IN THE COURT OF COMMON PLEAS OF ALLEGHENY COUNTY, PENNSYLVANIA

LAVERNE E. BERRANG, Administratrix of the Estate of CHARLES BERRANG, and LAVERNE E. BERRANG, in her own right,

Plaintiff,

vs.

EAGLE-PICHER INDUSTRIES, INC., et al.,

Defendants.

CIVIL DIVISION

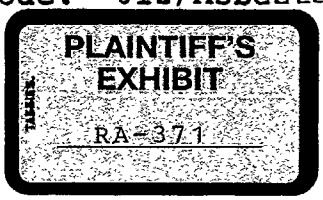
NO. G.D. 87-01249

Issue No.

JURY TRIAL DEMANDED

REPLY TO PLAINTIFF'S REQUEST FOR PRODUCTION AND ANSWERS TO INTERROGATORIES DIRECTED TO ASBESTOS DEFENDANTS

Code: 012/Asbestos



Filed on Behalf of:

EAGLE-PICHER INDUSTRIES, INC., Defendant

Counsel of Record for This Party:

WILLIAM R. HAUSHALTER, ESQUIRE
PA I.D. #15830

ROSENBERG, KIRSHNER P.A.
Firm #244
1500 Grant Building
Pittsburgh, PA 15219

(412) 281-4256

organizational unit of Defendant, the predecessor or subsidiary so engaged.

See the first introductory paragraph.

12. Has Defendant, Defendant's predecessors or any of Defendant's subsidiary companies, at any time, engaged in the mining, milling and/or subsequent sale of asbestos fiber? If so, please state:

A. The date such activity began;

B. The years during which such activity took place;

C. The date when such activity was terminated;

D. If such activity was terminated, the reason why;

E. The geographical area into which you claim the asbestos was sold; and,

F. Identify the organizational unit of Defendant, the predecessor or subsidiary so engaged.

The Company never mined asbestos and never sold raw asbestos. Also, the Company never sold processed asbestos for manufacturing purposes. However, on occasion as a convenience to contractors, the Company sold Eagle "20" or 7M asbestos.

13. Has Defendant, Defendant's predecessors or any of Defendant's subsidiary companies, at any time, engaged in the marketing and/or sale of any asbestos-containing product? If so, please state: YES.

See page 14 and 14(a) for Answer to Interrogatory No. 13.

B. The years during which such activity took place;

C. The date when such activity was terminated;

A. - C. See Exhibit I and II.

D. If such activity was terminated, the reason why; and,

See page 14(a) for Answer to Interrogatory 13(D).

E. The geographical area into which you claim the asbestos-containing product(s) were sold.

These products were used throughout the U.S. and Canada; occasionally there were export shipments.

14. For the period 1930 to date, state the addresses and business telephone numbers of each facility, building, mine, mill or location which was used by you as a mining, milling, manufacturing, processing, distribution or marketing facility for asbestos-containing products, state the inclusive dates each such facility was in operation, and further state its function (e.g., manufacturing, warehousing finished products, sales office, etc.).

See page 14(a) for Answer to Interrogatory No. 14.

15. Please list each asbestos-containing product mined, manufactured, sold, marketed and/or distributed by Defendant, Defendant's predecessors, and/or Defendant's subsidiaries at any time since 1930; and please state the following for each named product:

A. The year it was first mined, manufactured, sold, marketed, or distributed, and if discontinued, the year and the reason such mining, manufacture, sale, marketing or distribution stopped;

See page 15 for Answer to Interrogatory No. 15.

Answer to Interrogatory No. 13(D).

The Company discontinued manufacturing asbestos-containing insulation products in August, 1971 except for small quantities of "43" Finishing Cement which were manufactured and shipped for the balance of 1971 and in January and April, 1972, pursuant to special orders. The only asbestos-containing products the Company sold after 1972 were mastics. In these products the asbestos fibers were suspended in a wet solution and could not be released into the air upon application. Mastics were discontinued from the general product line in 1974. However, the Company filled special orders for small quantities of mastics into March, 1978, some of which were for overseas destinations.

