

BULLETINS
700 - 750

BULLETIN

NO. 750

February 17, 1983

SEMI-METALLIC DISC BRAKE LINING ON VEHICLES IN NORTH AMERICAN MARKET

This Bulletin is to up-date the listing of vehicles sold in the North American market which take semi-metallic disc brake linings. This Bulletin, when added to earlier Bulletins referred to below, covers vehicles known to the Institute to take these linings. There are certain cases where an import manufacturer probably used conventional asbestos type pads as original equipment, but has since released a semi-metallic set to retro-fit the earlier models. When we know that the vehicle manufacturer has released semi-metallics to retrofit models, we will show that vehicle as taking semi-metallics in this listing.

We do wish to caution that the manufacturers of imported vehicles do not file information with the Institute and for that reason we do not claim that the listing that follows is complete. Earlier Bulletins with similar information were:

BULLETIN NO. 709 and 709A - February-March, 1981
BULLETIN NO. 733 - March 3, 1982

	<u>FMSI LINING NUMBER</u>	
	<u>FRONT</u>	<u>REAR</u>
<u>AMERICAN MOTORS</u>		
1983, Spirit, Concord, Eagle (All)	7122A(O)	
<u>BUICK</u>		
1983, Electra, Police, Taxi	728A	
1983, Le Sabre (11" rears), Station Wagon	728A	
1983, Riviera	7070A	7070A
1983, Regal	7070A	
1983, Century	7070C	
	or 7136	
1983, Skylark (Power Brakes)	7070C	
1983, Skylark (Manual Brakes)	7070C(I)	
1983-82(Late), Skyhawk J	7130	
1982(Early), Skyhawk J	7114	
<u>CADILLAC</u>		
1983, Eldorado	7070A	
1983, Seville	7070A	
1983, Commercial, Limousine	728A	
1983-82(Late), Cimarron	7130	
1982(Early), Cimarron	7114	

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February 17, 1983

	FMSI LINING NUMBER	
	FRONT	REAR
<u>CHEVROLET</u>		
1983, Impala, Caprice (11" rears), Wagon	728A	
1983, Chevrolet Police, Taxi	728A	
1983, Monte Carlo, Malibu	7070A	
1983, Celebrity	7070C	
	or 7136	
1983, Camaro	7070A	
1983, Citation (Power Brakes)	7070C	
1983, Citation (Manual Brakes)	7070C(I)	
1983-82(Late), Cavalier	7130	
1982(Early), Cavalier	7114	
1983, Chevette	7135	
1983, Corvette	7137	7138
<u>CHEVROLET TRUCK</u>		
1983, S-10	7070A	
1983, El Camino	7070A	
1983, C-, K-, P-20	728A	
	or 7084A	
1983, C-, P-30	7081A	
	or 7084A	
1983, P-30 (JF-9)	7081A	7081A
1983, G-30	728A	
	or 7081A	
	or 7084A	
1983, B6P042 (option)	7141	7142
	or 7142	
1983, C6D042 (option)	7141	7142
1983, C7D042 (option)	7141	7142
	or 7142	
<u>CHRYSLER</u>		
1983, Chrysler Police, Taxi	7017	
1983, Cordoba Police	7017	
1983, LeBaron	7133A	
	or 7134A	
1983, Chrysler E	7134A	
<u>DODGE</u>		
1983, Diplomat Police, Taxi	7017	
1983, 400	7133A	
	or 7134A	
1983, 600	7134A	
1983, Aries	7097A	
1983, Omni, Charger	7139A	
1983, Shelby Charger	7134A	
<u>DODGE TRUCK</u>		
1983, Rampage	7139A	
<u>FORD</u>		
1983, Ford Police, Taxi	7082A	
1983, Fairmont, LTD, Thunderbird	7072B	
1983, Mustang (exc. 2.3L)	7072B	

February 17, 1983

	FMSI LINING NUMBER	
	FRONT	REAR
<u>FORD TRUCK</u>		
1983-82, Ranger	7125A	
1983, Bronco	738	
1983, E-250, F-250, E-350, F-350	7054	
1983, E-350 School Bus	7054	
1983, 800, 900 Series (certain models)	7041	
1983, 800 Series (certain models)	7149	
<u>GMC TRUCK</u>		
1983, S-15	7070A	
1983, Caballero	7070A	
1983, C-, K-, P-2500	728A	
	or 7084A	
1983, C-, P-3500	7081A	
	or 7084A	
1983, P-3500 (JF-9)	7081A	7081A
1983, G-3500	728A	
	or 7081A	
	or 7084A	
1983, B6P042 (option)	7141	7142
	or 7142	
1983, C6D042 (option)	7141	7142
1983, C7D042 (option)	7141	7142
	or 7142	
<u>HONDA</u>		
1981-79, Accord (Retrofit - D226)	7061	
<u>INTERNATIONAL HARVESTER</u>		
1983, School Bus and Commercial (option)	7108	7108
<u>JEEP</u>		
1983-82, CJ8 Scrambler	7122A(O)	
1983, CJ5, CJ7	7122A(O)	
<u>MACK TRUCK</u>		
1983, Certain Models with air brakes		7098
1983, Certain Models with hydraulic brakes	7041	
<u>MERCURY</u>		
1983, Mercury Police, Taxi	7082A	
1983, Zephyr, Cougar, Marquis	7072B	
1983, Capri (ex. 2.3L)	7072B	
<u>OLDSMOBILE</u>		
1983, Oldsmobile 98, Police, Taxi	728A	
1983, 88 (11 th years), Wagon	728A	
1983, Toronado	7070A	
1983, Cutlass	7070A	
1983, Cutlass Ciera	7070C	
	or 7136	
1983, Omega (Power Brakes)	7070C	
1983, Omega (Manual Brakes)	7070C(I)	
1983-82(Late), Firenza	7130	
1982(Early), Firenza	7114	

	FMSI LINING NUMBER	
	FRONT	REAR
<u>PLYMOUTH</u>		
1983, Gran Fury Police, Taxi	7017	
1983, Reliant	7097A	
1983, Horizon, Turismo	7139A	
1983, Scamp	7139A	
<u>PONTIAC</u>		
1983, Bonneville	7070A	
1983, Grand Prix	7070A	
1983, Firebird	7070A	
1983, 6000	7070C	
	or 7136	
1983, Phoenix (Power Brakes)	7070C	
1983, Phoenix (Manual Brakes)	7070C(I)	
1983, 2000	7130	
1982(Late), J2000	7130	
1982(Early), J2000	7114	
1983, 1000	7135	
<u>RENAULT</u>		
1983, Alliance	7131A	
1983, 18i	7123	
<u>TOYOTA</u>		
1982, Celica Supra	7128	7129
1983, Corolla Coupe, Hardtop, Liftback	7099	
<u>VOLKSWAGEN</u>		
1983, Rabbit, Scirocco	7087	
1983-82, Rabbit Pick-up	7087	
1982, Quantum	7126	

(I) = Inner Lining Only

(O) = Outer Lining Only

The data shown in this bulletin has been supplied by original equipment manufacturers and other sources, and while we believe that such information is correct, the Institute cannot and does not accept any responsibility or liability for errors or omissions, or harm resulting therefrom.

The data shown in this bulletin indicates dimensions only, and in no way refers to quality of any materials that may be embodied or used in the product or particular application, and moreover SINCE FIELD CONDITIONS AND OTHER FACTS MAY NECESSARILY VARY FROM ONE APPLICATION TO ANOTHER, FRICTION MATERIALS SUPPLIERS AND INSTALLERS SHOULD RELY ULTIMATELY AND SOLELY UPON THEIR OWN EXPERTISE AND JUDGMENT, AS TO QUALITY AND DIMENSIONAL SIZE. Under no circumstances should replacement items be modified in the field instead of obtaining a proper sized item from a supplier. If such items are modified in the field to fit, the Institute specifically disclaims all liability and responsibility for any harm resulting therefrom.

If any error or omission is noted in this bulletin, it should be reported immediately to the Friction Materials Standards Institute, E-210 Route 4, Paramus, New Jersey 07652.

Distribution: Delegates and Alternates
Active Members (List C)

Regional Members (U.S. Dues)
Licensees

BULLETIN

NO. 749

February 16, 1983

ORDERS FOR THE 1983 SUPPLEMENT TO THE 1982 AUTOMOTIVE DATA BOOK

The contract for printing the 1983 Supplement to the 1982 Automotive Data Book has been awarded to:

Tweddle Litho Company
24000 Harper Avenue
St. Clair Shores, MI 48080

This Supplement will contain all data gathered since publication of the 1982 Automotive Data Book, and as such will continue with both the brake lining-clutch facing information and with the brake shoe information that was in the combined 1982 catalog. The Institute will no longer publish a separate Brake Shoe Identification Catalog or Supplement. This 1983 Supplement is available to Active Members, Regional Members and Licensees.

We expect this Supplement to run 48 pages, and estimate that 60,000 copies will be sold. Based on these projections, the tentative price for the Supplement is:

\$230.00 per Thousand - Basic Supplement
\$10.00 per Thousand - 5 hole punch

If there is a change in the price per thousand due to a change in number of pages, or a change in the quantity ordered, or for author alterations, you will be notified.

As this is a Supplement, there is no cover. The Supplement is a self-cover with the 40 pound white offset paper. The only special ordering should be for either punching or no punching.

Please forward all orders to the Institute Office. Do not send them to the printer. (British Council and FMSI Canada members send to your respective associations). This is our only means of checking the total quantities ordered and the price charged, as well as whether only members are ordering.

The orders should be made out to Tweddle Litho Company, and should state punching and shipping instructions. If applicable, please advise any special conditions for shipping through your customs.

Please forward your orders so that they reach the Institute Office by April 1, 1983.

EWD/dr
Distribution: Delegates and Alternates
Active Members-List C
Regional Members
Licensees

E. W. Drislane
Executive Director

BULLETIN

NO. 748

January 19, 1983

REPEAL OF EXCISE TAX ON AUTOMOTIVE TRUCK PARTS

A significant part of the Gasoline Tax Law recently signed by President Reagan provided for repeal of the Excise Tax on replacement parts for trucks. This Excise Tax did not apply for parts sold for use on passenger cars, that tax having been eliminated in 1966. This Excise Tax had been 8% of the manufacturer's selling price for these truck parts.

This 8% Excise Tax is repealed as of January 7, 1983.

There are exceptions where the part is sold in connection with the initial retail sale of certain tractors, trucks or trailers and for parts added to the new tractor, truck or trailer within six months of its initial sale.

Regulations to implement this act have not been issued, but it is important that customers wishing to claim a refund under this change take an inventory of their floor stock of truck parts on which they paid the Federal Excise Tax. Your customer is entitled to this refund, and will send his claim for refund to the manufacturer based on his floor stocks of applicable parts on January 7, 1983. The manufacturer will submit the claim for refund to Internal Revenue Service and accordingly pass the refund along to the customer.

While full details on this Excise Tax refund procedure are not yet in writing, it is important that customers wishing to claim a floor stock refund proceed with an inventory of their floor stocks reconciled to the January 7, 1983 date.

There was a notice published in the Federal Register on December 30, 1982, dealing with the Manufacturers Excise Taxes on Motor Vehicles. This notice of proposed rulemaking had to do with amendments to update and revise Excise Tax regulations. This was published before the President had signed the Act repealing the Excise Tax on truck parts. This notice proposed changes in definitions and exemptions for certain types of vehicles (Campers, farm equipment, house trailers, concrete mixers, etc.). While it is not felt that this notice is of importance to our Membership, copies are available on request. The December 30, 1982 notice is not the important item--the repeal on January 7, 1983 is.

The foregoing is sent as a matter of information.

E. W. Drislane
Executive Director

Copies: Delegates and Alternates
Active Members - List 1
Regional Members - U. S. Dues
Licensees

BULLETIN

NO. 747

January 4, 1983

HISTORICAL SALES PROGRAM

The historical sales program continues on a quarterly basis. Regional Members using the copyrighted FMSI Numbers for marketing their products in the United States may participate if they wish. The Institute is requesting details of pieces sold for the full twelve months of 1982 (the full calendar year 1982). The rules for reporting details remain unchanged. Please remember that you are to report cumulative figures for the full 12 months.

1. Quantities will be reported in pieces (not units).
For roll linings, each foot of length will be one piece.
2. Our Accountants will report the names of the members from whom reports are received.
3. Total pieces in each group will be reported.
4. "Clutch Facings" does not include gear tooth discs, automatic transmission discs, or the 8-14" dia., (3/16 to 1/2" thick) asbestos composition discs.

While there is no change in your reporting to the Accountants, there will be a change in the form of the report to be rendered by the Accountants. Based on resolutions at the June 1976 membership meeting, for the annual report only, the Accountants will be asked to list the names of the members reporting in each product line. (On the quarterly reports, they have been listing only the members reporting without indicating who reported by product line). The data as filed will be confidential. Totals for each group will be shown and there is no way of determining quantities by individual members

You will be receiving from Marshall Granger and Company, Certified Public Accountants, a form for completing this information. Please return it to:

Marshall Granger & Company, CPA
1600 Harrison Avenue
Mamaroneck, New York 10543

If you report, please have your figures in by February 15, 1983. If you do not wish to report these figures, no reply is necessary. Only those reporting figures will receive the industry totals when the data is summarized. A sample form and definitions are attached.

EWD/dr
Enc.

E. W. Drislane
Executive Director

Distribution: Delegates & Alternates
Regional Members (paying
Active Members Dues)

EXHIBIT "A"

STATISTICAL PROGRAM OF THE
FRICTION MATERIALS STANDARDS INSTITUTE, INC.

Mail to:

Marshall Granger & Co., CPA
1600 Harrison Avenue
Namaroneck, NY 10543

* * * * *

See instructions for sales to other members.

Pieces sold to United States distributors, jobbers, private brands,
rebuilders, brake specialists, fleets, mass merchandisers, direct
consumers, government agencies, or other customers for use in the
United States replacement market:

/2 MONTHS JANUARY 1, to DEC 31 1982

Brake linings less than 3/4" nominal
thickness (See explanation for
roll linings).

Brake blocks, nominal thickness
of 3/4" and over

Disc Brake Linings

Clutch Facings

Total Pieces

STATISTICS SUPPLIED BY

SAMPLE
FORM

USE REPORTING FORM TO
BE SENT BY ACCOUNTANTS

Signature

Company

Telephone Number

EXHIBIT "B"

DEFINITION FOR HISTORICAL SALES

PIECES

The reports will show pieces of friction material, in groups as shown:

<u>Group</u>	<u>Description</u>	<u>Normal Usage</u>
Brake Lining	Friction materials less than a nominal 3/4" thickness (See note on roll lining)	Normally, <u>one piece</u> to a shoe
Brake Blocks	Friction materials with a nominal thickness of 3/4" and over	Normally, <u>two pieces</u> to a shoe
Disc Brake Linings	Friction materials sold (for disc brakes) to be attached to the shoe, or sold as a unit molded, bonded or riveted to the shoe	Normally, <u>one piece</u> to a shoe
Clutch Facing	Friction materials of annular shape, or segments thereof	Normally, <u>two annular pieces</u> per clutch plate

Note: For roll lining only, consider each foot of length equals one piece.

REPLACEMENT SALES TO UNITED STATES MARKET

This reporting is for sales to the United States replacement market only. Do not include sales to other markets. This includes sales under the friction material manufacturer's own name or brand name used by the customer, to automotive warehouse distributors, jobbers, rebuilders, brake specialists, fleets, mass merchandisers, direct consumers, government agencies or other customers for use in the United States replacement market.

When a friction materials manufacturer is shipping to a vehicle manufacturer, brake manufacturer, or clutch manufacturer, but has no reasonable way of determining if the pieces are for original equipment replacement purposes, estimates will not be used - these pieces will not be reported. However, where a friction material manufacturer is shipping to a point known to be used for replacement, or where he stencils or otherwise identifies the pieces as being for replacement purposes, or where the shipments otherwise are obviously known to be for replacement, these pieces will be reported.

The member who sells to the type customer or user indicated above will report those pieces sold, even if purchased from another Active Member or Regional Member.

When you sell your friction materials to another Member (Active or Regional) do not report those sales. Materials sold to Licensee Members of the Institute for the replacement market should be included.

B U L L E T I N

N O. 7 4 6

October 1, 1982

HISTORICAL SALES PROGRAM

The Historical Sales program continues on a quarterly basis. Regional Members using the copyrighted FMSI Numbers for marketing their products in the United States may participate if they wish. The Institute is requesting details of pieces sold for the first nine months of 1982. These are cumulative figures for the period from January 1 to September 30. The rules for reporting details remain unchanged.

1. Quantities will be reported in pieces (not units or sets).
For roll linings, each foot of length will be one piece.
2. Our Accountants will report the names of the Members from whom reports are received.
3. Total pieces in each group will be reported.
4. "Clutch Facings" does not include gear tooth discs, automatic transmission discs, or the 8 to 14" diameter (3/16" to 1/2" thick) asbestos composition discs.

The data as filed will be confidential. Totals for each group will be ~~shown~~ and one cannot determine quantities by individual Members. You will be receiving a form for completing this information from Marshall Granger & Company, CPA. Please return it to:

Marshall Granger & Company, CPA
1600 Harrison Avenue
Mamaroneck, NY 10543

If you report, please have your figures in by November 15, 1982. If you do not wish to report these figures, no reply is necessary. Only those reporting figures will receive the industry totals when the data is summarized. A sample form and definitions are attached.

EWD/dr

E. W. Drislane
Executive Director

Distribution: Active Members and
Regional Members who
reported at least once
in 1981-82

EXHIBIT "A"

STATISTICAL PROGRAM OF THE
FRICTION MATERIALS STANDARDS INSTITUTE, INC.

Mail to:

Marshall Granger & Co., CPA
1600 Harrison Avenue
Mamaroneck, NY 10543

* * * * *

See instructions for sales to other members.

Pieces sold to United States distributors, jobbers, private brands,
rebuilders, brake specialists, fleets, mass merchandisers, direct
consumers, government agencies, or other customers for use in the
United States replacement market:

9 MONTHS JANUARY 1, to SEP 30 1982

Brake linings less than 3/4" nominal
thickness (See explanation for
roll linings).

Brake blocks, nominal thickness
of 3/4" and over

Disc Brake Linings

Clutch Facings

Total Pieces

STATISTICS SUPPLIED BY

SAMPLE

USE ONLY FOR
BE SENT TO MEMBERS

Signature

Company

Telephone Number

EXHIBIT "B"

DEFINITION FOR HISTORICAL SALESPIECES

The reports will show pieces of friction material, in groups as shown:

<u>Group</u>	<u>Description</u>	<u>Normal Usage</u>
Brake Lining	Friction materials less than a nominal 3/4" thickness (See note on roll lining)	Normally, <u>one piece</u> to a shoe
Brake Blocks	Friction materials with a nominal thickness of 3/4" and over	Normally, <u>two pieces</u> to a shoe
Disc Brake Linings	Friction materials sold (for disc brakes) to be attached to the shoe, or sold as a unit molded, bonded or riveted to the shoe	Normally, <u>one piece</u> to a shoe
Clutch Facing	Friction materials of annular shape, or segments thereof	Normally, <u>two annular pieces</u> per clutch plate

Note: For roll lining only, consider each foot of length equals one piece.

REPLACEMENT SALES TO UNITED STATES MARKET

This reporting is for sales to the United States replacement market only. Do not include sales to other markets. This includes sales under the friction material manufacturer's own name or brand name used by the customer, to automotive warehouse distributors, jobbers, rebuilders, brake specialists, fleets, mass merchandisers, direct consumers, government agencies or other customers for use in the United States replacement market.

When a friction materials manufacturer is shipping to a vehicle manufacturer, brake manufacturer, or clutch manufacturer, but has no reasonable way of determining if the pieces are for original equipment replacement purposes, estimates will not be used - these pieces will not be reported. However, where a friction material manufacturer is shipping to a point known to be used for replacement, or where he stencils or otherwise identifies the pieces as being for replacement purposes, or where the shipments otherwise are obviously known to be for replacement, these pieces will be reported.

The member who sells to the type customer or user indicated above will report those pieces sold, even if purchased from another Active Member or Regional Member.

When you sell your friction materials to another Member (Active or Regional) do not report those sales. Materials sold to Licensee Members of the Institute for the replacement market should be included.

B U L L E T I N

N O. 7 4 5

September 24, 1982

FORMS FOR EPA ASBESTOS REPORTING REQUIREMENTS

The Institute released BULLETIN NO. 741 on August 4, 1982, advising that the EPA had published its Final Rule on Asbestos Reporting Requirements in the FEDERAL REGISTER on July 30, 1982. A copy of the Final Notice was distributed with that bulletin.

At that time, we contacted the EPA and asked for copies of the necessary forms, or at least better illustrations thereof. We have now received copies of the Forms and Instructions from EPA. The Forms and Instructions are:

1. Instruction Booklet for EPA Form 7710-36, "Reporting Commercial and Industrial Uses of Asbestos".
2. EPA Form 7710-36, Reporting Commercial and Industrial Uses of Asbestos (Primary Processor Form).
3. EPA Form 7710-37, Reporting Secondary Processing and Importation of Asbestos Mixtures.

Copies of the above three items are enclosed. If additional forms are needed, one should call the EPA toll free at 800-424-9065.

The foregoing and enclosed are sent as a matter of information.

E. W. Drislane
Executive Director

EWD/dr

Copies to:

Delegates and Alternates
Active Members - List B
Regional Members (U.S. Dues)

REPORTING SECONDARY PROCESSING AND IMPORTATION OF ASBESTOS MIXTURES

INSTRUCTIONS

This form is to be completed by persons who, in 1981, were secondary processors of asbestos or importers of asbestos mixtures or articles that contain asbestos components. See "Reporting Commercial and Industrial Uses of Asbestos", 40 CFR Part 763, Subpart D, for a full description of the reporting requirement and reporting schedule.

If additional space is needed, you should use additional copies of this form.

WHO MUST COMPLETE EPA FORM 7710-37

1. Secondary processors of asbestos must complete Part I and II of the form. Each plant site or manufacturing facility must be reported separately. If you process bulk asbestos fiber to make any of your products at this plant site, then you are a PRIMARY PROCESSOR and you should report this plant site on EPA Form 7710-36.
2. Importers of asbestos mixture(s) or article(s) containing asbestos components must complete Part I and III of the form. If you import bulk asbestos fiber, then you should report all importation activities on EPA Form 7710-36.
3. Those who are both secondary processors and importers must complete Parts I, II and III of the form.

DEFINITIONS

1. **Asbestos Mixture**—means a mixture which contains bulk asbestos or another mixture. Section 2 below lists typical terms for asbestos mixtures.
2. **Asbestos Component**—means any asbestos mixture, including any finished product containing an asbestos mixture, which is incorporated into an article. Section 1 below lists typical terms for products made from asbestos mixtures and components. Some examples of asbestos components are: asbestos paper in a hair-dryer; asbestos-reinforced plastic cabinet of a television; asbestos textile that is part of a particular type of garment.
3. **Secondary Processor of Asbestos**—means a person who processes an asbestos mixture.
4. **Importer of Asbestos Mixtures or Articles Containing Asbestos Component(s)**—means a person who imports merchandise that contains asbestos into the customs territory of the United States. Where there are two or more "Importers" for the same shipment, the Principal rather than the Agent should report if possible.

PART I COMPANY INFORMATION

Enter the name, address, and phone number of your company. Enter the name of the principal technical contact who is either responsible for the completion of this form, or has sufficient knowledge of its content to respond to questions posed by EPA. If you are reporting as an importer, check the appropriate box to indicate that you are either the Principal importer or the Agent for the Principal.

PART II SECONDARY PROCESSOR END PRODUCTS

End Product(s)—Locate in Section 1 the name of the product subcategory that most specifically describes your end product. In this column, enter the code number for the end product you make and write in the generic name for the product. If you are reporting a product that is not listed, enter the code for "other" that is listed under the most specific general category of products and write in the generic name. Report each end product on separate lines. For example, if you make appliances and are reporting toasters, enter "114" and "toaster".

Asbestos Mixture(s)—For each end product, locate in Section 2 the name of the asbestos mixture that most specifically describes the asbestos mixture that you incorporate into the end product. In this column, enter the code number for the asbestos mixture and write in the generic name. If you incorporate more than one asbestos mixture into a single end product, then use as many lines as necessary to report all asbestos mixtures in the end product. For example, if you incorporate asbestos millboard into your toaster, your entries would be as follows.

End Product	Asbestos Mixture
114 toaster	03 millboard

Quantity of Asbestos Mixture Consumed—Opposite each asbestos mixture that is listed, enter the quantity of each mixture that you consumed in 1981. Specify the quantity according to the unit of measure listed in Section 2. If the unit of measure is not listed, report the quantity in short tons. If your records do not permit you to list the quantities consumed for separate end products, then report the total amount of each type of asbestos mixture and enter "T" (for total) next to the figure.

PART III IMPORTERS OF ASBESTOS MIXTURE(S) OR ARTICLE(S) CONTAINING AN ASBESTOS COMPONENT

Asbestos Mixture or Article—For each type of imported product, locate in either Section 1 or Section 2 the name that most specifically describes the product you import. Enter the code number and generic name for the imported product.

Quantity of Asbestos Mixture(s) or Article(s) Imported—For each product listed, record the total annual quantity imported in 1981. Specify the quantity according to the unit of measure listed in Section 2, if possible, or according to the unit of measure as reported to the U.S. Customs Service upon entry of the merchandise into the United States.

Description of Asbestos Components in Article—List all asbestos components in the imported article by entering the name of the asbestos component opposite the name of the article. If the reported product is an asbestos mixture listed in Section 2, then you should not complete this description.

SECTION 1 - TYPICAL TERMS FOR PRODUCTS MADE OF ASBESTOS MIXTURES

AUTOMOTIVE AND FRICTION PRODUCTS

101. Drum brake lining (light-medium vehicle)
102. Disc brake pads (light-medium vehicle)
103. Disc brake pads (heavy vehicle)
104. Brake block (heavy equipment)
105. Clutch facings (all)
106. Automatic transmission friction components
107. Friction materials (industrial and commercial)
108. Custom automotive body filler
109. Transmissions
110. Mufflers
111. Radiator top insulation
112. Radiator sealant
113. Other (specify generic name)

APPLIANCES

114. Appliance, industrial and consumer (specify generic name)

CONSTRUCTION PRODUCTS

115. Boiler and furnace baffles
116. Decorated building panels
117. A/C sheet
118. Flexible air conductor
119. Hoods and vents
120. Portable construction building
121. Roofing, saturated
122. Roof shingles
123. Wallboard
124. Wall/roofing panels
125. Other (specify generic name)

CLOTHING

126. Aprons
127. Boots
128. Gloves and mittens
129. Hats and helmets
130. Overgaitors
131. Suits
132. Other (specify generic name)

FLOOR COVERINGS

133. Vinyl-asbestos floor tile
134. Asbestos-felt-backed sheet vinyl flooring

ELECTRICAL PRODUCTS AND COMPONENTS

135. Cable insulation
136. Electronic motor components
137. Electrical resistance supports
138. Electrical switchboard
139. Electrical switch supports
140. Electrical wire insulation
141. Motor armature
142. Other (specify generic name)

FIRE AND HEAT SHIELDING EQUIPMENT AND COMPONENTS

143. Arc deflectors
144. Fire doors
145. Fireproof absorbent paper
146. Heat shields
147. Molten metal handling equipment
148. Oven and stove insulation
149. Pipe wrap
150. Stove lining, wood and coal
151. Stove pipe rings
152. Sleeves
153. Thermal insulation
154. Other (specify generic name)

GASKETS

155. Sheet gasketing, rubber encapsulated beater addition
156. Sheet gasketing, rubber encapsulated compressed
157. Compressed sheet gasketing (other)
158. Metal reinforced gaskets
159. Automotive gaskets
160. Other (specify generic name)

MARINE EQUIPMENT AND SUPPLIES

161. Caulks, marine
162. Liners, pond or canal
163. Marine bulkheads
164. Other (specify generic name)

PAINTS, COATINGS, SEALANTS, AND COMPOUNDS

165. Asphaltic compounds
166. Automotive/truck body coatings
167. Buffing and polishing compounds
168. Caulking and patching compounds
169. Drilling fluid
170. Flashing compounds
171. Furnace cement
172. Glazing Compounds
173. Plaster and stucco
174. Pump, valve, flange, and tank sealing components
175. Roof coatings
176. Textured paints
177. Tile cement
178. Other (specify generic name)

TEXTILE AND FELT PRODUCTS

- (other than clothing)
179. Aluminized cloth
180. Rope or braiding
181. Yarn, lap, or roving
182. Wicks
183. Bags
184. Baiting
185. Blankets
186. Carpet padding
187. Commercial/industrial dryer felts
188. Draperies
189. Drip cloths
190. Fire hoses
191. Ironing board pads and insulation
192. Mantles, lamp or catalytic heater
193. Packing and packing components
194. Piano and organ felts
195. Rugs
196. Tape
197. Theater curtains
198. Umbrella
199. Other (specify generic name)

MISCELLANEOUS PRODUCTS

200. Aerial distress flares
201. Acoustical products
202. Ammunition wadding
203. Asbestos-reinforced plastic products
204. Ash trays
205. Baking sheets
206. Blackboards
207. Candlesticks
208. Chemical tanks and vessels
209. Filters
210. Grommets
211. Gun grips
212. Jewelry making equipment
213. Kilns
214. Lamp sockets
215. Light bulbs (all types)
216. Linings for vaults, safes, humidifiers, and filing cabinets
217. Phonograph records
218. Pottery clay
219. Welding rod coatings
220. Other (specify generic name)

SECTION 2 - TYPICAL TERMS FOR ASBESTOS MIXTURES

PAPERS, FELTS, OR RELATED PRODUCTS

- | | |
|---------------------------------|------------|
| 01. commercial paper | short tons |
| 02. rollboard | short tons |
| 03. millboard | short tons |
| 04. pipeline wrap | short tons |
| 05. beater-add gasketing paper | short tons |
| 06. high-grade electrical paper | short tons |
| 07. unsaturated roofing felt | short tons |
| 08. saturated roofing felt | short tons |
| 09. flooring felt | short tons |
| 10. corrugated paper | short tons |
| 11. specialty paper (specify) | short tons |

FLOOR COVERINGS

- | | |
|---|--------------|
| 12. vinyl-asbestos floor tile | square yards |
| 13. asbestos-felt-backed vinyl flooring | square yards |

ASBESTOS-CEMENT PRODUCTS

- | | |
|---------------------------|-----------------|
| 14. A/C pipe and fittings | short tons |
| 15. A/C sheet, flat | 100 square feet |
| 16. A/C sheet, corrugated | 100 square feet |
| 17. A/C shingle | squares |

FRICTION MATERIALS

- | | |
|--|--------|
| 18. drum brake lining (light-medium vehicle) | pieces |
| 19. disc brake pads (light-medium vehicle) | pieces |
| 20. disc brake pads (heavy equipment) | pieces |
| 21. brake block (heavy equipment) | pieces |
| 22. clutch facings (all) | pieces |
| 23. automatic transmissions friction components | pieces |
| 24. friction materials (industrial and commercial) | pieces |

TEXTILES

- | | |
|---|--------|
| 25. cloth | pounds |
| 26. thread, yarn, lap, roving, cord, rope or wick | pounds |

OTHER PRODUCTS

- | | |
|--|--------------|
| 27. sheet gasketing (other than beater-add) | square yards |
| 28. packing | pounds |
| 29. paints and surface coatings | gallons |
| 30. adhesives and sealants | gallons |
| 31. asbestos-reinforced plastics | pounds |
| 32. insulation materials not elsewhere classified (n.e.c.) | |
| 33. mixed or repackaged asbestos fiber | short tons |
| 34. other (n.e.c.) | |



REPORTING SECONDARY PROCESSING AND IMPORTATION OF ASBESTOS MIXTURES

When completed, send this form to:
US Environmental Protection Agency
PO Box 2070
Rockville, MD 20852

PART I - COMPANY INFORMATION

COMPANY NAME		FOR EPA USE ONLY	
ADDRESS (Street, City, State & ZIP Code)		TECHNICAL CONTACT	TELEPHONE NO.
		IMPORTER ☐ PRINCIPAL ☐ AGENT	

PART II - SECONDARY PROCESSOR END PRODUCT(S)

From the list in Section I, enter the asbestos end product produced. Opposite each product, list the asbestos mixture that you process, and the quantity of each mixture that you consumed in 1981.

END PRODUCT(S)		ASBESTOS MIXTURE(S)		QUANTITY OF ASBESTOS MIXTURE CONSUMED	
CODE	GENERIC NAME	CODE	GENERIC NAME	QUANTITY	UNIT OF MEASURE

PART III - IMPORTERS OF ASBESTOS MIXTURE(S) OR ARTICLE(S) CONTAINING ASBESTOS COMPONENTS

List the asbestos mixture(s) or article(s) that you import and the quantity of each item that you imported in 1981. Opposite each item, enter a description of the asbestos component in the mixture or article.

ASBESTOS MIXTURE(S) OR ARTICLE(S)		QUANTITY OF ASBESTOS MIXTURE(S) OR ARTICLE(S) IMPORTED		DESCRIPTION OF ASBESTOS COMPONENT(S) IN ARTICLE
CODE	GENERIC NAME	QUANTITY	UNIT OF MEASURE	

CERTIFICATION FOR CLAIMS OF CONFIDENTIAL BUSINESS INFORMATION

An authorized company official may claim any information reported on this form as confidential business information. To do this, the confidential information must be clearly circled with a red marker. In addition, an authorized company official must sign below to certify the truth and accuracy of the following four statements, which apply to all information that is claimed.

1. My company has taken measures to protect the confidentiality of the information, and it will continue to take these measures.
2. The information is not, and has not been, reasonably obtainable by other persons (other than governmental bodies) by using legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding) without my company's consent.
3. The information is not publicly available elsewhere.
4. Disclosure of the information claimed as confidential would cause substantial harm to my company's competitive position.

