertek) of Atlanta, GA and J & R Salvage, Inc. of Brooks, KY. Information on sponsorships is available by writing NAC, 2200 Parklake Drive, Atlanta, GA 30345, or by calling Mr. Huey at (404) 939-5480.
- A meeting of current and prospective members will be held on Thursday, July 15, 1983 in the Space Science Building on the campus of Georgia Tech (Atlanta, GA). All members and other interested parties are urged to attend. The meeting will begin promptly at 7:00 P.M.
- Articles for publication in the NAC NEWSLETTER should be sent to: Editor, NAC NEWSLETTER, P.O. Box 77285, Atlanta, GA 30357. Articles may include technical briefs, report summaries, book reviews, etc.

Quotes Without Comment

A monthly sample of news items from the Nation's Press about Asbestos in buildings

School Officials Criticize

By CARL W. BABCOCK
Post-Courier Reporter

4c/6

Charleston County School District personnel are still waiting for a complete report on asbestos in the county's schools from the state Department of Health and Environmental Control — and they are dissatisfied with the results they do have.

"There is more asbestos in the schools DHEC tested than was originally thought," said John M. Moorer, the school district's director of buildings and grounds. "Their inspection work was just not comprehensive enough because we are finding more asbestos in the schools than was indicated in the reports."

As an example, Moorer said, asbestos has been found in Garrett High School's gymnasium ceiling. None was mentioned in the DHEC report.

"We are conducting additional tests at the schools in which DHEC found asbestos and are telling the architect involved that we want all the asbestos removed from those schools," Moorer said. In addition, he said, the school district will recheck other schools in the system during the coming year.

The contract with Gemco Construction Company Inc. calls for the removal of any additional asbestos that may be found in the schools.

Moorer also is dissatisfied with the speed of the DHEC analysis. The inspection of the school system was to be finished by April 1. That was delayed until mid-July with 15 schools left to check.

Charleston, SC, NEWS AND COURIER, July 19, 1983

City schools face asbestos cleanup

By Jim Campbell
Sun Staff Writer

Asbestos potentially harmful to students and staff members has been discovered in nine Bremerton schools, and the district is facing a costly cleanup project which won't be completed by this fall's school reopening.

"The bottom line is, it's going to be out of there," said Vance Powell, director of administrative services.

But because the asbestos hazards sur-

faced only recently, the district lacks the time and money to complete a full-scale cleanup by September.

Powell said that by fall, the district hopes to have a comprehensive cleanup plan, firm cost estimates, and maybe some work under way. Board member James Robinson said some high-exposure areas may be closed off to students and staff members.

Bremerton, WA, SUN
July 15, 1983

Asbestos Survey

As of today, there are 13 schools uninspected and Moorer is unsure when those results will be ready.

"Unfortunately, asbestos has been found in the two schools that have been inspected," Moorer said. He said he was withholding the names of the schools until the staff and parents of those schools had been notified.

The DHEC official who is in charge of inspecting the county's schools was unavailable for comment.

However, asbestos removal from six of Charleston County's public schools is on schedule and the dangerous substance should be out of the schools by the August 19 deadline, according to Moorer.

St. Andrew's High School was to have been finished Monday, Moorer said, and removal work will begin today at North Charleston and Middleton high schools.

"So far there have been no major problems, other than finding more asbestos than we thought was there, and we are right on schedule," he said. The asbestos removal began July 7.

Elizabeth H. Alston, summer school consultant, said summer school sessions slated for Middleton were moved because of the asbestos problem. "We moved to the renovated wing of St. Andrew's, where there is no asbestos," she said.

Suspect asbestos

Federal Environmental Protection officials are inspecting New Jersey schools this week to determine if asbestos has been found in the buildings and if employees and parents have been informed of the presence of the suspected carcinogen. About 250 of the state's 2,500 public schools contain some "friable", or easily crumbled, asbestos material, an EPA spokesman said.

...
Toms River, NJ
REPORTER
July 6, 1983

Asbestos removal sought

The General Services Administration has a plan to eliminate asbestos in the William S. Moynihan Federal Building, Downtown. The GSA will ask Congress to spend \$3 million to install a sprinkler system in the building. Before the sprinklers can be installed, \$7.25 million must be spent to remove asbestos from ceilings and pipes. Almost \$3 million would be required to relocate employees during the removal and installation.