The Company discontinued manufacturing asbestos-containing insulation products because it had developed products which did not require asbestos fibers, the diminished demand for some products did not justify their continued manufacture, and to eliminate the possibility of harmful health effects.

Answer to Interrogatory No. 14.

The products listed in Exhibit I were manufactured at and shipped from the Company's facility in Joplin, Missouri. See Exhibit III for the addresses of the companies from which the products listed in Exhibit II were purchased.

From time to time, the Company used a warehouse in Newark, New Jersey, to store and ship minimal quantities of its products during the period from sometime prior to 1955 to 1971.

The Company's sales offices were located in Cincinnati, New York and Chicago. There were also salesmen in various localities working from their homes.

The addresses of the New York and Chicago offices were:

Chicago Sales Office

At least as early as 1955 - 10/31/63	1 North LaSalle Street Chicago 2, Illinois
11/1/63 - 10/31/67	633 South LaGrange Road LaGrange, Illinois
11/1/67 - 11/1/73	2720 Des Plaines Des Plaines, Illinois

New York Sales Office

1933 - 5/14/67	420 Lexington Avenue New York 17, New York
5/15/67 - 5/14/70	1209 Anderson Avenue Fort Lee, New Jersey
5/15/70 - 9/23/70	60 Westervelt Avenue Tenafly, New Jersey 07670

B. The years during which the product was mined, manufactured, sold, marketed or distributed;

A. - B. See Exhibits I and II as well as Answer to No. 11(D).

C. Which unit of Defendant, predecessor or subsidiary, mined, manufactured, sold, marketed and/or distributed the product;

See Answer to No. 11(E).

D. Whether or not said product was ever manufactured, sold, marketed or distributed in the Commonwealth of Pennsylvania and the time period during which such manufacture, sale, marketing or distribution took place; and

The Company does not have such information for each year. However, for a listing of asbestos-containing insulation products sold to or shipped to customers in Pennsylvania by the Company, beginning in 1965 and for 1961, see Exhibit IV, which was prepared from available invoices only. The Company has no sales invoices prior to 1965, except for some invoices for 1961 and a few miscellaneous invoices received through litigation. Sales data are based on the Company's fiscal year which is December 1 through November 30.

E. The plants and address(es) at which the product was mined or manufactured.

See Answer to No. 14.

16. Please list each asbestos-containing product mined, manufactured, sold, marketed and/or distributed by Defendant, Defendant's predecessors, and/or Defendant's subsidiaries at any time since 1930; and state the following for each named product:

A. Its generic name;

B. Its trade or brand name;

See page 16 for Answer to No. 16.

C. Any common, popular or slang names by which the product was referred, as well as the type of product involved (e.g., pipecover, g, cement, etc);

A. - C. See Exhibits I and II. The Company did not refer to its products by slang names.

D. Its chemical composition (include the specific asbestos fiber type(s) - e.g., amosite, chrysotile, or crocidolite - and percentage by weight of each asbestos fiber type contained in the product, as well as identify the percentage by weight of all other ingredients of the product);

See page 16(a) and 16(b) for Answer to No. 16(D).

E. The intended use of the product, including the temperature ranges for which the product was recommended;

See page 16(b) and 16(c) for Answer to No. 16(E).

F. The form in which the product was shipped (i.e., burlap bags, paper bags, drums, cardboard boxes, wooden crates, etc.), including the size and amount of the container;

See page 16(c) for Answer to No. 16(F).

G. The name of the company mining, manufacturing, marketing and/or selling said product, if not Defendant;

See page 16(d) for Answer to No. 16(G).

H. A detailed description of the intended method of preparation and application of the product;

See page 16(d) for Answer to No. 16(H).

I. A description of the physical appearance of the product, including size, shape, color and texture;

See Exhibits I and II.

Super "66" Insulating Cement was gray and One-Cote Finishing Cement was off-white to white.