SIGNATURE OF AUTHORIZED OFFICIAL	DATE
----------------------------------	------



United States
Environmental Protection
Agency

When completed send this form to:

U.S. Environmental Protection Agency
P.O. Box 2070
Rockville, MD 20852

REPORTING COMMERCIAL AND INDUSTRIAL USES OF ASBESTOS

Please read the accompanying instruction booklet before completing this form. Note that a separate form must be submitted for each plant site, except that total imports or exports of bulk asbestos may be reported in a consolidated corporate report. The instructions provide further directions.

When this form is complete, enclose it in the preaddressed envelope provided. Should you have any questions, please contact the Industry Assistance Office toll-free at (800) 424-9065 or in Washington, D.C. at (202) 554-1404.

All persons who are solely secondary processors, importers of asbestos mixtures, or importers of articles containing asbestos components will report in the first phase on EPA Form 7710-37, titled "Secondary Processing and Importation of Asbestos Mixtures." These persons will report in this form, EPA Form 7710-36, only upon receipt of notice to that effect from EPA (see 40 CFR 763, part D).

A(1). RESPONDENT IDENTIFICATION

1. Company name		Plant site name	
Address (Number and street)			
City	County	State	ZIP code
2. Principal technical contact person	Name	Job title	Office telephone (Area code, number, extension)
3. If applicable — Record mine identification number			
4. If applicable — Record the name and address of the parent corporation which is responsible for the fiscal management of the reporting site.			
Name of parent corporation			
Address (Number and street)			
City	County	State	ZIP code
5. Record the total number of years during which the manufacture and/or processing of asbestos has been conducted at the reporting site.			Number of years

A(2). RESPONDENT ACTIVITY

6. Identify your activity from the definitions in the instruction booklet and mark (X) the box next to the category below that best describes your activity(ies). Mark (X) next to all activities that you are reporting on this form. You must at least complete the portions of this report that are indicated next to the box you mark, and you must complete other sections if you conduct that activity. For example, if at the same plant site you process bulk asbestos to produce an asbestos mixture and you also process an asbestos mixture that is made at another location, then you as a primary processor must also complete part D as a secondary processor.

All persons who are miners, millers, primary processors, or importers of bulk asbestos must report their asbestos activities at all plant sites.

Mark (X) your activity(ies) that is reported on this form.

☐ Mine and mill — Complete parts A, B(1), G, H, I, J, K [B(3), if applicable]

☐ Primary processor — Complete parts A, C, G, H, I, J, K [B(3), if applicable]

☐ Importer of bulk asbestos — Complete parts A, B(2) [B(3), if applicable]

☐ Secondary processor — Complete parts A, D, G, H, I, J, K

☐ Importer of asbestos mixtures — Complete parts A and E

☐ Importer of article(s) containing asbestos component(s) — Complete parts A and F

A(3). CERTIFICATION FOR CLAIMS OF CONFIDENTIALITY

You may claim as confidential any information you submit on this form. The instructions provide specific instructions on how to assert claims of confidentiality. For information which you submit in attachments to the form, provide a copy which clearly indicates the information you wish to claim confidential.

Space is provided at the end of each line to claim information on that line confidential.

For any information on this form you claim as confidential, you must certify that the information is confidential. The signature below will attest to the truth and accuracy of the following statements. All four statements must be true about any information you claim confidential.

1. My company has taken measures to protect the confidentiality of the information, and it will continue to take these measures.

2. The information is not, and has not been, reasonably obtainable by other persons (other than governmental bodies) by using legitimate means (other than discovery based on a showing of special need and in a judicial or quasi-judicial proceeding) without my company's consent.

3. The information is not publicly available.

4. Disclosure of the information claimed as confidential would cause substantial harm to my company's competitive position.

7. Signature of authorized official	Date
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B(1). PRODUCTION OF BULK ASBESTOS

QUANTITY OF BULK ASBESTOS MINED OR MILLED

Enter , in short tons, the amount of bulk asbestos you produced (mined or milled) for 1979 through 1981.

Year	Report in short tons						Confidential Mark (X)
	Chrysotile	Crocidolite	Amosite	Anthophyllite asbestos	Tremolite asbestos	Actinolite asbestos	
1979							
1980							
1981							

B(2). IMPORTATION OF BULK ASBESTOS

QUANTITY OF BULK ASBESTOS IMPORTED

Enter , in short tons, the amount of bulk asbestos you imported for 1979 through 1981.

Mark (X) one: ☐ This is a corporate consolidated report.
☐ This is a plant site report.

Year	Report in short tons						Confidential Mark (X)
	Chrysotile	Crocidolite	Amosite	Anthophyllite asbestos	Tremolite asbestos	Actinolite asbestos	
1979							
1980							
1981							

B(3). EXPORTATION OF BULK ASBESTOS

QUANTITY OF BULK ASBESTOS EXPORTED

Enter , in short tons, the amount of bulk asbestos you exported for 1979 through 1981.

Mark (X) one: ☐ This is a corporate consolidated report.
☐ This is a plant site report.

Year	Report in short tons						Confidential Mark (X)
	Chrysotile	Crocidolite	Amosite	Anthophyllite asbestos	Tremolite asbestos	Actinolite asbestos	
1979							
1980							
1981							

C. PRIMARY PROCESSOR PRODUCTION

Enter the following information for each type of end product that you shipped from your plant site. Classify your end products according to the list below.

End product shipped (Enter one end product per line) (1)		Type of asbestos fiber (Use one line per mineral type) (2)	Year	Quantity of asbestos consumed (Short tons) (3)	Product shipments				Confidential Mark (X)
Code number	Generic name				Total annual production (4)		Value shipped (Thousands of dollars) (5)		
					Quantity	Unit of measure	Domestic	Exports	
		☐ Chrysotile ☐ Anthophyllite ☐ Crocidolite ☐ Tremolite ☐ Amosite ☐ Actinolite	1979						
			1980						
			1981						
		☐ Chrysotile ☐ Anthophyllite ☐ Crocidolite ☐ Tremolite ☐ Amosite ☐ Actinolite	1979						
			1980						
			1981						
	☐ Continued								
		☐ Chrysotile ☐ Anthophyllite ☐ Crocidolite ☐ Tremolite ☐ Amosite ☐ Actinolite	1979						
			1980						
			1981						
	☐ Continued								

(6) Estimate the percentage of the total value shipped from the plant site reported here as primary processor production in 1981 _____ %

Asbestos Mixture Product Subcategories

Papers, felts, or related products	Unit of measure	Asbestos-cement products	Unit of measure	Textiles	Unit of measure
01. Commercial paper	Short tons	14. A/C pipe and fittings	Short tons	25. Cloth	Pounds
02. Rollboard	Short tons	15. A/C sheet, flat	100 sq. ft.	26. Thread, yarn, lap, roving, cord, rope, or wick	Pounds
03. Millboard	Short tons	16. A/C sheet, corrugated	100 sq. ft.		
04. Pipeline wrap	Short tons	17. A/C shingle	Squares		
05. Beater-add gasketing paper	Short tons			Other products	
06. High-grade electrical paper	Short tons			27. Sheet gasketing (other than beater-add)	Sq. yards
07. Unsaturated roofing felt	Short tons	Friction materials		28. Packing	Pounds
08. Saturated roofing felt	Short tons	18. Drum brake lining (light-medium vehicle)	Pieces	29. Paints and surface coatings	Gallons
09. Flooring felt	Short tons	19. Disc brake pads (light-medium vehicle)	Pieces	30. Adhesives and sealants	Gallons
10. Corrugated paper	Short tons	20. Disc brake pads (heavy vehicle)	Pieces	31. Asbestos-reinforced plastics	Pounds
11. Specialty paper (Specify generic name)	Short tons	21. Brake block (heavy equipment)	Pieces	32. Insulation materials not elsewhere classified (Specify generic name)	(Specify)
		22. Clutch facings (all)	Pieces	33. Mixed or repackaged asbestos fiber	Short tons
Floor coverings		23. Automatic transmission friction components	Pieces	34. Other (Specify generic name)	(Specify)
12. Vinyl-asbestos floor tile	Square yards	24. Friction materials (industrial and commercial)	Pieces		
13. Asbestos-felt-backed vinyl flooring	Square yards				

D. SECONDARY PROCESSOR PRODUCTION

Enter the following information for each type of end product that you shipped from your plant site. Classify end products and asbestos mixtures consumed according to the lists on this form.

End product shipped (Enter one end product per line) (1)		Total annual production (2)			Asbestos mixture consumed and form (Enter one mixture per line) (3)		Function of asbestos in product (4)	Year	Annual consumption of asbestos mixtures (5)			Confidential Mark (X)
Code number	Generic name	Year	Quantity	Unit of measure	Code number	Generic name Form			Quantity	Unit of measure	Delivered cost (Thousands of dollars)	
		1979						1979				
		1980						1980				
		1981						1981				
		1979						1979				
		1980						1980				
	☐ Continued	1981						1981				
		1979						1979				
		1980						1980				
	☐ Continued	1981						1981				

(6) Estimate the percentage of the total value shipped from the plant site reported here as secondary processor production in 1981 _____ %

Typical terms for products made from asbestos mixtures

Automotive and friction products 101. Drum brake lining (light-medium vehicle) 102. Disc brake pads (light-medium vehicle) 103. Disc brake pads (heavy vehicle) 104. Brake block (heavy equipment) 105. Clutch facings (all) 106. Automatic transmission friction components 107. Friction materials (industrial and commercial) 108. Custom automotive body filler 109. Transmissions 110. Mufflers 111. Radiator top insulation 112. Radiator sealant 113. Other (Specify generic name) Appliances 114. Appliance, industrial and consumer (Specify generic name) Construction products 115. Boiler and furnace baffles 116. Decorated building panels 117. A/C sheet 118. Flexible air conductor 119. Hoods and vents 120. Portable construction building 121. Roofing, saturated 122. Roof shingles 123. Wallboard 124. Wall/roofing panels 125. Other (Specify generic name) Clothing 126. Aprons 127. Boots 128. Gloves and mittens 129. Hats and helmets 130. Overgaitors 131. Suits 132. Other (Specify generic name)	Floor coverings 133. Vinyl-asbestos floor tile 134. Asbestos-felt-backed sheet vinyl flooring Electrical products and components 135. Cable insulation 136. Electronic motor components 137. Electrical resistance supports 138. Electrical switchboard 139. Electrical switch supports 140. Electrical wire insulation 141. Motor armature 142. Other (Specify generic name) Fire and heat shielding equipment and components 143. Arc deflectors 144. Fire doors 145. Fireproof absorbent paper 146. Heat shields 147. Molten metal handling equipment 148. Oven and stove insulation 149. Pipe wrap 150. Stove lining, wood and coal 151. Stove pipe rings 152. Sleeves 153. Thermal insulation 154. Other (Specify generic name) Gaskets 155. Sheet gasketing, rubber encapsulated beater addition 156. Sheet gasketing, rubber encapsulated compressed 157. Compressed sheet gasketing (other) 158. Metal reinforced gaskets 159. Automotive gaskets 160. Other (Specify generic name)	Marine equipment and supplies 161. Caulks, marine 162. Liners, pond or canal 163. Marine bulkheads 164. Other (Specify generic name) Paints, coatings, sealants, and compounds 165. Asphaltic compounds 166. Automotive/truck body coatings 167. Buffing and polishing compounds 168. Caulking and patching compounds 169. Drilling fluid 170. Flashing compounds 171. Furnace cement 172. Glazing compounds 173. Plaster and stucco 174. Pump, valve, flange, and tank sealing components 175. Roof coatings 176. Textured paints 177. Tile cement 178. Other (Specify generic name) Textile and felt products 179. Aluminized cloth 180. Rope or braiding 181. Yarn, lap, or roving 182. Wicks 183. Bags 184. Belting 185. Blankets 186. Carpet padding 187. Commercial/industrial dryer felts 188. Draperies 189. Drip cloths 190. Fire hoses	Textile and felt products — Con. 191. Ironing board pads and insulation 192. Mantles, lamp or catalytic heater 193. Packing and packing components 194. Piano and organ felts 195. Rugs 196. Tape 197. Theater curtains 198. Umbrellas 199. Other (Specify generic name) Miscellaneous products 200. Aerial distress flares 201. Acoustical products 202. Ammunition wadding 203. Asbestos-reinforced plastic products 204. Ash trays 205. Baking sheets 206. Blackboards 207. Candlesticks 208. Chemical tanks and vessels 209. Filters 210. Grommets 211. Gun grips 212. Jewelry making equipment 213. Kilns 214. Lamp sockets 215. Light bulbs (all types) 216. Linings for vaults, safes, humidifiers, and filing cabinets 217. Phonograph records 218. Pottery clay 219. Welding rod coatings 220. Other (Specify generic name)
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E. IMPORTATION OF ASBESTOS MIXTURES

Enter the following information for each type of asbestos mixture that you imported in 1981. Classify your imports according to the lists in section C or D.

Asbestos mixtures (Enter one mixture per line) (1)		Asbestos fiber content (if known) (2)		Year	Total annual imports (3)			Confidential Mark (X)
Code number	Generic name	Type of asbestos	Quantity (Per unit)		Quantity	Unit of measure	Value of imports (U.S. dollars)	
		☐ Chrysotile ☐ Anthophyllite ☐ Unknown ☐ Crocidolite ☐ Tremolite ☐ Amosite ☐ Actinolite	☐ Unknown	1979				
				1980				
				1981				
		☐ Chrysotile ☐ Anthophyllite ☐ Unknown ☐ Crocidolite ☐ Tremolite ☐ Amosite ☐ Actinolite	☐ Unknown	1979				
				1980				
	☐ Continued			1981				
		☐ Chrysotile ☐ Anthophyllite ☐ Unknown ☐ Crocidolite ☐ Tremolite ☐ Amosite ☐ Actinolite	☐ Unknown	1979				
				1980				
	☐ Continued			1981				

U.S. ENVIRONMENTAL PROTECTION AGENCY	COMPANY NAME AND ADDRESS (Same as reported in item 1 on page 1)
REPORT OF COMMERCIAL AND INDUSTRIAL USES OF ASBESTOS Continued	

F. IMPORTATION OF ARTICLE(S) CONTAINING ASBESTOS COMPONENTS							
Enter the following information for each article that you imported in 1981. Classify your imports according to the lists in section C or D.							
Article name (Enter one article per line) (1)		Total annual imports (2)				Asbestos component(s) (Use one line per component) (3)	Confidential Mark (X)
Code number	Generic name	Year	Quantity	Unit of measure	Value (U.S. dollars)		
		1979					
		1980					
		1981					
		1979					
		1980					
		1981					
		1979					
		1980					
		1981					

G. EMPLOYEES	
Record the number of employees at the reporting site in each of the categories below. Count each employee in one category only.	
	Number of employees
(1) TOTAL number of employees at plant site (Sum of 2, 3, 4, and 5)	
(2) Number of production employees	
(3) Number of employees in shipping, receiving, and moving	
(4) Number of maintenance employees	
(5) Number of other employees	

H. SUMMARY OF CURRENT WORKER EXPOSURES									
This section requires you to report, by category of production workers, the arithmetic mean of the 8-hour time weighted average (TWA) and ceiling concentration exposure levels for all employees at the reporting site. Report for all employees for whom you have determined a TWA and according to each production line making the reported products. The instructions include a worksheet for making necessary calculations (see Appendix B).									
End product (Enter name) (1)	Respondent activity (2)	Production work category (3)	Number of employees (4)	8 hr. time weighted average				Ceiling concentration level (Range) (9)	Confidential Mark (X)
				Arithmetic mean of detectable measure- ments (5)	Standard deviation (6)	Total number of measure- ments (filters) (7)	Number of non- detectable measure- ments (8)		
Not applicable	Miners and millers	Mine operations (includes all employees working in mine, including transporters)							
		Mill operations (includes all employees working in production areas of mill)							
	Primary processors	Fiber introduction operations (includes blending, mixing, bag opening, fluffing, willowing, etc.)							
	Primary processors and second- ary pro- cessors	Wet mechanical operations (includes machining, saw- ing, drilling, cutting, grinding, pulverizing, weaving, etc.)							
		Dry mechanical operations (includes machining, saw- ing, drilling, cutting, grinding, pulverizing, weaving, etc.)							
		Other production employees							
	Primary processors	Fiber introduction operations (includes blending, mixing, bag opening, fluffing, willowing, etc.)							
	Primary processors and second- ary pro- cessors	Wet mechanical operations (includes machining, saw- ing, drilling, cutting, grinding, pulverizing, weaving, etc.)							
		Dry mechanical operations (includes machining, saw- ing, drilling, cutting, grinding, pulverizing, weaving, etc.)							
		Other production employees							
	Primary processors	Fiber introduction operations (includes blending, mixing, bag opening, fluffing, willowing, etc.)							
	Primary processors and second- ary pro- cessors	Wet mechanical operations (includes machining, saw- ing, drilling, cutting, grinding, pulverizing, weaving, etc.)							
		Dry mechanical operations (includes machining, saw- ing, drilling, cutting, grinding, pulverizing, weaving, etc.)							
		Other production employees							

(10) Sampling and analysis methods	
☐ Mark this box if you use the NIOSH method to sample airborne concentrations of asbestos fibers in the workplace and analyze measurements (DHEW (NIOSH) Pub. No. 79-127).	
If you utilize other sampling and analysis methods, enter the appropriate codes for those methods listed in the instruction booklet under part I. _____	

(11) Enter the lowest detectable level of the measurements that your company expects to attain by the sampling and analysis methods. (Measurements below this level should be considered as "nondetectable." for the purposes of this rule.)	
--	--

I. MEASURING ASBESTOS EMISSIONS OR FIBER RELEASE	
NPDES Permit number _____	Date _____
☐ Yes, enclosed is a separate report for this section concerning measuring asbestos emissions.	
☐ No separate report	

J. WASTE AND DISPOSAL

Enter the following information for each end product you report in section B(1), C, and D. If you cannot provide information by end product, provide information according to the form of waste (column 2).

End product (1)		Form of waste (sludge, slurry, broke or scrap, baghouse fines, or specify other) (2)	Total annual quantity of asbestos waste (Short tons) (3)	Average percent asbestos (4)	Disposal site (5)				Method of disposal (6)	Confidential Mark (x)
Code number	Generic name				Type of land disposal facility (See instructions) (a)	Location (b)	Ownership (c)	Permitted hazardous waste facility? (d)		
	☐ End product report ☐ Form of waste report			%	☐ Surface impoundment ☐ Waste pile ☐ Land treatment ☐ Land fill ☐ Seepage facility ☐ Injection well	☐ On-site ☐ Off-site	☐ Company ☐ Private ☐ Municipal	☐ Yes ☐ No		
	☐ End product report ☐ Form of waste report			%	☐ Surface impoundment ☐ Waste pile ☐ Land treatment ☐ Land fill ☐ Seepage facility ☐ Injection well	☐ On-site ☐ Off-site	☐ Company ☐ Private ☐ Municipal	☐ Yes ☐ No		
	☐ End product report ☐ Form of waste report			%	☐ Surface impoundment ☐ Waste pile ☐ Land treatment ☐ Land fill ☐ Seepage facility ☐ Injection well	☐ On-site ☐ Off-site	☐ Company ☐ Private ☐ Municipal	☐ Yes ☐ No		

(7) You may describe in a separate enclosure any steps you take to ensure that waste does not release airborne fibers.
☐ Yes, enclosed is a separate description of waste disposal practices. ☐ No separate report

K. POLLUTION CONTROL EQUIPMENT

On separate lines enter information about each piece of air pollution control equipment used to control asbestos emissions at your plant site. ☐ Confidential

Item number (1)	Type of equipment (See code) (2)	Gas stream volume and temperature (3)	Equipment size (Baghouse and ESP only) (4)	Estimated collection efficiency (Percent) (5)	Normal operating schedule (Hrs./year) (6)	Quantity collected annually (Pounds) (7)	Source of emissions (8)	Stack or chimney? (9)	Special problems? (10)
		Volume Temperature	Square feet ☐ N/A	% ☐ Designed ☐ Actual	Hrs./yr.	Pounds ☐ Designed ☐ Actual		☐ Yes ☐ No	
		Volume Temperature	Square feet ☐ N/A	% ☐ Designed ☐ Actual	Hrs./yr.	Pounds ☐ Designed ☐ Actual		☐ Yes ☐ No	
		Volume Temperature	Square feet ☐ N/A	% ☐ Designed ☐ Actual	Hrs./yr.	Pounds ☐ Designed ☐ Actual		☐ Yes ☐ No	
		Volume Temperature	Square feet ☐ N/A	% ☐ Designed ☐ Actual	Hrs./yr.	Pounds ☐ Designed ☐ Actual		☐ Yes ☐ No	
		Volume Temperature	Square feet ☐ N/A	% ☐ Designed ☐ Actual	Hrs./yr.	Pounds ☐ Designed ☐ Actual		☐ Yes ☐ No	
		Volume Temperature	Square feet ☐ N/A	% ☐ Designed ☐ Actual	Hrs./yr.	Pounds ☐ Designed ☐ Actual		☐ Yes ☐ No	

(11) Estimate the percent of plant exhaust air that is treated by the equipment listed above _____ %

Continuation of item answers



REPORTING COMMERCIAL AND INDUSTRIAL USES OF ASBESTOS

When completed send this form to:

U.S. Environmental Protection Agency
P.O. Box 2070
Rockville, MD 20852

Please read the accompanying instruction booklet before completing this form. Note that a separate form must be submitted for each plant site, except that total imports or exports of bulk asbestos may be reported in a consolidated corporate report. The instructions provide further directions.

When this form is complete, enclose it in the preaddressed envelope provided. Should you have any questions, please contact the Industry Assistance Office toll-free at (800) 424-9065 or in Washington, D.C. at (202) 554-1404.

All persons who are solely secondary processors, importers of asbestos mixtures, or importers of articles containing asbestos components will report in the first phase on EPA Form 7710-37, titled "Secondary Processing and Importation of Asbestos Mixtures." These persons will report in this form, EPA Form 7710-36, only upon receipt of notice to that effect from EPA (see 40 CFR 763, part D).

A(1). RESPONDENT IDENTIFICATION

1. Company name		Plant site name	
Address (Number and street)			
City	County	State	ZIP code
2. Principal technical contact person	Name	Job title	Office telephone (Area code, number, extension)
3. If applicable — Record mine identification number			
4. If applicable — Record the name and address of the parent corporation which is responsible for the fiscal management of the reporting site.			
Name of parent corporation			
Address (Number and street)			
City	County	State	ZIP code
5. Record the total number of years during which the manufacture and/or processing of asbestos has been conducted at the reporting site.			Number of years

A(2). RESPONDENT ACTIVITY

6. Identify your activity from the definitions in the instruction booklet and mark (X) the box next to the category below that best describes your activity(ies). Mark (X) next to all activities that you are reporting on this form. You must at least complete the portions of this report that are indicated next to the box you mark, and you must complete other sections if you conduct that activity. For example, if at the same plant site you process bulk asbestos to produce an asbestos mixture and you also process an asbestos mixture that is made at another location, then you as a primary processor must also complete part D as a secondary processor.

All persons who are miners, millers, primary processors, or importers of bulk asbestos must report their asbestos activities at all plant sites.

Mark (X) your activity(ies) that is reported on this form.

☐ Mine and mill — Complete parts A, B(1), G, H, I, J, K [B(3), if applicable]

☐ Primary processor — Complete parts A, C, G, H, I, J, K [B(3), if applicable]

☐ Importer of bulk asbestos — Complete parts A, B(2) [B(3), if applicable]

☐ Secondary processor — Complete parts A, D, G, H, I, J, K

☐ Importer of asbestos mixtures — Complete parts A and E

☐ Importer of article(s) containing asbestos component(s) — Complete parts A and F

A(3). CERTIFICATION FOR CLAIMS OF CONFIDENTIALITY

You may claim as confidential any information you submit on this form. The instructions provide specific instructions on how to assert claims of confidentiality. For information which you submit in attachments to the form, provide a copy which clearly indicates the information you wish to claim confidential.

Space is provided at the end of each line to claim information on that line confidential.

For any information on this form you claim as confidential, you must certify that the information is confidential. The signature below will attest to the truth and accuracy of the following statements. All four statements must be true about any information you claim confidential.

1. My company has taken measures to protect the confidentiality of the information, and it will continue to take these measures.

2. The information is not, and has not been, reasonably obtainable by other persons (other than governmental bodies) by using legitimate means (other than discovery based on a showing of special need and in a judicial or quasi-judicial proceeding) without my company's consent.

3. The information is not publicly available.

4. Disclosure of the information claimed as confidential would cause substantial harm to my company's competitive position.

7. Signature of authorized official	Date
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B(1). PRODUCTION OF BULK ASBESTOS

QUANTITY OF BULK ASBESTOS MINED OR MILLED							
Enter , in short tons, the amount of bulk asbestos you produced (mined or milled) for 1979 through 1981.							
Year	Report in short tons						Confidential Mark (X)
	Chrysotile	Crocidolite	Amosite	Anthophyllite asbestos	Tremolite asbestos	Actinolite asbestos	
1979							
1980							
1981							

B(2). IMPORTATION OF BULK ASBESTOS

QUANTITY OF BULK ASBESTOS IMPORTED							
Enter , in short tons, the amount of bulk asbestos you imported for 1979 through 1981.							
Mark (X) one: ☐ This is a corporate consolidated report. ☐ This is a plant site report.							
Year	Report in short tons						Confidential Mark (X)
	Chrysotile	Crocidolite	Amosite	Anthophyllite asbestos	Tremolite asbestos	Actinolite asbestos	
1979							
1980							
1981							

B(3). EXPORTATION OF BULK ASBESTOS

QUANTITY OF BULK ASBESTOS EXPORTED							
Enter , in short tons, the amount of bulk asbestos you exported for 1979 through 1981.							
Mark (X) one: ☐ This is a corporate consolidated report. ☐ This is a plant site report.							
Year	Report in short tons						Confidential Mark (X)
	Chrysotile	Crocidolite	Amosite	Anthophyllite asbestos	Tremolite asbestos	Actinolite asbestos	
1979							
1980							
1981							

C. PRIMARY PROCESSOR PRODUCTION

Enter the following information for each type of end product that you shipped from your plant site. Classify your end products according to the list below.

End product shipped (Enter one end product per line) (1)		Type of asbestos fiber (Use one line per mineral type)	Year	Quantity of asbestos consumed (Short tons) (3)	Product shipments				Confidential Mark (X)
Code number	Generic name	(2)			Total annual production (4)		Value shipped (Thousands of dollars) (5)		
					Quantity	Unit of measure	Domestic	Exports	
		☐ Chrysotile ☐ Anthophyllite	1979						
		☐ Crocidolite ☐ Tremolite	1980						
		☐ Amosite ☐ Actinolite	1981						
		☐ Chrysotile ☐ Anthophyllite	1979						
		☐ Crocidolite ☐ Tremolite	1980						
		☐ Amosite ☐ Actinolite	1981						
	☐ Continued	☐ Chrysotile ☐ Anthophyllite	1979						
		☐ Crocidolite ☐ Tremolite	1980						
		☐ Amosite ☐ Actinolite	1981						
	☐ Continued	☐ Chrysotile ☐ Anthophyllite	1979						
		☐ Crocidolite ☐ Tremolite	1980						
		☐ Amosite ☐ Actinolite	1981						

(6) Estimate the percentage of the total value shipped from the plant site reported here as primary processor production in 1981 _____ %

Asbestos Mixture Product Subcategories

Papers, felts, or related products	Unit of measure	Asbestos-cement products	Unit of measure	Textiles	Unit of measure
01. Commercial paper	Short tons	14. A/C pipe and fittings	Short tons	25. Cloth	Pounds
02. Rollboard	Short tons	15. A/C sheet, flat	100 sq. ft.	26. Thread, yarn, lap, roving, cord, rope, or wick	Pounds
03. Millboard	Short tons	16. A/C sheet, corrugated	100 sq. ft.		
04. Pipeline wrap	Short tons	17. A/C shingle	Squares		
05. Beater-add gasketing paper	Short tons			Other products	
06. High-grade electrical paper	Short tons	Friction materials		27. Sheet gasketing (other than beater-add)	Sq. yards
07. Unsaturated roofing felt	Short tons	18. Drum brake lining (light-medium vehicle)	Pieces	28. Packing	Pounds
08. Saturated roofing felt	Short tons	19. Disc brake pads (light-medium vehicle)	Pieces	29. Paints and surface coatings	Gallons
09. Flooring felt	Short tons	20. Disc brake pads (heavy vehicle)	Pieces	30. Adhesives and sealants	Gallons
10. Corrugated paper	Short tons	21. Brake block (heavy equipment)	Pieces	31. Asbestos-reinforced plastics	Pounds
11. Specialty paper (Specify generic name)	Short tons	22. Clutch facings (all)	Pieces	32. Insulation materials not elsewhere classified (Specify generic name)	(Specify)
Floor coverings		23. Automatic transmission friction components	Pieces	33. Mixed or repackaged asbestos fiber	Short tons
12. Vinyl-asbestos floor tile	Square yards	24. Friction materials (industrial and commercial)	Pieces	34. Other (Specify generic name)	(Specify)
13. Asbestos-felt-backed vinyl flooring	Square yards				

D. SECONDARY PROCESSOR PRODUCTION

Enter the following information for each type of end product that you shipped from your plant site. Classify end products and asbestos mixtures consumed according to the lists on this form.

End product shipped (Enter one end product per line) (1)		Total annual production (2)			Asbestos mixture consumed and form (Enter one mixture per line) (3)		Function of asbestos in product (4)	Year	Annual consumption of asbestos mixtures (5)			Confidential Mark (X)
Code number	Generic name	Year	Quantity	Unit of measure	Code number	Generic name Form			Quantity	Unit of measure	Delivered cost (Thousands of dollars)	
		1979						1979				
		1980						1980				
		1981						1981				
		1979						1979				
		1980						1980				
	☐ Continued	1981						1981				
		1979						1979				
		1980						1980				
	☐ Continued	1981						1981				

(6) Estimate the percentage of the total value shipped from the plant site reported here as secondary processor production in 1981 _____ %

Typical terms for products made from asbestos mixtures

Automotive and friction products 101. Drum brake lining (light-medium vehicle) 102. Disc brake pads (light-medium vehicle) 103. Disc brake pads (heavy vehicle) 104. Brake block (heavy equipment) 105. Clutch facings (all) 106. Automatic transmission friction components 107. Friction materials (industrial and commercial) 108. Custom automotive body filler 109. Transmissions 110. Mufflers 111. Radiator top insulation 112. Radiator sealant 113. Other (Specify generic name) Appliances 114. Appliance, industrial and consumer (Specify generic name) Construction products 115. Boiler and furnace baffles 116. Decorated building panels 117. A/C sheet 118. Flexible air conductor 119. Hoods and vents 120. Portable construction building 121. Roofing, saturated 122. Roof shingles 123. Wallboard 124. Wall/roofing panels 125. Other (Specify generic name) Clothing 126. Aprons 127. Boots 128. Gloves and mittens 129. Hats and helmets 130. Overgaitors 131. Suits 132. Other (Specify generic name)	Floor coverings 133. Vinyl-asbestos floor tile 134. Asbestos-felt-backed sheet vinyl flooring Electrical products and components 135. Cable insulation 136. Electronic motor components 137. Electrical resistance supports 138. Electrical switchboard 139. Electrical switch supports 140. Electrical wire insulation 141. Motor armature 142. Other (Specify generic name) Fire and heat shielding equipment and components 143. Arc deflectors 144. Fire doors 145. Fireproof absorbent paper 146. Heat shields 147. Molten metal handling equipment 148. Oven and stove insulation 149. Pipe wrap 150. Stove lining, wood and coal 151. Stove pipe rings 152. Sleeves 153. Thermal insulation 154. Other (Specify generic name) Gaskets 155. Sheet gasketing, rubber encapsulated beater addition 156. Sheet gasketing, rubber encapsulated compressed 157. Compressed sheet gasketing (other) 158. Metal reinforced gaskets 159. Automotive gaskets 160. Other (Specify generic name)	Marine equipment and supplies 161. Caulks, marine 162. Liners, pond or canal 163. Marine bulkheads 164. Other (Specify generic name) Paints, coatings, sealants, and compounds 165. Asphaltic compounds 166. Automotive/truck body coatings 167. Buffing and polishing compounds 168. Caulking and patching compounds 169. Drilling fluid 170. Flashing compounds 171. Furnace cement 172. Glazing compounds 173. Plaster and stucco 174. Pump, valve, flange, and tank sealing components 175. Roof coatings 176. Textured paints 177. Tile cement 178. Other (Specify generic name) Textile and felt products 179. Aluminized cloth 180. Rope or braiding 181. Yarn, lap, or roving 182. Wicks 183. Bags 184. Belting 185. Blankets 186. Carpet padding 187. Commercial/industrial dryer felts 188. Draperies 189. Drip cloths 190. Fire hoses	Textile and felt products - Con. 191. Ironing board pads and insulation 192. Mantles, lamp or catalytic heater 193. Packing and packing components 194. Piano and organ felts 195. Rugs 196. Tape 197. Theater curtains 198. Umbrellas 199. Other (Specify generic name) Miscellaneous products 200. Aerial distress flares 201. Acoustical products 202. Ammunition wadding 203. Asbestos-reinforced plastic products 204. Ash trays 205. Baking sheets 206. Blackboards 207. Candlesticks 208. Chemical tanks and vessels 209. Filters 210. Grommets 211. Gun grips 212. Jewelry making equipment 213. Kilns 214. Lamp sockets 215. Light bulbs (all types) 216. Linings for vaults, safes, humidifiers, and filing cabinets 217. Phonograph records 218. Pottery clay 219. Welding rod coatings 220. Other (Specify generic name)
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E. IMPORTATION OF ASBESTOS MIXTURES

Enter the following information for each type of asbestos mixture that you imported in 1981. Classify your imports according to the lists in section C or D.

