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

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

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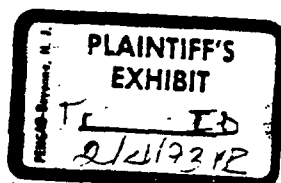
The attached information is provided in an attempt to comply with the following request that you made to C. W. Bickerstaff, Manager, Industrial Hygiene several weeks ago.

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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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 employe 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.

*Jella R. Heasley*  
Jella R. Heasley  
Sr. Industrial Hygiene Engineer

/jme

132/4085147

QUESTIONNAIRE - ASBESTOS\* PRODUCTS

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

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

List any others not mentioned above.

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- 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).

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

Application

Tradename & Supplier

|       |       |
|-------|-------|
| <hr/> | <hr/> |
| <hr/> | <hr/> |
| <hr/> | <hr/> |
| <hr/> | <hr/> |

- 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, WDC: 236-5867.

132/4065149

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

ATTACHMENT 11

ROSTER  
⊕ ASBESTOS SEMINAR  
HARRIOTT MOTOR INN  
PITTSBURGH (GREENTREE), PA.  
MARCH 5, 1976

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

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

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

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

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

B. A. Kerns, Manager  
Environmental Control  
Construction Technology, ⊕ Bldg.  
WIN: 235-3616

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

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

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

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

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

Gene Martinella, Supvr.  
Manufacturing Planning  
PCB - Trafford  
WIN: 236-5221

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

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

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

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

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

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

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Andy Sale, Director  
Disc., Safeguards & Safety  
Nuclear Energy Systems  
Monroeville, Pa.  
412-373-4643

G. E. 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  
Eloofield 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

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In March 1976, the Corporate Standards Department informed Industrial Hygiene of 42 Westinghouse Manufacturing locations that were using at the time, or were known to have used, asbestos or asbestos containing materials in their operations.

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

|                                                     |                                                   |
|-----------------------------------------------------|---------------------------------------------------|
| Athens, GA - Overhead Dist. Transformers            | Lester, PA - Steam Turbine, Gas Turbine           |
| Baltimore, MD - Systems Development                 | Lima, OH - Appliance Motors                       |
| Beaver, PA - Control Products                       | Lima, OH - Aerospace Electrical                   |
| Bedford, PA - Treated Materials                     | Lima, OH - Small Motors                           |
| Bloomfield, NJ - Lamp                               | Muncie, IN - Larger Power Transformers            |
| Bloomington, IN - Dist. Apparatus                   | Newark, NJ - Relay Instruments                    |
| Bridgeport, CT - Bryant Electric                    | Norman, OK - Residential Air Conditioning         |
| Buffalo, NY - General Control                       | Raleigh, NC - Meter                               |
| Buffalo, NY - Large Motor                           | Randolph, NJ - Elevators                          |
| Buffalo, NY - Medium Motor and Gearing              | Roundrock, TX - Heavy Industries Motor            |
| Buffalo, NY - Industrial Equipment                  | Sharon, PA - Transformers                         |
| Cheswick, PA - Electro-Mech                         | South Boston, VA - Small Power Transformers       |
| Cleveland, OH - Outdoor Lighting                    | Staunton, VA - Commercial & Ind. Air Conditioning |
| Derry, PA - Industrial Ceramics                     | Sunnyvale, CA - Marine                            |
| East Pittsburgh, PA - LRA & Switchgear              | Sykesville, MD - Industrial Equipment             |
| Greenville, PA - Specialty Transformers             | Sykesville, MD - Welding                          |
| Greentree (Pgh), PA - Industry Services             | Trafford, PA - Power Circuit Breaker              |
| Hampton, SC - Micarta                               | Vicksburg, MS - Interior Lighting                 |
| Horseheads, NY - Electronic Tube                    | West Mifflin, PA - Transportation                 |
| Hunt Valley, MD - Electronics System Supports       | Youngwood, PA - Semiconductor                     |
| Lyde Park (Boston, MA) - Sturtevant                 |                                                   |
| Jefferson City, MO - Underground Dist. Transformers |                                                   |

