



TO: CORPORATE INDUSTRIAL HYGIENE
FROM: 236-5848
DATE: July 7, 1981
SUBJECT: ASBESTOS PRODUCTS &
EMPLOYEE EXPOSURE TO ASBESTOS

TO: WESTINGHOUSE BUILDING - 2016
W. M. Bryant, Director
Property & Casualty Insurance

The attached information is provided in an attempt to comply with the following request that you made to C. W. Bickerstaff, Manager, Industrial Hygiene several weeks ago.

1. List of products manufactured or supplied by (W) which contain asbestos. If possible, please indicate which of these products are no longer manufactured or supplied by (W).
2. Employee exposure to asbestos--current and historical.

At the outset I want to mention that this data is by no means complete, but we are hopeful it will provide some background information.

During the early to mid 1960's, Industrial Hygiene was encouraging the divisions to eliminate the use of asbestos and find suitable substitutes. In February, 1976 an effort was made to gather specific data on the use of asbestos within the corporation, and to alert the divisions to the significance of its continued usage and the problems of compliance with OSHA Regulations. Attachment I is a copy of the letter sent to all Industrial Hygiene and Safety Coordinators, informing them of a one-day seminar on asbestos. A questionnaire was sent with this letter to survey the use of asbestos at each location. Attachment II is a roster of those attending the seminar.

Attachment III lists (W) locations that at one time or another used material containing asbestos. In Attachment IV we have summarized the data supplied on the returned questionnaires to indicate some of the Westinghouse products that contain some form of asbestos.



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DECEMBER 1982

Since 1976 most of these asbestos products have been replaced with another type of material. Attachment V is a list of some of these substitute materials. We are aware that Trafford PCB has had some difficulty in finding a replacement for the asbestos-neoprene stop gasket material for bushings. At the seminar, the Hampton people announced that a decision was made to stop production on asbestos containing micartas. However, because of the special need at other divisions, they may have some limited production. Bedford does have some limited production of coated asbestos paper.

We cannot answer to which (W) products, that contained asbestos are no longer manufactured or supplied, except to note that the Consumer Products group is no longer part of Westinghouse.

→ In regards to employee exposure, no monitoring was done prior to 1973. Attachment VI is a summary of asbestos monitoring done from 1973 to 1979, which we prepared for the Legal Department. We can bring it up to date if you need this information. I have also included Attachment VII summarizing data from the questionnaires to show asbestos products, used during plant operations, that are not included in a (W) product.

Hopefully this data will be helpful, and if we can be of any further assistance give us a call.

Gella R. Heasley
Gella R. Heasley
Sr. Industrial Hygiene Engineer

/jme

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IN RE: ALBRAMS

DECEMBER 1989

ATTACHMENT I



From: Building, Room 2070
WIN: 235-3916
Date: February 17, 1976
Subject: ASBESTOS SEMINAR

To: INDUSTRIAL HYGIENE AND SAFETY COORDINATORS
FML-20

The proposed OSHA asbestos standard, if promulgated in its present form, will impact on the production and use of asbestos and asbestos products.

A one-day Asbestos Seminar will be held on March 5, 1976, beginning at 8:30 a.m. and continuing until 4:00 p.m. at the Pittsburgh Marriott Motor Inn, Parkway West, Pittsburgh, Pennsylvania. A buffet luncheon will be available at a cost of \$6.10 per person.

The agenda will include a review of the proposed standard, ventilation and health considerations, and an asbestos substitute program. Below is a registration form which you should complete and return along with the attached questionnaire to Zella Heasley prior to February 25, 1976. If you have questions concerning the proposed standard or the seminar, Ms. Heasley can be contacted on WIN: 236-5847.

William H. Giesel, Manager
Industrial Hygiene and Safety

Attachment

RETURN TO: Zella Heasley
Westinghouse R&D Center, 401-3X9
Pittsburgh, Pennsylvania 15235

Asbestos Seminar
March 5, 1976

NAME AND TITLE:

DIVISION AND LOCATION:

WIN NO.:

MOTEL ACCOMMODATIONS NEEDED:

YES

NO

DATE:

TIME OF ARRIVAL:

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DECEMBER 1982

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QUESTIONNAIRE - ASBESTOS* PRODUCTS