Asbestos mixtures (Enter one mixture per line) (1)		Asbestos fiber content (if known) (2)		Year	Total annual imports (3)			Confidential Mark (X)
Code number	Generic name	Type of asbestos	Quantity (Per unit)		Quantity	Unit of measure	Value of imports (U.S. dollars)	
		☐ Chrysotile ☐ Anthophyllite ☐ Unknown		1979				
		☐ Crocidolite ☐ Tremolite		1980				
		☐ Amosite ☐ Actinolite	☐ Unknown	1981				
		☐ Chrysotile ☐ Anthophyllite ☐ Unknown		1979				
		☐ Crocidolite ☐ Tremolite		1980				
	☐ Continued	☐ Amosite ☐ Actinolite	☐ Unknown	1981				
		☐ Chrysotile ☐ Anthophyllite ☐ Unknown		1979				
		☐ Crocidolite ☐ Tremolite		1980				
	☐ Continued	☐ Amosite ☐ Actinolite	☐ Unknown	1981				

U.S. ENVIRONMENTAL PROTECTION AGENCY	COMPANY NAME AND ADDRESS (Same as reported in item 1 on page 1)
REPORT OF COMMERCIAL AND INDUSTRIAL USES OF ASBESTOS Continued	

F. IMPORTATION OF ARTICLE(S) CONTAINING ASBESTOS COMPONENTS
Enter the following information for each article that you imported in 1981. Classify your imports according to the lists in section C or D.

Article name (Enter one article per line) (1)		Total annual imports (2)				Asbestos component(s) (Use one line per component) (3)	Confidential Mark (X)
Code number	Generic name	Year	Quantity	Unit of measure	Value (U.S. dollars)		
		1979					
		1980					
		1981					
		1979					
		1980					
		1981					
		1979					
		1980					
		1981					

G. EMPLOYEES
Record the number of employees at the reporting site in each of the categories below. Count each employee in one category only.

	Number of employees	Confidential Mark (X)
(1) TOTAL number of employees at plant site (Sum of 2, 3, 4, and 5)		
(2) Number of production employees		
(3) Number of employees in shipping, receiving, and moving		
(4) Number of maintenance employees		
(5) Number of other employees		

H. SUMMARY OF CURRENT WORKER EXPOSURES
This section requires you to report, by category of production workers, the arithmetic mean of the 8-hour time weighted average (TWA) and ceiling concentration exposure levels for all employees at the reporting site. Report for all employees for whom you have determined a TWA and according to each production line making the reported products. The instructions include a worksheet for making necessary calculations (see Appendix B).

End product (Enter name) (1)		Respondent activity (2)	Production work category (3)	Number of employees (4)	8 hr. time weighted average				Ceiling concentration level (Range) (9)	Confidential Mark (X)
Code number	Generic name				Arithmetic mean of detectable measure- ments (5)	Standard deviation (6)	Total number of measure- ments (filters) (7)	Number of non- detectable measure- ments (8)		
Not applicable		Miners and millers	Mine operations (includes all employees working in mine, including transporters)							
			Mill operations (includes all employees working in production areas of mill)							
		Primary processors	Fiber introduction operations (includes blending, mixing, bag opening, fluffing, willowing, etc.)							
		Primary processors and secondary processors	Wet mechanical operations (includes machining, sawing, drilling, cutting, grinding, pulverizing, weaving, etc.)							
			Dry mechanical operations (includes machining, sawing, drilling, cutting, grinding, pulverizing, weaving, etc.)							
			Other production employees							
		Primary processors	Fiber introduction operations (includes blending, mixing, bag opening, fluffing, willowing, etc.)							
		Primary processors and secondary processors	Wet mechanical operations (includes machining, sawing, drilling, cutting, grinding, pulverizing, weaving, etc.)							
			Dry mechanical operations (includes machining, sawing, drilling, cutting, grinding, pulverizing, weaving, etc.)							
			Other production employees							
		Primary processors	Fiber introduction operations (includes blending, mixing, bag opening, fluffing, willowing, etc.)							
		Primary processors and secondary processors	Wet mechanical operations (includes machining, sawing, drilling, cutting, grinding, pulverizing, weaving, etc.)							
			Dry mechanical operations (includes machining, sawing, drilling, cutting, grinding, pulverizing, weaving, etc.)							
			Other production employees							

(10) Sampling and analysis methods

☐ Mark this box if you use the NIOSH method to sample airborne concentrations of asbestos fibers in the workplace and analyze measurements (DHEW (NIOSH) Pub. No. 79-127).

If you utilize other sampling and analysis methods, enter the appropriate codes for those methods listed in the instruction booklet under part I. _____

(11) Enter the lowest detectable level of the measurements that your company expects to attain by the sampling and analysis methods.
(Measurements below this level should be considered as "nondetectable." for the purposes of this rule.) _____

I. MEASURING ASBESTOS EMISSIONS OR FIBER RELEASE

NPDES Permit number _____	Date _____
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☐ Yes, enclosed is a separate report for this section concerning measuring asbestos emissions. ☐ No separate report

J. WASTE AND DISPOSAL

Enter the following information for each end product you report in section B(1), C, and D. If you cannot provide information by end product, provide information according to the form of waste (column 2).

End product (1)		Form of waste (sludge, slurry, broke or scrap, baghouse fines, or specify other) (2)	Total annual quantity of asbestos waste (Short tons) (3)	Average percent asbestos (4)	Disposal site (5)				Method of disposal (6)	Confidential Mark (x)
Code number	Generic name				Type of land disposal facility (See instructions) (a)	Location (b)	Ownership (c)	Permitted hazardous waste facility? (d)		
	☐ End product report ☐ Form of waste report			%	☐ Surface impoundment ☐ Waste pile ☐ Land treatment ☐ Land fill ☐ Seepage facility ☐ Injection well	☐ On-site ☐ Off-site	☐ Company ☐ Private ☐ Municipal	☐ Yes ☐ No		
	☐ End product report ☐ Form of waste report			%	☐ Surface impoundment ☐ Waste pile ☐ Land treatment ☐ Land fill ☐ Seepage facility ☐ Injection well	☐ On-site ☐ Off-site	☐ Company ☐ Private ☐ Municipal	☐ Yes ☐ No		
	☐ End product report ☐ Form of waste report			%	☐ Surface impoundment ☐ Waste pile ☐ Land treatment ☐ Land fill ☐ Seepage facility ☐ Injection well	☐ On-site ☐ Off-site	☐ Company ☐ Private ☐ Municipal	☐ Yes ☐ No		

(7) You may describe in a separate enclosure any steps you take to ensure that waste does not release airborne fibers.
☐ Yes, enclosed is a separate description of waste disposal practices. ☐ No separate report

K. POLLUTION CONTROL EQUIPMENT

On separate lines enter information about each piece of air pollution control equipment used to control asbestos emissions at your plant site. ☐ Confidential

Item number (1)	Type of equipment (See code) (2)	Gas stream volume and temperature (3)	Equipment size (Baghouse and ESP only) (4)	Estimated collection efficiency (Percent) (5)	Normal operating schedule (Hrs./year) (6)	Quantity collected annually (Pounds) (7)	Source of emissions (8)	Stack or chimney? (9)	Special problems? (10)
		Volume Temperature	Square feet ☐ N/A	% ☐ Designed ☐ Actual	Hrs./yr.	Pounds ☐ Designed ☐ Actual		☐ Yes ☐ No	
		Volume Temperature	Square feet ☐ N/A	% ☐ Designed ☐ Actual	Hrs./yr.	Pounds ☐ Designed ☐ Actual		☐ Yes ☐ No	
		Volume Temperature	Square feet ☐ N/A	% ☐ Designed ☐ Actual	Hrs./yr.	Pounds ☐ Designed ☐ Actual		☐ Yes ☐ No	
		Volume Temperature	Square feet ☐ N/A	% ☐ Designed ☐ Actual	Hrs./yr.	Pounds ☐ Designed ☐ Actual		☐ Yes ☐ No	
		Volume Temperature	Square feet ☐ N/A	% ☐ Designed ☐ Actual	Hrs./yr.	Pounds ☐ Designed ☐ Actual		☐ Yes ☐ No	
		Volume Temperature	Square feet ☐ N/A	% ☐ Designed ☐ Actual	Hrs./yr.	Pounds ☐ Designed ☐ Actual		☐ Yes ☐ No	

(11) Estimate the percent of plant exhaust air that is treated by the equipment listed above _____ %

Continuation of item answers

Toxic Substances



Reporting Commercial and Industrial Uses of Asbestos:

Instruction Booklet

EPA Form 7710-36

FMSI 17237

Table of Contents

	<u>Title</u>	<u>Page</u>
I.	Introduction and Reporting Schedule	1
II.	Missing Information	3
III.	Specific Instructions for Form 7710-36	4
	Appendix A -- Definition of Terms	19
	Appendix B -- How To Compute Summaries of Monitoring Data - Instructions and Worksheet	21

**INSTRUCTION BOOKLET--REPORTING COMMERCIAL AND INDUSTRIAL
USES OF ASBESTOS, EPA FORM 7710-36**

I. INTRODUCTION AND REPORTING SCHEDULE

A. Introduction

These instructions are for companies that mine and/or mill commercial asbestos, or process or import an asbestos product, and are required to submit EPA Form 7710-36 under 40 CFR Part 763, Subpart D. Data must be reported to the extent that they are known to or reasonably ascertainable by the submitter based on factual information that either is available in company files, or can be obtained without unreasonable burden or cost. Importers must report information in their possession, but need not contact foreign manufacturers for missing information.

1. Fill in all blocks

Fill in all blocks in the portions of the form that must be completed. Write "N/A" (not applicable) in large, bold letters on the first line of any section that does not have to be completed.

If data for a portion of the form that must be completed are not available, consult part II of these instructions, "Missing Information."

EPA will check all forms for completeness. Incomplete forms may be returned for completion. If only a few items are incomplete, EPA may call the designated Technical Contact to determine the correct answer rather than return the form.

2. Relevant Definitions

Reporting requirements are determined by the company's asbestos activity in 1981 (i.e., miner and/or miller, importer of bulk asbestos, primary processor of asbestos, secondary processor of asbestos, importer of asbestos mixtures, or importer of articles containing asbestos components). Definitions for reporting activities and other terms used in this form may be found in Appendix A.

3. Appropriate Number of Forms

A separate form must be submitted for each site. For example, a miner and/or miller at one site who is a primary processor at a different site must submit a form for each site.

All asbestos activities conducted at each site must be reported. A primary processor who also imports asbestos at a single site must report both the primary processing and importing activities on the same form.

4. Additional Space

If additional space is needed to report all required information, responses can be entered on a reproduction of the pertinent portion of the form and the continuation should be noted on that part of the form.

B. Portions of the Form To Complete and Reporting Schedule

1. Miners and/or Millers

Miners and/or millers, must complete parts A, B(1), G, H, I, J, and K of the form. Complete B(3) if applicable. Report for each plant site on a separate EPA Form 7710-36 and submit within 90 days of the effective date of the rule.

2. Primary Processors of Asbestos

Primary processors must complete parts A, C, G, H, I, J, and K of the form. Complete B(3) if applicable. If a facility processes an asbestos mixture that is made at a different plant site, part D must also be completed. Report for each plant site on a separate EPA Form 7710-36 within 90 days of the effective date of the rule.

3. Secondary Processors of Asbestos

Persons who are solely secondary processors must submit EPA Form 7710-37, "Reporting Secondary Processing and Importation of Asbestos Mixtures" within 60 days of the effective date of the rule. If the company is selected and notified by certified letter to complete EPA Form 7710-36, complete parts A, D, G, H, I, J, and K of the form for submission within 90 days of receiving notification.

4. Importers of Bulk Asbestos

Importers of Bulk Asbestos must complete at least parts A and B(2) of the form. Complete B(3) if applicable. Report all activities that involve asbestos on EPA Form 7710-36 within 90 days of the effective date of the rule.

5. Importers of Asbestos Mixtures

Importers of Asbestos Mixtures must submit EPA Form 7710-37 "Reporting Secondary Processing and Importation of Asbestos Mixtures," within 60 days of the effective date of the rule. If the company is selected and notified by certified letter to complete EPA Form 7710-36, complete parts A and E of the form and submit within 90 days of receiving notification.

6. Importers of Article(s) Containing Asbestos Component(s)

Importers of Article(s) Containing Asbestos Component(s) must submit EPA Form 7710-37 "Reporting Secondary Processing and Importation of Asbestos Mixtures," within 60 days of the effective date of the rule. If the company is selected and notified by certified letter to complete EPA Form 7710-36, complete parts A and F of the form and submit within 90 days of receiving notification.

II. MISSING INFORMATION

It is important to fill in all blocks in the portions of the form that must be completed. If the required information either cannot or need not be provided, enter one of the notations described below. Write "N/A" (not applicable) in large bold letters on the first line of any section that is not required. Only use "0" to report a quantity of zero.

Enter the following notations if the requested data are unknown, previously submitted to EPA or CPSC, or submitted as a corporate report.

- UNK -- The requested data are unknown and not reasonably ascertainable; or, not in the possession of the importer. This may be the case for information from a specific year or about a specific type of data that is required.
- CPSC -- The requested data have been previously reported to the Consumer Product Safety Commission (CPSC) in response to the December 22, 1980 Federal Register notice "Consumer Product Containing Asbestos; General Order for Submission of Information," (45 FR 84384). Use this notation only for the specific items of information that were submitted to CPSC. Do not use this notation in lieu of reporting if CPSC was instructed not to share the submitted information with EPA at the time of response to the CPSC General Order.
- CORP -- The requested data have been submitted for sections B(2) and B(3) (importation and exportation), in a corporate consolidated report. Inform the plant site management that a corporate consolidated report has been submitted and instruct those plant site(s) to enter "CORP" in sections B(2) and B(3).

EPA -- The requested data have already been submitted to EPA in the format of the reporting form as proposed or promulgated.

III. SPECIFIC INSTRUCTIONS FOR FORM 7710-36

A(1). Respondent Identification

1. Enter company name, and name and complete address of plant site.
2. Enter name, job title, and telephone number of the principal technical contact person to be contacted by the EPA for answers to any questions about the submitted form.
3. Miners must record the mine identification number assigned by the Mining Safety and Health Administration.
4. Enter name and address of the parent corporation responsible for fiscal management of the reporting site.
5. Enter the total number of years asbestos has been manufactured or processed at this plant site, through the date of this report.

A(2). Respondent Activity

Review the definitions in Appendix A of these instructions to ascertain required reporting activity(ies). Check the appropriate activity(ies) that is performed at this site. Complete the portions of the form listed next to the activities checked.

For example, a primary processor who makes an asbestos mixture and then processes the asbestos mixture at the same site to make a different end product should report the production of the final end product in part C. Only complete part D of the form if the facility processes an asbestos mixture that is made elsewhere.

A(3). Confidential Business Information

Any reported information may be claimed as confidential business information. When submitting the form, mark (X) in the space provided on each line of the form that contains confidential information. Additionally, an authorized company official must sign the "Certification for Claims of Confidentiality" to certify that the four statements on the form apply to all information claimed as confidential.

B(1). Production of Bulk Asbestos

Enter, in short tons, the amount of bulk asbestos produced (mined or milled), in 1979, 1980, and 1981.

B(2). Importation of Bulk Asbestos

Enter, in short tons, the amount of bulk asbestos imported in 1979, 1980, and 1981. Report all imports entering the U.S. Customs territory that are declared under Tariff Schedule of the United States, Annotated (TSUSA) Number 518.1110-518.1160. Mark in the appropriate box the source of this information.

B(3). Exportation of Bulk Asbestos

Enter, in short tons, the amount of bulk asbestos exported in 1979, 1980, and 1981. Mark in the appropriate box the source of this information.

C. Primary Processor Production

Individually list the product subcategories made and shipped from the plant site in 1979, 1980, and 1981 that incorporated bulk asbestos as a starting material. Read instructions for items 1, 2, and 3 before completing this section to ensure sufficient space for entries.

(1) End Product Shipped

Locate on the list of "Asbestos Mixture Product Subcategories" the most specific name that describes the end product(s) shipped from the plant site. Enter the corresponding code number for each product subcategory being reported. If the listed product subcategory name is not adequately descriptive, write in a generic name next to the code number. If the product is not listed, write in the appropriate code for "other" and a generic name for the product. Do not enter a trade name as a generic name. Do not report anything more specific than a product subcategory.

(2) Type of Asbestos Fiber Consumed

Mark (X) the fiber type(s) that is, or has been, used in production of reported product subcategory. Use one block for each fiber type incorporated into each product subcategory. If more than one type of fiber(s) is used for a product, mark (X) the additional fiber in the next block and mark (X) the continuation box in column 1. Do not list the same product subcategory twice.

(3) Quantity of Asbestos Consumed

For each type of asbestos, enter, in short tons, quantity consumed in 1979, 1980, and 1981.

(4) Total Annual Production

Record the total annual production quantity of each reported product subcategory in 1979, 1980, and 1981. Production quantities will be expressed in the units of measure indicated on the form next to the listed end product, as used by the Bureau of Census. If census units are not applicable, report production in short tons.

(5) Value Shipped

Record the total annual value shipped (in thousands of U.S. dollars) for each reported product subcategory in 1979, 1980, and 1981. These figures must be separated to show domestic sales and export sales (i.e., sales distributed outside the U.S. Customs Territory). If the breakdown is unknown, report total sales as "Domestic" sales, and write "UNK" under "Exports."

The valuation of products shipped should be based on the net selling value, f.o.b. plant, after discounts and allowances, and exclusive of freight charges and excise taxes.

When reporting products transferred to other establishments within the same company, the shipping plant should assign the full economic value to the transferred products. Include all direct costs of production and a reasonable proportion of all other costs and profits.

(6) Percentage of Total Value Shipped

Estimate the percentage of end products shipped that reflect primary processing of asbestos in 1981.

D. Secondary Processor Production

Individually list the product subcategories made and shipped from the plant site in 1979, 1980, and 1981 that incorporated an asbestos mixture as a starting material. Read the instructions for items 1, 2, and 3 before completing this section to ensure sufficient space for entries.

(1) End Product Shipped

Locate on the list of "Typical Terms for Products Made from Asbestos Mixtures" the most specific subcategory name that describes the product. Enter the corresponding code number for

each product subcategory being reported. If the product name listed is not adequately descriptive, write in a generic name next to the code number. If the product is not listed, enter the appropriate code for "other" and write in a generic name for the product. Do not enter a trade name as a generic name. Do not report anything more specific than a product subcategory.

(2) Total Annual Production (Quantity by Census Unit of Measure)

Record the total production of the reported product subcategory at this plant site in 1979, 1980, and 1981. Production quantities should be reported in the unit of measure used by the U.S. Department of Commerce, Bureau of the Census, for the 1977 Census of Manufacturers.

(3) Asbestos Mixture Consumed and Form

Locate and enter from the list of "Asbestos Mixture Product Subcategories" the code number of the asbestos mixture processed to produce the product subcategory. If the material processed is not listed, then enter the appropriate code for "other" and write the generic name of the asbestos material you process. Indicate the form in which the asbestos starting material is purchased (e.g., roll of paper, 3'x5' sheets, reams of 8"x11" sheets).

Use one block for each asbestos mixture incorporated into the product subcategory. If there is more than one asbestos mixture per product subcategory, list the mixture(s) in the next block(s) and mark (X) the continuation box in column 1. Do not list the same product subcategory twice.

(4) Function of the Asbestos in Product

Briefly describe the function of the asbestos in the product. Examples of possible asbestos functions are: rot resistance, heat insulation, fire shield, electrical insulation, dimensional stability, filler, or tensile strength.

(5) Annual Consumption of Asbestos Mixtures

Record the total annual quantity and specify Census Bureau unit of measure and the total annual cost (in thousands of U.S. dollars) of the asbestos mixtures consumed in 1979, 1980, and 1981.

The value of the materials consumed should be based on the delivered cost, i.e., the amount paid or payable after discounts and including freight and other direct charges incurred in acquiring the materials. Charges include purchases, transfers from other establishments of the company, and withdrawals from inventories.

Materials transferred to the plant site from other plants within the company should be assigned their full economic value, as assigned by the shipping plant, plus cost of freight and handling charges.

(6) Percentage of Total Value Shipped

Estimate the percentage of end products shipped that reflect secondary processing of asbestos in 1981.

E. Importation of Asbestos Mixtures

Individually list the asbestos mixtures imported to the plant site in 1979, 1980, and 1981. Read the instructions for items 1, 2, and 3 before completing this section to ensure sufficient space for entries.

(1) Asbestos Mixture

Locate on the list of "Asbestos Mixture Product Subcategories" the most specific name that describes the mixture imported. Enter the corresponding code number of each product subcategory being reported. If the name of the product subcategory is not adequately descriptive, write in a generic name next to the code number. If the imported product subcategory is not listed, enter the appropriate code for "other" and write in a generic name for the product. List each product subcategory on a separate line. Do not enter a trade name as a generic name. Do not report anything more specific than a product subcategory.

(2) Asbestos Fiber Content

Mark (X) the type of asbestos fiber in the imported asbestos mixture and enter the total quantity of asbestos per unit of the mixture (the unit used to report quantity imported). The quantity of asbestos should be reported in pounds. If these data are not available, mark (X) "UNK."

Use one block for each type of fiber that is in the imported mixture. If the mixture contains more than one type of asbestos fiber, list the additional fiber(s) in the next block(s) and note the continuation in column J. Do not list the same mixture twice.

(3) Total Annual Imports

Record the total annual quantity of each listed product subcategory imported in 1979, 1980, and 1981.

Quantities will be expressed in the units of measure used by the U.S. Bureau of the Census or according to the unit used to report importation to the U.S. Customs Service.

Record the total annual value imported (U.S. dollars) for each product in 1979, 1980, and 1981. This figure can be drawn from the U.S. Customs Service entry forms as the "Entered Value in U.S. Dollars" or "Value."

F. Importation of Article(s) Containing Asbestos Component(s)

Individually list the articles containing an asbestos component that were imported in 1979, 1980, and 1981. Only report information relating to imported product subcategories listed under "Typical Terms for Products Made from Asbestos Mixtures." If the component was reported on EPA Form 7710-37 during Phase 1, use the same code(s) and generic name(s) as reported on that form. Read the instructions for items 1, 2, and 3 before completing this section to ensure sufficient space for entries.

(1) Article Name

Locate on the list of "Typical Terms for Products Made from Asbestos Mixtures" the most specific name that describes your product. If the listed product name does not adequately describe your product, write in a generic name next to the code number. List each product on a separate line. If the imported product is not listed, enter the appropriate code number for "other" and write in a generic name. Do not enter a trade name as a generic name.

(2) Total Annual Imports

Record the total number of units that were imported in 1979, 1980, and 1981. Quantities will be reported in the unit of measure that was used to declare the merchandise upon entry into the U.S. or by the U.S. Bureau of Census for the 1977 Census of Manufacturers. Enter the value of the imported merchandise in U.S. dollars.

(3) Asbestos Component(s)

List all asbestos components contained in the imported article by name, or by describing the mixture making up the component. Use one block for each asbestos component. If the imported article contains more than one asbestos component, list the component in the next block and note the continuation in column 1. Do not list the same article twice.

G. Employees

Classify all employees as of January 1981 into the following categories. In items 2-5, COUNT EACH EMPLOYEE IN ONLY ONE CATEGORY. In this section, report numbers of individuals without regard to the number of hours worked.

- (1) Total Number of Employees. Enter the total number of employees (the sum of items 2, 3, 4, and 5) who worked at the reporting plant site as of January 1981. If you employed seasonal workers in 1981, add the number of those workers to the total.
- (2) Number of Production Employees. Enter the number of production employees who work in areas where ASBESTOS IS MANUFACTURED OR PROCESSED. Do not include plant site production employees who work in separate areas where no asbestos fiber or asbestos product is processed. This number must equal the total number of employees reported in Section H, for all product lines.
- (3) Number of Shipping, Receiving, and Moving Employees. Enter the number of employees involved with shipping, receiving, or moving asbestos fiber or asbestos-containing products.
- (4) Number of Maintenance Employees. Enter the number of maintenance employees who perform maintenance tasks in work areas where asbestos fiber, asbestos products, or asbestos waste are processed, stored, or moved.
- (5) Number of Other Employees. Enter the number of other employees at the location that are not counted in items 2-4.

H. Summary of Current Worker Exposures

Report, by category of production workers, the arithmetic mean of the 8-hour time weighted average (TWA) exposure level for all employees at the reporting site for whom a TWA has been determined. Appendix B describes how to perform the calculations and includes a worksheet.

SUMMARIZE ONLY EXISTING MONITORING DATA; ADDITIONAL MONITORING IS NOT REQUIRED.

Submit a single TWA value (arithmetic mean) to summarize existing monitoring data that will describe current exposure levels that employees in general production categories may experience while working on each production line. Summarize and report monitoring data separately for workers on the production line for each end product subcategory that has been reported as either "Primary Processor Production" (part C) or "Secondary Processor Production" (part D). Miners and millers, must provide a single, separate TWA value for the mine and for the mill.

For each End Product Subcategory, enter the number of workers who perform the production operations listed below. Only count employees who were counted as production workers in item 2 of part G of the form. Each employee is to be counted only one time, in the operation and product line that is the employee's primary assignment.

After grouping the 8-hour TWAs, follow the detailed instructions in Appendix B to find the mean, standard deviation, number of measurements, and ceiling ranges for each group.

NOTE: The sum of all production employees listed in column 4 must equal the number of production employees entered in item 2 of part G.

(1) End Product

Primary or secondary processors must enter the same code number(s) and generic name(s) they listed in part C or D of the form. Miners and/or millers do not complete this block.

(2) Respondent Activity

Determine applicable category of activity.

(3) Production Work Category

Divide production employees into the Production Work Categories for each end product subcategory. Count mine workers under Mine Operations and mill workers under Mill Operations.

Fiber Introduction Operations are operations where bulk (raw) asbestos is mixed with or added to a combination of other materials. Primary processors will list employees who handle bulk or raw asbestos fiber. Secondary processors do not use bulk asbestos as a starting material.

Wet Mechanical Operations are operations where asbestos fiber, asbestos mixtures, or asbestos-containing materials are fabricated, modified, or altered, and the asbestos component is wetted to reduce the release of airborne asbestos fiber. This category includes such activities as: machining, sawing, drilling, cutting, grinding, or pulverizing. Count employees whose principal job is to control or work with the tool or machinery performing the operation. Count all asbestos textile workers involved with wet operations here, whether involved in spinning, twisting, or weaving operations.

Dry Mechanical Operations are operations where asbestos fiber, asbestos mixtures, or asbestos-containing materials are fabricated, modified, or altered without any intentional wetting of the material during the operation. This category includes activities such as: machining, sawing, drilling, cutting,

grinding, or pulverizing. Count employees whose principal job is to control or work with the tool or machinery performing the operation. Count all asbestos textile workers in dry operations here, whether involved in spinning, twisting, or weaving operations.

Other Production Employees are production employees involved in operations that require handling of asbestos fiber or materials in a manner not covered in the operations described in the other categories. This category will include workers who perform an operation that involves handling an asbestos mixture, such as bonding asbestos-felt-backing for vinyl sheet flooring or injecting asbestos-reinforced plastic into a mold. Other production workers who are to be counted in this category include (but are not limited to) employees who take products off a production line, assemble parts, oversee drying or rolling operations, or inspect, weigh, or package asbestos mixtures or asbestos-containing products.

(4) Number of Employees

Enter next to the appropriate job classification the number of employees working in jobs meeting the general descriptions provided. Count employees only one time and only under the job description that best describes their primary duties.

(5) Arithmetic Mean of Detectable Measurements

Locate monitoring data for any employees counted in column 4 and group those monitoring data according to the employee's general job classification. Determine the arithmetic mean of those detectable TWA values for each work category. Calculate the mean only to the nearest one-hundredth (e.g., 0.05). The arithmetic mean is the sum of the time-weighted averages divided by the number of time-weighted averages. (See Appendix B for instructions and worksheet for determining the arithmetic mean.) If there are no measurements for workers in a particular work category, write in "No measurements."

(6) Standard Deviation

Enter the standard deviation for each arithmetic mean you calculate in column 5. (See Appendix B for instructions and a worksheet for determining the standard deviation.)

(7) Number of Measurements Used

For each work category, enter the total number of actual observations (filters) used to determine all of the employee's TWAs in the category. This includes the number of all non-detectable measurements.

(8) Number of Non-detectable Measurements

For each work category, enter the number of measurements that are below detectable levels. (Non-detectable levels may not be greater than 0.1 f/cc.)

(9) Ceiling Concentration Level

For each work category, enter the range of ceiling concentration levels that were determined. Provide the low and high measurements.

(10) Sampling and Analyses Methods

If the company used the NIOSH methodology to sample airborne concentrations of asbestos fibers in the workplace and to analyze measurements [DHEW (NIOSH) Pub. No. 79-127], check the corresponding box on the form.

If the company used other sampling and analysis methods, enter the appropriate codes for those methods listed in the next section of these instructions.

The reporting company has the option to describe in an attachment any additional information that will better describe work practices or other measures instituted to reduce the levels of airborne fibers or to protect workers from exposure to asbestos. Attach any additional materials to this form at the time of submission.

- (11) Enter the lowest detectable level of the measurements the company expects to attain by the sampling and analysis methods. (Measurements below this level are considered "non-detectable" for the purposes of this rule.)

I. Measuring Asbestos Emissions or Fiber Release

If the plant site has applied for a water effluent discharge permit (NPDES Permit), provide the application date and the permit number that was assigned.

Summarize and report separately the results of any measurements or monitoring performed to determine the amount of asbestos fiber released during the production, use, or disposal of asbestos fiber or asbestos products (other than already reported in part H of this form). If attaching any such information for this section, check the "yes" box on the form. If not, mark "X" for no separate report. Where possible, the measurements should characterize the type of fibers found and the fiber size distribution, and should be reported according to the following ranges.

Reports submitted in response to this section should describe the methodologies used to perform any tests, to gather samples, and to analyze samples. If this information has been previously submitted to a Federal agency, do not report again here, but indicate the date and to whom the information was sent, and briefly describe the nature of the information. Where possible, summarize the sampling and analytical methodologies according to the terms and abbreviations listed below.

Fiber Size Distributions

<1.0
1.0-2.0
2.0-3.0
3.0-4.0
4.0-5.0
5.0-10.0
10.0-20.0
20.0-30.0
>30.0

Sampling Methodologies

K Konimeter
TP Thermal Precipitator
I Impinger
MI Midget Impinger
MF Membrane Filter

Analysis Methodologies

OPTICAL MICROSCOPY
PC Phase Contrast Microscopy
PM Polarizing Microscopy
DS Dispersion Staining
OM Other optical microscopy techniques (specify)
ELECTRON MICROSCOPY
TEM Transmission Electron Microscopy
SEM Scanning Electron Microscopy
ED Electron Diffraction
XRS X-Ray Spectrometry
EM Unknown electron microscopy results
0 Any other analysis methodology (Provide specifications)

EPA Provisional Methodology

EPA -- "Electron Microscope Measurement of Airborne Asbestos Concentrations - A Provisional Methodology," EPA-600/2-77-178 (Revised June 1978).

J. Waste and Disposal

Entries in this section will account for the waste that is not recycled and results from the production of each type of end product subcategory reported. The percentage of the total waste from the plant site that results from the production of each end product subcategory may be estimated. Report separately the data for each end product subcategory. If unable to determine quantities by product subcategory, report total quantities disposed of for each form of waste.

(1) Product Line

Enter the product subcategory code (and generic name if used) for each end product subcategory reported in parts B(1), C, or D. Miners and/or millers need only list the type of bulk asbestos fiber reported in section B(1). If unable to determine wastes by

end product subcategory, report according to the form of the waste (see below); enter the name(s) and code(s) from parts C and D. Mark (X) in the appropriate box to indicate that the data is either an "End Product Report" or a "Form of Waste Report."

(2) Form of Waste

Record the form of the waste either after completion of the processing or as it leaves the plant site. Report asbestos collected in control devices, such as baghouse fines, on a separate line.

(3) Total Annual Quantity of Asbestos Waste (Short Tons)

Enter the total quantity, in short tons, of asbestos waste generated by each reported end product production line in 1981. Asbestos waste is a waste product that contains asbestos as some of the total waste. Do not report quantities of waste recycled or reprocessed.

(4) Average Percent Asbestos

Record in short tons the average percentage of asbestos (by weight) in the total quantity of asbestos waste. This figure may be an estimate based on previous experience or an extrapolation of production mass balance figures.

(5) Disposal Site(s)

(a) Type of Land Disposal Facility

Mark (X) one of the following types of land disposal facilities for the asbestos waste of each end product subcategory or form of waste. See the February 5, 1981, Federal Register (46 FR 11126) for comprehensive definitions of the types of facilities.

- Surface Impoundments - facilities at which liquid wastes or other liquids are impounded or held. Surface impoundments are generally earthen structures designed to hold an accumulation of liquids or wastes containing free liquid.
- Waste Piles - facilities at which wastes, usually in a solid state, are placed on the land for storage or treatment.
- Land Treatment - facilities at which wastes (usually in a solid, semi-solid, semi-liquid, or liquid state) are spread on the ground for the purpose of treatment.

- Landfills - facilities at which wastes, usually in solid or semi-solid state, are placed into or on the land for permanent disposal.
 - Seepage Facilities - facilities at which wastes (usually in a liquid, semi-liquid, or semi-solid state) are placed into or on the land for storage, treatment, or disposal. A seepage facility is designed with the objective of discharging liquids into the land. There are four types of seepage facilities:
 - seepage lagoons
 - drying beds
 - seepage pits
 - seepage beds
 - Injection Wells - facilities at which wastes in a fluid (usually liquid) state are injected into the land under a pressure head greater than the pressure head of the ground water into or above which they are injected for disposal.
- (b) Location of Disposal Facility - For each end product subcategory (or form of waste), mark (X) whether wastes are disposed of at this plant site (on-site) or at another site (off-site).
- (c) Ownership of Disposal Facility - For each end product subcategory (or form of waste), mark (X) whether this disposal facility is owned by reporting company (company), another private company (private), or a municipality (municipal).
- (d) Permitted Hazardous Waste Facility - For each product subcategory (or form of waste), mark (X) whether the disposal facility is permitted under any applicable State or Federal hazardous waste regulation.
- (6) Method of Disposal
- Briefly describe the specific methods used to dispose of asbestos waste. For example, if you wet the waste and place it in a bag or drum prior to disposal, that should be noted here.
- (7) Additional Information
- Submit any additional information to describe any steps taken during waste disposal to reduce the release of airborne asbestos fibers. If enclosing a separate description, check "Yes" on the form; if not, check "No" in the space provided.

