ASBESTOS IS 100% SAFE! RIGHT?

ALAN LLOYD, CIH, CSP
USEPA Certified Asbestos Building Inspector
USEPA Certified Asbestos Management Planner
USEPA Certified Asbestos Project Designer
Commonwealth of Pennsylvania Asbestos Inspector
City of Philadelphia Asbestos Investigator
City of Philadelphia Asbestos Project Inspector
State of Florida Licensed Asbestos Consultant
New York State Asbestos Consultant
State of Delaware Project Monitor
New Jersey Asbestos Safety Technician
Commonwealth of Virginia Asbestos Building Inspector
State of Maine Asbestos Building Inspector
Certified Industrial Hygienist
Certified Safety Professional
Environmental Sustainability Partner
40-Hour Hazwopper Certified
WHAT IS ASPBESTOS?
How small is asbestos?

2-3 rice grains

20,000 Asbestos Fibers

5-6 human hairs

www.AsbestosDiseaseAwarenessOrganization.org
HOW IS ABESTOS USED?
H.W. JOHNS' asbestos

ROOF, RAILROAD AND SEASIDE PAINTS.

- Slate
- Gray
- Buff
- Yellow
- Red
- Brown
—but the roof didn’t burn

If only the walls had been as faithful as the roof! But then—the roof was Johns-Manville Asbestos that thwarted the fire—actually fell on it, blanketed it, literally cooled it to death!

And so not only the neighborhood was saved, but even the property next door.

The walls were wood—not brick or terra cotta like most modern buildings, or even like the modest house adjoining.

But despite this, Asbestos Roofing here went one step beyond the greatest claim ever made for it. Here in this and hundreds of other instances, Asbestos Roofing not only protected from communicated fire—but smothered its own flame as well. Not satisfied with policing the building-up for years against the weather—it suddenly turned fireman and put out the blaze beneath it. And there it hung, mute, practically intact, a silent testimonial for fire safety.

Surely, now safety standards among our communities with the growing prevalence of this staunch roofing.

Surely there is something that transcends the commercial in preaching Johns-Manville Asbestos Roofing. From photographs like this one—for a test.

H. W. JOHNS-MANVILLE CO.

New York City

Poughkeepsie—Albany—Kewanee:

Asbestos Roofing—Asbestos Roofing—Asbestos Roofing.

JOHNS-MANVILLE
Serves in Conservation
ASBESTOS-CEMENT solves this problem

The Nation's Need for REFRIGERATOR LININGS

This is one of a series of advertisements designed to show how Asbestos-cement can help to solve almost infinitely varied range of problems. At present, wartime needs have a monopoly of its service, but when peace comes, the manufacturers look forward to extending further its usefulness.

TURNERS ASBESTOS CEMENT CO., LTD.
TRAFFORD PARK
MANCHESTER 7

"TURNALL"
Slip-on Glaze Sheets for Refrigerator and Cold Storage Chamber Lining
Quilted

ASBESTOS MITTS

... they last twice as long

These asbestos mitts for handling hot metal molds and shapes are reversible to fit either hand. Both sides quilted, won't shred or fray on rough, jagged material. Double wear, double life. Wool lined. All seams double stitched. The answer to troublesome problems. $2.20 a pair. Discounts for quantities. One of 4300 production-speeding, time-saving safety gloves, aprons, sleeves, spats, etc. Write for Free catalog.

INDUSTRIAL GLOVES CO.
6547 Garfield Blvd., Danville, Ill.
(In Canada: Safety Supply Co., Toronto)
ARE YOU GOING FLOOR-CARE CRAZY?

Get smart...get Flor-Ever

Dirt comes right off Flor-Ever, America's leading vinyl floor,—so Easy,—so Fast

Artif. floor-cleaning shiners. Forget flooring aggravation—and add wonderful, gleaming color and smoothness to your rooms, too. Discover Flor-Ever.

Flor-Ever is the micro-smooth vinyl floor that is cleaned so much easier. Flor-Ever is the vinyl floor you can love because it's vinyl-angle. Flor-Ever is the gliding vinyl floor never harmed by ordinary kitchen messes.

And, Flor-Ever is setting new standards for wear.