1. Which of the following asbestos containing products are used in your operations:

☐ Block	☐ Filter Media	☐ Rope Packing
☐ Board	☐ Laminated Compositions	☐ Sheet Packing
☐ Brake Lining	☐ Micarta Bars	☐ Sheet (Asbestos
☐ Cable & Wire	☐ Micarta Sheet	☐ bonded with rubber)
☐ (Asbestos Insul.)	☐ Molding Mixtures	☐ Sheet (Mill Board)
☐ Cement Sheet	☐ Molding Compositions	☐ Sleeving
☐ Cloth-Treated	☐ Paper-Treated	☐ Tape
☐ Cloth-Untreated	☐ Paper-Untreated	☐ Transite
☐ Fibers (Air Floats)	☐ Powder	☐ Yarn
☐ Fiber Powder	☐ Pulverized Asbestos	
☐ (Resin Grade)		

List any others not mentioned above.

- If possible bring to the seminar or send in advance a small sample of each product used at your plant. Place each sample in a plastic bag identified by a Westinghouse Material Code Number and/or Supplier and Tradename.

2. Describe application (if more space is needed, use other side).

3. List products that have been investigated and found satisfactory as substitutes for asbestos.

<u>Application</u>	<u>Tradename & Supplier</u>
☐	☐
☐	☐
☐	☐
☐	☐

- Bring or send a small sample of each. Package and mark the same as requested for the asbestos product.

- * If you need a copy of the proposed asbestos standard, call Zella Heasley, Industrial Hygiene, WDN: 236-5847.

RETURN TO: Zella Heasley, Westinghouse R&D Center, by February 27, 1976

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WIN: 236-5847
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ROSTER
Ⓢ ASBESTOS SEMINAR
MARRIOTT MOTOR INN
PITTSBURGH (GREENTREE), PA.
MARCH 5, 1976

Raymond A. Bleeker
Design Engrg.
Architectural Systems Div.
Grand Rapids, Michigan
WIN: 523-7277

Edward S. Bober
Safety Administrator
Accident Prevention
Ⓢ R&D Center
WIN: 236-7272

J. C. Botts, Manager
Insulation Design Engrg.
East Pittsburgh-LRA
WIN: 236-2823

Phil Chekanski, Safety Engr.
Water Reactors Division
NES Building-Monroeville
412-373-4651

Denese A. Deeds
Industrial Hygienist
Accident Prevention
Buffalo Divisions
WIN: 245-2616

Carol W. Erdley, Engr.
LRAD
Irwin Mica Plant
412-863-7000

Smith Gause
Engineering Manager
Hampton Micarta Divs.
WIN: 422-6343

M. A. Gipko, Envir. Engr.
Plant Services
East Pittsburgh
WIN: 236-2454

John Harrington
General Manager
Hampton Micarta Divs.
WIN: 422-6320

Needham Holden
Accident Prevention
Charlotte Nuclear Turbine Plant
WIN: 422-2454

W. A. Itzel, Staff Asst. Engr.
Industrial Services Division
Greentree, Pa.
412-928-4768

B. A. Kerna, Manager
Environmental Control
Construction Technology, Ⓢ Bldg.
WIN: 235-3616

George E. Laverty, Safety Supvr.
Accident Prevention
Sharon Transf. Divs.
WIN: 224-5316

Norman E. Martello, Engr.
PCB - Trafford
WIN: 236-5316

Gane Martinalla, Supvr.
Manufacturing Planning
PCB - Trafford
WIN: 236-5221

Paul Palmieri, Supvr.
Accident Prevention
Control Equipment Group-Beaver
WIN: 222-1371

Larry Rudolph, Manager
Accident Prevention
Industry Services Division
Greentree, Pa.
412-928-4679

C. R. Ruffing, Engrg.
Insulation Development
East Pittsburgh-LRA
WIN: 236-2771

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Andy Sato, Director
Lisc., Safeguards & Safety
Nuclear Energy Systems
Monroeville, Pa.
412-373-4645

G. H. Schilling
Accident Prevention
Derry, IMD-Bedford, Manor,
West Mifflin Plants
WIN: 222-7263

R. M. Sexton, Manager
Insulation Development
East Pittsburgh-LRA
WIN: 236-2774

Dr. A. A. Spritzer
Medical Director
☺ Nuclear Center
Monroeville, Pa.
412-373-4649

C. W. Waltz
OSHA Administrator
East Pittsburgh-LRA
WIN: 236-2192

James R. Welshons
Corporate Standards
☺ R&D Center
WIN: 236-7232

Paul Wike, Buyer
East Pittsburgh-LRA
WIN: 236-2234

Richard T. Williams
Division Admin.
Accident Prevention
Bloomfield Lamp Div.
WIN: 326-3338