K. Pollution Control Equipment

In this section, provide information on all air pollution equipment located at the plant site to control or remove airborne asbestos fiber. List each piece of equipment on a separate line on the form, even though identical units may be used at the plant site. Use the codes listed in this section for each piece of equipment being reported. For additional space, fill in and attach additional copies of the form. If the company has submitted portions of the required data to EPA previously and the data are still current, enter "EPA" in place of those data, and reference the address where the data were sent and the date they were sent.

(1) Item Number

Number each piece of equipment consecutively (one through the total number of pieces of equipment).

(2) Type of Equipment

For each item number, enter the appropriate abbreviation from the following list.

- Baghouse (BH)
 - Reverse Air (RA)
 - Pulse Jet (PJ)
 - Shake (S)
 - Other (O)

For example, if the baghouse used is equipped for both reverse air and shake cleaning, enter (BH) (RA) (S).

- Scrubber (S)
 - Venturi (V)
 - Impingement (I)
 - Spray (SP)
 - Other (O)

If the scrubber used is the venturi type, also enter the pressure drop in inches of water in parentheses. For example, if the range of pressure drop, is 40-60 inches, enter (S) (V) (40-60).

- Electrostatic Precipitator (ESP)
- Cyclone (C)
- Multiple Cyclone (MC)
- Other (O)

(3) Gas Stream Volume and Temperature

For each piece of equipment, enter the gas volume (in cubic feet per minute) and the operating temperature (in °F). Use actual

data for these entries, although estimates or design figures may be used if actual data are unavailable. Ranges (ex: 8,000-10,000 ACFM at (40-180 °F)) are also acceptable.

(4) Equipment Size

If electrostatic precipitators and/or baghouses are used, enter the total square feet of collecting surface area. For all other types of equipment mark (X) "N/A."

(5) Estimated Collection Efficiency

Enter the collection efficiency (percent), or an estimate of this value, of each piece of equipment. Mark (X) either design (D) or actual (A) to indicate basis for response.

(6) Normal Operating Schedule

Enter the normal number of operating hours either actual or estimated for each piece of equipment during 1981.

(7) Quantity Collected Annually

Estimate the quantity of material in pounds that is (or would be, given the design of the equipment) collected annually by each piece of equipment in 1981. Include all asbestos and non-asbestos materials in the total. If possible, estimate the percent (by weight) of asbestos in the collected material. Mark (X) either design (D) or actual (A) to indicate basis for response.

(8) Source of Emissions

Enter a brief description of the source of the emissions such as work area exhaust ventilation, curing oven, mixer, various, etc.

(9) Stack or Chimney

Indicate whether the air pollution control device discharges to a stack or chimney; check "Yes" or "No."

(10) Special Problems

If there is a special problem with particulate collection or with any specific piece of equipment, discuss it in the space provided. Be sure to indicate which piece of equipment is being discussed.

(11) Estimate the percent of plant exhaust air that is treated by the plant site's pollution control equipment.

Appendix A

DEFINITION OF TERMS

Several terms are used throughout the reporting form and the instruction booklet to describe the different kinds of asbestos products and how to report them.

Asbestos Mixture: a mixture which contains bulk asbestos or another asbestos mixture as an intentional component. An asbestos mixture can be utilized as a finished product or incorporated into other products.

Bulk Asbestos (or raw asbestos): any quantity of asbestos fiber of any type or grade, or combination of types of grades, that is mined or milled with the express purpose to obtain asbestos. The term does not include asbestos that is produced or processed as a contaminant or an impurity. Asbestos is a group of naturally occurring, inorganic, highly fibrous, silicate minerals, which easily separate into long, thin, flexible fibers when crushed or processed. Included in the definition are the asbestiform varieties of: chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonite-grunerite); anthophyllite; tremolite; and actinolite.

End Product: the product subcategory that is either shipped from the reported site or imported into the United States.

Generic Name: a term that describes the coded product subcategory better than the subcategory name given on the form. If the product subcategory name on the form is adequate, use it.

Importer: a person or facility importing asbestos, in bulk form or as part of a mixture or article, into the customs territory of the United States. This definition includes:

- The person liable for the payment of any duties on the merchandise, or
- An authorized agent on his behalf (as defined in 19 CFR 1.11). Importer also includes, as appropriate:
 - The consignee;
 - The importer of record;
 - The actual owner if an actual owner's declaration and superseding bond has been filed in accordance with 19 CFR 141.20; or
 - The transferee, if the right to draw merchandise in a bonded warehouse has been transferred in accordance with Subpart C of 19 CFR Part 144. For the purpose of this definition, the customs territory of the United States consists of the 50 states, Puerto Rico, and the District of Columbia.

When two or more persons meet the same definition of "importer" for the same shipment, the principal in the transaction, not his agent or agents, should report.

NOTE: If reporting company purchased in the United States an asbestos product that originated outside the United States, do not report as an importer.

For reporting purposes, there are several classes of importers:

- An Importer of Bulk Asbestos imports bulk asbestos into the customs territory of the United States. Imported bulk asbestos is declared to the United States Customs Service upon entry as Tariff Schedule of the United States, Annotated, (TSUSA) numbers 518.1110-518.1160. Importers need report information only to the extent that the information is in their possession.
- An Importer of Asbestos Mixtures imports asbestos mixtures into the customs territory of the United States. Imported mixtures include, but are not limited to, merchandise declared to the United States Customs Service upon entry as Tariff Schedule of the United States, Annotated, numbers (TSUSA Number) 518.2-518.5, or other TSUSA Numbers that may pertain to asbestos mixtures.
- An Importer of Article(s) Containing Asbestos Component(s) imports an article that contains one or more asbestos components.

Miner and/or Miller of Asbestos: a person who either mines or mills asbestos. Mined or extracted asbestos-containing ore is further milled to produce bulk asbestos. Milling involves the separation of the fibers from the ore, grading and sorting the fibers, or fiberizing crude asbestos ore.

Primary Processor of Asbestos: a person who processes bulk asbestos to make an asbestos mixture or a product that contains asbestos. A primary processor who makes an asbestos mixture and then processes the asbestos mixture at the same site to make a different end product should report production of the final end product. Primary processing includes the mixing or repackaging of raw asbestos fiber.

Product Subcategory: the type of asbestos mixture or the type of end product listed and numbered on the form.

Secondary Processor of Asbestos: a person who processes an asbestos mixture that is then incorporated into that person's end product. Secondary processors use asbestos mixtures that are made at a site other than the site being reported. For instance, asbestos millboard may be purchased by a secondary processor, who could cut that millboard and incorporate it into an appliance.

Appendix B

HOW TO COMPUTE SUMMARIES OF MONITORING DATA -- INSTRUCTIONS AND WORKSHEETS

These instructions describe how to compute the arithmetic mean and standard deviation of the TWA values for each category of employees counted in column 4 of part H of the form. It is probably easier to compute the figures by working through one line at a time. For example, a primary processor who has employees working in the fiber introduction area should locate all monitoring data for those employees, and work through question 10 before beginning computations for the next production work category for that end product. A worksheet is attached to these instructions; after completing it, transfer your computations to part H of the form.

- I. To compute the "mean" for the TWA values for a production work category, first list all of the TWA values for employees counted in the category. Do not include non-detectable TWA values in the following calculations.

For example, assume the following TWA values (listed in column A) for a production work category:

No.	(A) TWA Values	(B) Squares of Column (A)
1.	1.00	1.00
2.	1.50	2.25
3.	0.50	0.25
4.	1.75	3.06
5.	1.25	1.56
	6.00	8.12

After listing the TWA values in column (A) on the worksheet, square each value and enter the square in column (B) on the worksheet. The squares are used later to compute the standard deviation. Sum both columns.

- II. Next, determine the number (N) of values. In this example, N = 5.
- III. The "mean" is the sum of the TWA values in column A divided by the number of values (N).

In this example:

$$\text{Mean} = \frac{\text{Sum of TWA Values } 6.00}{N} = \frac{6.00}{5} = 1.20$$

- IV. To calculate the "standard deviation" of these values, first compute the "variance" according to the following formula.

In this example:

$$\begin{aligned}(V) &= \frac{1}{N - 1} \times [\text{Sum of Column B} - \frac{(\text{Sum of Column A})^2}{N}] \\&= \frac{1}{5 - 1} \frac{[8.12 - (6.0 \times 6.0)]}{5} \\&= 1/4 [8.12 - 7.2] \\&= \frac{.92}{4} \\V &= .23\end{aligned}$$

- V. Finally, the standard deviation (SD) is the square root of the variance.

In this example:

$$\begin{aligned}SD &= \sqrt{V} \\&= \sqrt{.23} \\SD &= 0.48\end{aligned}$$

The arithmetic mean is entered in column 5 on the form, and the standard deviation is entered in column 6 on the form.

Worksheet

I.	No.	(A) TWA Values	(B) Squares of Column (A)
	1.		
	2.		
	3.		
	4.		
	5.		
	Total	_____	_____

II. Number of TWA values (N) = _____

III. Mean = $\frac{\text{Sum of Column A}}{N}$

IV. Variance (V) = $\frac{1}{N - 1} [\text{Sum of Column B} - \frac{(\text{Sum of Column A})^2}{N}]$

$$= \frac{1}{\boxed{}} \left[\boxed{} - \frac{\boxed{}^2}{N} \right]$$

= _____

V. Standard Deviation (SD) = $\sqrt{V}$ = $\sqrt{}$
= _____

B U L L E T I N

N O. 7 4 4

August 25, 1982

DEPOSITION AND EXAMINATION OF INSTITUTE RECORDS RELATING TO ASBESTOS LITIGATION

This is to advise the Membership that the Institute Office, with Legal Counsel, has spent several days this month involved with asbestos litigation. In two cases, we have produced our records to outside Attorneys and in the most recent case I gave a deposition. As both Counsel and Paralegals from his office have been involved, this has not been without cost to the Institute. In addition, it has consumed a considerable amount of my time.

We are not defendants in these cases, but it would appear that Member Firms are involved. The cases for which our records have been subpoenaed were:

<u>Counsel</u>	<u>Case</u>	<u>Court</u>
Porzio, Bromberg & Newman, Morristown, NJ (for the Defendants)	Orvil T. Braswell and Parlee K. Braswell, Plaintiffs vs. Johns-Manville, et al, De- fendants and related World- bestos cases	Southern District of Indiana, Indianapolis Division
Blank, Rome, Comisky & McCauley, Philadelphia, Pa. (for the Plaintiffs)	Janet M. Rice Administratrix of the Estate of Paul S. Rice & Nancy W. Rees, Executrix of the Estate of Kermit M. Rees and Nancy W. Rees in her own right vs. Johns-Manville Corp. et al	United States District Court for the Eastern District of Pennsylvania

The papers that were subpoenaed were described as follows in the Indiana Case:

All documents included in the following: Minutes of all trade associa-
tion meetings; membership records; correspondence generated by and
received by Friction Materials Institute relating to asbestos; any
and all medical articles, trade publications, newsletters, periodicals
and any other publication concerning the potential health hazards of
asbestos; and studies received or sponsored by Friction Materials
Institute or proposals for same concerning the potential health hazards
of asbestos.

August 25, 1982

The papers for the Pennsylvania cases were described in the subpoena as follows:

1. Membership lists of the Friction Materials Standards Institute from inception of the Institute to the present;
2. Membership lists of the Asbestos Study Committee of the Institute from inception of the Committee to the present;
3. Minutes of all meetings of the Institute's Board of Directors, general membership, Asbestos Study Committee, or any other committee or subdivision of the Institute in which the use of asbestos in brakes and/or friction materials was discussed;
4. Reports, bulletins and/or any other communication about the health hazards associated with asbestos exposure which were prepared by and/or distributed by the Institute or any of its subdivisions to all or part of the general Institute and/or to the public;
5. Reports, bulletins and/or any other communications about the health hazards associated with asbestos exposure which were received by the Institute from any of its members, any government agency, any trade association, and/or any other person or entity.

In addition, one Member of the Institute has asked for permission to review papers of similar content, and with our Counsel's approval such inspection will be made in the near future.

The foregoing is sent to the Membership as a matter of information.

E. W. Drislane
Executive Director

EWD/dr

Distribution:

Delegates and Alternates
Health and Environmental Affairs Committee

B U L L E T I N

N O . 7 4 3

August 25, 1982

OSHA GUIDELINES FOR REPEATED VIOLATIONS

Mr. Armstrong, Chairman of our Health and Environmental Affairs Committee, has suggested that the enclosed guidelines for handling repeated OSHA Violations be distributed to the Membership.

Two points in the guidelines are summarized as follows:

1. To be cited as a repeated violation, the violation must occur at the "same establishment" within three years of the date the original violation became a final order, or within three years of the correction date, whichever is later.
2. A multi-facility employer would not be cited if the violation recurred at a plant or business other than the one originally cited.

The full text of this OSHA directive is enclosed.

E. W. Drislane
Executive Director

EWD/dr

Distribution:

Delegates and Alternates
Health and Environmental Affairs Committee
Active Members - List B

U.S. Department of Labor

Assistant Secretary for
Occupational Safety and Health
Washington, D.C. 20210



OSHA Instruction CPL 2.52
JUN 28 1982
Office of Compliance Programming

Subject: Repeated Violations

- A. Purpose. This instruction provides revised guidelines to ensure uniform and effective administration of the repeated citation policy.
- B. Scope. This instruction applies OSHA-wide.
- C. References. This instruction affects OSHA Instruction CPL 2.45, Interim Field Operations Manual, Chapters VII, VIII, X and XII. To the extent that policies in this instruction conflict with procedures outlined in the FOM, the FOM procedures are superseded.
- D. Action. Regional Administrators and Area Directors shall ensure that citations for repeated violations are consistent with the guidelines established in F of this instruction.
- E. Federal Program Change. This instruction describes a Federal program change which affects State programs. Each Regional Administrator shall:
 - 1. Ensure that this change is promptly forwarded to State designees.
 - 2. Explain the technical content of this change to the State designee as requested.
 - 3. Ensure, within 30 days of forwarding this instruction, that the State submits:
 - a. A plan change supplement; or
 - b. A proposed timetable for adoption of the change; or
 - c. Reasons why it is not necessary for the State to adopt this change.
 - 4. Ensure that, within 6 months of forwarding this instruction, the Federal program change (or its equivalent) is implemented and a plan change supplement

OSHA Instruction CPL 2

Office of Compliance Programming

is submitted by the State to the Region for review and processing.

F. Guidelines. A repeated violation may be cited for another violation of a previously cited section of a standard, etc. (as defined in the FOM, Chapter VIII, paragraph B.5.a) at the same establishment, within three years of the date that the original violation became a final order or within three years of the final correction date, whichever is later.

1. For purposes of determining whether a violation is repeated, the following criteria shall apply:

- a. Fixed Establishment. A fixed establishment is interpreted to mean "a single physical location where business is conducted or where services or industrial operations are performed," as defined in 29 CFR 1903.2(b).

EXAMPLE: A multi-facility employer would not be cited for a repeated violation if the same violation recurred at a plant or business location other than the one previously cited.

- b. Nonfixed Establishment. A nonfixed establishment (e.g., construction sites, oil and gas drilling sites) is interpreted to mean "all geographical sites or locations within the Area Office jurisdiction where construction, drilling, or other movable operation is being performed by the employer."

EXAMPLE: Where the construction site extends over a large area and/or the scope of the job is unclear (such as road building), that portion of the workplace specified in the employer's contract which falls within an Area Office jurisdiction is the establishment. If an employer's activities at a jobsite are performed in two or more Area Office jurisdictions, a violation in Area A cannot serve as the basis for a repeated violation in Area B.

- c. Longshoring Establishment. As defined in OSHA Instruction CPL 2.3, paragraph 4.a.(2), "a longshoring establishment will encompass all longshoring activities of a single stevedore within any single port area."

OSHA Instruction CPL 2

Office of Compliance Programming

2. Other maritime employers covered by OSHA standards (e.g., shipbuilding, ship repairing) are generally fixed establishments as defined in F.1.a.
3. After the CSHO makes the initial recommendation that the violation be cited as "repeated," the Area Director shall:
 - a. Ensure that the violation meets the criteria outlined in F.1;
 - b. Ensure that the procedures of the FOM, Chapter VIII, paragraphs B.5.b, c, d and f are adhered to;
 - c. Ensure that the case file includes a copy of the the prior violation citation which serves as the basis for the repeated citation. If the prior violation citation is not available, the basis for the repeated citation must, nevertheless, be adequately documented in the case file;
 - d. In unique or unusual circumstances, take further steps, as necessary, to ensure that the violation meets the criteria outlined in this instruction before being cited as a repeated violation.
- G. Background. Modification of OSHA's policy for citing repeated violations has been under consideration for some time. The previous policy did not limit the length of time that a citation could serve as a basis for a repeated violation. In addition, application of the policy regarding fixed establishments, nonfixed establishments and longshoring operations has not been uniform throughout OSHA. The guidelines set forth in this instruction are intended to assure uniform and effective administration of the repeated citation policy.



Thorne G. Auchter
Assistant Secretary

DISTRIBUTION: National, Regional, and Area Offices
All Compliance Officers
State Designees
NIOSH Regional Program Directors

B U L L E T I N

N O . 7 4 2

August 6, 1982

ASBESTOS COMPENSATION COALITION - PROPOSED
"OCCUPATIONAL DISEASE COMPENSATION IMPROVEMENT ACT"

Mr. Dave Pullen of the Asbestos Compensation Coalition addressed the Institute's Membership at the June Meeting. In his presentation, Mr. Pullen advised that the Coalition was preparing a proposed legislative approach to justly compensate victims of asbestos-related diseases. This would take the form of Federal Legislation with a bill addressing occupational diseases generically, to be supplemented by an implementing resolution directed at asbestos related diseases specifically. Mr. Pullen advised that when a draft of this legislation was available, copies would be sent the Institute.

We have now received copies. As this presentation covers 140 pages, copies are being sent to the Members of the Health and Environmental Affairs Committee and the Delegates only. Copies are not enclosed with the Alternates' copy of this Bulletin. The papers enclosed are:

1. Memo from the Asbestos Compensation Coalition addressed to "Those Reviewing the Occupational Disease Compensation Improvement Act"
2. Tab A - Summary
3. Tab B - DRAFT BILL - "Occupational Disease Compensation Improvement Act"
4. Tab C - DRAFT RESOLUTION - "Implementing Resolution for Asbestos Related Diseases"

The Coalition has asked for questions, comments and suggestions. If a Member wishes to comment, such comments sent to the Institute will be referred to the Health and Environmental Affairs Committee for possible preparation of formal comments. A Member may also wish to comment directly to the Coalition. If there are questions, please direct them to the Coalition--names and phone numbers are shown on the cover memo from the Coalition.

E. W. Drislane
Executive Director

EWD/e

Copies to:
Delegates and Alternates
HEA Committee

B U L L E T I N

N O . 7 4 1

August 4, 1982

ENVIRONMENTAL PROTECTION AGENCY - ASBESTOS REPORTING REQUIREMENTS

The Environmental Protection Agency (EPA) published its Final Rule on Asbestos Reporting Requirements in the FEDERAL REGISTER on July 30, 1982. A copy of the Final Rule is enclosed.

This rule requires reporting to the EPA by asbestos manufacturers, importers and processors. Specifically included as "Primary Processors" are those who enter asbestos into a product. This would include all friction materials manufacturers who use asbestos in their products. Many friction materials manufacturers would also be required to report in their roles as "Secondary Processors" which would include shops that do additional work on the asbestos-containing product—such as brake rebuilding operations, assembly of new-lined shoes as well as in their roles as importers of friction products.

The effective date for this rule is August 30, 1982. Primary Processors must report to the EPA within 90 days of the effective date of the rules.

The reporting forms required are 7710-36 (Primary Processor) and 7710-37 (Secondary Processor). The forms illustrated in the FEDERAL REGISTER are almost unreadable as they were reduced from the actual 17 x 22 size, and because of limitations on stencil type copying. These forms are available by calling toll free 800-424-9065. While the Institute has ordered copies of these forms, we do not have any available at this writing.

The foregoing is sent as a matter of information.

E. W. Drislane
Executive Director

EWD/e

Copies to:
Delegates and Alternates
Active Members - List B
Regional Members (U.S. Dues)

federal register

Friday
July 30, 1982

Part VII

Environmental Protection Agency

Asbestos Reporting Requirements

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 763

[OPTS-84004B; TSH-FRL 2124-4]

Asbestos Reporting Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This final rule, under the authority of section 8(a) of the Toxic Substances Control Act (TSCA), 15 U.S.C. 2607(a), requires reporting to EPA by asbestos manufacturers, importers, and processors. The information sought includes data on the quantities of asbestos used in making products, employee exposure data, and waste disposal and pollution control equipment data. Reported information will be utilized by EPA and other Federal agencies in considering the regulation of asbestos.

DATE: This regulation becomes effective on August 30, 1982.

FOR FURTHER INFORMATION CONTACT: Douglas G. Bannerman, Industry Assistance Office (TS-799), Environmental Protection Agency, Rm. E-511, 401 M St., SW., Washington, D.C. 20460, Toll free: (800-424-9065). In Washington, D.C. (554-1404). Outside the USA: (Operator-202-544-1404).

SUPPLEMENTARY INFORMATION:

OMB Control Number: (2000-0478).

I. Introduction

EPA proposed a rule in the Federal Register of January 28, 1981 (46 FR 8200) under section 8(a) of the Toxic Substances Control Act (TSCA), to obtain information on industrial and commercial uses of asbestos. The Agency received 80 written comments on the proposal and held one public meeting. This preamble explains the provisions and procedures of the final rule and the changes EPA has made to reduce the burden of the rule.

The basic design of the rule remains unchanged; it divides the asbestos industry into two groups for reporting purposes. EPA will require detailed information on EPA Form 7710-36, "Reporting Commercial and Industrial Uses of Asbestos," from the first group—persons who mine, mill, or import bulk asbestos, or process it to form an asbestos mixture or product, such as asbestos paper. The latter persons are called "primary processors of asbestos." This first group must report within 90 days of the effective date of this rule.

EPA will require reporting in two phases for the second group—secondary processors of asbestos (secondary processors of asbestos make products from asbestos mixtures, not bulk asbestos), and persons who import asbestos mixtures or other products that contain asbestos. In the first phase, companies will have 60 days from the effective date of the rule to identify themselves and the asbestos mixtures they process or import on EPA Form 7710-37, "Reporting Secondary Processing and Importation of Asbestos Mixtures." EPA will then select a sample of respondents from this identification phase to complete the detailed EPA Form 7710-36 in the second phase of reporting for this group.

After considering the substantive comments to the proposed rule, the Agency has changed several provisions of the proposed rule to reduce the burden on respondents without significantly decreasing the value of the information that this rule will collect. The two primary changes from the proposal are (1) respondents must submit data from only 3 years on EPA Form 7710-36 and (2) the recordkeeping requirements for customer lists and monitoring data are eliminated. A full discussion of the substantive comments and EPA's responses to those comments can be found in a document entitled "Public Comments on the Proposed TSCA Section 8(a) Asbestos Reporting Rule" which is part of the public record for this rule and is incorporated into this document.

II. Purpose of the Rule

This rule will obtain current information about major aspects of asbestos manufacturing, processing, and importation to support the Agency's asbestos risk investigation. Under TSCA, EPA is examining the costs and the benefits to society from all applications of asbestos in order to decide, within a range of potential options, what actions may be necessary to adequately protect the public health. The investigation is considering the various Federal authorities now regulating different aspects of asbestos exposures, to examine the effectiveness of current regulatory activities. In addition to providing data for the TSCA investigation, this information rule will support decisions on a number of potential Federal actions by providing a total picture of the current situation that will help focus further activities in the most appropriate manner.

Information obtained by this rule, along with already available data, will be used to describe the exposures and economics of asbestos use to the extent

needed for determining the cost and effectiveness of potential risk-reduction steps. The Agency will consider this reported information in calculating the extent of exposure from asbestos and in determining where the exposures present an unreasonable risk. The Agency cannot now adequately determine what asbestos-containing products are currently made and who makes them. While there are over 3,000 existing patents for applications of asbestos, there is no information on which ones have been used commercially. For example, persons who commented on the proposed reporting rule identified some products which the Agency had previously not identified as containing asbestos. Individual reports which identify firms, production sites, and asbestos products will provide an inventory of asbestos use that is not presently available.

The regulatory investigation now underway is examining the separate and cumulative exposures to all types of populations that occur during production, manufacturing, use, and disposal of asbestos products. Concurrently, EPA scientists are developing a health risk assessment to use in quantitatively predicting adverse health effects resulting from exposure to asbestos. Information from this rule will permit the Agency to attribute accurately the risk in specific industries or from specific products to a portion of the overall cumulative risk. The Agency will use the data to identify areas where exposure levels should be reduced. The reports will also identify industries and products that require no further consideration.

The Agency is assessing all available information and conducting factual discussions with industry. The information collected through this rule will offer a neutral basis from which the Agency can establish agreements, as appropriate, for industry to take voluntary steps to reduce the levels of risk. The Agency will encourage industry to adopt voluntary actions to control exposure levels.

EPA expects to initiate regulatory proceedings to control exposures in cases where non-regulatory actions are not appropriate. The Agency will examine the various Federal statutes to find the most appropriate authority to effect the necessary control. If TSCA provides the proper authority, the Agency may take actions to control specific uses of asbestos which involve risks that are found to be "unreasonable" within the meaning of section 6 of TSCA. The Agency may

determine that labeling of products would sufficiently reduce the risk.

If the Agency determines that regulatory measures are warranted under the authority of section 6 of TSCA, the Agency will use information from this rule to support regulatory impact analyses required under Executive Order 12291. A complete data base will allow the Agency to choose and document better the most cost-effective regulatory approach. The Agency will consider all relevant information that it can reasonably obtain from the current manufacturers and processors who would be most affected by regulations.

A. Need for the Data

This reporting is being required because adequate data are not otherwise available for the present investigation to determine where unreasonable risks from asbestos exist and the appropriate approaches to reduce those risks. Information that is currently available to the Agency is sufficient as the basis for qualitative generalizations about both the value of using asbestos in its various application and the risks from those activities. Yet, the Agency has no set of information that it can reference in quantifying either the risk from or the value of the various products and product subcategories. Before drawing any final conclusions about asbestos, the Agency needs a data base that it can use to characterize the current situation with a greater degree of accuracy.

EPA has examined all information presently available to Federal agencies and solicited information from industry prior to the issuance of this rule. Agency personnel and contractors reviewed the extensive literature concerning asbestos; obtained information from other Federal agencies; and developed new data and made site visits when possible. The search for information is described in an internal EPA document entitled, "Technical Information Summary" (TIS), which is part of the public record for this rule. The TIS summarizes the various sources of available information both in published literature and from Federal agencies, and it evaluates the usefulness of the information to the Agency. Additionally, the TIS describes efforts by EPA contractors to conduct necessary analyses and the problems they have encountered.

Briefly, the "Technical Information Summary" contains the following conclusions about Government and industry documents that are available: While information is available generally to characterize the industries that make

products from bulk asbestos, very little data exist on secondary processors. Further, all of the information that is available is inadequate in several respects. The basic data source of asbestos consumption patterns is from the Bureau of Mines. Many of the documents concerning industrial and commercial uses of asbestos cite the Bureau of Mines data. However, the data used by the Bureau of Mines to determine asbestos consumption are from an annual voluntary survey of only a portion of asbestos processors and, for instance, do not count 40 percent of the bulk asbestos we know is imported. The Bureau of Mines estimates that the asbestos consumption figures are accurate only to ± 50 percent. EPA expects to attain a higher degree of accuracy because virtually all of the processing of bulk asbestos will be reported under this rule and this production will be reported according to well-defined categories of both companies and products. In addition, EPA will be able to characterize all industry segments with greater confidence from data obtained in the representative survey. Agency contractors who have developed the preliminary analyses for the asbestos investigation participated in the design of these information requirements to ensure that any gaps and shortcomings of existing information will be corrected to the extent possible.

Available information provides general characteristics of the industries which make and process asbestos products. However, the information is already in an aggregated form and discrete components cannot be separated from the totals. For instance, at this time the Agency cannot characterize many products because data about the asbestos products are mixed in aggregates with data about similar, non-asbestos products. The underlying data of the aggregates, which are needed for the Agency analyses, are not available in most cases. For example, the Bureau of the Census is precluded under Title 13, U.S. Code, from disclosing individual reports it receives. Further, the information is too superficial to analyze separately subcategories of products. In some areas, as is the case for most secondary processors, existing information is too sparse to enable the Agency to make any but the most general estimates.

The lack of detail in available information means that the Agency is not able to analyze the effects that regulatory or voluntary actions on a single product may have on a multi-product industry and to quantify expected reductions in risk. This rule

will characterize activities at the plant-site level, which will permit the Agency to analyze how specific actions would affect various elements of the analyses.

Most of the existing information consists of estimates that are based on data which may not reflect the current situation because the data were gathered many years ago. The most comprehensive information available covers the years 1975-1976, and it was generated to support and respond to OSHA's proposal in 1975 to lower the asbestos workplace standard. Present information indicates that significant changes have occurred. For instance, the U.S. Bureau of Mines reports that apparent consumption in the United States of raw asbestos fiber declined 36 percent in 1980, with a drop in consumption from 653,847 short tons in 1976 to 353,703 short tons in 1980. Changes have also occurred in the number of employees and the patterns of asbestos use. Information gathered through this rule will ensure a representative picture of the present situation and it will update or verify where possible data that already exist.

The TIS reviews EPA's search for information within EPA and from other Federal agencies. Data have been acquired from the EPA Compliance Data System Asbestos National Emission Standard For Hazardous Air Pollutants (NESHAP) file, inspection data from both the Occupational Safety and Health Administration (OSHA) and the Mine Safety and Health Administration (MSHA), reports from CPSC's General Order (see the following paragraphs), and importer data from the U.S. Customs Service. The Agency has acquired and evaluated information from these agencies, and concluded that these data do not adequately substitute for the information to be gathered by this rule.

A significant source of information on exposure levels in industry is the Occupational Safety and Health Administration (OSHA), which has performed workplace inspections since it promulgated the workplace exposure level standard in 1972. OSHA records contain a great deal of anecdotal information but, for the following reasons, few generalizations can be drawn about industry-wide exposure levels or the number of workers that are exposed. Because OSHA does not uniformly inspect all industries, it is difficult to make statistically valid extrapolations for all of industry. Moreover, approximately 80 percent of OSHA's inspections are in response to complaints, and cannot be extrapolated to make industry-wide estimates.

Inspections responding to complaints generally examine only the work area of concern to the complainant and, therefore, the data generally do not represent the facility-wide exposure situation. Finally, reports are available on industries in only 34 states, because the other states have been authorized by OSHA to conduct their own inspections.

The Consumer Product Safety Commission (CPSC) required the manufacturers of specified consumer products to submit certain information about how asbestos is used in those products under a General Order on December 22, 1980 (45 FR 84384). The Agency is examining the submitted data where respondents did not object to CPSC's sharing the reports with EPA. This rule contains a provision whereby companies need not report the same information to EPA if it was already reported to CPSC without objection to CPSC's sharing the data. However, the data from this General Order does not fully substitute for this rule because the Agency is interested in subjects beyond what CPSC asked, such as employee exposure and plant-site emissions.

Agency contractors have encountered a great deal of difficulty in performing their assessments with information that is available. A principal problem is that aggregate information about broad product categories is all that is available. This shortcoming in available data is significant because the contractors have found large variations in the ways companies process asbestos, control emissions, and dispose of wastes. Their draft reports contain many generalities and qualify many findings by citing the unreliability of available data or the absence of certain types of data. The contractors have individually attempted to gather additional data from industry, but have found that companies are reluctant to disclose confidential business information. Agency staff have intervened by officially requesting needed information; however, very little data has been submitted as a result.

B. Uses of Collected Information

The section 8(a) data will be used for analyses in the TSCA regulatory investigation and will be useful to other EPA offices and other Federal agencies. In preparation for obtaining these data, the Agency has developed plans to automate the information in a manner that will maximize the utility of the information to the Agency, other Federal agencies, and the public. A full description of how the Agency plans to use the reported data including computer-generated data outputs, can be found in the Information Use Plan

that is part of the public record for this rule.

In the TSCA investigation, the Agency will use the information both to describe the current situation and to forecast changes either in the absence of additional regulation or as a result of new actions. Analyses will be conducted on several levels: industry-wide; by product category; and product subcategory. The Agency will use reported data to prepare exposure assessments, analyses of control options, and, if necessary, regulatory impact analyses.

The first analysis of the reported data will be the exposure assessment, where the operational objective is the development of sufficient data to determine cumulative human exposures. For the exposure assessment, the rule will identify the primary processor manufacturing sources, counting both workplace exposures (numbers of workers according to their general category of work and their exposure levels by product line) and the exposures to populations living around the plant-site (environmental releases from pollution control equipment and from uncontrolled vents). The size of the exposed general population and associated exposure levels will be computed using recognized techniques to analyze environmental pathways and monitoring data that provide the basis for modeling. In a sample survey, the Agency will learn how asbestos mixtures are used by secondary processors, who will provide facts that characterize exposure levels for their operations, the size of their workforce, and exposures to the general population. Primary and secondary processors will report the kinds and quantities of asbestos-containing waste they generate, which will permit analysis of possible fiber release into the atmosphere from waste sites. Importers will report the types of asbestos-containing materials that currently enter the U.S. customs territory. The Agency will relate production reports by secondary processors and importers with existing data to estimate the kinds of populations that may be exposed during the installation, use, removal, and disposal of the end-product.