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## ATTACHMENT IV

(W) PRODUCTS CONTAINING ASBESTOS

| <u>PLANT</u>                 | <u>FORM OF ASBESTOS</u>                | <u>APPLICATION</u>                                                   |
|------------------------------|----------------------------------------|----------------------------------------------------------------------|
| Buffalo                      | Treated and untreated cloth and paper. | Insulation in motors                                                 |
|                              | Micarta sheet and bars                 | Wedges in motors                                                     |
|                              | Cement - filled with asbestos fibers   | Baked on wound resistor tubes to keep wires properly spaced          |
| Consumer Products Division   | Paper, Cloth                           | Insulation                                                           |
| East Pittsburgh              | Micarta Sheet                          | Stator slot wedges                                                   |
|                              | Asbestos paper - treated               | Turn insulation on edge wound field coils for large hydro-generators |
|                              | Sheet - asbestos bonded                | Gasket material                                                      |
|                              | Cable & wire - asbestos insulation     | --                                                                   |
| East Pittsburgh<br>--Irwin-- | Cloth, Paper                           | Molded "U" channels and molded shields for insulation                |
|                              | Powdered asbestos                      | Filler in resin mixtures supplied to other (W) locations             |
| Grand Rapids                 | Board and Sheet                        | Fire retardant office divider panels                                 |

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| <u>PLANT</u>          | <u>FORM OF ASBESTOS</u>        | <u>APPLICATION</u>                                                                                                                                              |
|-----------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Greenville            | Resin filled with asbestos     | Caulking for metal transformer case seams                                                                                                                       |
|                       | Laminated compositions         | Insulation                                                                                                                                                      |
|                       | Micarta sheet                  | Terminal boards                                                                                                                                                 |
|                       | Paper (silicone resin treated) | Coils                                                                                                                                                           |
| IMD (Bedford)         | Paper                          | Coat and laminate the paper for electrical insulation for (W) divisions                                                                                         |
| IMD (Hampton)         | Paper                          | Asbestos filled micartas                                                                                                                                        |
| IMD (Manor)           | Powdered asbestos              | Filler in their B-7-365 which is used at Sharon as wet winding resin.<br><br>Filler in epoxy resin (W) M535337D used at Trafford PCB as tract resistant coating |
| IMD (West<br>Mifflin) | Treated paper                  | Molded part (not certain as to ultimate usage)                                                                                                                  |
| Lester                | Block                          | Insulation in turbines                                                                                                                                          |
|                       | Asbestos sheet packing         | Gasket material                                                                                                                                                 |
| Muncie                | Tape                           | Barrier on shell of transformer gasket material                                                                                                                 |

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| <u>PLANT</u> | <u>FORM OF ASBESTOS</u>                  | <u>APPLICATION</u>                                                                                                                                                                            |
|--------------|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sharon       | Micarta sheet                            | Terminal boards and core-coil spacers                                                                                                                                                         |
|              | Varnished asbestos paper                 | Wound into coils as fillers                                                                                                                                                                   |
|              | Transite                                 | Duct spacers and fillers plus reactor disks                                                                                                                                                   |
| South Boston | Rope packing                             | Used as barrier during welding of covers on top of transformers. Material is caught between top flange of tank and bottom of cover. Transformer is shipped with asbestos packing in position. |
| Saunton      | Micarta sheet<br>(Hampton product)       | Terminal supports for CE terminals                                                                                                                                                            |
| Trafford PCB | Micarta sheet                            | Core washers for current transformers.                                                                                                                                                        |
|              | Asbestos-neoprene sheet                  | Stop gaskets for bushings and EHV columns.                                                                                                                                                    |
|              | Asbestos filled epoxy resin (W) M53533FD | Track resistant coating                                                                                                                                                                       |

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# ATTACHMENT V

## SUMMARY

### ASBESTOS SUBSTITUTES PRESENTLY USED 1976

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

| PLANT                    | YEAR<br>SAMPLES<br>WERE TAKEN | NUMBER<br>TAKEN<br>THAT YEAR | RANGE OF<br>RESULTS<br>(FIBERS/cc) | NUMBER<br>ABOVE<br>PEL |
|--------------------------|-------------------------------|------------------------------|------------------------------------|------------------------|
| Asheville                | 1979                          | 3                            | < 0.01 to 0.013                    | 0                      |
| Baltimore                | 1976<br>(Before July)         | 3                            | < 0.2 to 2.0                       | 0                      |
| Bedford                  | 1976<br>(Before July)         | 15                           | < 0.02 to 0.04                     | 0                      |
|                          | 1978                          | 3                            | 0.04                               | 0                      |
| Bettis<br>(West Mifflin) | 1979                          | 2                            | 0.02 to 0.33                       | 0                      |
| Bloomington              | 1976<br>(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<br>Burlington | 1979                          | 14                           | < 0.01 to 0.2                      | 0                      |

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ASBESTOS AIR SAMPLE RESULTS 1973-1979