See also Answer to No. 16(H).

Answer to Interrogatory No. 16(D).

Defendant objects to this portion of the interrogatory for it is overly broad, unduly burdensome, irrelevant, immaterial, and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving said objection, see Exhibits I and II.

According to the Company's annual cost of production accounting records, the approximate asbestos content of the insulation products formerly manufactured by the Company was as follows:

Product	Approx. Asbestos Content (by Weight) Percentage	
CEMENTS:		
Super "66" Insulating Cement	8.8 to 12.0	(1930-1934)
	8.5 to 10.0	(1935-1963)
	4.0 to 4.4	(1964-1968)
	3.5 to 3.6	(1969-Sept.1971)
"43" Finishing Cement	73.0 to 76.3	(1944-1971)
	75.7	(Jan.& April,197
Fireproofing Cement	3.5 to 3.6	(1948-1960)
	2.8 to 3.1	(1961-1965)
One-Cote Finishing Cement	3.3	(1960)
	4.8 to 6.3	(1961-1967)
	2.8 to 3.2	(1968-Sept.1971)
Hylo Finishing Cement	4.8 to 5.5	(1963-1967)
	2.7 to 6.9	(1968-Sept.1971)
Hi-Stick Insulating Cement	4.3 to 6.3	(1964-1969)
"33" Insulating Cement	7.8 to 10.8	(1935-1944)
	13.8 to 14.7	(1945-1949)
"99" Finishing Cement	72.2 to 82.6	(1935-1962)
"106" Finishing Cement	25.2 to 28.5	(1948-1962)
"111" Finishing Cement	2.1 to 3.7	(1935-1966)
"330" Insulating Cement	8.9 to 10.0	(1939-1940) (1942 & 1945)
"1003" Finishing Cement	4.7	(1947 only)
Navy Grade Cement	14.6 to 16.2	(1955-1956)
	8.3 to 8.8	(1958-1959)
Navy Special Cement	11.9	(1945 only)
MASTICS:		
Insulseal	16.8 to 20.8	(1935-1968)
Insulseal-All Purpose	6.0 to 6.9	(1968-1969)
Insulstic-Trowel Grade	12.5 to 16.0	(1939-1962)
Insulstic-Brush Grade	7.1 to 16.4	(1942-1953)
	7.5 to 13.5	(1957-1959)
Swetchek	1.6 to 11.3	(1945-1947)
	1.5 to 1.9	(1948-1961)

Answer to Interrogatory No. 16(D) continued.

Product	Approx. Asbestos Content (by Weight) Percentage	
BLOCK:		
Vercel Block	4.1 to 7.5	(1937-1944)
DE 85 Block	4.2 to 10.3	(1947-1953)
DE 95 Block	9.7	(1949)
	4.0 to 9.1	(1950-1953)
Supertemp Block	1.0 to 4.0	(1938-1940)
	0.3 to 1.6	(1941-1945)

The Company used only chrysotile asbestos in asbestos-containing insulation products it formerly manufactured, except for D.E. Block, which contained chrysotile and amosite asbestos.

The products sold, but not manufactured, by the Company contained chrysotile asbestos, except Hylo Block and Pipe Covering which was produced by Owens-Corning Fiberglas, and which at times contained chrysotile and amosite asbestos. The Company is uncertain what type of asbestos 85% Magnesia Pipe Covering and Block Insulation contained.

The percentage of asbestos in each asbestos-containing insulation product which the Company formerly sold, but did not manufacture, may be available from the manufacturer.

Answer to Interrogatory No. 16(E).

See Exhibits I and II.

The Company's asbestos-containing insulation products were intended for a number of high temperature industrial insulation applications. High temperature applications require products designed for service temperatures in excess of 800 degrees F.

The products were intended to be used and handled by the insulation workers in the manner which was standard to their trade.