This exposure assessment will be performed for each asbestos product category, and in most cases the Agency will assess exposures from product subcategories. The exposure factors will be used as input to appropriate dose-response studies to establish a risk factor that describes the estimated number of premature deaths to all populations as a result of the asbestos

activity that is assessed. In the case of asbestos, the number of premature deaths and related health care costs are the primary societal costs that can be quantified. The assessments for each category will be considered as a whole, both to determine the overall extent of risk presented by asbestos and to attribute to each category or subcategory their portion of the total risk. As already stated, the Agency will concentrate its further efforts on products that appear to pose the greatest potential for human exposure.

The risk assessment may show that the total risk is so small that no further consideration is warranted. Alternatively, it may identify a particularly hazardous, apparently unnecessary situation that the Agency may want to investigate further. If the latter is the case, the Agency would examine the particular situation to find if there is a way to reduce the exposure levels. The particular situation could be referred to OSHA if it is a correctable workplace problem. The Agency would also examine the situation to determine the cost and availability of substitutes. This rule will not obtain information about substitutes; the Agency believes that it already possesses sufficient information to conduct analyses of substitutes. A great deal of information about the development of substitutes has been submitted to the Agency since the initiation of the asbestos investigation. In addition, EPA and CPSC jointly sponsored a national workshop on substitutes for asbestos in July 1980, where a great deal of information was presented. A record of the workshop can be found in the EPA publication "Proceedings of the National Workshop on Substitutes for Asbestos", EPA-560/3-80-001, which can be acquired from the National Technical Information Service (NTIS).

The Agency will also examine a hazardous situation to determine why it exists and the likelihood that it will continue. With the level of risk already defined, Agency analysts would determine the value and benefits that can be attributed to that situation. With a baseline understanding of the current economic value, Agency analysts can forecast the situation as it will be several years later if uninterrupted by regulation. Trend analysis permits the Agency to study the effects of market forces that encourage or discourage growth. Baseline data can be used to predict the future situation, which can then be compared to projections of regulatory effects to estimate the incremental change that could result from various regulatory options. The

principal economic measures that will be determined from data obtained through this rule are the value of production, the importance of the asbestos activity to the total value produced at the reported sites, the number of employees, the relative value of imports to exports, and the relative value of production to the Gross National Product. These measures will illustrate the monetary importance of the product to the plant site, to the company, to the total asbestos market, to the nation, and to the balance of trade.

Primary processors will report the value of their production for the last three years, describing the amount made for both export and domestic markets. Data from three years will permit analysts to use a multi-year average that is more reliable than data from a single year. Primary processors will report their consumption of bulk asbestos each year and estimate the relative value of their asbestos activity to total production at the plant site. Secondary processors will report the production of end products in which they incorporate the asbestos material and the purpose of including that material in the product. Both types of processors will report the total number of employees at the plant site as well as the number of production employees making subcategories of end products. With this detailed information, the Agency will be able to predict the future value of production and to establish what might be the economic effects of regulation.

Where the Agency finds that regulatory proceedings are appropriate, it will, through this rule, already have collected information necessary to describe fully the expected effects of the possible alternatives and to perform the analyses required by E.O. 12291. Thus, a complete data base provided by this rule will preclude the need to obtain additional data later in the investigation, which would delay resolution of the investigation. Timely action will benefit the Agency, industry, and the public by providing a means to take immediate action that protects public health and by removing a cloud of uncertainty over other uses of asbestos.

The primary purpose of gathering these data is to support the TSCA investigation. However, as noted earlier, other EPA offices and Federal agencies may also utilize the data base in any studies that involve the commercial and industrial uses of asbestos. EPA's Office of Air Quality Planning and Standards (OAQPS) is reviewing the Asbestos National Emission Standard for

Hazardous Air Pollutants (NESHAP). Data from this rule that characterize and quantify emissions from stationary sources, the current economics of the industry, and its pollution control practices will be of value during the appraisal of this 1973 standard. EPA's Office of Solid Waste (OSW) may develop guidelines for the handling and disposal of asbestos-containing wastes. OSW expects to use data from this rule that quantify the kinds of waste presently generated by manufacturers and describe how and where those companies currently dispose of their wastes. Information that characterizes the kinds of asbestos-containing waste and current waste disposal practices will permit analysts to determine the relative degree of hazard posed by waste disposal activities. The Consumer Product Safety Commission (CPSC) is examining consumer products to determine what products may pose a chronic hazard to consumers. EPA has coordinated the data requirements of this rule with CPSC to eliminate duplication and to ensure that the reports will be useful to the CPSC investigation. This rule will provide a listing and quantification of imported and domestically produced consumer products containing asbestos which is not presently available. OSHA and MSHA have supported this rule throughout its development, because a current listing of companies, products, numbers of employees, and exposure levels would be very useful in reviews of the asbestos workplace exposure standards.

III. What to Report

EPA has developed two forms which are to be completed by respondents. The composite form, EPA Form 7710-36, "Reporting Commercial and Industrial Use of Asbestos," (hereafter referred to as the "Primary Form"), has individual sections for reporting data about products, production, asbestos consumption, employees, workplace exposures, waste and disposal, pollution control equipment, and estimated quantities of asbestos emissions. Production and importation from 1979-1981 will be reported by category of product, rather than by individual product lines. Respondents will fill out the sections that apply to them. Each respondent is to complete the relevant sections of the form depending on the activities of the reported plant site. The instructions to the form clearly list the sections that are to be completed by miners and millers, importers of bulk asbestos, and primary processors respectively. Those persons will complete all applicable sections of the

Primary Form, and will report all asbestos importation and processing activities in the first reporting phase. In addition, the Primary Form contains separate sections to be completed in a second reporting phase by a sample of persons who are only secondary processors and importers of asbestos-containing products. Persons from those segments who are selected to complete the Primary Form during the sample survey will complete the applicable sections (see discussion below in unit VI, "Reporting Procedures").

EPA Form 7710-37, "Secondary Processing and Importation of Asbestos Mixtures," (hereafter referred to as the "Secondary Form"), is a short survey form which requires identification of asbestos mixtures or components, the amounts consumed or imported in 1981, and the products into which these mixtures and components are incorporated. The Secondary Form, to be completed by secondary processors and importers of asbestos-containing products, will serve several purposes for the Agency. The procedural purpose of the Secondary Form is to permit EPA to identify the companies in these groups in the least burdensome manner so that only a representative sample of the groups will be required to complete the Primary Form. The information from the Secondary Form, because it identifies firms and products and production amounts, will in itself provide EPA with valuable information. Data from the Secondary Forms will show the breadth of the secondary processor population and the variety of asbestos-containing products that are presently manufactured or imported. Finally, the reports of the quantities of asbestos mixtures that were consumed or imported in 1981 will permit EPA to gauge the present levels of processing and importation of asbestos products. These data will be used in estimating potential worker and consumer exposure and in judging the economic consequences of alternative options. In addition, knowing the products of secondary processing will support determinations of the availability of substitutes.

IV. Who Reports

This rule defines who must report and what to report according to the industrial activity of the respondent during 1981. The Primary Form must be completed by all persons who mine, mill, import, or process bulk asbestos. The Secondary Form must be completed by secondary processors or persons who import asbestos mixtures or articles containing asbestos components. Some

of these persons will be selected subsequently also to complete the Primary Form. This section will clarify the meaning of some of these terms that are specific to this rule.

Under this rule, a manufacturer is a person who mines or mills (produces) bulk asbestos or a person who imports asbestos either as bulk asbestos or as part of a product. Persons who, in addition to manufacturing, also process their products will report as both manufacturers and primary processors, as described below. This rule does not require reports by manufacturers or processors of products which contain asbestos as a contaminant or an impurity. While the Agency is concerned about the health risk posed by fibrous minerals in many ores or other products, this subject is not within the scope of the present rule.

TSCA defines a processor, in part, as a person who prepares a chemical substance of mixture, after its manufacture, for distribution in commerce. This rule classifies processors into two groups according to their starting material. "Primary processors of asbestos" are those whose starting material is bulk asbestos. "Secondary processors of asbestos" are those whose starting materials are asbestos mixtures.

A primary processor starts with bulk asbestos and makes a mixture that contains asbestos fiber. A primary processor may simply mix or repackage different types or sizes of fiber and then sell that product. Such mixing or repackaging of fibers is considered primary processing of bulk asbestos for the purpose of this rule. Asbestos mixtures are products to which asbestos fiber has been intentionally added and which can be used or processed further and incorporated into other products. For example, asbestos cement, asbestos paper, and asbestos-reinforced plastics are asbestos mixtures. In some cases, a primary processor further processes the asbestos mixtures. If so, the person is also a secondary processor. For instance, asbestos paper can be further processed to incorporate it into an article, or asbestos-reinforced plastics can be further processed to make vinyl-asbestos floor tile. Under this regulation, persons who are involved in both primary and secondary processing activities at the reported plant site must report both types of activities on the Primary Form. Only persons who are solely secondary processors at the reported plant site report as secondary processors.

"Secondary processors" are those who start with asbestos mixtures and incorporate them into their own

products. For example, persons who fabricate asbestos cement sheet by cutting the sheet to make an electrical switch board, or persons who make garments by cutting an asbestos textile, are secondary processors. A person who fabricates asbestos cement sheet by cutting it to a specific dimension for a customer is a secondary processor. An automobile manufacturer is a secondary processor if he incorporates asbestos felt into an automobile as a hood insulation blanket or makes heating vent ducts from asbestos paper. A paint formulator is a secondary processor if he purchases a paint that contains asbestos and reformulates the paint by adding some agent to give the paint special properties for specific applications. A complete list of categories of asbestos-containing materials and products may be found in EPA Forms 7710-36 and 7710-37.

Those who import an asbestos mixture or an article containing an asbestos component(s) are required to identify themselves and the asbestos component(s) of the imported product. By this requirement, EPA is attempting to determine what asbestos-containing products are being distributed to consumers and to industry. This will enable the Agency to estimate the total health risk posed by asbestos, including the risk from imported products. The Agency recognizes that there is a large universe of asbestos-containing products that are imported, and that some importers may not know that discrete components of imported merchandise contain asbestos. To ease the burden on companies that import a number of products that may contain asbestos, this rule requires importers to provide information relating only to the products listed in the reporting forms. Therefore, in some cases, EPA will not learn of or obtain data on all imports that contain asbestos. However, the lists of products are very comprehensive and EPA expects to obtain information on most imports that contain asbestos. Some products, such as automobiles, are deliberately omitted because the Agency can otherwise obtain necessary information. Importers should note that under this rule, they are not required to conduct extensive research or to contact the foreign manufacturer to learn this information. Thus, under the rule, importers are required to report to the extent that this information is in their possession.

This rule requires reporting by manufacturers (including importers) and processors of asbestos mixtures. Section 8(a) states that reporting by manufacturers or processors of mixtures should be required only when the

Administrator determines that it is "necessary for the effective enforcement" of TSCA. Those who manufacture or process asbestos mixtures are also necessarily processors of asbestos, the chemical substance. Therefore, the "effective enforcement" finding is not needed. Nevertheless, the characterization of these products and processing activities is essential to the asbestos investigation and to the extent that such persons can be regarded as manufacturers or processors of mixtures, the Administrator finds that it is necessary for the effective enforcement of TSCA. For a more detailed discussion of this issue, see the preamble to the proposed rule at 46 FR 8204, which is hereby adopted.

V. Exemptions From the Rule

The Agency is exempting certain classes of potential respondents from the requirements of the rule. The exemptions are designed to reduce the overall burden of the rule while still obtaining sufficient information for analyses that are planned.

All companies employing 10 or fewer employees are exempted from the requirements of this rule. EPA estimates that over 40 percent of companies not otherwise excluded will be exempted as a result of this provision, while firms that account for approximately 97 percent of employees and sales will still be included. Further discussion of this provision can be found below in unit XIII, "Regulatory Flexibility Act."

Certain secondary processors are excluded from this rule. Secondary processors are exempted if they apply, assemble, install, erect, or consume asbestos products without modifying or fabricating the asbestos products. For instance, an appliance manufacturer who installs electric motors containing asbestos components is excluded if the motor is made elsewhere. Similarly, an automobile manufacturer need not report the installation of pre-fabricated hood insulation blankets if no fabrication is required during installation. An airplane manufacturer would not report the application of asbestos-containing caulk. Included in this category are secondary processors who merely adjust an asbestos mixture prior to or during assembly or installation. While the Agency believes there may be risks from asbestos exposures in these categories, it expects to complete necessary analyses with estimates and extrapolations of data reported by the persons who make the asbestos-containing products that are processed by the excluded industries. For example, processors infrequently

"true" pre-formed brake linings during assembly with brake foundations to get a better fit. In this case, reports from manufacturers of the pre-formed brake linings will sufficiently quantify production of the friction material product subcategories. Exposure scenarios for the excluded industries can be quantified by relating expected exposure levels with the quantities of products that are made. Therefore, reports from these excluded industries are not essential.

This rule also exempts persons who repair articles, repackage asbestos mixtures without modification, or who engage in construction work. The Agency proposes to exempt these persons from reporting primarily because so many persons are in these categories, the workforce is constantly changing, and they are generally composed of many small businesses, such as brake repair shops and construction companies. Also, as is the case with other excluded industries, exposure scenarios for the construction and brake repair industries can be developed by relating expected exposure levels with production levels reported by product manufacturers.

Section 8(a) of TSCA does not apply to distributors of chemical substances or mixtures. Therefore, persons who are solely distributors, and do not manufacture, process, or import, are not covered by this rule.

Reporting is not required by persons who are "end users" of bulk asbestos or asbestos products and do not further distribute such items in commerce. The most common example of this is in the manufacture of chlorine, where some persons use asbestos as a diaphragm to separate chlorine and caustic soda. While much bulk asbestos is consumed annually by this industry and much waste generated, asbestos fiber is not present in the resultant products which are distributed in commerce and these activities are therefore not "processing" of asbestos.

VI. Reporting Procedures

Companies must report the activities of each plant site on an individual reporting form with one exception. That exception is that respondents have the option to report all of their company imports or exports on a single form. The form instructions explain further how this is to be done.

Miners, millers, primary processors, and importers of bulk asbestos must submit all appropriate portions of the Primary Form within 90 days after the effective date of the final rule. If the respondent's activities include "secondary processing" or importing of

asbestos mixtures or articles containing asbestos components, all such activities, including those at other plant sites, must be reported at the same time the person reports as a miner, primary processor, or importer of bulk asbestos.

EPA will require reporting in a different way for persons who are solely secondary processors or importers of asbestos mixtures. Apparently there are many thousands of persons who are secondary processors or importers of asbestos-containing mixtures. EPA has devised a scheme to reduce the reporting burden for these companies. Persons who are solely secondary processors or importers of asbestos mixtures or articles containing asbestos components will report to EPA in phases. First, they will submit the Secondary Form within 60 days after the effective date of the rule. The Secondary Form reports will be used by EPA to improve the Agency's knowledge of the products being made with asbestos, the number of companies making the products that contain asbestos and the amounts of asbestos mixtures they use, and the kinds and amounts of mixtures and products being imported.

Further reporting of the information on the primary form by some respondents will be necessary to develop more complete profiles and projections for regulatory analyses. The Secondary Form will not ask all respondents (estimated to comprise 5,750 reports) for the detailed information the EPA would like to consider in the risk and economic analyses. Instead, the Agency plans to have a representative sample of Secondary Form respondents report more detailed information. The Agency wants to account for 100 percent of asbestos usage, but for purposes of this analysis, and to reduce the reporting burden, the Agency has determined extrapolations can be made from less than 100 percent. EPA believes that a sampling technique can provide information that would adequately describe secondary asbestos processing and products. Sampling to decrease the number of processors required to submit additional detailed information will reduce the overall burden of additional reporting substantially. In unit VIII, "Reporting Burden", EPA estimates that Phase 2 reporting will be required from approximately 1500 of the Phase 1 respondents. The objective is to sample only the number necessary to meet the goal of attaining a reliable sample.

EPA plans to use a stratified random sampling method as the basis for the sample survey. That is, the respondents to the Secondary Form will be divided into non-overlapping and reasonably

homogeneous strata and then sampled by stratum. The strata will be defined by all or an appropriate subset of the following variables: reported asbestos-starting material, reported asbestos end product, and the volume of asbestos-starting material annually consumed. Additionally, the population may be further stratified according to size (the amount of asbestos mixture processed or imported) and geographic location, which will ensure that any sample fully represents the whole population. The type of asbestos-starting material and the asbestos end product would permit EPA to analyze a representative portion of each product category application. Consideration of the amount of the asbestos-starting material that is consumed will better ensure representation of both larger and smaller processors of asbestos materials.

The Agency can make the final decision on which variable(s) to use in stratifying and how large the sample will be only after examining the composition of the Secondary Form respondents, since the actual numbers of respondents and the products they report in the first phase will not be known until the first phase reports are submitted. The Agency will use standard statistical techniques in conducting the sample survey.¹ The Agency will stratify and sample respondents with the goal of minimizing the reporting burden as much as is practical. To extrapolate an estimate about a population from a sample survey requires obtaining reports from enough respondents to represent the whole population. To make an estimate about a stratum composed of a few respondents may require sampling a larger percentage than would be necessary to make an estimate of the same reliability about a stratum composed of a greater number of respondents. EPA will use one or a combination of the variables listed in the preceding paragraph to stratify respondents for the sample survey. The Agency will select the stratifying variable(s) which will result in the fewest number of respondents while still ensuring a reliable statistical sample.

The Secondary Form respondents selected for more detailed reporting will be notified by certified letter. These persons will have 90 days to complete relevant portions of the Primary Form.

Some persons subject to reporting under this rule may be exempted from reporting certain information already

¹ Kish, Leslie. Survey Sampling. New York: John Wiley, 1965.

reported to EPA or CPSC. A company which has adequately reported data to EPA will not be required to report the same information again, and must write "EPA" in place of the data on the form. Persons who have already reported production or importation quantities to CPSC must still identify themselves and the names of their products to EPA according to the requirements of this rule. However, data already reported must be referenced by writing "CPSC" in place of the data, unless the respondent specifically requested CPSC not to release the data to EPA.

The Agency intends to send reporting forms directly to as many potential respondents as possible. To identify persons currently subject to this rule, a master list of persons who produce or make asbestos products has been assembled from a number of different lists supplied by industry associations, Government agencies, and industry information that is publicly available. In addition, efforts will be made to publicize these reporting requirements widely, so that persons as yet unknown to EPA will comply with these reporting requirements.

VII. Confidentiality

The Agency has developed specific instructions for asserting and certifying claims of confidentiality for any information submitted in response to this rule. These instructions are incorporated in the reporting forms and may be found in §§ 763.76 and 763.77 of the rule. Any claims of confidentiality must be made at the time of submission as provided in 40 CFR Part 2 as amended September 8, 1978 (43 FR 39997), and March 23, 1979 (44 FR 17673), and in the manner specified in the reporting forms of this proposed rule. To ensure proper handling, confidential material must be submitted to: U.S. Environmental Protection Agency, Post Office Box 2070, Rockville, MD 20852.

This rule employs a simple certification method to assert a claim of confidentiality. To assert a claim of confidentiality, the respondent must mark the applicable line on the form that contains confidential information. The respondent must certify that the company has taken measures to protect the confidentiality of the information, that the information is not publicly available, and that disclosure of the information would cause the company substantial competitive harm. All of these conditions must exist for any information to be confidential. Determinations on confidentiality will be made by EPA in accordance with 40 CFR Part 2.

The Agency intends to aggregate information about production, consumption, employment, and environmental release that is reported for this rule. The Agency will primarily use aggregate data for analyses necessary to support the TSCA section 6 regulatory investigation. These data aggregates and analyses will be part of the section 6 asbestos rulemaking record that is available to the public. To protect confidential information in the aggregate data sets, in most cases no data from individual reports will be released, even if they are nonconfidential. Releasing discrete data could jeopardize the aggregate data sets, because through subtraction of nonconfidential data from the aggregate it could be possible to ascertain specific confidential data.

As previously stated, EPA intends to share all reported data with other Federal agencies, including confidential data in individual reports. However, EPA will require that personnel from other agencies obtain a TSCA security clearance before access to confidential data is granted (See "TSCA Confidential Business Information Security Manual," Chapter 6—Security Requirements for Other Federal Agencies). Similarly, EPA will require that an agency adopt certain security procedures before confidential information can be stored at that agency.

VIII. Changes From the Proposal

The final rule modifies several requirements of the proposed rule to ease the reporting burden, to respond to specific problems that were raised by commenters on the proposal, or to obtain the most useful information. Further discussion of comments on the proposal and our responses can be found in a document entitled "Public Comments on the Proposed TSCA Section 8(a) Asbestos Reporting Rule," which is part of the public record for this rule.

The final rule does not include the proposed requirement to keep lists of customers and to submit the lists at the Agency's request. Commenters convinced the Agency that that the information would be very sensitive and the requirement could be very burdensome. Also, the purpose of this rule is to characterize the industries making essentially finished goods, while most customers are "users" or distributors and, therefore, outside the scope of the present rule.

Several changes to the reporting forms should be noted. The Agency has substantially reduced the amount of requested information by requiring respondents to report production of subcategories of end products for only 3

years. The proposal would have required production data for 5 years about specific end products, including trade names, and data for 10 years about the importation or production of bulk asbestos. Data reported according to consistent subcategories of products will provide sufficient detail for our analyses. The Agency believes that data for 3 years will sufficiently describe the current situation, as well as provide reliable averages for analyses. An additional change is that data on bulk asbestos fiber is required only for each type of mineral. Again, EPA is not requiring data about specific grades of chrysotile fiber because the Agency's analyses do not need that level of detail.

The requirement to summarize workplace monitoring data is revised to increase the utility of the reported data and facilitate reporting. Respondents will still report only monitoring data that already exist in their files; however, they will summarize that data according to the types of end products they are reporting. The reports will be more useful to the Agency and OSHA by directly relating workplace concentration levels to the number of workers making the end product that is reported. The final rule does not require respondents to estimate the number of hours that workers are annually exposed to the measured concentration levels. While information on the duration of exposures would be useful, commenters asserted that extensive and burdensome searches through payroll records would be necessary to locate the data. Since the reports will consist of summaries of 8-hour time-weighted averages, Agency analysts will use assumptions and other available information to calculate duration of exposures.

The requirement to report air pollution control equipment has been modified at the request of EPA's Office of Air Quality Planning and Standards (OAQPS). The final rule requires respondents to answer several technical questions about each piece of equipment, replacing the proposal's requirement to provide the brand name and model number of each piece. The revised questions will obtain all the information necessary to estimate emissions and costs and will eliminate the need for submitters to calculate the quantities of asbestos that are released. OAQPS believes that the revisions will reduce reporting requirements while improving the usefulness of the data.

EPA is including two provisions to address special problems of importers. First, importers were concerned they would be unable to identify all imported

goods that contain asbestos and, therefore, would not fully comply with the rule. This rule provides that importers need report information relating only to the types of products listed on the form, which should cover most such imports. Second, importers asserted that the requirement to provide "reasonably ascertainable" information on the Primary Form during the second phase of reporting could require them to seek information from foreign manufacturers, possibly at considerable cost. The final rule requires importers to provide information "in their possession" during both phases of reporting.

IX. Reporting Burden

In order to assess the clarity of the form and to ensure that data are reported in the most effective manner, the Agency conducted a pre-test of the form through the Institute for Survey Research, Temple University. The respondents were members of the Asbestos Information Association. This pre-test was quite valuable to EPA in improving the clarity and coherence of the form. In addition, the respondents estimated the cost of completing each section of the form. The final report by the Institute for Survey Research, "Design and Testing of Asbestos Use Reporting Form", is part of the public record for this rule. The pre-test was not a statistically-based sample and only eight companies were asked to participate. Therefore, the resultant cost estimates could not be used directly to compute the reporting impacts of this rule. However, the pre-test results helped EPA arrive at an impact estimate. A detailed description of the reporting burden estimates can be found in a report by Arthur Young & Company, "Economic Impact Analysis for the TSCA Section 8(a) Rule, Reporting Commercial and Industrial Uses of Asbestos", which is part of the public record for this rule. The results of the pre-test and the reporting burden calculations are summarized in the "Reports Impact Analysis", an internal EPA report that is available in the OPTS Reading Room. The documents cited above may be acquired by writing or calling the Industry Assistance Office at the address and telephone number given at the beginning of this notice.

In unit XII of this preamble—"Regulatory Flexibility Act"—EPA calculates that 40 percent of the secondary processors will be small businesses and will be exempt from this rule. Therefore, in this section costs are calculated for 5,385 secondary processors, while we estimate there may be a total of 8,974 secondary processors

if small businesses are counted. (These estimates are derived from a formula used in 1976 by the Asbestos Information Association, which is described in the "Reports Impact Analysis.") In addition, EPA calculations exclude primary processors who are known to be small businesses. However, the Agency does not calculate the cost reduction from excluding small importers because the composition of that segment is not well-defined, although it does expect that this group will contain some small businesses. Therefore, the actual reporting costs may be less than our present calculations.

As already discussed, two reporting forms will be used for this rule. The Primary Form will be completed by miners, millers, primary processors of asbestos, and importers of bulk asbestos in a first reporting phase. EPA estimates that for this group of respondents, a total of 487 reports would be received by the Agency. Completion of these reports would require a total of 7,500 hours, and cost approximately \$230,000.

Secondary processors and importers of asbestos mixtures or articles containing asbestos components will be required initially to complete the Secondary Form. The Agency estimates that it will take four hours to complete each form, at a cost of \$120 per form. The Agency anticipates receiving 5,750 such reports. Therefore, the Secondary Form reporting would require a total of 23,000 hours, and would cost approximately \$690,000.

The Agency expects that approximately 1,500 of those persons who initially complete the Secondary Form will be selected, in a sample survey, to complete the Primary Form. The sample survey will require a total of 36,000 hours, and would cost \$1,100,000.

Based on these cost estimates, and assuming a small business exclusion, EPA estimates the total cost of reporting for this rule would be \$2 million, requiring 66,500 reporting hours.

Using available data, an economic impact analysis of the proposed rule was performed for primary processors. Using the measure of the one-time cost as a percent of annual gross profits, the estimated impact was found to be minimal (around 0.1 percent) for even the smallest primary processors (the ones most likely to be impacted).

Such an economic impact analysis was not possible for the other industry segments affected by this rule due to unavailability of data. EPA did compare the average value of shipments for four-digit SIC codes for primary processors and other SIC codes likely to contain

asbestos secondary processors. This comparison suggested no significant difference between primary processors and other industry segments in the size ranges of 10-49 employees and 20-49 employees. These size categories are the smallest establishments likely to be impacted by this proposed rule and the ones most likely to experience adverse effects. On this basis, EPA feels that the potential impacts on secondary processors and others in the asbestos industry will be of a similar small magnitude as the impacts estimated for the primary processors. Refer to two documents in the public record: (1) "TSCA Section 8(a) Rule Reporting Commercial and Industrial Uses of Asbestos: Economic Impact on Secondary Processors," memorandum from Regulatory Impacts Branch, December, 1980, and (2) "Economic Impact Analysis for the TSCA Section 8(a) Rule Reporting Commercial and Industrial Uses of Asbestos," Arthur Young & Company, Washington, DC, October, 1980.

X. Sunset Provision

The general requirements of this rule will expire 5 years after the effective date of the rule. The selection and notification of sample survey participants for Phase 2 reporting (see unit VII of this preamble and § 763.71(c) of the rule) will take place within three years after the effective date of the rule. If EPA determines that any requirements of this rule should be continued, a notice to that effect will be published for comment.

XI. Public Record

EPA has established a public record for this rulemaking as defined in section 19(a)(3) of TSCA (docket number OPTS-84004). The public record, along with a complete index, is available for inspection in the OPTS reading room, E-107, from 8:00 a.m. to 4:00 p.m. Monday through Friday, except legal holidays, (401 M St., S.W., Washington, D.C. 20460). This record contains the basic information that the Agency considered in developing this rule. The Agency will supplement the record with additional information as it is received. This record includes the following:

1. The proposed rule, published in the *Federal Register* of January 20, 1981, (46 FR 8200).
2. Comments received in response to the proposed rule, including any comments received from the Office of Management and Budget during Paperwork Reduction Act of 1980 review.

3. "Commercial and Industrial Use of Asbestos Fibers; Advance Notice of Proposed Rulemaking," published in the *Federal Register* of October 17, 1979 (44 FR 60061).

4. "Commercial and Industrial Use of Asbestos Fibers. Extension of Comment Period and Announcement of Additional Control Option," published in the *Federal Register* of December 17, 1979 (45 FR 18374).

5. Comments received in response to the *Advance Notice of Proposed Rulemaking* and the *Notice of Proposed Rulemaking*.

6. Reports Impact Analysis of this rulemaking.

7. "Statistics for Companies with 10 or Fewer Employees" memorandum, from Chemical Information Reporting Branch, October 30, 1980.

8. "Design and Testing of Asbestos Use Reporting Form," Institute for Survey Research, Temple University, Philadelphia, PA., June 30, 1980.

9. "Economic Impact Analysis for the TSCA Section 8(a) Rule, Reporting Commercial and Industrial Uses of Asbestos", Arthur Young & Company, Washington, D.C., October, 1980.

10. The Technical Information Summary for this rulemaking.

11. The Information Use Plan for this rulemaking.

12. Records of all communications between EPA personnel and persons outside the Agency pertaining to the development of this rule. (This does not include any inter- or intra-agency memoranda unless specifically noted in the index of the rulemaking record.)

13. "Public Comments on the Proposed TSCA Section 8(a) Asbestos Reporting Rule."

XII. Regulatory Assessment Requirements

This rule fully complies with the following regulatory assessment requirements.

A. Executive Order 12291

Under Executive Order 12291, EPA must judge whether a regulation is "Major" and, therefore, subject to the requirement of a Regulatory Impact Analysis. EPA has determined that this regulation is not Major because it does not have an effect of \$100 million or more on the economy and it will not affect competition, employment, or production costs. EPA estimates the total cost of this one-time reporting requirement is \$2.0 million. This regulation was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291. Any comments from OMB to EPA and EPA response to those comments

will be available for public inspection in the record for this rulemaking.

B. Regulatory Flexibility Act

The Agency has included several provisions in this rule to minimize both its overall impact on businesses and the reporting requirements for individual companies. First, EPA is exempting the smallest companies that could be subject to the rule—those companies with 10 or fewer employees. This small business exemption will eliminate reporting from over 40 percent of the companies and the Agency estimates that it will reduce the overall potential cost of the rule by \$1.1 million. EPA is also excluding from any reporting two large segments of processors that are composed of a high percentage of small businesses—construction and brake repair companies. Including those segments would raise the overall cost of this rule by several million dollars.

Second, every effort has been made to minimize the amount of data to be reported. Based on a pretest by industry and public comments, the Agency has designed the forms to require only common business information essential to the Agency's investigation. The economic impact analysis estimates that the median cost to any single respondent submitting the long form will be \$1,100, which is about 0.1 percent of the smallest company's profits. The reporting costs for many small businesses will probably be less than the median cost because they will generally report about fewer products and employees.

Third, EPA will apply a sampling approach to over 90 percent of the respondents. Only a representative sample of secondary processors, which is the largest industrial segment subject to the rule and is composed of a large percentage of small businesses, will be selected for full reporting. In phase one, secondary processors will submit a short, one-page form that EPA estimates will take at most four hours (\$120) to complete. The Agency will select the minimum necessary number of companies from phase one respondents to submit the long form in phase two. Utilizing this sample survey means that only 1/3 of all respondents to the rule will have to complete the long form.

The Agency is including these provisions as a special consideration to small businesses. The Agency's economic impact analysis shows that this rule will have a negligible impact on any business. Therefore, in accordance with the Regulatory Flexibility Act (Pub. L. 96-354), EPA has determined that this rule will not have a significant economic impact on a substantial number of small

entities. As required, EPA has consulted with the Office of Advocacy, Small Business Administration.

C. Paperwork Reduction Act of 1980

As just described, the Agency has made every effort to minimize the amount of required information and the burden on respondents to the rule. The reporting forms were pretested, the proposed requirements have been reduced in a number of ways, and 90 percent of the respondents will be sampled. Furthermore, this rule exempts entire classes of businesses in cases where the Agency believes necessary analyses can be conducted with information that is otherwise available.

The Agency has prepared extensive plans to utilize fully all information that is collected through this rule. The Agency's "Information Use Plan", which is part of the public record, describes the specific uses that are planned for the required data elements. In addition, the Agency coordinated these information requirements with other Federal agencies to maximize the usefulness of reported data. The information to be reported does not duplicate efforts by other Federal agencies and the data will be useful to several regulatory agencies. An automated information system will ensure the most effective use of submitted data. Fully operational Agency procedures will protect confidential business information contained in the reports.

Information collection requirements contained in this regulation (§ 763.71) have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.*, and have been assigned OMB control number 2000-0478.

List of Subjects in 40 CFR Part 763

Environmental protection, Hazardous materials, Recordkeeping and reporting requirements, Asbestos.

Dated: July 23, 1982.

Anne M. Gorsuch,
Administrator.

PART 763—ASBESTOS

Therefore, 40 CFR Part 763 is amended by adding a new Subpart D to read as follows:

Subpart A-C—[Reserved]

Subpart D—Reporting Commercial and Industrial Uses of Asbestos

Sec.
763.60 Scope and compliance.
763.63 Definitions.

- 763.65 Who must report.
 763.71 Schedule for reporting.
 763.74 Confidential business information.
 763.76 Reporting commercial and industrial use of asbestos.
 763.77 Reporting secondary processing and importation of asbestos mixtures.
 763.78 Sunset provision.
 Authority: Sec. 8(a) Toxic Substances Control Act (TSCA), Pub. L. 94-469, 90 Stat. 2029, (15 U.S.C. 2607(c)).

Subpart D—Reporting Commercial and Industrial Uses of Asbestos

§ 763.60 Scope and compliance.

(a) This rule requires reporting by persons who manufacture, import, or process asbestos. Different reporting requirements are imposed depending on the person's activity. Manufacturers, importers and processors of commercial and industrial asbestos fiber must report quantity, use, and exposure information. Importers of mixtures and articles containing asbestos and processors of asbestos mixtures will report to EPA in two phases. They initially must report limited information about processing or importation. Some must subsequently report additional information if they are selected as respondents in a sample survey.