Eugene W. Wood
Accident Prevention
Baltimore Defense Div.
WIN: 234-2007

C. R. Zimmerman
IMD - Bedford
WIN: 222-6125

Gerald T. Brady, Manager
Accident Prevention
East Pittsburgh
WIN: 236-2823

Industrial Hygiene & Safety Staff

John Adams, Engineer
George Arensman, Administrator
Keith Bodden, Administrator
Zella Heasley, Engineer
William Ziefel, Manager

01/20/91 10:11 AM
J.R. ABRAMS
DECEMBER 1992

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R.F. ALBRAHMS
DECEMBER 1992

This information was available, because these divisions were participating in the Corporate Standards Material Code System. Following is a list of these locations.

Lester, PA-Steam Turbine, Gas Turbine

Lima, OH - Appliance Motors
Lima, OH - Aerospace Electrical
Lima, OH - Small Motors

Newark, NJ - Relay Instruments
Norman, OK - Residential Air Conditioning

Raleigh, NC - Meter
Randolph, NJ - Elevators
Roundrock, TX - Heavy Industries Motor

Sharon, PA - Transformers
South Boston, VA - Small Power Transformers
Staunton, VA - Commercial & Ind. Air Conditioning
Sunnyvale, CA - Marine
Sykesville, MD - Industrial Equipment
Sykesville, MD - Welding

Trafford, PA - Power Circuit Breaker

Vicksburg, MS - Interior Lighting

West Mifflin, PA - Transportation

Youngwood, PA - Semiconductor

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ATTACHMENT V

SUMMARYASBESTOS SUBSTITUTES PRESENTLY USED 1976

<u>PLANT</u>	<u>APPLICATION</u>	<u>SUBSTITUTE MATERIAL</u>
<u>Bloomfield</u>	Curtains-glare and heat shield	Fiberglass Cloth (Pais Mfg. Co.)
<u>Buffalo</u>	Insulation	Nomex (DuPont) Mica Silicone Sheet Glass Doryl Glass Melamine
<u>E. Pgh.</u>	Protective Blankets for Soldering	Nomex (DuPont)
	Blankets	Refrasil (Hitco) M 41514GC
<u>Lester</u>	Insulating Blanket Filler	Kaowool (Babcock & Wilcox) M 41414AD Temp Mat (Pgh. Corning) M 41414AD
	Pipe Insulation	Flame Safe (Johns-Manville) M 41424JC (fiberglass)
	Block Insulation and Pipe	Thermo 12 (Johns-Manville) M 46102BB
	Cement for Block	Super Power House Cement (Keene Ind. Insulation Corp.)
	Insulating Blanket Cover	Textoglass 1925/9383 Glass Cloth (Pocar, Philadelphia, Pa.)
<u>Sharon</u>	Tank Cover Gaskets	Fiberfrax Rope (Carborundum) Glass Sleaving
	Heat Trap for Brazing	Wet Cheese Cloth Fiberfrax Rope (Carborundum)
	Stop Gasket for Bushings	Duroid 900 (Rogers Corp.)
	Shielding for Weld-Braze	Aluminum Sheet Nomex (DuPont) Fiberfrax (Carborundum)
<u>South Boston</u>	Weld Barrier (Blankets)	Textoglass S/192-/9383 (J.P.Stevens)
	Weld Barrier (Sheet)	Textoglass S/84205/9383 (J.P.Stevens)

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ATTACHMENT VI

ASBESTOS AIR SAMPLE RESULTS 1973-1979

PLANT	YEAR SAMPLES WERE TAKEN	NUMBER TAKEN THAT YEAR	RANGE OF RESULTS (FIBERS/cc)	NUMBER ABOVE PEL
Asheville	1979	3	< 0.01 to 0.013	0
Baltimore	1976 (Before July)	3	< 0.2 to 2.0	0
Bedford	1976 (Before July)	15	< 0.02 to 0.04	0
	1978	3	0.04	0
Bettis (West Mifflin)	1979	2	0.02 to 0.33	0
Bloomington	1976 (After July)	3	< 0.01 to 0.04	0
Buffalo	1975	3	< 0.5	0
	1977	19	< 0.01 to 0.22	0
	1978	3	0.06 to 0.09	0
Canada LTD Burlington	1979	14	< 0.01 to 0.2	0