According to presently available product brochures, which were used as sales aids and were supplied from time to time, the following were the service temperatures for the various insulation products (including protective coatings) for which information is available:

Product	Service Temperature
Super "66" Insulating Cement	to 1800 degrees F
"43" Finishing Cement	to 1000 degrees F
Fireproofing Cement	to 2000 degrees F
One-Cote Finishing Cement	to 1200 degrees F
Hylo Finishing Cement	to 1200 degrees F
Hi-Stick Insulating Cement	to 1200 degrees F

Answer to Interrogatory No. 16(E) continued.

Product	Service Temperature
"33" Insulating Cement	to 1800 degrees F
"99" Finishing Cement	to 1000 degrees F
"106" Finishing Cement	to 1900 degrees F
"111" Finishing Cement	to 2300 degrees F
Hylo Block & Pipe Covering	to 1200 degrees F
Eagle "20" Cement	to 1000 degrees F
85% Magnesia Pipe Covering	to 600 degrees F
Vercel Block	to 1400 degrees F
Supertemp Block	to 1900 degrees F
"DE 85" Block	to 1300 degrees F
"DE 95" Block	to 2000 degrees F
Protective Coatings	
Insulseal	to 450 degrees F
Spray-Mastic	to 250 degrees F
Stalastic (Standard)	to 400 degrees F
(Hi-Temp)	to 700 degrees F
Stamastic	to 500 degrees F
Swetchek	to 150 degrees F

Answer to Interrogatory No. 16(F).

Cements were packaged in 100-lb., 50-lb., or 25-lb. open mouth multi-wall kraft paper bags, except Eagle "20" Cement, a product merely sold, but not manufactured by the Company, which also was packaged in 100-lb. burlap bags, and "99" Finishing Cement and "111" Insulating Cement, which at some unknown time prior to 1943 were in 100-lb. burlap bags. Mastics and other wet solutions were packaged in 55-gallon open head steel drums and 5-gallon open head steel pails. Pipe covering and blocks were packaged in cartons. Additionally, for the time periods indicated "66" Cement was packaged as follows: 1949 through 1965, 50-lb., 25-lb. and 8-lb. open mouth multi-wall kraft paper bags; 1953 and 1954 only, 50-lb., 25-lb., 8-lb. and 2-lb. bags; 1966 through 1971, 50-lb. and 2-lb. bags. Observation: 25-lb., 8-lb. and 2-lb. bags were designed for refractory companies only.

The Company's cement insulation products were packaged in open mouth pasted end or sewn bottom bags and were sewn at the top by cotton thread. Prior to 1958, in addition to cotton thread, some of the bags were closed at the top with tie wire.

Answer to Interrogatory No. 16(G).

Defendant objects to this interrogatory for it is overly broad and vague. Without waiving said objection, see Answer to No. 14.

See also Exhibit I pages 5 and 6 for a listing of companies for whom the Company rebranded its asbestos-containing insulation products.

Answer to Interrogatory No. 16(H).

Cements were in a dry, granulated form. For use, they were mixed with water and trowelled on or applied by hand.

Insulstic was a wet sodium-silicate solution. Insulseal, Spray-Mastic, Stalastic, Stamastic, and Swetchek were wet asphalt emulsions. These were trowelled or brushed on with the exception of Spray-Mastic which was sprayed on. In these products, the asbestos fibers were suspended in a wet solution and could not be released into the air upon application.

Blocks and pipe covering were in dry, solid form. Normally, they were held in place by impaling or banding. Sometimes, they were cut and/or drilled to fit specific applications. Also, see Answer to No. 16(E).

identifying markings which appeared on the product, as well as a description of the package used, the dates that type of package was used, and any logos, product names, trademarks, etc. which appeared on the package;

See page 17(a) for Answer to No. 16(J).

K. Identify each individual who participated in the design, preparation and approval of the company manufacturing and/or technical specifications for the product;

See page 17(b) for Answer to No. 16(K).

L. Whether the product has been altered in chemical composition since first being made. If so, please state as to each such alteration:

(1) The date of alteration;

(2) The nature of the alteration;

(3) The reason for the alteration;

See page 17(c) for Answer to No. 16(L)(1-3)

(4) Identify the person(s) recommending or approving such alteration;

See page 17(d) for Answer to No. 16(L)(4).