(b) Subsection 15(3) of TSCA makes it unlawful for any person to fail or refuse to submit information required under this rule. Section 16 provides that a violation of section 15 renders a person liable to the United States for a civil penalty and possible criminal prosecution. Under section 17, the district courts of the United States have jurisdiction to restrain any violation of section 15.

§ 763.63 Definitions.

The definitions in section 3 of TSCA and the following definitions apply for this rule:

(a) "Asbestos" means the asbestiform varieties of: chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonite-grunerite); anthophyllite; tremolite; and actinolite.

(b) "Asbestos mixture" means a mixture which contains bulk asbestos or another asbestos mixture as an intentional component. An asbestos mixture may be either amorphous or a sheet, cloth fabric, or other structure. This term does not include mixtures which contain asbestos as a contaminant or impurity.

(c) The term "bulk asbestos" means any quantity of asbestos fiber of any type or grade, or combination of types or grades, that is mined or milled with the purpose of obtaining asbestos. This term does not include asbestos that is

produced or processed as a contaminant or an impurity.

(d) "EPA" means the United States Environmental Protection Agency.

(e) "Importer" means anyone who imports any chemical substance, including a chemical substance as part of a mixture or article, into the customs territory of the U.S. and includes the person liable for the payment of any duties on the merchandise, or an authorized agent on his behalf. Importer also includes, as appropriate:

- (1) The consignee.
- (2) The importer of record.
- (3) The actual owner if an actual owner's declaration and superseding bond has been filed in accordance with 19 CFR 141.20.

(4) The transferee, if the right to draw merchandise in a bonded warehouse has been transferred in accordance with Subpart C of 19 CFR Part 144. For the purpose of this definition, the customs territory of the U.S. consists of the 50 states, Puerto Rico, and the District of Columbia.

(f) "Known to or reasonably ascertainable by" means all information in a person's possession or control, plus all information that a reasonable person might be expected to possess, control, or know, or could obtain without unreasonable burden or cost.

(g) "Manufacture for commercial purposes" means to import, produce, or manufacture with the purpose of obtaining an immediate or eventual commercial advantage for the manufacturer and includes, among other things, such "manufacture" of any amount of a chemical substance or mixture:

- (1) For commercial distribution, including for test marketing, and
 - (2) For use by the manufacturer, including use for product research and development, or as an intermediate.
- "Manufacture for commercial purposes" also applies to substances that are produced coincidentally during the manufacture, processing, use, or disposal of another substance or mixture, including both byproducts and coproducts that are separated from that other substance or mixture, and impurities that remain in that substance or mixture. Byproducts and impurities may not in themselves have commercial value. They are nonetheless produced for the purpose of obtaining a commercial advantage since they are part of the manufacture of a chemical product for a commercial purpose.

(h) "Miner of asbestos" is a person who produces asbestos by mining or extracting asbestos-containing ore so that it may be further milled to produce bulk asbestos for distribution in

commerce, and includes persons who conduct milling operations to produce bulk asbestos by processing asbestos-containing ore. Milling involves the separation of the fibers from the ore, grading and sorting the fibers, or fiberizing crude asbestos ore. To mine or mill is to "manufacture" for commercial purposes under TSCA.

(i) "Person" means any natural person, firm, company, corporation, joint venture, partnership, sole proprietorship, association, or any other business entity, any State or political subdivision thereof, any municipality, any interstate body, and any department, agency, or instrumentality of the Federal Government.

(j) "Primary processor of asbestos" is a person who processes for commercial purposes bulk asbestos.

(k) "Process for commercial purposes" means the preparation of a chemical substance or mixture, after its manufacture, for distribution in commerce with the purpose of obtaining an immediate or eventual commercial advantage for the processor. Processing of any amount of a chemical substance or mixture is included. If a chemical or mixture containing impurities is processed for commercial purposes, then those impurities are also processed for commercial purposes.

(l) "Secondary processor of asbestos" is a person who processes for commercial purposes an asbestos mixture.

(m) "Site" means a contiguous property unit. Property divided only by a public right-of-way shall be considered one site. There may be more than one manufacturing plant on a single site.

(n) "Small manufacturer, processor, or importer" means a manufacturer or processor who employed no more than 10 full-time employees at any one time in 1981.

§ 763.65 Who must report.

(a) Persons who were miners or primary processors of asbestos, or importers of bulk asbestos in 1981 must complete and submit a separate EPA Form 7710-36, Reporting Commercial and Industrial Use of Asbestos (see § 763.76), for each site and for each company activity not elsewhere reported, according to the schedule in § 763.71. When two or more persons meet the definition of "importer" for the same shipment, the principal in the transaction, not his agent or agents, shall report.

(b) Persons who were secondary processors of asbestos in 1981 must complete and submit Parts I and II of EPA Form 7710-37, Reporting Secondary

Processing and Importation of Asbestos Mixtures (see § 763.77), for each site or activity, according to the schedule in § 763.71.

(c) Persons who were importers in 1981 of asbestos mixtures or articles containing asbestos components must complete and submit Parts I and III of EPA Form 7710-37, Reporting Secondary Processing and Importation of Asbestos Mixtures, according to the schedule in § 763.71. When two or more persons meet the definition of "importer" for the same shipment, the principal in the transaction, not his agent(s), shall report.

(d) Secondary processors of asbestos and importers of asbestos mixtures or articles containing asbestos components must complete and submit a single EPA Form 7710-36, Reporting Commercial and Industrial Use of Asbestos, according to the schedule in § 763.71(c), if selected for further reporting as described in § 763.71(c).

(e) Particular information required on EPA Form 7710-36 which has been previously submitted to the Consumer Product Safety Commission (CPSC) in accordance with a general order dated Dec. 22, 1980 (45 FR 84384), may be referenced in the appropriate place on the form and need not be submitted unless the respondent has informed the CPSC of his objection to any sharing of the data with EPA. Information for 1981 which was not required by CPSC must be reported on the EPA forms.

(f) The following persons are not subject to §§ 763.65 and 763.71.

(1) Secondary processors of asbestos, to the extent that they process an asbestos mixture to repair articles, to construct buildings or other such construction activities, or to apply, assemble, install, erect, consume, or repackage the mixture without modification.

(2) Persons who are small manufacturers, processors, or importers, as defined in § 763.63(n).

§ 763.71 Schedule for reporting.

(a) All miners, primary processors, and importers of bulk asbestos subject

to reporting under § 763.65(a) shall submit required data on EPA Form 7710-36 within 90 days after the effective date of this rule.

(b) All secondary processors and importers subject to reporting under § 763.65 (b) and (c) shall submit required data on EPA Form 7710-37 within 60 days after the effective date of this rule.

(c) All persons subject to paragraph (b) of this section who are selected for additional reporting shall submit required data on EPA Form 7710-36 within 90 days after receipt of EPA notification to do so. Selections will be made in the following manner. The respondents will be selected using a stratified random sampling technique. First, qualified statisticians will review reports on EPA Form 7710-37 and determine the optimal method to stratify respondents according to the composition of the respondent population. The strata will be defined by all or an appropriate subset of the following variables: the end product; the asbestos mixture that is the starting material in the end product; the volume of the asbestos mixture annually consumed or imported. Respondents will be stratified into as few groups as reasonably possible. The size of the sample will be determined after all respondents have been stratified. EPA intends to require further reporting from the minimum number of respondents possible while still meeting the EPA needs for statistically sound data. If there are insufficient numbers of respondents in a group to perform a statistically sound sample survey, then all of the respondents in that group may be required to complete EPA Form 7710-36. A standard random selection technique will be employed to select persons who will be required to complete and submit EPA Form 7710-36. Notification shall be sent by certified letter, signed by the Office Director, Office of Toxic Substances, and will have attached copies of this rule and EPA Form 7710-36. Letters of notification will be sent by EPA no later than three years after the effective date of this rule.

(d) EPA Form 7710-36 and EPA Form 7710-37 can be obtained by writing or telephoning:

Industry Assistance Office, Office of Pesticides and Toxic Substances (TS-799), Washington, D.C. 20460. Toll free: (800-424-9065). In Washington call: (554-1404).

(e) Completed forms must be mailed to: U.S. Environmental Protection Agency, Post Office Box 2070, Rockville, MD. 20852.

§ 763.74 Confidential business information.

(a) Any person submitting a document under this rule may assert a business confidentiality claim covering all or part of the submitted material unless otherwise instructed on the reporting form. EPA will disclose information covered by a claim only as provided in procedures set forth in 40 CFR Part 2.

(b) Certification for a claim made on any item reported under § 763.65 must be made by signing the certification statement as specified in the forms.

(c) If no certified claim accompanies a document at the time it is submitted to EPA, the document may be placed in an open file available to the public without further notice to the respondent.

§ 763.76 Reporting commercial and industrial uses of asbestos.

The following EPA Form 7710-36, Reporting Commercial and Industrial Uses of Asbestos, will be completed and submitted to EPA as required in §§ 763.65 and 763.71. Information must be reported on this form to the extent that it is known to or reasonably ascertainable by the respondent, except for importers. Importers must report information on this form to the extent that it is in the possession of the respondent.

(a) EPA Form 7710-36 (5-80). [insert form]

(b) [Reserved]

BILLING CODE 6160-50-M

EPA Form 7710-36 (Rev. 12-1-79)



United States
Environmental Protection
Agency

U.S. Environmental Protection Agency
P.O. Box 2070
Rockville, MD 20852

REPORTING COMMERCIAL AND INDUSTRIAL USES OF ASBESTOS

Please read the accompanying instruction booklet before completing this form. Note that a separate form must be submitted for each plant site except that subsidiaries or divisions of bulk asbestos may be reported in a consolidated corporate report. The instructions provide further directions.

Other: This form is complete, enclose it in the preaddressed envelope provided. Should you have any questions, please contact the Industry Assistance Office (Room 4100) at EPA (Room 210-37), listed "Secondary Processing and Importation of Asbestos Mixtures." These persons will report in the future EPA Form 7710-36, once such regulatory notice to that effect from EPA (see 40 CFR 161.10) has been issued.

A(1). RESPONDENT IDENTIFICATION

1. Company Name: _____ Plant Site Name: _____

2. Principal Office: _____ Name: _____ Location: _____

3. If applicable, Report to the identification number: _____

4. If applicable, Record the name and address of the parent corporation which is responsible for the reporting of this reporting site. If not a parent corporation, record the name and address of the company which is responsible for the reporting of this reporting site.

5. Record the total number of years during which the manufacture and/or processing of asbestos has been conducted at the reporting site: _____

A(2). RESPONDENT ACTIVITY

6. Identify your activity from the definitions in the instruction booklet and mark (X) the box next to the category below that best describes your activity. Mark (X) next to all activities that you are reporting on this form. Do not mark at least one box in each category if you are reporting on this form. You must mark one box in each category if you are reporting on this form. You must mark one box in each category if you are reporting on this form. You must mark one box in each category if you are reporting on this form.

7. Signature of authorized official: _____ Date: _____

B(1). PRODUCTION OF BULK ASBESTOS

QUANTITY OF BULK ASBESTOS MINED OR MILLED

Enter in short tons, the amount of bulk asbestos you produced (mined or milled) for 1979 through 1981.

Year	Chrysotile	Amosite	Anthrophyllite asbestos	Actinolite asbestos	Other
1979					
1980					
1981					

B(2). IMPORTATION OF BULK ASBESTOS

QUANTITY OF BULK ASBESTOS IMPORTED

Enter in short tons, the amount of bulk asbestos you imported for 1979 through 1981.

Year	Chrysotile	Amosite	Anthrophyllite asbestos	Actinolite asbestos	Other
1979					
1980					
1981					

B(3). EXPORTATION OF BULK ASBESTOS

QUANTITY OF BULK ASBESTOS EXPORTED

Enter in short tons, the amount of bulk asbestos you exported for 1979 through 1981.

Year	Chrysotile	Amosite	Anthrophyllite asbestos	Actinolite asbestos	Other
1979					
1980					
1981					

Page 2

C. PRIMARY PROCESSOR PRODUCTION

Enter the following information for each type of end product that you shipped from your plant site. Classify your end products according to the list below.

Code number	End product shipped (Enter one end product per line)	Type of asbestos fiber (Use one fiber name at a time)	Year	Quantity of asbestos contained (Short tons)	Total annual production		Value shipped (Thousands of dollars)		Comments (Max. 25)
					Quantity	Unit of measure	Domestic	Export	
		Chrysotile	1979						
		Amosite	1980						
		Anthophyllite	1981						
		Chrysotile	1979						
		Amosite	1980						
		Anthophyllite	1981						
		Chrysotile	1979						
		Amosite	1980						
		Anthophyllite	1981						
		Chrysotile	1979						
		Amosite	1980						
		Anthophyllite	1981						

(B) Estimate the percentage of the total value shipped from the plant site reported here as primary processor production in 1981.

D. SECONDARY PROCESSOR PRODUCTION

Enter the following information for each type of end product that you shipped from your plant site. Classify end products and asbestos mixtures consumed according to the lists on this form.

Code number	End product shipped (Enter one end product per line)	Total annual production		Asbestos mixture consumed and form		Function of asbestos in product	Year	Annual consumption of asbestos mixtures		Comments (Max. 25)
		Quantity	Unit of measure	Code number	Quantity			Unit of measure	Quantity	
		1979					1979			
		1980					1980			
		1981					1981			
		1979					1979			
		1980					1980			
		1981					1981			

(B) Estimate the percentage of the total value shipped from the plant site reported here as secondary processor production in 1981.

Typical terms for products made from asbestos mixtures

Automotive and traction products

121. Drum brake linings (light medium vehicle)
122. Disc brake pads (light medium vehicle)
123. Disc brake pads (heavy vehicle)
124. Brake shoes (heavy vehicle)
125. Clutch facings (all)
126. Asbestos reinforcement in brake components
127. Friction material in clutch and component
128. Friction material in clutch and component
129. Friction material in clutch and component
130. Friction material in clutch and component
131. Friction material in clutch and component
132. Friction material in clutch and component
133. Friction material in clutch and component
134. Friction material in clutch and component

Asbestos products

135. Asbestos reinforcement in brake components
136. Asbestos reinforcement in brake components
137. Asbestos reinforcement in brake components
138. Asbestos reinforcement in brake components
139. Asbestos reinforcement in brake components
140. Asbestos reinforcement in brake components
141. Asbestos reinforcement in brake components
142. Asbestos reinforcement in brake components
143. Asbestos reinforcement in brake components
144. Asbestos reinforcement in brake components

Construction products

145. Asbestos reinforcement in brake components
146. Asbestos reinforcement in brake components
147. Asbestos reinforcement in brake components
148. Asbestos reinforcement in brake components
149. Asbestos reinforcement in brake components
150. Asbestos reinforcement in brake components
151. Asbestos reinforcement in brake components
152. Asbestos reinforcement in brake components
153. Asbestos reinforcement in brake components
154. Asbestos reinforcement in brake components

Other products

155. Asbestos reinforcement in brake components
156. Asbestos reinforcement in brake components
157. Asbestos reinforcement in brake components
158. Asbestos reinforcement in brake components
159. Asbestos reinforcement in brake components
160. Asbestos reinforcement in brake components
161. Asbestos reinforcement in brake components
162. Asbestos reinforcement in brake components
163. Asbestos reinforcement in brake components
164. Asbestos reinforcement in brake components

E. IMPORTATION OF ASBESTOS MIXTURES

Enter the following information for each type of asbestos mixture that you imported in 1981. Classify your imports according to the list in column (1).

Code number	Asbestos mixture (Enter one mixture per line)	Asbestos mixture name		Quantity (Short tons)	Value	Total annual imports		Comments (Max. 25)
		Type of asbestos	Quantity			Unit of measure	Value of imports (Thousands of dollars)	
		Chrysotile	1979					
		Amosite	1980					
		Anthophyllite	1981					
		Chrysotile	1979					
		Amosite	1980					
		Anthophyllite	1981					
		Chrysotile	1979					
		Amosite	1980					
		Anthophyllite	1981					

EPA Form 7710-56 (12-7-81)

U.S. ENVIRONMENTAL PROTECTION AGENCY		COMPANY NAME AND ADDRESS (Please print or type in block letters)								
REPORT OF COMMERCIAL AND INDUSTRIAL USES OF ASBESTOS Continued										
F. IMPORTATION OF ARTICLE(S) CONTAINING ASBESTOS COMPONENTS										
Enter the following information for each article that you imported in 1981. Classify your imports according to the lists in section C or D.										
Article name (If more than one article, list separately) (1)	Total annual imports (2)				Asbestos component(s) (Use one line per component) (3)	Comments (4)				
	Year	Quantity	Unit of measure	Value (U.S. dollars)						
	1979									
	1980									
	1981									
	1979									
	1980									
	1981									
	1979									
	1980									
	1981									
G. EMPLOYEES										
Record the number of employees at the reporting site in each of the categories below. Count each employee in one category only.										
						Number of employees	Comments (4)			
(1) TOTAL number of employees at plant site (Sum of 2, 3, 4, and 5)										
(2) Number of production employees										
(3) Number of employees in shipping, receiving, and moving										
(4) Number of maintenance employees										
(5) Number of other employees										
H. SUMMARY OF CURRENT WORKER EXPOSURES										
This section requires you to report, by category of production workers, the arithmetic mean of the 8-hour time weighted average (TWA) and ceiling concentration exposure levels for all employees at the reporting site. Report for all employees for whom you have determined a TWA and according to each production line making the reported products. The instructions include a worksheet for making necessary calculations (see Appendix B).										
End product (Enter name) (1)	Responsible activity (2)	Production work category (3)	Number of employees (4)	8 hr. time weighted average				Number of employees exposed (8)	System used (9)	Notes (10)
				Arithmetic mean of detectable measurements (5)	Standard deviation (6)	Total number of measurements (7)	Number of detectable measurements (8)			
Not applicable	Miners and millers	Mine operations (includes all employees working in mine, including transporters) Mill operations (includes all employees working in production areas of mill)								
	Primary processors	Fiber introduction operations (includes blending, mixing, bag opening, buffing, whitening, etc.)								
	Primary processors and secondary processors	Wet mechanical operations (includes machining, sawing, drilling, cutting, grinding, pulverizing, weaving, etc.) Dry mechanical operations (includes machining, sawing, drilling, cutting, grinding, pulverizing, weaving, etc.) Other production employees								
	Primary processors	Fiber introduction operations (includes blending, mixing, bag opening, buffing, whitening, etc.)								
	Primary processors and secondary processors	Wet mechanical operations (includes machining, sawing, drilling, cutting, grinding, pulverizing, weaving, etc.) Dry mechanical operations (includes machining, sawing, drilling, cutting, grinding, pulverizing, weaving, etc.) Other production employees								
	Primary processors	Fiber introduction operations (includes blending, mixing, bag opening, buffing, whitening, etc.)								
	Primary processors and secondary processors	Wet mechanical operations (includes machining, sawing, drilling, cutting, grinding, pulverizing, weaving, etc.) Dry mechanical operations (includes machining, sawing, drilling, cutting, grinding, pulverizing, weaving, etc.) Other production employees								
(10) Sampling and analysis methods ☐ Mark this box if you use the NIOSH method to sample airborne concentrations of asbestos fibers in the workplace and analyze measurements (NIOSH NIOSH Pub. No. 79-127). If you utilize other sampling and analysis methods, enter the appropriate codes for those methods listed in the instruction booklet under part I.										
(11) Enter the lowest detectable level of the measurements that your company expects to attain by the sampling and analysis methods. (Measurements below this level should be considered as "nondetectable" for the purpose of this rule.)										
I. MEASURING ASBESTOS EMISSIONS OR FIBER RELEASE										
NIOSH Permit number: _____ Date: _____ ☐ Yes, enclosed is a separate report for this section concerning measuring asbestos emissions. ☐ No separate report										

J. WASTE AND DISPOSAL

Enter the following information for each end product you report in section B(1), C, and D. If you cannot provide information on product, provide information on the form of waste (see item 2).

Code number	End product (1)	Form of waste (slurry, sludge, or solid; high-purity free, or specialty other)	Total annual quantity of asbestos waste (Short tons) (2)	Average percent asbestos (4)	Disposal site (5)				Permitted hazardous waste facility? (6)	Amount of disposal (8)	Chemical analysis (9)
					Type of land disposal facility (See instructions) (a)	Location (b)	Ownership (c)	Permitted hazardous waste facility? (d)			
	☐ End product report ☐ Form of waste report			%	☐ Surface impoundment ☐ Waste pile ☐ Land treatment ☐ Land fill ☐ Sewage facility ☐ Injection well	☐ On site ☐ Off site	☐ Company ☐ Private ☐ Municipal	☐ Yes ☐ No			
	☐ End product report ☐ Form of waste report			%	☐ Surface impoundment ☐ Waste pile ☐ Land treatment ☐ Land fill ☐ Sewage facility ☐ Injection well	☐ On site ☐ Off site	☐ Company ☐ Private ☐ Municipal	☐ Yes ☐ No			
	☐ End product report ☐ Form of waste report			%	☐ Surface impoundment ☐ Waste pile ☐ Land treatment ☐ Land fill ☐ Sewage facility ☐ Injection well	☐ On site ☐ Off site	☐ Company ☐ Private ☐ Municipal	☐ Yes ☐ No			

(7) You may describe in a separate enclosure any other waste that you rate 10% or more than waste does but release airborne fibers.
☐ Yes, enclosed is a separate description of waste disposal practices. ☐ No separate report

K. POLLUTION CONTROL EQUIPMENT

On separate lines enter information about each piece of air pollution control equipment used to control asbestos emissions at your plant site.

Item number (1)	Type of equipment (See code) (2)	Gas stream volume and temperature (3)	Equipment size (Baghouse and 5 ft min) (4)	Estimated collection efficiency (Percent) (5)	Normal operating schedule (Days/year) (6)	Quantity collected annually (Pounds) (7)	Source of emissions (8)	Stack or chimney? (9)	Special problems (10)
	Temperature	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual
	Volume	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual
	Temperature	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual
	Volume	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual
	Temperature	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual
	Volume	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual
	Temperature	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual
	Volume	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual
	Temperature	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual
	Volume	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual	Design Actual

(11) Estimate the percent of plant exhaust air that is treated by the equipment listed above.

Continuation of item answers

EPA Form 7710-38 (Rev. 11-77)

BILLING CODE 5550-50-C

Asbestos Reporting Schedule—Reporting Commercial and Industrial Uses of Asbestos, EPA Form 7710-36

I. Introduction and Reporting Schedule

A. Introduction

These instructions are for companies that manufacture and/or mill commercial asbestos, or process or import an asbestos product, and are required to submit EPA Form 7710-36 under 40 CFR Part 263, Subpart D. Data must be reported to the extent that they are known or reasonably ascertainable by the submitter based on factual information that either is available in company files, or can be obtained without unreasonable burden or cost. Importers must report information in their possession, but need not contact foreign manufacturers for missing information.

1. **Fill in all blocks.** Fill in all blocks in the portions of the form that must be completed. Write "N/A" (not applicable) in large, bold letters on the first line of any section that does not have to be completed.

If data for a portion of the form that must be completed are not available, consult part II of these instructions, "Missing Information."

EPA will check all forms for completeness. Incomplete forms may be returned for completion. If only a few items are incomplete, EPA may call the designated Technical Contact to determine the correct answer rather than return the form.

2. **Relevant Definitions.** Reporting requirements are determined by the company's asbestos activity in 1981 (i.e., miller and/or miller, importer of bulk asbestos, primary processor of asbestos, secondary processor of asbestos, importer of asbestos mixtures, or importer of articles containing asbestos component(s). Definitions for reporting activities and other terms used in this form may be found in Appendix A.

3. **Appropriate Number of Forms.** A separate form must be submitted for each site. For example, a miner and/or miller at one site who is a primary processor at a different site must submit a form for each site.

All asbestos activities conducted at each site must be reported. A primary processor who also imports asbestos at a single site must report both the primary processing and importing activities on the same form.

4. **Additional Space.** If additional space is needed to report all required information, responses can be entered on a reproduction of the pertinent portion of the form and the continuation should be noted on that part of the form.

B. Portions of the Form To Complete and Reporting Schedule

1. **Miners and/or Millers, Miners and/or millers** must complete parts A, B(1), C, H, I, J, and K of the form. Complete B(3) if applicable. Report for each plant site on a separate EPA Form 7710-36 and submit within 90 days of the effective date of the rule.

2. **Primary Processors of Asbestos.** Primary processors must complete parts A, C, G, H, I, J, and K of the form. Complete B(3) if applicable. If a facility processes an asbestos

mixture, it must be at a different plant site. Part D must also be completed. Report for each plant site on a separate EPA Form 7710-36 within 90 days of the effective date of the rule.

3. **Secondary Processors of Asbestos.** Persons who are solely secondary processors must submit EPA Form 7710-37, "Reporting Secondary Processing and Importation of Asbestos Mixtures" within 60 days of the effective date of the rule. If the company is selected and notified by certified letter to complete EPA Form 7710-36, complete parts A, D, C, H, I, J, and K of the form for submission within 90 days of receiving notification.

4. **Importers of Bulk Asbestos.** Importers of Bulk Asbestos must complete at least parts A and B(2) of the form. Complete B(3) if applicable. Report all activities that involve asbestos on EPA Form 7710-36 within 90 days of the effective date of the rule.

5. **Importers of Asbestos Mixtures.** Importers of Asbestos Mixtures must submit EPA Form 7710-37 "Reporting Secondary Processing and Importation of Asbestos Mixtures" within 60 days of the effective date of the rule. If the company is selected and notified by certified letter to complete EPA Form 7710-36, complete parts A and B of the form and submit within 90 days of receiving notification.

6. **Importers of Article(s) Containing Asbestos Component(s).** Importers of Article(s) Containing Asbestos Component(s) must submit EPA Form 7710-37 "Reporting Secondary Processing and Importation of Asbestos Mixtures" within 90 days of the effective date of the rule. If the company is selected and notified by certified letter to complete EPA Form 7710-36, complete parts A and F of the form and submit within 90 days of receiving notification.

II. Missing Information

It is important to fill in all blocks in the portions of the form that must be completed. If the required information either cannot or need not be provided, enter one of the notations described below. Write "N/A" (not applicable) in large bold letters on the first line of any section that is not required. Only use "0" to report a quantity of zero.

Enter the following notations if the requested data are unknown, previously submitted to EPA or CPSC, or submitted as a corporate report.

UNK—The requested data are unknown and not reasonably ascertainable; or, not in the possession of the importer. This may be the case for information from a specific year or about a specific type of data that is required.

CPSC—The requested data have been previously reported to the Consumer Product Safety Commission (CPSC) in response to the December 22, 1980 Federal Register notice "Consumer Product Containing Asbestos: General Order for Submission of Information," (43 FR 64384). Use this notation only for the specific items of information that were submitted to CPSC. Do not use this notation in lieu of reporting of CPSC was instructed not to share the submitted information with EPA at the time of response to the CPSC General Order.

CORP—The requested data have been submitted for sections B(2) and B(3) (importation and exportation) in a corporate consolidated report. Inform the plant site manager that a corporate consolidated report has been submitted and instruct those plant managers to enter "CORP" in sections B(2) and B(3).

EPA—The requested data have already been submitted to EPA in the format of the reporting form as proposed or promulgated.

III. Specific Instructions for Form 7710-36

A(1). Respondent Identification

1. Enter company name, and name and complete address of plant site.

2. Enter name, job title, and telephone number of the principal technical person to be contacted by the EPA for answers to any questions about the submitted form.

3. Miners must record the mine identification number assigned by the Mining Safety and Health Administration.

4. Enter name and address of the parent corporation responsible for fiscal management of the reporting site.

5. Enter the total number of years asbestos has been manufactured or processed at this plant site, through the date of this report.

A(2). Respondent Activity

Review the definitions in Appendix A of these instructions to ascertain required reporting activity(ies). Check the appropriate activity(ies) that is performed at this site. Complete the portions of the form listed next to the activities checked.

For example, a primary processor who makes an asbestos mixture and then processes the asbestos mixture at the same site to make a different end product should report the production of the final end product in part C. Only complete part D of the form if the facility processes an asbestos mixture that is made elsewhere.

A(3). Confidential Business Information

Any reported information may be claimed as confidential business information. When submitting the form, mark (X) in the space provided on each line of the form that contains confidential information. Additionally, an authorized company official must sign the "Certification for Claims of Confidentiality" to certify that the four statements on the form apply to all information claimed as confidential.

B(1). Production of Bulk Asbestos

Enter, in short tons, the amount of bulk asbestos produced (mined or milled), in 1979, 1980, and 1981.

B(2). Importation of Bulk Asbestos

Enter, in short tons, the amount of bulk asbestos imported in 1979, 1980, and 1981. Report all imports entering the U.S. Customs territory that are declared under Tariff Schedule of the United States, Annotated (TSUSA) Number 518.1110-518.1160. Mark in the appropriate box the source of this information.

B(3) Exportation of Bulk Asbestos

Enter, in short tons, the amount of bulk asbestos exported in 1979, 1980, and 1981. Mark in the appropriate box the source of this information.

C. Primary Processor Production

Individually list the product subcategories made and shipped from the plant site in 1979, 1980, and 1981 that incorporate bulk asbestos as a starting material. Read instructions for items 1, 2, and 3 before completing this section to ensure sufficient space for entries.

(1) *End Product Shipped.* Locate on the list of "Asbestos Mixture Product Subcategories" the most specific name that describes the end product(s) shipped from the plant site. Enter the corresponding code number for each product subcategory being reported. If the listed product subcategory name is not adequately descriptive, write in a generic name next to the code number. If the product is not listed, write in the appropriate code for "other" and a generic name for the product. Do not enter a trade name as a generic name. Do not report anything more specific than a product subcategory.

(2) *Type of Asbestos Fiber Consumed.* Mark (X) the fiber type(s) that is, or has been, used in production of reported product subcategory. Use one block for each fiber type incorporated into each product subcategory. If more than one type of fiber(s) is used for a product, mark (X) the additional fiber in the next block and mark (X) the continuation box in column 1. Do not list the same product subcategory twice.

(3) *Quantity of Asbestos Consumed.* For each type of asbestos, enter, in short tons, quantity consumed in 1979, 1980, and 1981.

(4) *Total Annual Production.* Record the total annual production quantity of each reported product subcategory in 1979, 1980, and 1981. Production quantities will be expressed in the units of measure indicated on the form next to the listed end product, as used by the Bureau of Census. If census units are not applicable, report production in short tons.

(5) *Value Shipped.* Record the total annual value shipped (in thousands of U.S. dollars) for each reported product subcategory in 1979, 1980, and 1981. These figures must be separated to show domestic sales and export sales (i.e., sales distributed outside the U.S. Customs Territory). If the breakdown is unknown, report total sales as "Domestic" sales, and write "UNK" under "Exports."

The valuation of products shipped should be based on the net selling value, f.o.b. plant, after discounts and allowances, and exclusive of freight charges and excise taxes.

When reporting products transferred to other establishments within the same company, the shipping plant should assign the full economic value to the transferred products. Include all direct costs of production and a reasonable proportion of all other costs and profits.

(6) *Percentage of Total Value Shipped.* Estimate the percentage of end products shipped that reflect primary processing of asbestos in 1981.

D. Secondary Processor Production

Individually list the product subcategories made and shipped from the plant site in 1979,

1980, and 1981 that incorporated an asbestos mixture as a starting material. Read the instructions for items 1, 2, and 3 before completing this section to ensure sufficient space for entries.

(1) *End Product Shipped.* Locate on the list of "Typical Terms for Products Made from Asbestos Mixtures" the most specific subcategory name that describes the product. Enter the corresponding code number for each product subcategory being reported. If the product name listed is not adequately descriptive, write in a generic name next to the code number. If the product is not listed, enter the appropriate code for "other" and write in a generic name for the product. Do not enter a trade name as a generic name. Do not report anything more specific than a product subcategory.

(2) *Total Annual Production (Quantity by Census Unit of Measure).* Record the total production of the reported product subcategory at this plant site in 1979, 1980, and 1981. Production quantities should be reported in the unit of measure used by the U.S. Department of Commerce, Bureau of the Census, for the 1977 Census of Manufacturers.

(3) *Asbestos Mixture Consumed and Form.* Locate and enter from the list of "Asbestos Mixture Product Subcategories" the code number of the asbestos mixture processed to produce the product subcategory. If the material processed is not listed, then enter the appropriate code for "other" and write the generic name of the asbestos material you process. Indicate the form in which the asbestos starting material is purchased (e.g., roll of paper, 3'x5' sheets, reams of 8"x11" sheets).

Use one block for each asbestos mixture incorporated into the product subcategory. If there is more than one asbestos mixture per product subcategory, list the mixture(s) in the next block(s) and mark (X) the continuation box in column 1. Do not list the same product subcategory twice.

(4) *Function of the Asbestos in Product.* Briefly describe the function of the asbestos in the product. Examples of possible asbestos functions are: rot resistance, heat insulation, fire shield, electrical insulation, dimensional stability, filler, or tensile strength.

(5) *Annual Consumption of Asbestos Mixtures.* Record the total annual quantity and specify Census Bureau unit of measure and the total annual cost (in thousands of U.S. dollars) of the asbestos mixtures consumed in 1979, 1980, and 1981.

The value of the materials consumed should be based on the delivered cost, i.e., the amount paid or payable after discounts and including freight and other direct charges incurred in acquiring the materials. Charges include purchases, transfers from other establishments of the company, and withdrawals from inventories.

Materials transferred to the plant site from other plants within the company should be assigned their full economic value, as assigned by the shipping plant, plus cost of freight and handling charges.

(6) *Percentage of Total Value Shipped.* Estimate the percentage of end products shipped that reflect secondary processing of asbestos in 1981.

E. Importation of Asbestos Mixtures

Individually list the asbestos mixtures imported to the plant site in 1979, 1980, and 1981. Read the instructions for items 1, 2, and 3 before completing this section to ensure sufficient space for entries.