Flor-Ever's vinyl-rich colors are today's decorator's dream. They're unbelievably beautiful. Furthermore, Flor-Ever in one of its many forms, is perfect for every place—over wood or concrete—basement to attic (or store, office, institution). See Flor-Ever's galaxy of colors and styles today!

By the Yard—
By the Toll

Flor-Ever VINYL

FLOORING and COUNTER TOP

for...
basement to attic...
store or office...
everywhere and every purpose

PIPE COVERING.


CHALMERS-SPENCE CO.
419-421 Eighth St., New York.
The best cigarette NEWS for over 40 years

..THE FILTER TIP

that holds throat irritants in check

SMOKE CLEAN SMOKE

All reputable manufacturers remove impurities from the cut tobacco leaf—but irritants developed when the tobacco burns can be removed only from the smoke itself. This the du Maurier Filter Tip does. Irritants are retained by the cellulose between the crepe paper which screens the smoke selectively, letting pass for your enjoyment the fragrance, aroma and flavor of the costliest American and princely Oriental leaf, specially blended.

By cleansing the smoke, the du Maurier Filter Tip not only enhances flavor, it also keeps you fit, and protects your throat from irritation.

What the du MAURIER SELECTIVE FILTER TIP does:

It provides the common-sense method of preventing smoker's throat because it effectively retains irritants.
It stops particles of tobacco getting into the mouth.
It guards physical fitness.
It protects lips and teeth from stain.
It avoids burning the tongue.
It brings out the flavor and makes the smoke delightfully sweet and cool.
It gives a cleaner, healthier and more satisfying smoke.

du MAURIER CIGARETTES

When only the best will do

20 cigarettes for 30¢
Prohibited Products
• Corrugated paper
• Commercial paper
• Flooring felt
• Rollboard
• Specialty paper
• New uses of asbestos
Authorized Products

- Corrugated asbestos cement sheet
- Flat asbestos cement sheet
- **Vinyl asbestos floor tile**
- Asbestos cement pipes
- Asbestos cement shingles
- Friction materials
- Brake linings
- Clutch facing
- Disc brake pads
- Asbestos clothing
- Automatic transmission components

**Roofing felt**
- Roof coating
- Non-roof coatings
- Millboard
- Pipeline wrap
- Acetylene cylinder filler
- Asbestos diaphragms
- High grade electrical paper
- Packings

- Sealant tape
- Brake blocks
- Missile liners
- Arc shutes
- Battery separators
- Reinforced plastic
- Textile products
- Gaskets
Used in over 3,000 products.
IS ASBESTOS 100% SAFE?
Exposure to Asbestos Occurs

47.9 Years
Mean Latency for Men

53.3 Years
Mean Latency for Women

Years After Exposure
According to the World Health Organization, more than 107,000 people die each year from asbestos-related lung cancer, mesothelioma, and asbestosis resulting from occupational exposure.
In his 1997 book, “The Art of the Comeback,” President Donald Trump claimed asbestos is “100 percent safe, once applied.”
IS ABESTOS BANNED?
Top 5 Asbestos Exporters

- Russia: 657 (in thousands of metric tons, 2008)
- Kazakhstan: 216
- Brazil: 178
- Canada: 176
- China: 14


Graphic by www.stephenrountree.com
Clean Air Act of 1970 classified asbestos as a hazardous air pollutant and gave the EPA the power to regulate the use and disposal of asbestos. Spray-applied asbestos products were banned with the passage of this act.

In 1976, the Toxic Substances Control Act (TSCA) provided the EPA the authority to place restrictions on asbestos.

The Asbestos Hazard Emergency Response Act of 1986 (AHERA) made the EPA establish standards for inspecting and removing asbestos in schools. In 1990, the EPA expanded the certification requirements to apply to commercial buildings.