Answer to Interrogatory No. 16(J).

No logos, writing, impressions or identifying marks appeared on the products themselves. However, see Answer to No. 16(F).

Defendant does not have complete information on past packaging, but all the Company's products, except private label products, had on the package the name of the product; Eagle-Picher's name; its address; its logo, mixing and/or application instructions, where applicable; and statement of net contents.

See Exhibit V for a copy of the mixing instructions. Also, see Exhibit VI for a copy of logos which appeared on the containers of the Company's asbestos-containing insulation products.

After being advised in 1964 by the National Insulation Manufacturers Association (NIMA) that the major producer of asbestos products, Johns-Manville Corporation, had informed the NIMA Board that it was placing a caution on its products that contained asbestos, the Company elected to follow this practice of the industry leader.

The Company placed the following caution on the containers of its asbestos-containing finishing and insulating cements in June, 1964. This same caution remained on these products until they no longer contained asbestos or they were discontinued.

> "CAUTION. This product contains asbestos fiber. Inhalation of asbestos in excessive quantities over long periods of time may be harmful. If dust is created when this product is handled, avoid breathing the dust. If adequate ventilation control is not possible, wear respirators approved by the U.S. Bureau of Mines for pneumoconiosis producing dust."

The caution was located on the lower portion of the container. See Exhibit VII for a copy of the caution.

Hylo Block and Pipe Covering, which was produced by Owens-Corning and was merely sold by the Company, included a caution on the packages beginning in January, 1967.

Also, see Exhibits I, II and VIII regarding Eagle-Picher's trademarks which appeared on the containers of asbestos-containing insulation products formerly sold by the Company.

In addition, see Exhibit XXIII for a copy of a warranty which appeared on some of the packages of the Company's asbestos-containing insulation products.

V E R I F I C A T I O N

The undersigned, ROBERT BOCKSTAHLER, aver(s) that the statement of fact contained in the attached REPLY TO PLAINTIFF'S REQUEST FOR PRODUCTION & ANSWERS TO INTERROGATORIES are true and correct to the best of his information, knowledge and belief, and are made subject to the penalties of 18 PA. CONST. STAT. ANN. SECTION 4904 relating to unsworn falsification to authorities.

DATED: 8/29/88

Robert L. Bockstahler for Eagle-Picher Industries, Inc.

CERTIFICATE OF SERVICE

I hereby certify that I have served a true and correct copy of the within REPLY TO REQUEST FOR PRODUCTION & ANSWERS TO INTERROGATORIES on all Counsel of Record this 8th day of September, 198 8, by U.S. Mail, postage prepaid.

William R. Haushalter, Esquire

EXHIBIT ____

Product Name	Date Began/Discontinued Manufacture	Description	Contents
[illegible] "66" Insulating Cement	1970/1971	Dry bulk cement composed of Eagle-Picher granulated mineral wool thoroughly blended with suitable binding, rust inhibitive, and plasticizing ingredients.	Granulated Fiber, Bentonite Clay, Tri-Sodium Phosphate, Sodium Nitrite, Sudsing Agent; Asbestos
[illegible] Finishing Cement	1960/1971	Dry bulk cement composed of Eagle-Picher mineral wool and diatomaceous earth, thoroughl blended with suitable binding, rust inhibitive and plasticizing ingredients.	Granulated Mineral Wool, Bentonite Clay, Sodium Nitrate, Portland Cement, Diatomaceous Earth, Asbestos
Fireproofing Cement	1948/1965	Dry bulk high temperature cement composed of asbestos fiber and Bentonite clay thoroughly blended with suitable binding, rust inhibitive, and plasticizing ingredients.	Granulated Mineral Fiber, Asbestos, Diatomaceous Earth, Lumnite or Portland Cement, Bentonite Clay, Fire Clay, Sudsing Agent, Sodium Nitrate, Tri-Sodium Phosphate, Glass Fiber (1962 to 1965 only)
11" Finishing Cement	1944/1971*	Durable hard white finish coating for indoor insulation on heated surfaces.	Asbestos, Portland Cement
"11" Insulating Cement	1935/1949	Vermiculite base insulating cement used on masonry surfaces, primarily in the steel industry.	Vermiculite, Clay, Asbestos

*Small quantities of "43" were manufactured
nd shipped in January and April, 1972
ursuant to special orders.