(1) *Asbestos Mixture.* Locate on the list of "Asbestos Mixture Product Subcategories" the most specific name that describes the mixture imported. Enter the corresponding code number of each product subcategory being reported. If the name of the product subcategory is not adequately descriptive, write in a generic name next to the code number. If the imported product subcategory is not listed, enter the appropriate code for "other" and write in a generic name for the product. List each product subcategory on a separate line. Do not enter a trade name as a generic name. Do not report anything more specific than a product subcategory.

(2) *Asbestos Fiber Content.* Mark (X) the type of asbestos fiber in the imported asbestos mixture and enter the total quantity of asbestos per unit of the mixture (the unit used to report quantity imported). The quantity of asbestos should be reported in pounds. If these data are not available, mark (X) "UNK."

Use one block for each type of fiber that is in the imported mixture. If the mixture contains more than one type of asbestos fiber, list the additional fiber(s) in the next block(s) and note the continuation in column 1. Do not list the same mixture twice.

(3) *Total Annual Imports.* Record the total annual quantity of each listed product subcategory imported in 1979, 1980, and 1981.

Quantities will be expressed in the units of measure used by the U.S. Bureau of the Census or according to the unit used to report importation to the U.S. Customs Service.

Record the total annual value imported (U.S. dollars) for each product in 1979, 1980, and 1981. This figure can be drawn from the U.S. Customs Service entry forms as the "Entered Value in U.S. Dollars" or "Value."

F. Importation of Article(s) Containing Asbestos Component(s)

Individually list the articles containing an asbestos component that were imported in 1979, 1980, and 1981. Only report information relating to imported product subcategories listed under "Typical Terms for Products Made from Asbestos Mixtures." If the component was reported on EPA Form 7710-37 during Phase 1, use the same code(s) and generic name(s) as reported on that form. Read the instructions for items 1, 2, and 3 before completing this section to ensure sufficient space for entries.

(1) *Article Name.* Locate on the list of "Typical Terms for Products Made from Asbestos Mixtures" the most specific name that describes your product. If the listed product name does not adequately describe your product, write in a generic name next to the code number. List each product on a separate line. If the imported product is not listed, enter the appropriate code number for "other" and write in a generic name. Do not enter a trade name as a generic name.

(2) *Total Annual Imports.* Record the total number of units that were imported in 1979,

1980, and 1981. Quantities will be reported in the unit of measure that was used to declare the merchandise upon entry into the U.S. or by the U.S. Bureau of Census for the 1977 Census of Manufacturers. Enter the value of the imported merchandise in U.S. dollars.

(3) *Asbestos Components*. List all asbestos components contained in the imported article by name, or by describing the mixture making up the component. Use one block for each asbestos component. If the imported article contains more than one asbestos component, list the component in the next block and note the continuation in column 1. Do not list the same article twice.

C. Employees

Classify all employees as of January 1981 into the following categories. In items 2-5, COUNT EACH EMPLOYEE IN ONLY ONE CATEGORY. In this section, report numbers of individuals without regard to the number of hours worked.

(1) *Total Number of Employees*. Enter the total number of employees (the sum of items 2, 3, 4, and 5) who worked at the reporting plant site as of January 1981. If you employed seasonal workers in 1981, add the number of these workers to the total.

(2) *Number of Production Employees*. Enter the number of production employees who work in areas where ASBESTOS IS MANUFACTURED OR PROCESSED. Do not include plant site production employees who work in separate areas where no asbestos fiber or asbestos product is processed. This number must equal the total number of employees reported in Section II, for all product lines.

(3) *Number of Shipping, Receiving, and Moving Employees*. Enter the number of employees involved with shipping, receiving, or moving asbestos fiber or asbestos-containing products.

(4) *Number of Maintenance Employees*. Enter the number of maintenance employees who perform maintenance tasks in work areas where asbestos fiber, asbestos products, or asbestos waste are processed, stored, or moved.

(5) *Number of Other Employees*. Enter the number of other employees at the location that are not counted in items 2-4.

II. Summary of Current Worker Exposures

Report, by category of production workers, the arithmetic mean of the 8-hour time weighted average (TWA) exposure level for all employees at the reporting site for whom a TWA has been determined. Appendix B describes how to perform the calculations and includes a worksheet.

Summarize Only Existing Monitoring Data: Additional Monitoring Is Not Required

Submit a single TWA value (arithmetic mean) to summarize existing monitoring data that will describe current exposure levels that employees in general production categories may experience while working on each production line. Summarize and report monitoring data separately for workers on the production line for each end product subcategory that has been reported as either "Primary Processor Production" (part C) or "Secondary Processor Production" (part D). Miners and millers, must provide a single,

single TWA value for the mine and for the mill.

For each End Product Subcategory enter the number of workers who perform the production operations listed below. Only count employees who were counted as production workers in item 2 of part C of the form. Each employee is to be counted only one time, in the operation and product line that is the employee's primary assignment.

After grouping the 8-hour TWAs, follow the detailed instructions in Appendix B to find the mean, standard deviation, number of measurements, and ceiling ranges for each group.

Note.—The sum of all production employees listed in column 4 must equal the number of production employees entered in item 2 of part C.

(1) *End Product*. Primary or secondary processors must enter the same code number(s) and generic name(s) they listed in part C or D of the form. Miners and/or millers do not complete this block.

(2) *Responsible Activity*. Determine applicable category of activity.

(3) *Production Work Category*. Divide production employees into the Production Work Categories for each end product subcategory. Count mine workers under *Mine Operations* and mill workers under *Mill Operations*.

Fiber Introduction Operations are operations where bulk (raw) asbestos is mixed with or added to a combination of other materials. Primary processors will list employees who handle bulk or raw asbestos fiber. Secondary processors do not use bulk asbestos as a starting material.

Wet Mechanical Operations are operations where asbestos fiber, asbestos mixtures, or asbestos-containing materials are fabricated, modified, or altered, and the asbestos component is wetted to reduce the release of airborne asbestos fiber. This category includes such activities as: machining, sawing, drilling, cutting, grinding, or pulverizing. Count employees whose principal job is to control or work with the tool or machinery performing the operation. Count all asbestos textile workers involved with wet operations here, whether involved in spinning, twisting, or weaving operations.

Dry Mechanical Operations are operations where asbestos fiber, asbestos mixtures, or asbestos-containing materials are fabricated, modified, or altered without any intentional wetting of the material during the operation. This category includes activities such as: machining, sawing, drilling, cutting, grinding, or pulverizing. Count employees whose principal job is to control or work with the tool or machinery performing the operation. Count all asbestos textile workers in dry operations here, whether involved in spinning, twisting, or weaving operations.

Other Production Employees are production employees involved in operations that require handling of asbestos fiber or materials in a manner not covered in the operations described in the other categories. This category will include workers who perform an operation that involves handling an asbestos mixture, such as bonding asbestos-felt-backing for vinyl sheet flooring or injecting asbestos-reinforced plastic into a

rod. Other product or work categories are to be counted in this category in a code that are not listed in the operations with the probability of a product or line, assembly parts, over and done with, or other operations, or on per weight, or package asbestos mixtures or asbestos containing products.

(4) *Number of Employees*. Enter next to the appropriate job classification the number of employees working in jobs meeting the general description as provided. Count employees only one time and only under the job description that best describes their primary duties.

(5) *Arithmetic Mean of Detectable Measurements*. Locate monitoring data for any employees counted in column 4 and group these monitoring data according to the employee's general job classification. Determine the arithmetic mean of those detectable TWA values for each work category. Calculate the mean only in the nearest one-hundredth (e.g., 0.05). The arithmetic mean is the sum of the time-weighted averages divided by the number of time weighted averages. (See Appendix B for instructions and worksheet for determining the arithmetic mean.) If there are no measurements for workers in a particular work category, write in "No measurements."

(6) *Standard Deviation*. Enter the standard deviation for each arithmetic mean you calculate in column 5. (See Appendix B for instructions and a worksheet for determining the standard deviation.)

(7) *Number of Measurements Used*. For each work category, enter the total number of actual observations (filters) used to determine all of the employee's TWAs in the category. This includes the number of all non-detectable measurements.

(8) *Number of Non-detectable Measurements*. For each work category, enter the number of measurements that are below detectable levels. (Non-detectable levels may not be greater than 0.1 f/cc.)

(9) *Ceiling Concentration Level*. For each work category, enter the range of ceiling concentration levels that were determined. Provide the low and high measurements.

(10) *Sampling and Analysis Methods*. If the company used the NIOSH methodology to sample airborne concentrations of asbestos fibers in the workplace and to analyze measurements (NIOSH (NIOSH) Pub. No. 79-127), check the corresponding box on the form.

If the company used other sampling and analysis methods, enter the appropriate codes for those methods listed in the next section of these instructions.

The reporting company has the option to describe in an attachment any additional information that will better describe work practices or other measures instituted to reduce the levels of airborne fibers or to protect workers from exposure to asbestos. Attach any additional materials to this form at the time of submission.

(11) *Enter the lowest detectable level of the measurements the company expects to attain by the sampling and analysis methods.* (Measurements below this level are considered "non-detectable" for the purposes of this rule.)

I. Measuring Asbestos Emissions or Fiber Release

If the plant site has applied for a water effluent discharge permit (NPDES Permit), provide the application date and the permit number that was assigned.

Summarize and report separately the results of any measurements or monitoring performed to determine the amount of asbestos fiber released during the production, use, or disposal of asbestos fiber or asbestos products (other than already reported in part II of this form). If attaching any such information for this section, check the "yes" box on the form. If not, mark "X" for no separate report. Where possible, the measurements should characterize the type of fibers found and the fiber size distribution, and should be reported according to the following ranges.

Reports submitted in response to this section should describe the methodologies used to perform any tests, to gather samples, and to analyze samples. If this information has been previously submitted to a Federal agency, do not report again here, but indicate the date and to whom the information was sent, and briefly describe the nature of the information. Where possible, summarize the sampling and analytical methodologies according to the terms and abbreviations listed below.

Fiber size distributions	Analysis methodologies
> 1.0	Critical Microscopy.
1.0-2.0	PC Phase Contrast Microscopy.
2.0-3.0	PM Polarizing Microscopy.
3.0-4.0	OS Osborn Staining.
4.0-5.0	OM Other optical microscopy techniques (specify).
5.0-10.0	Electron Microscopy.
10.0-25.0	TEM Transmission Electron Microscopy.
25.0-30.0	SEM Scanning Electron Microscopy.
30.0	
Sampling Methodologies	
ED Electron Diffraction.	
XRS X Ray Spectrometry.	
EM Unknown electron microscopy results.	
K Kompact	
TP Thermal Precipitator	
I Impinger	C Any other analysis methodology (Provide specifications).
MI Midget Impinger	
MF Membrane Filter	
EPA Provisional Methodology	
EPA—"Electron Microscope Measurement of Airborne Asbestos Concentration—A Provisional Methodology," EPA-600/2-77-178 (Revised June 1978).	

J. Waste and Disposal

Entries in this section will account for the waste that is not recycled and results from the production of each type of end product subcategory reported. The percentage of the total waste from the plant site that results from the production of each end product subcategory may be estimated. Report separately the data for each end product subcategory. If unable to determine quantities by product subcategory, report total quantities disposed of for each form of waste.

(1) *Product Line*. Enter the product subcategory code (and generic name if used) for each end product subcategory reported in parts B(1), C, or D. Miners and/or millers need only list the type of bulk asbestos fiber reported in section B(1). If unable to determine wastes by end product subcategory, report according to the form of the waste (see below); enter the name(s) and code(s) from parts C and D. Mark (X) in the appropriate box to indicate that the data is either an "End Product Report" or a "Form of Waste Report."

(2) *Form of Waste*. Record the form of the waste either after completion of the processing or as it leaves the plant site. Report asbestos collected in control devices, such as baghouse fines, on a separate line.

(3) *Total Annual Quantity of Asbestos Waste (Short Tons)*. Enter the total quantity, in short tons, of asbestos waste generated by each reported end product production line in 1981. Asbestos waste is a waste product that contains asbestos as some of the total waste. Do not report quantities of waste recycled or reprocessed.

(4) *Average Percent Asbestos*. Record in short tons the average percentage of asbestos (by weight) in the total quantity of asbestos waste. This figure may be an estimate based on previous experience or an extrapolation of production mass balance figures.

(5) *Disposal Site(s)*. (a) *Type of Land Disposal Facility*. Mark (X) one of the following types of land disposal facilities or the asbestos waste of each end product subcategory or form of waste. See the February 5, 1981, Federal Register (46 FR 11126) for comprehensive definitions of the types of facilities.

- *Surface Impoundments*—facilities at which liquid wastes or other liquids are impounded or held. Surface impoundments are generally earthen structures designed to hold an accumulation of liquids or wastes containing free liquid.
- *Waste Piles*—facilities at which wastes, usually in a solid state, are placed on the land for storage or treatment.
- *Land Treatment*—facilities at which wastes (usually in a solid, semi-solid, semi-liquid, or liquid state) are spread on the ground for the purpose of treatment.
- *Landfills*—facilities at which wastes, usually in solid or semi-solid state, are placed into or on the land for permanent disposal.
- *Seepage Facilities*—facilities at which wastes (usually in a liquid, semi-liquid, or semi-solid state) are placed into or on the land for storage, treatment, or disposal. A seepage facility is designed with the objective of discharging liquids into the land. There are four types of seepage facilities:

- seepage lagoons
- drying beds
- seepage pits
- seepage beds

- *Injection Wells*—facilities at which wastes in a fluid (usually liquid) state are injected into the land under a pressure head greater than the pressure head of the ground water into or above which they are injected for disposal.

(3) *Location of Disposal Facility*—For each end product subcategory (or form of waste), mark (X) whether wastes are disposed of at this plant site (on-site) or at another site (off-site).

(4) *Ownership of Disposal Facility*—For each end product subcategory (or form of waste), mark (X) whether this disposal facility is owned by reporting company (company), another private company (private), or a municipality (municipality).

(5) *Permitted Hazardous Waste Facility*—For each product subcategory (or form of waste), mark (X) whether the disposal facility is permitted under any applicable State or Federal hazardous waste regulation.

(6) *Method of Disposal*—Briefly describe the specific methods used to dispose of asbestos waste. For example, if you wet the waste and place it in a bag or drum prior to disposal that should be noted here.

(7) *Additional Information*. Submit any additional information to describe any steps taken during waste disposal to reduce the release of airborne asbestos fibers. If enclosing a separate description, check "Yes" on the form; if not, check "No" in the space provided.

k. Pollution Control Equipment

In this section, provide information on all air pollution equipment located at the plant site to control or remove airborne asbestos fiber. List each piece of equipment on a separate line on the form, even though identical units may be used at the plant site (Use the codes listed in this section for each piece of equipment being reported. For additional space, fill in and attach additional copies of the form. If the company has submitted portions of the required data to EPA previously and the data are still current, enter "EPA" in place of those data, and reference the address where the data were sent and the date they were sent.

(1) *Item Number*. Number each piece of equipment consecutively (one through the total number of pieces of equipment).

(2) *Type of Equipment*. For each item number, enter the appropriate abbreviation from the following list.

- Baghouse (BH)
 - Reverse Air (RA)
 - Pulse Jet (PJ)
 - Shake (S)
 - Other (O)

For example, if the baghouse used is equipped for both reverse air and shake cleaning, enter (BH) (RA) (S).

- Scrubber (S)
 - Venturi (V)
 - Impingement (I)
 - Spray (SC)
 - Other (O)

If the scrubber used is the venturi type also enter the pressure drop in inches of water in parentheses. For example, if the range of pressure drop is 40–60 inches, enter (S) (V) (40–60).

- Electrostatic Precipitator (ESP)
- Cyclone (C)
- Multiple Cyclone (MC)
- Other (O)

(3) *Gas Stream Volume and Temperature*. For each piece of equipment, enter the gas volume (in cubic feet per minute) and the operating temperature (in °F). Use actual data for these entries, although estimates or design figures may be used if actual data are unavailable. Ranges (e.g., 8,000–10,000 ACFM at 150–180 °F) are also acceptable.

(4) *Equipment Size*. If electrostatic precipitators and/or baghouses are used, enter the total square feet of collecting surface area. For all other types of equipment mark (X) "N/A."

(5) *Estimated Collection Efficiency*. Enter the collection efficiency (percent), or an estimate of this value, for each piece of equipment. Mark (X) either design (D) or actual (A) to indicate basis for response.

(6) *Normal Operating Schedule*. Enter the normal number of operating hours either actual or estimated for each piece of equipment during 1981.

(7) *Quantity Collected Annually*. Estimate the quantity of material in pounds that is (or would be, given the design of the equipment) collected annually by each piece of equipment in 1981. Include all asbestos and non-asbestos materials in the total. If possible, estimate the percent (by weight) of asbestos in the collected material. Mark (X) either design (D) or actual (A) to indicate basis for response.

(8) *Source of Emissions*. Enter a brief description of the source of the emissions such as work area exhaust ventilation, curing oven, mixer, various, etc.

(9) *Stack or Chimney*. Indicate whether the air pollution control device discharges to a stack or chimney; check "Yes" or "No."

(10) *Special Problems*. If there is a special problem with particulate collection or with any specific piece of equipment, discuss it in the space provided. Be sure to indicate which piece of equipment is being discussed.

(11) Estimate the percent of plant exhaust air that is treated by the plant site's pollution control equipment.

Appendix A

Definition of Terms

Several terms are used throughout the reporting form and the instruction booklet to describe the different kinds of asbestos products and how to report them.

Asbestos Mixture a mixture which contains bulk asbestos or another asbestos mixture as an intentional component. An asbestos mixture can be utilized as a finished product or incorporated into other products.

Raw Asbestos (or raw asbestos) any quantity of asbestos fiber of any type or grade, or combination of types or grades, that is mined or milled with the express purpose to obtain asbestos. The term does not include asbestos that is produced or processed as a contaminant or an impurity. Asbestos is a group of naturally occurring, inorganic, highly fibrous, silicate minerals, which easily separate into long, thin, flexible fibers when crushed or processed. Included in the definition are the asbestosiform varieties of: chrysotile (serpentine); crocidolite; ferrochrysotile; amosite (cunninghamite-grunerite); anthophyllite; tremolite; and actinolite.

End Product: the product subcategory that is either shipped from the reported site, or imported into the United States.

Generic Name: a term that describes the coded product subcategory better than the subcategory name given on the form. If the product subcategory name on the form is adequate, use it.

Importer: a person or facility importing asbestos, in bulk form or as part of a mixture or article, into the customs territory of the United States. This definition includes:

- The person liable for the payment of any duties on the merchandise, or
- An authorized agent on his behalf (as defined in 19 CFR 1.11). Importer also includes, as appropriate:
 - The consignee;
 - The importer of record;
 - The actual owner if an actual owner's declaration and superseding bond has been filed in accordance with 19 CFR 141.20; or
 - The transferee, if the right to draw merchandise in a bonded warehouse has been transferred in accordance with Subpart C of 19 CFR Part 144. For the purpose of this definition, the customs territory of the United States consists of the 50 states, Puerto Rico, and the District of Columbia. When two or more persons meet the same definition of "importer" for the same shipment, the principal in the transaction, not his agent or agents, should report.

Note.—If reporting company purchased in the United States an asbestos product that originated outside the United States, do not report as an importer.

For reporting purposes, there are several classes of importers:

- An **Importer of Bulk Asbestos** imports bulk asbestos into the customs territory of the United States. Imported bulk asbestos is declared to the United States Customs Service upon entry as Tariff Schedule of the United States, Annotated, (TSUSA) numbers 518.1110-518.1160. Importers need report information only to the extent that the information is in their possession.
- An **Importer of Asbestos Mixtures** imports asbestos mixtures into the customs territory of the United States. Imported mixtures include, but are not limited to, merchandise declared to the United States Customs Service upon entry as Tariff Schedule of the United States, Annotated, numbers (TSUSA Number) 518.2-518.5, or other TSUSA Numbers that may pertain to asbestos mixtures.
- An **Importer of Article(s) Containing Asbestos Component(s)** imports an article that contains one or more asbestos components.

Miner and/or Miller of Asbestos: a person who either mines or mills asbestos. Mined or extracted asbestos-containing ore is further milled to produce bulk asbestos. Milling involves the separation of the fibers from the ore, grading and sorting the fibers, or fiberizing crude asbestos ore.

Primary Processor of Asbestos: a person who processes bulk asbestos to make an asbestos mixture or a product that contains asbestos. A primary processor who make an asbestos mixture and then processes the asbestos mixture at the same site to make a different end product should report production of the final end product. Primary processing includes the mixing or repackaging of raw asbestos fiber.

Product Subcategory: the type of asbestos mixture or the type of end product listed and numbered on the form.

Secondary Processor of Asbestos: a person who processes an asbestos mixture that is then incorporated into that person's end product. Secondary processors use asbestos mixtures that are made at a site other than the site being reported. For instance, asbestos millboard may be purchased by a secondary processor, who could cut that millboard and incorporate it into an appliance.

Appendix B

How To Compute Summaries of Monitoring Data—Instructions and Worksheets

These instructions describe how to compute the arithmetic mean and standard deviation of the TWA values for each category of employees counted in column 4 of part II of the form. It is probably easier to compute the figures by working through one line at a time. For example, a primary processor who has employees working in the fiber introduction area should locate all monitoring data for those employees, and work through question 10 before beginning computations for the next production work category for that end product. A worksheet is attached to these instructions; after completing it, transfer your computations to part II of the form.

1. To compute the "mean" for the TWA values for a production work category, first list all of the TWA values for employees counted in the category. Do not include non-detectable TWA values in the following calculations.

For example, assume the following TWA values (listed in column A) for a production work category:

No.	TWA values	Squares of column (A)
1	1.00	1.00
2	1.50	2.25
3	0.50	0.25
4	1.75	3.06
5	1.25	1.56
	6.00	8.12

After listing the TWA values in column (A) on the worksheet, square each value and enter the square in column (B) on the worksheet. The squares are used later to compute the standard deviation. Sum both columns.

II. Next, determine the number (N) of values. In this example, N = 5.

III. The "mean" is the sum of the TWA values in column A divided by the number of values (N).

In this example:

$$\text{Mean} = \frac{\text{Sum of TWA Values}}{N} = \frac{6.00}{5} = 1.20$$

IV. To calculate the "standard deviation" of these values, first compute the "variance" according to the following formula.

In this example:

$$\begin{aligned} (V) &= \frac{1}{N-1} \times \left[\text{Sum of Column B} - \frac{(\text{Sum of Column A})^2}{N} \right] \\ &= \frac{1}{5-1} \left[\frac{8.12 - (6.0 \times 6.0)}{5} \right] \\ &= \frac{1}{4} [8.12 - 7.2] \\ &= \frac{.92}{4} \\ V &= .23 \end{aligned}$$

V. Finally, the standard deviation (SD) is the square root of the variance.

In this example:

$$\begin{aligned} \text{SD} &= \sqrt{V} \\ &= \sqrt{.23} \\ \text{SD} &= 0.48 \end{aligned}$$

The arithmetic mean is entered in column 5 on the form, and the standard deviation is entered in column 6 on the form.

BILLING CODE 4540-50-M

Worksheet

I.	No.	(A)	(B)
		TWA Values	Squares of Column (A)
	1.		
	2.		
	3.		
	4.		
	5.		
	Total	_____	_____

II. Number of TWA values (N) = _____

III. Mean = $\frac{\text{Sum of Column A}}{N}$

IV. Variance (V) = $\frac{1}{N - 1} \left[\text{Sum of Column B} - \frac{(\text{Sum of Column A})^2}{N} \right]$

$$= \frac{1}{\boxed{}} \left[\boxed{} - \frac{\boxed{}^2}{N} \right]$$

$$= \underline{\hspace{2cm}}$$

V. Standard Deviation (SD) = $\sqrt{V}$ = $\sqrt{\hspace{2cm}}$

$$= \underline{\hspace{2cm}}$$

§ 763.77 Reporting secondary processing and importation of asbestos mixtures.

The following EPA Form 7710-37, *Reporting Secondary Processing and Importation of Asbestos Mixtures*, will be completed and submitted to EPA as required in §§ 763.65 and 763.71. Information must be reported on this form to the extent that it is in the possession of the respondent. Importers must report imported products only if the imported product is listed on this form.

(a) EPA Form 7710-37 (8-80)

BILLING CODE 6560-90-M

 US ENVIRONMENTAL PROTECTION AGENCY REPORTING SECONDARY PROCESSING AND IMPORTATION OF ASBESTOS MIXTURES					
PART I - COMPANY INFORMATION					
COMPANY NAME ADDRESS (Street, City, State & ZIP Code)				FOR EPA USE ONLY TECHNICAL CONTACT TELEPHONE NO. IMPORTER ☐ PRINCIPAL ☐ AGENT	
PART II - SECONDARY PROCESSOR END PRODUCT(S)					
From the list in Section I, enter the asbestos end product produced. Opposite each product, list the asbestos mixture that you process, and the quantity of each mixture that you consumed in 1981.					
END PRODUCT(S)		ASBESTOS MIXTURE(S)		QUANTITY OF ASBESTOS MIXTURE CONSUMED	
CODE	GENERIC NAME	CODE	GENERIC NAME	QUANTITY	UNIT OF MEASURE
PART III - IMPORTERS OF ASBESTOS MIXTURE(S) OR ARTICLE(S) CONTAINING ASBESTOS COMPONENTS					
List the asbestos mixture(s) or article(s) that you import and the quantity of each item that you imported in 1981. Opposite each item, enter a description of the asbestos component in the mixture or article.					
ASBESTOS MIXTURE(S) OR ARTICLE(S)		QUANTITY OF ASBESTOS MIXTURE(S) OR ARTICLE(S) IMPORTED		DESCRIPTION OF ASBESTOS COMPONENT(S) IN ARTICLE	
CODE	GENERIC NAME	QUANTITY	UNIT OF MEASURE		
CERTIFICATION FOR CLAIMS OF CONFIDENTIAL BUSINESS INFORMATION					
An authorized company official may claim any information reported on this form as confidential business information. To do this, the confidential information must be clearly circled with a red marker. In addition, an authorized company official must sign below to certify the truth and accuracy of the following four statements, which apply to all information that is claimed.					
1. My company has taken measures to protect the confidentiality of the information, and it will continue to take these measures. 2. The information is not, and has not been, reasonably obtainable by other persons (other than governmental bodies) by using legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding) without my company's consent. 3. The information is not publicly available elsewhere. 4. Disclosure of the information claimed as confidential would cause substantial harm to my company's competitive position.					
SIGNATURE OF AUTHORIZED OFFICIAL				DATE	

EPA Form 7710-37 (10-81)

REPORTING SECONDARY PROCESSING AND IMPORTATION OF ASBESTOS MIXTURES

INSTRUCTIONS

This form is to be completed by persons who, in 1980, were secondary processors of asbestos or importers of asbestos mixtures or articles that contain asbestos components. See "Reporting Commercial and Industrial Uses of Asbestos", 40 CFR Part 763, Subpart D, for a full description of the reporting requirement and reporting schedule.

If additional space is needed, you should use additional copies of this form.

WHO MUST COMPLETE EPA FORM 7710-37

1. Secondary processors of asbestos must complete Part I and II of the form. Each plant site or manufacturing facility must be reported separately. If you process bulk asbestos fiber to make any of your products at this plant site, then you are a PRIMARY PROCESSOR and you should report this plant site on EPA Form 7710-36.
2. Importers of asbestos mixture(s) or article(s) containing asbestos components must complete Part I and II of the form. If you import bulk asbestos fiber, then you should report all importation activities on EPA Form 7710-36.
3. Those who are both secondary processors and importers must complete Parts I, II and III of the form.

DEFINITIONS

1. Asbestos Mixture—means a mixture which contains bulk asbestos or another mixture. Section 2 below lists typical terms for asbestos mixtures.
2. Asbestos Component—means any asbestos mixture, including any finished product containing an asbestos mixture, which is incorporated into an article. Section 1 below lists typical terms for products made from asbestos mixtures and components. Some examples of asbestos components are: asbestos paper in a hair-dryer; asbestos-reinforced plastic cabinet of a television; asbestos textile that is part of a particular type of garment.
3. Secondary Processor of Asbestos—means a person who processes an asbestos mixture.
4. Importer of Asbestos Mixtures or Articles Containing Asbestos Component(s)—means a person who imports merchandise that contains asbestos into the customs territory of the United States. Where there are two or more "importers" for the same shipment, the Principal rather than the Agent should report it possible.

PART I COMPANY INFORMATION

Enter the name, address, and phone number of your company. Enter the name of the principal technical contact who is either responsible for the completion of this form, or has sufficient knowledge of its contents to respond to questions posed by EPA. If you are reporting as an importer, check the appropriate box to indicate that you are either the Principal importer or the Agent for the Principal

PART II SECONDARY PROCESSOR END PRODUCTS

End Product(s)—Locate in Section 1 the name of the product subcategory that most specifically describes your end product. In this column, enter the code number for the end product you make and write in the generic name for the product. If you are reporting a product that is not listed, enter the code for "other" that is listed under the most specific general category of products and write in the generic name. Report each end product on separate lines. For example, if you make appliances and are reporting toasters, enter "114" and "toaster".

Asbestos Mixture(s)—For each end product, locate in Section 2 the name of the asbestos mixture that most specifically describes the asbestos mixture that you incorporate into the end product. In this column, enter the code number for the asbestos mixture and write in the generic name. If you incorporate more than one asbestos mixture into a single end product, then use as many lines as necessary to report all asbestos mixtures in the end product. For example, if you incorporate asbestos millboard into your toaster, your entries would be as follows:

End Product	Asbestos Mixture
114 toaster	03 millboard

Quantity of Asbestos Mixture Consumed—Opposite each asbestos mixture that is listed, enter the quantity of each mixture that you consumed in 1980. Specify the quantity according to the unit of measure listed in Section 2. If the unit of measure is not listed, report the quantity in short tons. If your records do not permit you to list the quantities consumed for separate end products, then report the total amount of each type of asbestos mixture and enter "T" (for total) next to the figure.

PART III IMPORTERS OF ASBESTOS MIXTURE(S) OR ARTICLE(S) CONTAINING AN ASBESTOS COMPONENT

Asbestos Mixture or Article—For each type of imported product, locate in either Section 1 or Section 2 the name that most specifically describes the product you import. Enter the code number and generic name for the imported product.

Quantity of Asbestos Mixture(s) or Article(s) Imported—For each product listed, record the total annual quantity imported in 1980. Specify the quantity according to the unit of measure listed in Section 2, if possible, or according to the unit of measure as reported to the U.S. Customs Service upon entry of the merchandise into the United States.

Description of Asbestos Components in Article—List all asbestos components in the imported article by entering the name of the asbestos component opposite the name of the article. If the reported product is an asbestos mixture listed in Section 2, then you should not complete this description.

SECTION 1 - TYPICAL TERMS FOR PRODUCTS MADE OF ASBESTOS MIXTURES

AUTOMOTIVE AND FRICTION PRODUCTS

- 101 Drum brake lining (light-medium vehicle)
- 102 Disc brake pads (light-medium vehicle)
- 103 Disc brake pads (heavy vehicle)
- 104 Brake block (heavy equipment)
- 105 Clutch facings (all)
- 106 Automatic transmission friction components
- 107 Friction materials (industrial and commercial)
- 108 Custom automotive body filler
- 109 Transmissions
- 110 Mufflers
- 111 Radiator top insulation
- 112 Radiator sealant
- 113 Other (specify generic name)

APPLIANCES

- 114 Appliance, industrial and consumer (specify generic name)

CONSTRUCTION PRODUCTS

- 115 Boiler and furnace baffles
- 116 Decorated building panels
- 117 A/C sheet
- 118 Flexible air conductor
- 119 Hoods and vents
- 120 Portable construction building
- 121 Roofing, saturated
- 122 Roof shingles
- 123 Wallboard
- 124 Wall roofing panels
- 125 Other (specify generic name)

CLOTHING

- 126 Aprons
- 127 Boots
- 128 Gloves and mittens
- 129 Hats and helmets
- 130 Overalls
- 131 Suits
- 132 Other (specify generic name)

FLOOR COVERINGS

- 133 Vinyl-asbestos floor tile
- 134 Asbestos-felt backed sheet vinyl flooring

ELECTRICAL PRODUCTS AND COMPONENTS

- 135 Cable insulation
- 136 Electronic motor components
- 137 Electrical resistance supports
- 138 Electrical switchboard
- 139 Electrical switch supports
- 140 Electrical wire insulation
- 141 Motor armature
- 142 Other (specify generic name)

FIRE AND HEAT SHIELDING EQUIPMENT AND COMPONENTS

- 143 Arc deflectors
- 144 Fire doors
- 145 Fireproof absorbent paper
- 146 Heat shields
- 147 Motion metal handling equipment
- 148 Oven and stove insulation
- 149 Pipe wrap
- 150 Stove lining, wood and coal
- 151 Stove pipe rings
- 152 Stoves
- 153 Thermal insulation
- 154 Other (specify generic name)

GASKETS

- 155 Sheet gasketing, rubber encapsulated baster edition
- 156 Sheet gasketing, rubber encapsulated compressed
- 157 Compressed sheet gasketing (other)
- 158 Metal reinforced gaskets
- 159 Automotive gaskets
- 160 Other (specify generic name)

MARINE EQUIPMENT AND SUPPLIES

- 161 Canals, marine
- 162 Liners, sand or coral
- 163 Marine bulkheads
- 164 Other (specify generic name)

PAINTS, COATINGS, SEALANTS, AND COMPOUNDS

- 165 Asphaltic compounds
- 166 Automotive/truck body coatings
- 167 Buffing and polishing compounds
- 168 Caulking and patching compounds
- 169 Drilling fluid
- 170 Finishing compounds
- 171 Furnace cements
- 172 Glazing Compounds
- 173 Plaster and stucco
- 174 Pumps, valves, flange, and tank sealing components
- 175 Roof coatings
- 176 Textured paints
- 177 Tile cement
- 178 Other (specify generic name)

TEXTILE AND FELT PRODUCTS (other than clothing)

- 179 Aluminized cloth
- 180 Rope or bracing
- 181 Yarn, lap, or roving
- 182 Wicks
- 183 Bags
- 184 Belting
- 185 Blankets
- 186 Carpet padding
- 187 Commercial/industrial driver felts
- 188 Draperies
- 189 Drap cloths
- 190 Fire hoses
- 191 Ironing board pads and insulation
- 192 Mantles, lamp or catalyst heater
- 193 Packing and packing components
- 194 Pione and organ felts
- 195 Rugs
- 196 Tape
- 197 Theater curtains
- 198 Umbrellas
- 199 Other (specify generic name)

MISCELLANEOUS PRODUCTS

- 200 Aerial distress flares
- 201 Acoustical products
- 202 Ammunition wedding
- 203 Asbestos-reinforced plastic products
- 204 Ash trays
- 205 Baking sheets
- 206 Blackboards
- 207 Candelsticks
- 208 Chemical tanks and vessels
- 209 Filters
- 210 Grommets
- 211 Gun grips
- 212 Jewelry making equipment
- 213 Kins
- 214 Lamp sockets
- 215 Light bulbs (all types)
- 216 Linings for vaults, safes, humidifiers, and filing cabinets
- 217 Phonograph records
- 218 Pottery clay
- 219 Welding rod coatings
- 220 Other (specify generic name)

SECTION 2 - TYPICAL TERMS FOR ASBESTOS MIXTURES

PAPERS, FELTS, OR RELATED PRODUCTS

- 01 commercial paper
- 02 rollboard
- 03 millboard
- 04 positive wrap
- 05 baster-add gasketing paper
- 06 high-grade electrical paper
- 07 unsaturated roofing felt
- 08 saturated roofing felt
- 09 flooring felt
- 10 corrugated paper
- 11 specialty paper (specify)

FLOOR COVERINGS

- 12 vinyl-asbestos floor tile
- 13 asbestos-felt-backed vinyl flooring

ASBESTOS-CEMENT PRODUCTS

- 14 A/C pipe and fittings
- 15 A/C sheet, flat
- 16 A/C sheet, corrugated
- 17 A/C shingle

- short tons
- short tons
- short tons
- short tons
- short tons
- short tons
- short tons
- short tons
- short tons
- short tons
- short tons

- square yards
- square yards

- short tons
- 100 square feet
- 100 square feet
- squares

FRICTION MATERIALS

- 18 drum brake lining (light-medium vehicle)
- 19 disc brake pads (light-medium vehicle)
- 20 disc brake pads (heavy equipment)
- 21 brake block (heavy equipment)
- 22 clutch facings (all)
- 23 automatic transmissions friction components
- 24 friction materials (industrial and commercial)

TEXTILES

- 25 cloth
- 26 thread, yarn, lap, roving, cord, rope or web

OTHER PRODUCTS

- 27 sheet gasketing (other than baster-add)
- 28 packing
- 29 paints and surface coatings
- 30 adhesives and sealants
- 31 asbestos-reinforced plastics
- 32 insulation materials not elsewhere classified (n.e.c.)
- 33 mixed or encapsulated asbestos fiber
- 34 other (n.e.c.)