Pittsburgh, PA
POST-GAZETTE
SUN-TELEGRAPH
July 19, 1983

A member service from National Asbestos Council, Inc.
2200 PARKLAKE DRIVE ATLANTA, GEORGIA 30345

ALCOA00000090

Asbestos work put on ice

By FRED AUN
Advance Staff Writer

A labor union conflict has resulted in the delay of an asbestos removal project for Warren County's nursing home, a project that may have been overestimated by more than \$100,000.

In June the Warren County freeholders agreed to spend about \$230,000 to remove asbestos pipe wrapping found during renovation work at Warren Haven, the county

nursing home in Oxford. The asbestos had been installed in the nursing home's walls and ceilings during the 1950s, and the freeholders decided to remove it while the pipes were exposed for the expansion.

The work was to have been started last week by United Painting Co. (UPC) of Mount Vernon, N.Y. The renovation is being done by a general contractor — N.P.S. Constructors Inc. of Secaucus.

At the freeholder meeting Wednesday, however, Freeholder Irene Smith said UPC had suddenly backed out of the proposed contract. Although she had not received an official explanation, Smith said she'd heard rumors regarding UPC's change of heart that could have meant improper tactics had been used.

"I just smell something here and I want to know about it," Smith said, adding she wanted to find out "if

anyone sought to sabotage this project."

UPC President A.N. Stein used stronger words than "sabotage" when explaining Thursday why he withdrew the asbestos removal offer.

Stein said his workers are members of the International Brotherhood of Painters and Allied Trades and noted his firm is known nationally as one of the leaders in asbestos removal and related work.

He said he had "struck a deal" with N.P.S. after the company called and asked for a bid. But just as UPC was ready to begin work, Stein said, he received a call from the head of the labor union involved with the Warren Haven expansion.

That union, according to Stein, claimed it had jurisdiction over the asbestos removal. "I said, 'who gave it to you? God?'" Stein said, citing National Labor Relations Law rulings that prohibit such actions.

Then, he claimed, he was called by a representative of the carpenters' union at the job. That person said the only work UPC would be allowed to do is the asbestos removal. All related work, which Stein had included in his bid and said he does in all asbestos removals, was to be left to the carpenters.

"They said they wanted union labor that was in harmony with the union

withdrew his proposal. In that proposal he offered to do the job for \$89,000.

When asked why the freeholders had been told the job would cost \$229,158 in May, Stein said he had no idea. He noted that the only work his proposal didn't cover was reinstallation of the ceiling, a job that he said normally costs about \$15,000.

Calls to Vince Paolicelli, the architect hired by Warren County for the job were not returned. According to Warren County Treasurer Comptroller/Treasurer Robert Leupo, Paolicelli is responsible for authorizing change orders in the Warren Haven renovation.

Leupo said he was surprised to learn of the more than \$100,000 difference between UPC's claimed quotation and the \$229,000 figure presented to the freeholders by N.P.S.

Also unavailable for comment were the president of N.P.S., Warren County's purchasing agent Robert Sheridan, and all three of the freeholders.

Calls to the trailer of Bill Glemck, the N.P.S. supervisor at Warren Haven, were also not answered.

labor on the job," Stein said.

Stein said he then sent a letter to N.P.S. saying the pressure from N.P.S. unions was not in accord with standard labor practices, and

Dover, NJ, ADVANCE
July 8, 1983

Asbestos vacuumed out

By Sue Wallace

Herald-News Writer

Masked men really cleaned up this week at Taft School.

Wearing white protective suits, hair covering and masks, employees of J.F. Walton & Co. Inc. used a giant vacuum cleaner to remove asbestos from the boiler room of the Joliet school.

The room was filled with a water mist to wet down the fibers so they could be removed. The project took about three

days and is expected to cost the school district \$13,800.

The asbestos was being removed as a result of a study conducted early this year which found that asbestos fibers used to insulate pipes in the boiler room were being circulated though the school's ventilation system.

The district decided to remove the asbestos to avoid any possible health hazard. Asbestos has been linked to lung cancer and lung inflammation.

John Dolak, who is in charge of business affairs for the Joliet Public Grade School District, said the ventilation system was turned off last spring to limit circulation of the fibers until they could be removed.

Dolak said the asbestos fibers were part of a blown-in type of insulation. He said no other school in the district used this type of insulation. The asbestos was removed from the boiler room in preparations for the installation of a new boiler.