Product Name	Date Began/Discontinued Manufacture	Description	Contents
"66" Finishing Cement	1915/1962	Hard, durable finishing cement used primarily as a finish over other insulation.	Diatomaceous Earth, Asbestos, Clay, Calcium Sulfate
"106" Finishing Cement	1948/1962	Hard, Fire-protective finishing cement for indoor and outdoor use.	Lumnite Cement, Asbestos, Clay
"111" High Temperature Cement	1915/1966	Diatomaceous Earth aggregate base product (to 2300°F) used as a refractory insulating material.	Diatomite Aggregate, Fire Clay, Asbestos, Bentonite Clay
Hylo Finishing Cement	1963/1971	Same as One-Coto Cement	Granulated Mineral Wool, Diatomaceous Earth, Bentonite Clay, Asbestos, Portland Cement, Sodium Nitrate, Sudsing Agent
Hi Stick Insulating Cement	1964/1969	Insulating Cement specially formulated to give maximum adhesion to valves and fittings.	Granulated Mineral Wool, Bentonite Clay, Sodium Nitrite, Sudsing Agent, Portland Cement, Asbestos
Insulseal	1935/1969	Tough black protective coating for insulation, composed of asbestos, clay, and other additives in an asphalt base.	Emulsified Asphalt, Asbestos, Bentonite Clay, Water, Carbon Black, Methyl Alcohol

Insulatic	1919/1962	Adhesive material used to temporarily hold in place and to speed the application of rigid and semirigid insulation.	Asbestos, Sodium Silicate
Sweetchek	1945/1961	Asphaltic base compound used to prevent condensation.	Asphalt, Alcohol, Asbestos, Calcium Carbonate
Vercel Block	1937/1944	Vermiculite insulating block for use up to 1400°F.	Vermiculite, Clay, Asbestos, Magnesium Sulfate
Superlemp Block	1938/1945	Dark gray mineral wool insulating block composed of Eagle-Picher Mineral Wool and suitable binding agents and formed into semirigid shapes with square corners and parallel faces.	Mineral Wool Tufts, Linseed Oil, Asbestos [1], Bentonite Clay, Magnesium Sulphate, Starch, Sodium Silicate
"DE 85" Block	1947/1953	Rigid type Diatomaceous Earth block used on a variety of heated equipment with temperatures up to 1300°F.	Diatomite, Lime, Perlite Asbestos, White Plaster
"DE 95" Block	1949/1953	Diatomaceous Earth block used principally on heating surfaces exposed to higher temperature range (to 2000°F)	Diatomite Aggregate, Plaster, Lime, Venetian Red Dye, Asbestos

NOTE: Several of the products listed were also packaged under private labels.

[1]The company's year end cost of production accounting records reveal that a small percentage of chrysotile asbestos fiber was charged against a product known as "Superlemp Block." However, former plant managers of the Company deny that the product ever contained asbestos fiber.

1. Navy [illegible] were "Super 66" types with a higher asbestos fiber content.

2. "130" Insulating cement was produced in 1939, 1940, 1942 and 1945. This was a duplicate of the "33" cement formula.

3. "1001" cement was produced in 1947 only.