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 DECEMBER 1989

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ASBESTOS AIR SAMPLE RESULTS 1973-1979

PLANT	YEAR SAMPLES WERE TAKEN	NUMBER TAKEN THAT YEAR	RANGE OF RESULTS (FIBERS/cc)	NUMBER ABOVE PEL
Greentree	1978	2	0.12 to 0.22	0
Lester	1977	8	0.9 to 6.3	3
	1979	6	< 0.01 to 0.53	0
Manor	1977	6	< 0.01 to 95	0
Newark	1978	6	< 0.01	0
Norman	1979	2	< 0.01	0
O'Hara Township	1977	5	< 0.01	0
Pittsburgh KDKA-TV	1979	5	< 0.01	0
Puerto Rico	1979	1	< 0.01	0

* Two air samples taken for a short time period along with OSHA Industrial Hygienist resulted in high concentrations of Asbestos-like fibers. Over an 8-hour period the results did not exceed the PEL.

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 RE: ALBAMA
 DECEMBER 1982

ASBESTOS AIR SAMPLE RESULTS 1973-1979

PLANT	YEAR SAMPLES WERE TAKEN	NUMBER TAKEN THAT YEAR	RANGE OF RESULTS (FIBERS/cc)	NUMBER ABOVE PEL
Research & Development Center Churchill	1974	2	0.07 to 0.14	0
	1976 (Before July)	6	< 0.03 to 123	3
Richmond Kentucky	1979	2	< 0.01	0
Salina	1978	6	< 0.01 to 0.03	0
Sharon	1975	4	< 0.5 to 8.0	1
	1976 (After July)	8	< 0.02 to 0.06	0
	1977	2	< 0.03	0
	1978	4	< 0.01	0
South Boston	1979	2	< 0.01	0
Sunnyvale	1976 (After July)	4	< 0.01	0
	1977	20	< 0.01 to 1.7	0
	1978	6	< 0.01 to 20	1

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ASBESTOS AIR SAMPLE RESULTS 1973-1979

⑤ PLANT	YEAR SAMPLES WERE TAKEN	NUMBER TAKEN THAT YEAR	RANGE OF RESULTS (FIBERS/cc)
Sykesville	1978	2	0.02 to 0.09
Trafford	1975	3	< 0.03 to 3.0
	1976 (After July)	1	0.05
	1978	1	< 0.01
West Mifflin LMD	1976 (Before July)	3	0.2 to 21
West Mifflin Transportation	1976 (Before July)	3	0.1 to 0.2
	1976 (After July)	2	0.02 to 0.06

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RE: ABRAMS

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ATTACHMENT VII

ASBESTOS USED IN PLANT OPERATIONS

<u>PLANT</u>	<u>FORM OF ASBESTOS</u>	<u>USAGE</u>
Baltimore Divs.	Board, pipe covering micarta, rope packing, cable and wire, sheet packing, transite sheet, caulking compound	Insulation Weld curtains Gasket material Electrical tape
Buffalo	Untreated paper	Used as a liner in die cast and to catch drippings of varnish in ovens
Derry	Sheet	Place unfired ware on it until it cures or sets
	Cloth untreated	Used when annealing machine parts
	Rope packing and transite Tape	Making arc stacks ---
East Pittsburgh	Blanket	Blanket for soldering, brazing or cutting
	Cloth, tape, yarn, sleeving, paper untreated board	(no specific operation mentioned)
Greenville	Sheet packing.	Oven lining
Greentree	Micarta Paper Rope packing Cable	Motor slot wedges General use Packing ---
IMD (Manor)	Asbestos fibers	Mixed into resins for B-7-365 and (W) M53533FD

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IN RE: ABRAMS
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<u>PLANT</u>	<u>FORM OF ASBESTOS</u>	<u>USAGE</u>
Lamp Divisions	Board, block, transite	Insulation on furnaces, ovens and lamp making equipment
	Treated cloth	Curtains for glare and heat shielding
	Pulverized	Used to make furnace cement for heat insulation
Lester	Cloth, sheet packing, sleeving, tape, flex tubing	Induction heating and stress relieving
	Paper, rope, packing, sleeving tape	Babbitting
	Rope packing	Submerged arc welding
Muncie	Rope packing, sheet packing	Heat barriers on brazing and/or welding operations
Reform	Sleeving, transite, yarn	Insulation
Sharon	Cloth or paper	Heat trap for brazing. Shielding for welding or brazing
South Boston	Blanket, sheet	Weld barrier