Joliet, IL, HERALD NEWS, July 12, 1983

ALCOA0000009098

Hawkins commission to get asbestos advice

By KEN CROWDER
Hawkins County Bureau

ROGERSVILLE — A consulting engineer is expected Monday to explain to Hawkins County's 21 commissioners what can be done about 122,000 square feet of potentially harmful asbestos in four county schools.

But County Executive J.B. Howe said yesterday the commission likely would not take action for at least two weeks on the school board's expected request for money to remove the asbestos from Mooresburg, Hawkins and Church Hill elementary schools and Surgoinsville Middle School.

Kingsport, TN, TIMES-NEWS
July 16, 1983

School board sets special asbestos contract meeting

The Hendry County School Board will meet in special session Thursday, June 7, at 6 p.m. to consider a contract for removal of asbestos from four Hendry schools.

Superintendent William Burke said Tuesday that the work needs to be completed before students return to class.

Asbestos has been identified as a cancer-causing agent.

Asbestos has been found in Clewiston High School, Clewiston Intermediate School, LaBelle Middle School, and LaBelle Elementary School.

Clewiston, FL, NEWS, July 6, 1983

Manville Corp. sued the U.S. for breach of contract, alleging that federal officials knew, but failed to disclose, that shipyard workers were overexposed to asbestos during World War II. Manville is trying to force the U.S. to pay up to half of the asbestos-related health claims against it.

San Francisco, CA
WALL STREET JOURNAL
July 20, 1983

Any Asbestos Exposure Is A Danger

by Ruth Miller

Asbestos is dangerous. In fact, so dangerous that there is no level of exposure to asbestos fibers that experts can be sure is really safe.

To help consumers remove the danger of asbestos and to clarify which products with asbestos are a health risk, the Consumer Product Safety Commission and the Environmental Protection Agency have put out a booklet, *Asbestos in the Home*. For your copy, send \$2.75 to the Consumer Information Center, Dept. 217L, Pueblo, Colorado 81009.

Size is part of the danger with asbestos, since asbestos fibers are so small and light they can be easily inhaled. You can't see the tiny asbestos fibers, and they are so small they pass through the filters of normal vacuum cleaners and get back into the air. After many years of exposure, cancer can develop.

Cigarette smokers face a special hazard when they are exposed to asbestos. Asbestos exposure and cigarette smoking together have been shown to cause a combined risk of lung cancer greater than either danger alone.

However, not all products with asbestos are a health risk. The risk exists only when asbestos fibers are released into the air from the material or product. Soft, easily-crumbled material containing asbestos has the greatest potential for asbestos release and, therefore, has the greatest potential to create health risks.

Home products where asbestos is likely to be used in-

clude building materials, appliances, ceilings, wall and pipe coverings, floor tiles and some roofing materials. Basically, asbestos has been used to strengthen materials, for thermal insulation, and for fire protection. In most cases, the asbestos is combined with other materials which make the fibers less likely to float free into the air.

If you are concerned about whether or not you have asbestos in your home, the manufacturer of a product may be able to tell you, based on the model number and age of the product. Also, people who have frequently worked with asbestos, such as plumbers and building/heating contractors, often are able to make a reasonable judgment after a visual inspection about whether or not a material contains asbestos.

If you do find asbestos in your home, it is best to leave it alone. If it is a wall material, paint or paper over it. If you have old asbestos floor tiles where the fibers might be exposed, it is best to lay new floor tiles or linoleum over them.

When it is necessary to remove or work with products containing asbestos, get help from a contractor who is trained and experienced in working with it. Remember, anytime someone is working with asbestos they should wear an approved respirator, protective gloves, hat and other protective clothing.

(The writer is the home economist with the University of Maryland's Cooperative Extension office in Prince Frederick.)

Prince Frederick, MD, CALVERT INDEPENDENT
July 13, 1983

ALCOA0000009099

Asbestos repairs to be costly locally

By SHEILA GOUR
Times Education Writer

Two months after their announcement that potentially dangerous asbestos material was found in schools throughout Caddo and Bossier parishes, both systems are facing repair plans that will cost more than \$300,000 each.

The first major corrective action will be taken this summer for the Caddo school system, with removal of an asbestos ceiling at Captain Shreve High School. That project, which officials estimate will cost about \$11,000, also includes encapsulation (a sealing process) of some less-exposed areas in the school library.