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| PLANT           | YEAR<br>SAMPLES<br>WERE TAKEN | NUMBER<br>TAKEN<br>THAT YEAR | RANGE OF<br>RESULTS<br>(FIBERS/cc) | NUMBER<br>ABOVE<br>PEL |
|-----------------|-------------------------------|------------------------------|------------------------------------|------------------------|
| Cheswick        | 1976<br>(After July)          | 2                            | 6.2 to 9.4                         | 2                      |
| Derry           | 1976<br>(Before July)         | 2                            | < 0.1 to 0.2                       | 0                      |
| East Pittsburgh | 1973                          | 20                           | < 0.1 to 110                       | 4                      |
|                 | 1974                          | 3                            | < 0.1 to 1.4                       | 0                      |
|                 | 1975                          | 10                           | < 0.3 to 0.48                      | 0                      |
|                 | 1976<br>(After July)          | 18                           | < 0.01 to 3.8                      | 2                      |
|                 | 1977                          | 2                            | 0.5 to 2.1                         | 1                      |
|                 | 1978                          | 3                            | < 0.01 to 0.16                     | 0                      |
|                 | 1979                          | 23                           | < 0.01 to 1.5                      | 0                      |
| Elmira          | 1976<br>(After July)          | 2                            | 0.7 to 1.7                         | 0                      |
|                 | 1978                          | 26                           | < 0.01 to 0.18                     | 0                      |
| Fairmont        | 1978                          | 2                            | 0.09 to 0.11                       | 0                      |
| Forest Hills    | 1978                          | 2                            | < 0.01                             | 0                      |

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ASBESTOS AIR SAMPLE RESULTS 1973-1979

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| ⑤ PLANT               | YEAR<br>SAMPLES<br>WERE TAKEN | NUMBER<br>TAKEN<br>THAT YEAR | RANGE OF<br>RESULTS<br>(FIBERS/cc) | NUMBER<br>ABOVE<br>PEL |
|-----------------------|-------------------------------|------------------------------|------------------------------------|------------------------|
| Greentree             | 1973                          | 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 93                       | 0*                     |
| Newark                | 1978                          | 6                            | < 0.01                             | 0                      |
| Norman                | 1979                          | 2                            | < 0.01                             | 0                      |
| O'Hara Township       | 1977                          | 5                            | < 0.01                             | 0                      |
| Pittsburgh<br>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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ASBESTOS AIR SAMPLE RESULTS 1973-1979

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| ② PLANT                                    | YEAR<br>SAMPLES<br>WERE TAKEN | NUMBER<br>TAKEN<br>THAT YEAR | RANGE OF<br>RESULTS<br>(FIBERS/cc) | NUMBER<br>ABOVE<br>PEL |
|--------------------------------------------|-------------------------------|------------------------------|------------------------------------|------------------------|
| Research & Development Center<br>Churchill | 1974                          | 2                            | 0.07 to 0.14                       | 0                      |
|                                            | 1976<br>(Before July)         | 6                            | < 0.03 to 123                      | 3                      |
| Richmond<br>Kentucky                       | 1979                          | 2                            | < 0.01                             | 0                      |
|                                            |                               |                              |                                    |                        |
| Salina                                     | 1978                          | 6                            | < 0.01 to 0.03                     | 0                      |
|                                            |                               |                              |                                    |                        |
| Baron                                      | 1975                          | 4                            | < 0.5 to 8.0                       | 1                      |
|                                            | 1976<br>(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<br>(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

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| ② PLANT                        | YEAR<br>SAMPLES<br>WERE TAKEN | NUMBER<br>TAKEN<br>THAT YEAR | RANGE OF<br>RESULTS<br>(FIBERS/cc) | NUMBER<br>ABOVE<br>PEL |
|--------------------------------|-------------------------------|------------------------------|------------------------------------|------------------------|
| Sykesville                     | 1978                          | 2                            | 0.02 to 0.09                       | 0                      |
| Trafford                       | 1975                          | 3                            | < 0.03 to 3.0                      | 0                      |
|                                | 1976<br>(After July)          | 1                            | 0.05                               | 0                      |
|                                | 1978                          | 1                            | < 0.01                             | 0                      |
| West Mifflin LMD               | 1976<br>(Before July)         | 3                            | 0.2 to 21                          | 1                      |
| West Mifflin<br>Transportation | 1976<br>(Before July)         | 3                            | 0.1 to 0.2                         | 0                      |
|                                | 1976<br>(After July)          | 2                            | 0.02 to 0.06                       | 0                      |

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## ATTACHMENT VII

**CONFIDENTIAL**ASBESTOS USED IN PLANT OPERATIONS

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

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Attachment VII  
Page 2

| <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                                            |

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