4. From time to time the Research group developed experimental cement products containing asbestos fiber. Quantities were quite small and used primarily for in-house test evaluation. The products concerned, indicating the year of experimentation, are as follows:

Firekote (1942)	Insulac (1939)
Coprtex (1939)	Drycote (1945)
Castable Cement (1969)	Superfill "A" (1967)
Superfill "F" (1968)	

5. Hi-Temp Corrosion Resistant Paint, a mixture of Hi-Temperature Stalastic and methylene chloride was produced in small quantities in 1969 and 1971. The addition of methylene chloride simply diluted the Stalastic to a "brush-on" viscosity.

Super "66" Insulating Cement	A. P. Green Insulating Cement*	A. P. Green Fire Brick Co.	5/1/40 to 8/16/71	1949 - 1971
	C-18 Insulating Cement*	Bigelow-Liptak Corporation	5/5/49 to 8/16/71	1949 - 1971
	CF-660 Insulating Cement**	Owens-Corning Fiberglas, Supply and Contracting Division	1958 to date unknown	1958 - 1967
	SF-40 Insulating Cement*	Owens-Corning Fiberglas, Supply and Contracting Division		1967 - 1971
	FINCO Mineral Wool Insulating Cement	Fiberglass Engineering Co.		1953 - 1958
	Stazon Cement*	North American Refractories Co.	12/26/57 to 8/16/71	1958 - 1971
	Fitch #1	Fitch Recuperator Co.		1939 - 1955
	Armatemp No. 166**	Armstrong Contracting & Supply Div.	3/15/62 to date unknown	1957 - 1971
	MW 50**	Philip Carey	1956 to 1968	1958,1966,1967
	H. W. Insulating Cement	Harbison-Walker	2/24/53 to 1/1/57	1953 - 1958
	Unarco No. 310 Cement**	Union Asbestos & Rubber Co.	8/1/57 to date unknown	1953 - 1962
	Mineral Wool Insulating Cement, Grade 313*	GAF	12/11/70 to 5/26/71	1971
	General Refractories Insulating Cement	General Refractories Co.	6/16/49 to date unknown	1949 - 1971
		H. K. Porter, Refractories Div.		1966 - 1971
		Babcock & Wilcox, Refractories Div.		1966 - 1971
"1" Insulating Cement	Fitch #2	Fitch Recuperator Co.		1940 - 1941, 1943 - 1946, 1948 - 1950

[illegible] Finishing Cement	[illegible] 10 Cement*	Bigelow-Liptak Corp.	5/5/49 to 8/16/71	1949-1961, 1966
	SS-11 White Finishing Cement*	A. P. Green Fire Brick Co.	5/1/49 to 8/16/71	1952, 1954, 1956 - 1970
[illegible] Cote Cement***	[illegible] 110**	Owens-Corning Fiberglas, Supply and Contracting Division	1958 to date unknown	1960 - 1967
	SF 30*	Owens-Corning Fiberglas, Supply and Contracting Division		1967 - 1971
	MW 1**	Philip Carey	1956 to 1968	1966
	Armstemp No. 10**	Armstrong Contracting & Supply Div.	3/15/62 to date unknown	1962 - 1971
	IC-11*	Bigelow-Liptak Corp.	5/5/49 to 8/16/71	1960 - 1971
	Insul-Finish*	General Refractories Co.	6/16/49 to date unknown	1960 - 1965
				1967 - 1970
	SS-10 Insulating & Finishing Cement*	A. P. Green Fire Brick Co.	5/1/49 to 8/16/71	1960 - 1970
	Unicote Cement*	North American Refractories Co.	12/20/57 to 8/16/71	1960-1966, 1970
	Unarco No. 10 Cement**	Union Asbestos & Rubber Co.	8/1/57 to date unkown	1960 - 1962
	Single Cote Insulating Cement, Grade 412*	GAF	12/11/70 to 5/26/71	1971
		H. K. Porter, Refractories Div.		1966 - 1967
		Babcock & Wilcox, Refractories Div.		1966 - 1968

* Exclusively Eagle-Picher's product

** Not exclusively Eagle-Picher's product

*** One-Cote cement did not contain asbestos prior to 1960.

After being advised in 1964 by the National Insulation Manufacturers Association (NIMA) that the major producer of asbestos products, Johns-Manville Corporation, had informed the NIMA Board that it was placing a caution on its products that contained asbestos, the Company elected to follow this practice of the industry leader.