Charles Miller, Caddo school plant director, said the five-year plan for removal or treatment of asbestos ceiling

Shreveport, LA, THE SHREVEPORT TIMES, July 20, 1983

ings and insulation material at 16 of the area campuses may end up costing the system less than he originally predicted. Those early estimates were hovering around the \$1 million mark, but a thorough search of various repair methods yielded a more realistic figure — about \$60,000 per year, Miller said.

Still, those expenditures will probably mean cuts or postponements in other capital projects that school officials would like to see completed but are not considered crucial. "We'll continue to do the heavy maintenance that needs to be done," Miller said, "but asbestos will take precedence over some of these other things."

Bossier Parish may be facing a somewhat bigger problem costwise, with an estimated \$345,000 dedicated to the project for 13 of its schools.

While that figure isn't much over the Caddo system repair plan, it represents a much larger portion of Bossier's \$38 million budget (Caddo's spending plan exceeds \$100 million).

Those cost figures were included in an updated list of maintenance needs presented to the Bossier School Board at its Finance Committee meeting last week — a list that totaled \$2.5 million. School administrators have asked for a property tax increase that possibly would be placed before voters in October to cover those expenses, and proponents of the increase say the asbestos problem will be one of the first needs addressed if the tax increase passes.

"That will be one of the highest priorities," said Bossier Assistant School Superintendent Jap Gullatt. "We plan to concentrate first on those schools where the need is most critical — Airline, Parkway and Bossier high schools."

Continued from Page One

\$48,000 for Bossier High School. Gullatt also said work has already started at Greenacres Junior High on that \$41,000 project.

School administrators across the country were required by the Environmental Protection Agency in May to identify and announce to the public any on-campus sites where the asbestos material was present. But the federal agency has not required systems to remove the substance, and has offered no grants toward resolving the issue. In addition, Miller said, EPA-approved specifications for the work have been difficult to pinpoint. "There has been no timetable set (by the EPA) for removal or treatment," he said. "And new products are announced almost constantly."

Five or six new encapsulation products have been introduced since the asbestos test results were first obtained this spring, he added. Cost figures on those products and on removal methods also have varied widely — from \$1 to about \$5 per square foot.

Frank Backs Asbestos Removal Funds

At the urging of several Members of Congress, including Representative Barney Frank (D-Mass) a key House subcommittee has taken a first step toward providing federal help for removing harmful asbestos from the nation's schools. Asbestos was widely used until the early 1970's to insulate buildings until it was found to be a dangerous substance that can cause cancer and serious lung disease.

Congress passed the Asbestos School Hazard Detection and Control Act in 1980, which requires schools to be surveyed for asbestos dangers and provides assistance for its clean-up. But since this bill was enacted into law, no federal money has been appropriated to help local communities with the expensive process of removing asbestos.

Newton, MA

VILLAGER AND TRANSCRIPT
July 21, 1983

Asbestos Costly to Lovington

LOVINGTON — Discovery of low-level asbestos in several Lovington school buildings will mean a number of long-range projects the district wants to do will be moved back at least a year.

School Superintendent Ross Black told school board members here last night the most recent laboratory reports indicate there is from 8 to 13 percent asbestos in some ceilings that are encapsulated in acoustical plastic.

Hobbs, NM, NEWS-SUN
July 13, 1983

Asbestos to Be Topic Of Talk At Building

WASHINGTON — Responding to a request from Senator David Pryor and Congressman Beryl Anthony, both of Arkansas, the federal General Services Administration (GSA) yesterday agreed to arrange a presentation to employees at the Pine Bluff Federal Building, where a GSA study detected the presence of asbestos, according to a spokesman for Anthony's office.

The senator and the congressman asked for the presentation because they were concerned about the lack of in-

formation that GSA has made public on the asbestos situation. Such information is necessary they said, regardless of the degree of risk caused by the asbestos.

In notifying Pryor and Anthony, Ray Kliene, deputy administrator of GSA wrote: "I would like to emphasize that the asbestos containing material at the Pine Bluff building has no physical damage and the building has a low potential asbestos risk."

No meeting date has been set, the spokesman said, but it was hoped that it could be held this month.