In July 1989, the EPA issued the Asbestos Ban and Phase-Out Rule (ABPR), which planned to impose a full ban on the manufacturing, importation, processing and sale of asbestos-containing products. … never happened…overturned in 1991 and could only be applied to a few products…
The EPA determined that six categories of asbestos-containing products fit that classification, including:

- Flooring felt
- Rollboard
- Commercial paper
- Corrugated paper
- Specialty paper
- New uses of asbestos

Only spray-applied asbestos and these six products are banned in the U.S. All other uses of asbestos, such as automotive brake pads and gaskets, roofing products, floor tiles, joint compound, etc are legal.
1994 – OSHA Asbestos in Construction Standard

2016 - Frank R. Lautenberg Chemical Safety for the 21st Century Act

April 5, 2019 – Significant New Use Rule. Becomes effective June 5, 2019
FEDERAL DEMO/RENO REQUIREMENTS
Federal Asbestos Regulations

Always check for State/Local program requirements!

EPA

NESHAP
40 CFR Part 61 Subpart M
Demolition, renovation and waste issues
- Inspections prior to disruption
- Notifications
- Required removal
- Waste packaging & approved landfills
- Waste shipment records

AHERA
40 CFR Part 763
K-12 schools, public and private
- Inspections & Assessments
- Management Plans
- Communication
- Worker Protection Rule
40 CFR Part 763 Subpart G
- OSHA protection for those in State/Municipal employment

OSHA

General Industry
29 CFR 1910.1001
- Permissible exposure limits and exposure assessments
- Inspection before exposures
- Communication
- Worker protection; Respiratory protection must meet 29 CFR 1910.134
- Training
- Mandatory appendices

Construction
29 CFR 1926.1101
- Permissible exposure limits and exposure assessments
- Inspection before exposures
- Communication
- Worker protection; Respiratory protection must meet 29 CFR 1910.134
- Classes of asbestos disturbing work (I-IV)
  - Training
  - Mandatory appendices
OSHA

- Covers asbestos exposure to all workers.
- Defines what is asbestos-containing.
- Employer responsibilities.
MUST presume if not tested.

Presume vs Assume

Presumed Asbestos Containing Material means thermal system insulation and surfacing material found in buildings constructed no later than 1980.
1980's
OSHA determined that buildings constructed after January 1981 are less likely to have asbestos-containing materials installed in them, but this is not for certain.

- *LOI*, September 5, 1996

Presume vs Assume
PENNSYLVANIA REQUIREMENTS?
CITY OF PHILADELPHIA REQUIREMENTS?
Asbestos Inspection Report

Name of Building: 2136-38 Market St
Name of Building Owner: STB Investment Corp
Name of Licensed Investigator: Kenneth A. Hudson
Name of Certified Lab: 

Scope of Work: 

No, Asbestos Found

Asbestos Containing Material Present: No

List Asbestos Containing Material (ACM) located in the planned renovation/demolition area(s). Damaged ACM must be listed and then repaired or removed prior to renovation. You (Investigator) must label all ACM that may be left in the work area.

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
<th>Type (Code 1)</th>
<th>Square</th>
<th>Linear</th>
<th>Condition (Code 2)</th>
<th>Action (Code 3)</th>
</tr>
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<tbody>
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Code 1:
- F1L - Fibrous
- NF1 - Non-Fibrous Cat. 1
- NF2 - Non-Fibrous Cat. 2

Code 2:
- DD - Deteriorated or Deformed
- RD - Removed not necessary prior to Demo/Reno
- RNP - Repair & Refurb ACM, removal not necessary

Certify: I hereby certify that the foregoing statements are true and the information contained in this report is true. This certification is made subject to the penalties set forth in 31 P.S. §4993 relating to false statements to authorities. Furthermore, I certify that the inspection, sampling, and labeling requirements of section X of the Asbestos Control Regulations (ACR) have been met. The building owner has been notified of the ACR requirements and given a copy of this report. If the inspection has revealed ACM which will be disturbed by the proposed work or if it has revealed ACM in bad condition, the building owner has been notified to repair or remove the ACM in accordance with the ACR prior to excavation or demolition activity.

Signed: [Signature] Date: 7-28-13
Asbestos in the News

- Philadelphia Schools ($170 M)
  - Claire’s Cosmetics
- Asbestos in Drinking Water
  - J&J Baby Powder Case
- Man Arrested for Dumping Asbestos
- Contractor pleads guilty to mishandling asbestos
- Contractor pleads guilty to improperly removing asbestos
- Asbestos endangering workers on jobsite
Question everything