The Company placed the following caution on the containers of its asbestos-containing finishing and insulating cements in June, 1964. This same caution remained on these products until they no longer contained asbestos or they were discontinued.

> "CAUTION. This product contains asbestos fiber. Inhalation of asbestos in excessive quantities over long periods of time may be harmful. If dust is created when this product is handled, avoid breathing the dust. If adequate ventilation control is not possible, wear respirators approved by the U.S. Bureau of Mines for pneumoconiosis producing dust."

The caution was located on the lower third of the front of the bag.

Additionally, in a June 2, 1964, letter to those for whom the Company produced private-label asbestos-containing insulation products, Mr. John Harrington, General Sales Manager, enclosed an excerpt from a meeting of the Board of Directors of the National Insulation Manufacturers Association (NIMA) regarding Johns-Manville's placing of a cautionary note on its asbestos products; he stated that the Company was planning to use the same cautionary note, and asked those companies if they wished the same action taken on their behalf.

The Company no longer manufactures these products. However, any available information regarding the caution is in the files of the Corporate Legal Department, Eagle-Picher Industries, Inc., Cincinnati, Ohio.

4-28-88

EXHIBIT ___

Asbestos Containing Insulation Products Sold (but not manufactured)
By Eagle-Picher Industries, Inc.

Product Name (Source)	Date Began/Discontinued Sales	Description	Contents
Spray Mastic (APCO Oil)	1960/1974**	Weather-protective coating.	Petroleum Asphalt, Clay, Asbestos
Foilseal (APCO Oil)	1969/1974**	Tough black protective coating for insulation.	Emulsified Asphalt, Asbestos, Bentonite Clay, Water, Carbon Black, Methyl Alcohol
Insulstic (Carey)	1963/1974	Adhesive material used to temporarily hold in place and to speed the application of rigid and semirigid insulation.	Asbestos, Sodium Silicate
Stalastic (Southwest Grease and Gibson Homans)	1937/1974*	A weather and vapor-barrier coating.	Petroleum Asphalt, Asbestos, Clay, Calcium Carbonate
Stamastic (Southwest Grease)	1937/Approx. 1968	Same as Stalastic, immediately above.	Same as Stalastic
Weatherbak (Carey)	1962/Approx. 1966	A weather-protective and anticondensation compound.	Emulsified Asphalt, Asbestos, Bentonite Clay, Water, Carbon Black, Methyl Alcohol
Carey-Temp Block and Pipe Covering (Carey)	1956/1960	Molded rigid block or pipe covering.	Perlite, Asbestos, Clay, Sodium Silicate
Kaylo Block and Pipe Covering (Owens-Corning)	1960/1969 1972/1972	Molded rigid block or pipe covering.	Calcium Silicate, Clay, Asbestos, Diatomaceous Earth

duct Name (Source)	Date Began/Discontinued Sales	Description	Contents
lo Block and pe Covering (GAF)	1969/1971	Same as Owens-Corning Hylo, immediately above.	Same as Owens-Corning Hylo
gle 20 or 24 sbestos Corp., ney Canadian, GAF)	1934/1969	Insulation Cement Ingredient	Chrysotile Asbestos Fiber
1" Insulating ment (J-M)	1950/1968	Vermiculite base insulating cement used on masonry surfaces, primarily in the steel industry.	Vermiculite, Asbestos, Clay
Magnesia Pipe vering and Insulation ney & Others)	1956/1960	Insulating block and pipe covering.	Magnesium Carbonate and Asbestos

Calastic was discontinued from our general product line on December 1, 1974. However, special orders were accepted in 1975 through late March, 1978. The Company performed a sales agent function only in 1975-1978.

Spray Mastic and Insulseal were discontinued from our general product line on December 1, 1974. However, in 1975 small quantities were sold pursuant to special requests.

ptember, 1986