Pine Bluff, AR, COMMERCIAL, July 16, 1983

NATIONAL ASBESTOS COUNCIL

2200 Parklake Drive, Suite 150, Atlanta, GA 30345

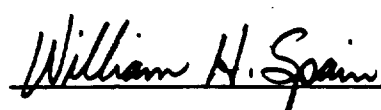
August, 1983

Are you familiar with the NATIONAL ASBESTOS COUNCIL? As a member of the AIHA, you belong to a profession which is an essential element of any asbestos abatement team. Yet it is hard for all of us to get information on and remain up-to-date with asbestos abatement techniques and issues.

The National Asbestos Council serves the purpose of gathering, generating and distributing timely information on asbestos issues. It consists of industrial hygienists, consultants, architects and engineers, building owners, contractors, educators, doctors, lawyers, and others who are actively associated with asbestos projects. The promotion of professionalism is a cornerstone of all of our activities.

The materials with this letter will help you become better acquainted with the Council. If the ongoing services of this Council can be of benefit to you or your firm, we suggest you join as a corporate or individual member. Joining now will help you stay up-to-date in this fast changing field. It will also give you opportunities to participate in advancing the frontiers of this multi-disciplinary concern.

If you have any questions, please feel free to call our Executive Director, Mr. Stewart Huey, at 404/939-5480. We hope you will accept our personal invitation to join and be active in the National Asbestos Council.

F. Burt Vardeman
President

William H. Spain, CIH, CSP
NAC Board Member

"ASBESTOS ABATEMENT & THE NEGATIVE AIR CONCEPT"

Mr. Rick Lutterbach, veteran asbestos abatement contractor of over 500 projects was one of the first environmental control engineers to develop and utilize the theory of negative air pressure on asbestos abatement projects. His "on the job" research was instrumental in the design and development of the Ultimate-Aire "Hog 4000"; a complete negative air system for asbestos projects. The following interview for the National Asbestos Council will provide answers to some common questions asked by Asbestos Abatement Contractors concerning the negative air pressure concept. Mr. Lutterbach is President of Control Resources Corporation, a national asbestos abatement firm, headquartered in Michigan City, Indiana.

NAC: What is the negative air concept?

ANSWER: Basically the typical abatement project has a series of air locks between the contaminated work zone and the non-contaminated area. The use of negative air is simply creating a pressure drop in the contaminated area thus creating an air flow into the work zone from the non-contaminated area.

NAC: How is negative air actually accomplished?

ANSWER: Specifically, every project has its own personality, therefore we must speak in generalities. Negative air is accomplished by strategic placement of Air filtration equipment in the contaminated area. A machine, like the "HOG 4000" is placed opposite to the decontamination chamber. Contaminated air is drawn through a series of filters, including a HEPA filter and is exhausted through a manifold attached to a 12 inch diameter flexible hose. This hose ports through a template in an exterior window or door. When sufficient equipment is utilized, a tremendous air flow is exhausted out of the building 99.97% clean.

NAC: Why is negative air necessary on an asbestos abatement project?

ANSWER: There are several reasons, all of equal importance, so I will address them individually.

- (1) **General Safety:** Plasticizing and decontamination barriers are subject to many variables such as human error, improper methods, faulty taping, unusual construction and many areas where there is potential for accidental contamination to clean areas or live adjacent environments. Negative air is like an insurance policy against the many possible sources of air leaks. Air is drawn through the decontamination

chamber and is also scavenged through all existing air leaks which have not been plasticized correctly. Lets face bare facts, I have not seen an asbestos abatement project yet that could be considered air-tight. Negative air makes this a reality.

- (2) **Type "C" Respiratory Environments:** In addition to the aforementioned general safety, the utilization of supplied air to asbestos workers on projects adds an additional hazard to the adjacent clean area or live environment. The typical Type "C" supplied air system is supplying 15-30 cfm of air to the worker. Simple mathematics shows you that positive air pressure is being exhausted in the contaminated area thus forcing asbestos fibers through the decontamination area and into the clean zone through any available air leaks. There is no question in my mind that utilizing Type "C" systems without compensating negative air equipment is an unacceptable procedure and enhances the possibility of gross contamination of areas outside the work zone.
- (3) **Worker Comfort & Productivity:** The typical abatement project is very humid and hot. Productivity of the worker decreases substantially when the outside temperature rises. Encapsulants fail to cure properly, tape adherence fails, etc., etc. Negative air creates a constant inflow of cooler less humid air into the work zone. This air flow decreases humidity and temperature thus eliminating heat stress and increasing worker productivity.
- (4) **Final Certification:** The moment every abatement contractor and client waits for is the final air monitoring results to certify his work area is clean of asbestos fibers. It's ironic how much time is spent on cleaning walls, floors and HEPA vacuuming all surfaces when no time is spent on cleaning the air. An asbestos fiber, as we all know, is aerodynamically inclined to suspend itself in the environment for quite some time. Cleaning surfaces and not the air has led many abatement contractors to rather lengthy certification periods. The use of the negative air concept will completely exchange and clean the air in a contaminated zone approximately 96 times in a 24 hour period. A certain method to achieve a clean bill of health and speedy certification.

(Continued on next page.)

NAC: Is there a recommended formula for establishing adequate negative air pressure?

ANSWER: We have found as a general rule that utilizing adequate negative air equipment to insure a complete exchange of air by volume in the work area every 15 minutes insures a good clean and safe project. We have tested and researched this ratio on many projects with varying concentrations of asbestos and differing types including amosite with satisfactory results.

NAC: How do we know that the air being exhausted to the outside is actually free from asbestos?

ANSWER: There are very few negative air pressure systems on the market today. I can only speak on behalf of the system that I assisted in designing. The "HOG 4000" has a series of filters including a HEPA that has been tested and meets the NIOSH standards for efficiency. The blower and seals for the filter housing has been similarly tested to check for possible bypass of unfiltered air. In addition the "HOG 4000" has been field tested to assure that asbestos fibers in the exhaust air are minimized. In retrospect the answer to the question is to use quality tested equipment.

In summation, negative air and asbestos abatement are synonymous in my opinion. There is more to the entire concept than our brief interview can expose. As a NAC member, I encourage our membership to investigate this concept more extensively to insure safety for themselves and their clients.

EDITOR'S NOTE: *Interviewee has offered his assistance to any NAC member by calling or writing to Control Resources Corp., P.O. Box -R-, Michigan City, Indiana 46360. Telephone # (219) 872-4747.*

LETTER TO THE EDITOR:

Editor:

We totally agree with Stan Shaw's fine article on asbestos in private homes in Volume 1, Number 1.

Our own recent experience with residential types of problems includes:

1. A woman who had an "Armstrong" type floor removed, scrapped and sanded: then she vacuumed the house. Fortunately the floor tile did not contain any asbestos, but she was quite hysterical after she had called all federal agencies and finally found us in the yellow pages.
2. Another owner sent in fiber glass insulation and was quite over wrought when we said there was no asbestos.
3. A condominium containing 100 buildings had chrysotile (30-45%) in the attic areas

where residents stored their belongings and had frequent contact. The boiler room and maintenance areas were in a similar asbestos condition.

These types of cases support that Stan has stated. We need to participate in the development of guidelines for private residences and commercial buildings. Rumors are circulating in Washington that EPA plans to do this, this summer, but professional guidelines from the NAC would be most desirable in helping promote this possibility.

Please continue this fine organization and newsletter.

Robert K. Simon, Ph.D., Tech. Dir.
Industrial Hygiene and Occupational
Medicine Laboratory, Fairfax, VA

A new EPA Guidance Document (EPA 560/5-83-002) titled "Guidance for Controlling Friable Asbestos Containing Materials in Buildings" (March, 1983) is available. The document discusses the establishment of an asbestos control program including detecting asbestos, assessing the problem, selecting a course of action, and determining asbestos abatement completion. It may be obtained by calling toll free (800) 424-9065.

CONTINUING EDUCATION OPPORTUNITIES

• An "Asbestos Abatement Training Course" will be offered by the University of Arizona Health Sciences Center, Tucson, AZ 85724. The course will be conducted July 6-8 in Reno, Nevada, and repeated August 3-5 in San Diego, California. The 2 1/2 day course has a registration fee of \$495. Registration is limited. Information is available by calling Yma Ford or Herschella Horton at (602) 626-6835.

• The Environmental Health and Safety Division at Georgia Tech will offer two courses on July 13-15 on the Tech campus. "Building Survey" and "Supervision of Asbestos Abatement Contracts" each carry a registration fee of \$300, and an optional exam is available on the Supervision Course for \$50. Further information is available from James L. Burson or William M. Ewing at (404) 894-3806, or from Dwight Brown at the Region IV office of the EPA at (404) 881-3864.

Information on other continuing education opportunities is welcome. Write NAC Editor, 2200 Parklake Drive, Suite 150, Atlanta, GA 30345.