- pieces
- pieces
- pieces
- pieces
- pieces
- pieces
- pieces

- pounds
- pounds

- square yards
- pounds
- gallons
- gallons
- pounds

- short tons

BILLING CODE 6560-50-C

(b) [Reserved]

§ 763.78 Sunset provision.

All requirements of this rule will terminate five years after promulgation of this rule. This provision is not a defense to any enforcement action based on noncompliance which occurred during the effective period of this rule.

[FR Doc. 82-20684 Filed 7-29-82; 8:45 am]

BILLING CODE 6560-50-M

B U L L E T I N

N O. 7 4 0

July 2, 1982

HISTORICAL SALES PROGRAM

The historical Sales program continues on a quarterly basis. Regional Members using the copyrighted FMSI Numbers for marketing their products in the United States may participate if they wish. The Institute is requesting details of pieces sold for the first six months of 1982. These are cumulative figures for the period from January 1 to June 30. The rules for reporting details remain unchanged.

1. Quantities will be reported in pieces (not units or sets). For roll linings, each foot of length will be one piece.
2. Our Accountants will report the names of the Members from whom reports are received.
3. Total pieces in each group will be reported.
4. "Clutch Facings" does not include gear tooth discs, automatic transmission discs, or the 8 to 14" diameter (3/16" to 1/2" thick) asbestos composition discs.

The data as filed will be confidential. Totals for each group will be shown and there is no way of determining quantities by individual Members. You will be receiving a form for completing this information from Marshall Granger & Company, CPA. Please return it to:

Marshall Granger & Company, CPA
1600 Harrison Avenue
Mamaroneck, NY 10543

If you report, please have your figures in by August 15, 1982. If you do not wish to report these figures, no reply is necessary. Only those reporting figures will receive the industry totals when the data is summarized. A sample form and definitions are attached.

EWD/erc

E. W. Drislane
Executive Director

Distribution: Active Members and
Regional Members who
reported at least once
in 1981-82

EXHIBIT "A"

STATISTICAL PROGRAM OF THE
FRICTION MATERIALS STANDARDS INSTITUTE, INC.

Mail to:

Marshall Granger & Co., CPA
1600 Harrison Avenue
Mamaroneck, NY 10543

* * * * *

See instructions for sales to other members.

Pieces sold to United States distributors, jobbers, private brands,
rebuilders, brake specialists, fleets, mass merchandisers, direct
consumers, government agencies, or other customers for use in the
United States replacement market:

JUN 30 1982

6 MONTHS JANUARY 1, to

Brake linings less than 3/4" nominal
thickness (See explanation for
roll linings).

Brake blocks, nominal thickness
of 3/4" and over

Disc Brake Linings

Clutch Facings

Total Pieces

STATISTICS SUPPLIED BY

SAMPLE
FORM

USE REPORTING FORM TO
BE SENT BY ADDRESSEES:

Signature

Company

Telephone Number

EXHIBIT "B"

DEFINITION FOR HISTORICAL SALES

PIECES

The reports will show pieces of friction material, in groups as shown:

<u>Group</u>	<u>Description</u>	<u>Normal Usage</u>
Brake Lining	Friction materials less than a nominal 3/4" thickness (See note on roll lining)	Normally, <u>one piece</u> to a shoe
Brake Blocks	Friction materials with a nominal thickness of 3/4" and over	Normally, <u>two pieces</u> to a shoe
Disc Brake Linings	Friction materials sold (for disc brakes) to be attached to the shoe, or sold as a unit molded, bonded or riveted to the shoe	Normally, <u>one piece</u> to a shoe
Clutch Facing	Friction materials of annular shape, or segments thereof	Normally, <u>two annular pieces</u> per clutch plate

Note: For roll lining only, consider each foot of length equals one piece.

REPLACEMENT SALES TO UNITED STATES MARKET

This reporting is for sales to the United States replacement market only. Do not include sales to other markets. This includes sales under the friction material manufacturer's own name or brand name used by the customer, to automotive warehouse distributors, jobbers, rebuilders, brake specialists, fleets, mass merchandisers, direct consumers, government agencies or other customers for use in the United States replacement market.

When a friction materials manufacturer is shipping to a vehicle manufacturer, brake manufacturer, or clutch manufacturer, but has no reasonable way of determining if the pieces are for original equipment replacement purposes, estimates will not be used - these pieces will not be reported. However, where a friction material manufacturer is shipping to a point known to be used for replacement, or where he stencils or otherwise identifies the pieces as being for replacement purposes, or where the shipments otherwise are obviously known to be for replacement, these pieces will be reported.

The member who sells to the type customer or user indicated above will report those pieces sold, even if purchased from another Active Member or Regional Member.

When you sell your friction materials to another Member (Active or Regional) do not report those sales. Materials sold to Licensee Members of the Institute for the replacement market should be included.

B U L L E T I N

N O. 7 3 9

June 24, 1982

CANPARTS AUTOMOTIVE INTERNATIONAL APPLICATION FOR REGIONAL MEMBERSHIP

This is to advise the Membership that we have received an application for Regional Membership from Canparts Automotive International, Ltd., of Cambridge, Ontario, Canada.

Over the past two or three years we have had correspondence with Mr. Bill Bartels of Canparts, relative to Membership in the Institute. As you may be aware, Canparts was started in late 1979 by several individuals from Certified Brakes in Toronto. When Canparts first marketed their disc brake pads, we contacted them about use of the FMSI Numbers, and they agreed to discontinue their use. There have been several "false starts" as regards Membership since then, but we recently wrote Canparts concerning one of its customers' use of our copyrighted numbers and trademarks.

We have now received an application for Regional Membership in the Institute. If the application is accepted, Canparts' Regional Membership would be with rights for use of the Institute's copyrights and trademarks in marketing their products in the United States. They are aware of the higher fee schedule for Regional Members marketing products in the United States using the Institute's copyrights and trademarks.

Canparts is a manufacturer of disc brake pads. They have marketed their pads in Canada and the United States since 1980.

Their application is now being reviewed by the Membership Committee. That Committee will make its recommendations to the Board of Directors. Their application was accompanied by the required deposit of the first years dues in advance.

If any Member has information which would be of help to the Board of Directors and subsequently to the Membership in evaluating this application, please let the Institute Office know. No action is required of the Membership at this time. This is simply to advise the Membership of this application.

EWD/erc
cc-Delegates & Alternates

E. W. Drislane
Executive Director

BULLETIN

N O. 7 3 8

June 21, 1982

NOTICE ON INCREASED MEMBERSHIP FEES

At the recent meeting of the Board of Directors and the Membership, the Board voted to increase the annual fee. This notice relates to the increase in fees for Active Members (United States Resident Members). Similar increases will be assessed on Regional Members and Licensees.

The changes will be in the basic Active Membership Fee only. There will be no change in the assessment for categories in which a Member participates. The total fee for an Active Member is the basic fee plus a fee for each category (brake linings, brake blocks, clutch facings, new un-lined brake shoes) in which a Member participates. The present fee, and the fee to take effect on July 1, 1982, are as follows:

	<u>Old Fee</u>	<u>Increased Fee (82-83)</u>
Basic Fee	\$1,150	\$1,300
Category Fee	700	700

This would mean that a Member in one category would have a fee increase from \$1,850 to \$2,000 (8.1%); a Member in two categories would have a fee increase from \$2,550 to \$2,700 (5.9%); a Member in three categories would have a fee increase from \$3,250 to \$3,400 (4.6%).

HISTORY OF ANNUAL FEE SINCE 1970

The Board in deciding on this increase, has asked that the relative stability of the fee be noted to the Membership. This is shown in the following table:

<u>Period</u>	<u>Years</u>	<u>Basic</u>	<u>Category</u>
1970-71	1 year	1,000	600
1971-72 to 1978-79	8 years	1,050	650
1979-80 to 1981-82	3 years	1,150	700
1982-83		1,300	700

Prior to 1970, there had been regular fee increases. Based on these figures, an Active Member since 1970-71 would have faced the following fee increases in total and per year rate of increase (over 12 years):

<u>Member/Categories</u>	<u>Amount</u>	<u>% Since 1970</u>	<u>Annual %</u>
One Category	\$400	25.0	2.1
Two Categories	500	22.7	1.9
Three Categories	600	21.4	1.8

RESERVE FOR ENVIRONMENTAL ACTIVITIES

The increased income realized from this increase is to be credited to a "Reserve for Environmental Activities." The Board of Directors voted for this increase in order to fund what may be additional expenses for possible consultant activities, or other substantial costs in the environmental, waste disposal, landfill, or other regulatory areas. It was the Board's intent to raise and reserve funds at this time with an orderly lower fee increase than might be the case in the future if such increased expenses come on the Institute without earlier planning.

In review of this increase with the Accountants, the additional funds realized will be credited to a "Reserve for Environmental Activities." If and when future costs are realized in this area, those costs will be charged to the Reserve.

* * * * *

The foregoing information is sent to the Membership as a matter of information. No action is required at this time. The increased fee will be in the fee billing invoices for the first half of the 1982-83 fiscal year which will be mailed on July 1, 1982.

EWD/erc
Copies- Delegates & Alternates

E. W. Drislane
Executive Director

BULLETIN

NO. 737

May 25, 1982

1982 AUTOMOTIVE DATA BOOK

On February 19, 1982 we advised that the contract for printing the "1982 Automotive Data Book" had been awarded to Corley Printing Company of St. Louis, Missouri. We solicited orders for the catalog at that time.

As noted in that bulletin, this catalog is to be a completely new catalog combining the lining and facing information formerly in the Red Book with the brake shoe identification information formerly in the Blue Book. We expected some difficulties with this new catalog as its layout was changed markedly. However, we are experiencing considerable difficulty and delay with the Typesetter that the Printer selected. Copy was sent to the Printer during the last week in February. Normally, the typesetting would be complete by now, and the Printer would have either printed the book by the end of May, or would be ready to print.

Unfortunately, that is not the case this year. The slow and poor proof copy has not been finished yet. The Printer seems unable to move this catalog off dead-center. While I would like to say that it was not our fault, I can't. I mistakenly recommended this Printer based on earlier work with smaller Supplements. It is now apparent that the award to Corley was a mistake.

Please bear with us on this delay. I would hope that somehow this catalog will be published early in July. I regret this delay.

EWD/erc

Distribution:

Delegates and Alternates

Regional Members

Licensees

Data Book and Technical Committee

E. W. Drislane

Executive Director

B U L L E T I N

N O. 7 3 6

May 11, 1982

APPLICATION FOR LICENSEE MEMBERSHIP FILED BY THE BRENIER COMPANY, INC.

This is to advise the Membership that an application has been received from the Brenier Company, Inc. for Licensee Membership in the Institute. The Brenier Company application was filed by Mr. William T. Lucas, Sr., President of the company.

The Brenier Company, Inc. is a manufacturer of insulator materials for disc brake pads. They have apparently been in the insulator business for some ten years. Based on our Constitution and By-Laws, they would be eligible for Licensee Membership. Our eligibility requirements read as follows:

Any person, firm or corporation located in any country,
engaged in the manufacture of brake shoes, or materials
for their attachment or assembly.....shall be eligible
to become a Licensee.

The Membership Committee is now reviewing this application. We are asking the Membership at this time that if it has any information either in favor of accepting this application, or rejecting this application, to advise the Office accordingly. Any such information would be considered by the Board of Directors in its review of the application.

No other action is called for on the part of the Membership at this time.

EWD/erc

Distribution:

Delegates and Alternates

E. W. Drislane

Executive Director

B U L L E T I N

N O . 7 3 5

April 12, 1982

DECLARATION RE PRODUCT CATEGORIES

FOR

FEE FORMULA BASIS

According to our Constitution and By-Laws, the Fee Formula for Active Members must be reviewed annually. Data on categories is accumulated and reported to a Fee Formula Committee and to the Board of Directors who then make recommendations on the fee schedule to the Membership.

As a Member may be engaged in a category one year and not the following (or the reverse) declaration must be filed annually in order to arrive at a proper fee formula and category assessment.

At the June 1975 Meeting, the Board of Directors resolved that category filing information would no longer be confidential. This change was reviewed by Counsel and put into effect for fiscal 1976-77. All categories in which your firm is engaged must be reported. Category filing information will be assembled in summary form to be reported to the Membership.

Would you kindly complete and return one copy of the attached form to the Institute Office. We will prepare a summary to assist the Fee Formula Committee and the Board of Directors in establishing the fee formula for the fiscal year starting July 1, 1982.

Filing categories are unchanged from those of recent years. Refer to the "Explanation of Category Filing" attached to the form. If you have questions, please give me a call.

Kindly return your declaration by May 10, 1982. A stamped return envelope is enclosed with the Delegate's copy.

E. W. Drislane
Executive Director

EWD/e

Distribution: Delegates and Alternates

EXPLANATION OF CATEGORY FILING

General - A member must be engaged in at least one of the first three categories, in order to be a member. The number of categories checked is used to determine the fees paid during the next fiscal year. Any member not filing this information correctly will be assessed the full fee for all categories.

Confidentiality - The fee category information is no longer confidential. The data will be reviewed by the Board of Directors to determine its reasonableness. Summary results will be distributed to the Membership.

"Our Company is Engaged as follows:" - If a member manufactures and sells, purchases and sells, or both purchases and manufactures, and sells the product indicated in the replacement market, he is "engaged" in that category. In other words, if he sells that product he is engaged in that category. Further, the replacement market includes automotive, industrial, and off road equipment--where Friction Materials Standards Institute, Inc. performs a service, either through cataloguing, assignment of copyrighted FMSI numbers, or the maintaining of prints. If a member sells a certain product type, but only to market where FMSI does not provide services, he does not report that category. Where a member sells a certain product only to a market where there are FMSI services available, but he declines to use these services, he must report that category.

Brake Lining - Under 3/4" Nominal, Including Disc Brake Linings - This includes linings whether loose, attached to shoes, or in roll form, sold to market where the FMSI numbering system is available.

Brake Blocks and Disc Brake Linings - 3/4" Nominal and Over - This includes brake blocks, whether loose or attached to shoes, sold to markets where the FMSI numbering system is available. The 3/4" nominal includes tapered blocks with a maximum thickness of approximately .700", with minimum thickness below .500". This also includes disc brake linings 3/4" and over, measuring lining thickness only at its thickest point. When measuring a lined shoe, to determine lining thickness, measure from the top of the shoe.

Clutch Facings - This includes loose facings or facings attached to plates, sold to markets where the FMSI numbering system is available.

Brake Shoes - New Unlined, Including New Unlined Disc Brake Shoes - This category includes new and unlined shoes (whether drum or disc type) which are sold as new and unlined shoes in the replacement market. If all the new and unlined shoes are sold as lined shoe assemblies, do not report this category.

Friction Materials Standards Institute
East 210 Route 4
Paramus, NJ 07652

Gentlemen:

In response to BULLETIN NO. 735 of April 12, 1982 concerning the declaration of information to be use in determining the annual fee, our company is engaged as follows:

<u>Category</u>	<u>We sell to the United States replacement market:</u>
Brake Linings - Under 3/4" Nominal, Including Disc Brake Linings	☐
Brake Blocks - 3/4" Nominal or over, including heavy duty disc brake linings	☐
Clutch Facings	☐
Brake Shoes - New Unlined, Including New Unlined Disc Brake Shoes	☐

Please affix an "X" in the square to the right of the category or categories in which your company is engaged.

Signature: _____

Company: _____

Date: _____

Kindly return declaration to the Institute Office no later than
May 10, 1982.

B U L L E T I N

N O . 7 3 4

April 1, 1982

HISTORICAL SALES PROGRAM

The historical sales program continues on a quarterly basis. Regional Members using the copyrighted FMSI Numbers for marketing their products in the United States may participate if they wish. The Institute is requesting details of pieces sold for the first three months of 1982. The rules for reporting details remain unchanged.

1. Quantities will be reported in pieces (not units or sets). For roll linings, each foot of length will be one piece.
2. Our Accountants will report the names of the Members from whom reports are received.
3. Total pieces in each group will be reported.
4. "Clutch Facings" does not include gear tooth discs, automatic transmission discs, or the 8 to 14" diameter (3/16" to 1/2" thick) asbestos composition discs.

The data as filed will be confidential. Totals for each group will be shown and there is no way of determining quantities by individual Members. You will be receiving a form for completing this information from Marshall Granger & Company, CPA. Please return it to:

Marshall Granger & Company, CPA
1600 Harrison Avenue
Mamaroneck, NY 10543

If you report, please have your figures in by May 15, 1982. If you do not wish to report these figures, no reply is necessary. Only those reporting figures will receive the industry totals when the data is summarized. A sample form and definitions are attached.

E. W. Drislane
Executive Director

EWD/e

Distribution: Active Members and
Regional Members who
reported at least once
in 1981-82

EXHIBIT "A"

STATISTICAL PROGRAM OF THE
FRICTION MATERIALS STANDARDS INSTITUTE, INC.

Mail to:

Marshall Granger & Co., CPA
1600 Harrison Avenue
Mamaroneck, NY 10543

* * * * *

See instructions for sales to other members.

Pieces sold to United States distributors, jobbers, private brands,
rebuilders, brake specialists, fleets, mass merchandisers, direct
consumers, government agencies, or other customers for use in the
United States replacement market:

3 MONTHS JANUARY 1, to MAR 31 1982

Brake linings less than 3/4" nominal
thickness (See explanation for
roll linings).

Brake blocks, nominal thickness
of 3/4" and over

Disc Brake Linings

Clutch Facings

Total Pieces

STATISTICS SUPPLIED BY

Signature

Company

Telephone Number

EXHIBIT "B"

DEFINITION FOR HISTORICAL SALES

PIECES

The reports will show pieces of friction material, in groups as shown:

<u>Group</u>	<u>Description</u>	<u>Normal Usage</u>
Brake Lining	Friction materials less than a nominal 3/4" thickness (See note on roll lining)	Normally, <u>one piece</u> to a shoe
Brake Blocks	Friction materials with a nominal thickness of 3/4" and over	Normally, <u>two pieces</u> to a shoe
Disc Brake Linings	Friction materials sold (for disc brakes) to be attached to the shoe, or sold as a unit molded, bonded or riveted to the shoe	Normally, <u>one piece</u> to a shoe
Clutch Facing	Friction materials of annular shape, or segments thereof	Normally, <u>two annular pieces</u> per clutch plate

Note: For roll lining only, consider each foot of length equals one piece.

REPLACEMENT SALES TO UNITED STATES MARKET

This reporting is for sales to the United States replacement market only. Do not include sales to other markets. This includes sales under the friction material manufacturer's own name or brand name used by the customer, to automotive warehouse distributors, jobbers, rebuilders, brake specialists, fleets, mass merchandisers, direct consumers, government agencies or other customers for use in the United States replacement market.

When a friction materials manufacturer is shipping to a vehicle manufacturer, brake manufacturer, or clutch manufacturer, but has no reasonable way of determining if the pieces are for original equipment replacement purposes, estimates will not be used - these pieces will not be reported. However, where a friction material manufacturer is shipping to a point known to be used for replacement, or where he stencils or otherwise identifies the pieces as being for replacement purposes, or where the shipments otherwise are obviously known to be for replacement, these pieces will be reported.

The member who sells to the type customer or user indicated above will report those pieces sold, even if purchased from another Active Member or Regional Member.

When you sell your friction materials to another Member (Active or Regional) do not report those sales. Materials sold to Licensee Members of the Institute for the replacement market should be included.

BULLETIN

NO. 733

March 3, 1982

SEMI-METALLIC DISC BRAKE LININGS ON VEHICLES IN NORTH AMERICAN MARKET

Institute BULLETINS NO. 709 and 709A in early 1981 indicated the usage of semi-metallic disc brake linings on vehicles sold in the North American market. That BULLETIN listed usage by FMSI Lining Number. This BULLETIN adds 1982 usage where known, and adds other vehicles where semi-metallic usage had not earlier been listed. This BULLETIN, with BULLETINS 709 and 709A, covers all semi-metallic disc brake usage known to the Institute. As most import vehicle manufacturers do not provide information to the Institute, it is likely that some imports have semi-metallic disc brakes unknown to the Institute.

	<u>FMSI LINING NUMBER</u>	
	<u>FRONT</u>	<u>REAR</u>
<u>AMERICAN MOTORS</u>		
1982, Spirit, Concord, Eagle (all)	7122A(O)	
<u>BUICK</u>		
1982, Le Sabre (11" rears), Wagons	728A	
1982, Buick Electra, Police, Taxi	728A	
1982, Riviera	7070A	7070A
1982, Regal	7070A	
1982, Century	7070C	
1982, Skylark (Power Brakes)	7070C	
1982, Skylark (Manual Brakes)	7070C(I)	
1982, Skyhawk J	7114	
<u>CADILLAC</u>		
1982, Eldorado	7070A	
1982, Seville	7070A	
1982, Commercial	728A	
1982, Cimarron	7114	
<u>CHEVROLET</u>		
1982, Impala, Caprice (11" rears), Wagons	728A	
1982, Chevrolet Police, Taxi	728A	
1982, Monte Carlo, Malibu	7070A	
1982, Celebrity	7070C	

SEE DISCLAIMER AT END OF BULLETIN

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March 3, 1982

		<u>FMSI LINING NUMBER</u>	
		<u>FRONT</u>	<u>REAR</u>
<u>CHEVROLET (CONT.)</u>			
1982, Camaro		7070A	
1982, Citation (Power Brakes)		7070C	
1982, Citation (Manual Brakes)		7070C(I)	
1982, Cavalier		7114	
1982, Chevette		7115	
1981, Chevette Diesel		7115	
<u>CHEVROLET TRUCK</u>			
1982, S-10		7070A	
1982, El Camino		7070A	
1982, C-,K-,P-20		728A	
	or	7084A	
1982, C-, P-30		7081A	
	or	7084A	
1982, P-30 (JF-9)		7081A	7081A
1982, G-30		728A	
	or	7081A	
	or	7084A	
<u>CHRYSLER</u>			
1982, Chrysler Police, Taxi		7017	
1982, Cordoba Police		7017	
1982, Le Baron		7097A	
<u>DODGE</u>			
1982, 400, Aries		7097A	
1982, Omni		7074A	
1982, Diplomat Police, Taxi		7017	
<u>FORD</u>			
1982, Ford Police, Taxi		7082A	
1982, Fairmont, Granada, Thunderbird		7072B	
1982, Mustang (Except 2.3L)		7072B	
<u>FORD TRUCK</u>			
1982, Bronco		788	
1982-81, F150 (Some models)		788	
1982, E250, F250(HD), E350, F350		7054	
1981, E250, F250(HD), E350, F350		7054(I)	
1982-80, E350 School Bus		7054	
1982, 800, 900 Series (Certain models)		7041	
<u>GMC TRUCK</u>			
1982, S-15		7070A	
1982, Caballero		7070A	
1982, C-,K-,P-2500		728A	
	or	7084A	
1982, C-, P-3500		7081A	
	or	7084A	
1982, P-3500 (JF-9)		7081A	7081A
1982, G-3500		728A	
	or	7081A	
	or	7084A	

March 3, 1982

	FMSI LINING NUMBER	
	FRONT	REAR
<u>INTERNATIONAL HARVESTER</u>		
1982, School Bus and Commercial (option)	7108	7108
<u>JEEP CORPORATION</u>		
1982, CJ5, CJ7	7122A(O)	
<u>MACK TRUCK</u>		
1982, Certain models with air brakes	7098	
1982, Certain models with hydraulic brakes	7041	
<u>MERCURY</u>		
1982, Mercury Police, Taxi	7082A	
1982, Zephyr, Cougar, XR7	7072B	
1982, Capri (Except 2.3L)	7072B	
<u>OLDSMOBILE</u>		
1982, Delta 88 (11"rears), Wagons	728A	
1982, Oldsmobile 98, Police, Taxi	728A	
1982, Toronado	7070A	
1982, Cutlass	7070A	
1982, Cutlass Ciera (FWD)	7070C	
1982, Omega (Power Brakes)	7070C	
1982, Omega (Manual Brakes)	7070C(I)	
1982, Firenza	7114	
<u>PLYMOUTH</u>		
1982, Gran Fury Police, Taxi	7017	
1982, Reliant	7097A	
1982, Horizon	7074A	
<u>PONTIAC</u>		
1982, Bonneville	7070A	
1982, Grand Prix	7070A	
1982, Firebird	7070A	
1982, Phoenix (Power Brakes)	7070C	
1982, Phoenix (Manual Brakes)	7070C(I)	
1982, 6000	7070C	
1982, J2000	7114	
1982, T1000	7115	
<u>RENAULT</u>		
1982-81, 181	7123	
<u>SAAB</u>		
1981-79, 900, 900 Turbo	7051 (O)	
<u>TOYOTA</u>		
1982, Corolla, Coupe, Hardtop, Liftback	7099	
1981-80, Celica Supra	7118	
<u>VOLKSWAGEN</u>		
1982, Rabbit, Scirocco	7087	

(I)= Inner Lining Only

(O)= Outer Lining Only

The data shown in this bulletin has been supplied by original equipment manufacturers and other sources, and while we believe that such information is correct, the Institute cannot and does not accept any responsibility or liability for errors or omissions, or harm resulting therefrom.

The data shown in this bulletin indicates dimensions only, and in no way refers to quality of any materials that may be embodied or used in the product or particular application, and moreover SINCE FIELD CONDITIONS AND OTHER FACTS MAY NECESSARILY VARY FROM ONE APPLICATION TO ANOTHER, FRICTION MATERIALS SUPPLIERS AND INSTALLERS SHOULD RELY ULTIMATELY AND SOLELY UPON THEIR OWN EXPERTISE AND JUDGMENT, AS TO QUALITY AND DIMENSIONAL SIZE. Under no circumstances should replacement items be modified in the field instead of obtaining a proper sized item from a supplier. If such items are modified in the field to fit, the Institute specifically disclaims all liability and responsibility for any harm resulting therefrom.

If any error or omission is noted in this bulletin, it should be reported immediately to the Friction Materials Standards Institute, E-210 Route 4, Paramus, New Jersey 07652.

EWD/erz

Distribution: Active Members
(List B, D)
Regional Members
(U. S. Dues)
Licensees

E. W. Drislane
Executive Director

B U L L E T I N

N O. 7 3 2

February 22, 1982

FRICION, S. A. OF MEXICO ACCEPTED AS REGIONAL MEMBER

This is to advise the Membership that Friccion, S. A. of Mexico has been voted into Regional Membership by the Active Members of the Institute.

The Institute advised the Active Members on the application for Regional Membership filed by Friccion, S. A. on January 4, 1982. The Membership Committee and the Board of Directors voted unanimously to accept the application. Ballots were mailed to the Delegates and Alternates on January 21, 1982. Fifteen Members voted to accept the Friccion, S.A. application and one Member voted against acceptance. In accordance with ARTICLE III, Section 4, Election to Membership, Friccion, S. A. has been accepted as a Regional Member in the Institute.

The contact at Friccion, S. A. is Senor Victor Contreras Martinez, and the address of the new Member is:

Friccion, S. A.,
Dalia 101-2
Mexico 13, D. F.

Their Membership will be effective as of April 1, 1982. The foregoing is sent as a matter of information to the Membership.

EWD/erc

Distribution:

Delegates and Alternates
Active Members-List A

E. W. Drislane

Executive Director

B U L L E T I N

N O. 7 3 1

February 19, 1982

ORDERS FOR THE 1982 AUTOMOTIVE DATA BOOK

The contract for the printing of the "1982 Automotive Data Book" has been awarded to:

Corley Printing Company
9804 Page Boulevard
St. Louis, MO 63132

This book is a completely new catalog which will combine the lining and facing information formerly in the Red Book with the brake shoe identification information formerly in the Blue Book. For this reason, it will be larger than before--probably to include about 160 pages plus cover. Also, because of the new format, this book will be available to Licensees as well as Active Members and Regional Members.

On an estimate of the total order quantity being 60,000 copies with 160 pages, the preliminary price is

\$719.00 per Thousand-Basic Catalog
15.00 per Thousand-5 hole punch

If there is a change in the price per thousand due to a change in number of pages or to changes in order quantities, or for author's alterations, you will be notified.

Please forward all orders to the Institute Office. Do not send them to the printer. (British Council and FMSI Canada members send to your respective associations). This is our only means of checking the total quantities ordered and the price charged, as well as whether only members are ordering.

The orders should be made out to Corley Printing Company, and should state punching and shipping instructions. If you have special instructions such as "no cover" please indicate if you wish "no stitch" and "no trim." If applicable, please advise any special conditions for shipping through your customs.

Please forward your orders so that they reach the Institute Office by April 1, 1982.

EWD/erc

Distribution: Active Members-List D
Regional Members
Licensees

E. W. Drislane

Executive Director

BULLETIN

NO. 730

February 8, 1982

SEMINAR ON ASBESTOS LITIGATION

This is to advise the Membership that Harcourt Brace Jovanovich, a New York Publisher of periodicals, books and information materials for the Law Profession is sponsoring a Seminar on Asbestos Litigation.

The Seminar will be held in New York City on March 1-2 and in Chicago on March 22-23. I have enclosed a Registration Form which gives basic information on the Seminar.

The program is structured as follows:

1. Scope of Litigation--past, present and projected
2. Asbestos Industry
3. Medical Questions
4. Determination of Liability
5. Workers' Compensation Issues
6. Questions Regarding Damages
7. Insurance Coverage
8. Settlements and Trials
9. Relevant Proposed Legislation

The faculty includes representatives of the Legal Profession, individuals from insurance companies and industry, as well as Dr. Selikoff. From the brochure which was sent on this subject, this is geared towards the Legal Professional, but it may have direct impact on others in the health and environmental fields.

The Institute is not in any way connected with this Seminar. The registration form notes that a "course book" is included with the registration fee, and that the book is available for \$30 to those who cannot attend the Seminar. More information can be gathered by calling either (1) (800) 223-0231 or (212) 888-2652. The foregoing is sent as a matter of information.

EWD/erc

Enc:

Distribution:

Delegates and Alternates
Active Members - List C

E. W. Drislane

Executive Director

Law & Business, Inc.
Harcourt Brace Jovanovich, Publishers
757 Third Avenue
New York, New York 10017

Postage
U.S. POSTAGE
PAID
Baltimore, Md.
Permit No. 2975

A Timely Seminar
**NEW DIRECTIONS IN
ASBESTOS
LITIGATION**

To Register Mail this Form in an Envelope to:

Law & Business, Inc., 757 Third Avenue, New York, NY 10017

Or Register by Telephone:

Toll-free (1) (800) 223-0231; in N.Y.S. call 888-2652

REGISTRATION

Please register me for the **Asbestos Litigation** seminar. Fee including course book \$350.

☐ **March 1-2, New York City**, The New York Hilton Hotel 40243

☐ **March 22-23, Chicago**, The Hyatt Regency Hotel 40244

☐ C01104 I cannot attend the seminar, but I wish to purchase the course book when it is published on March 8, \$30.

PUBLICATIONS

☐ **Federal Attorney Fee Awards Reporter**, One Year (6 issues), \$95 (reg. price \$120.) Upon payment, I'll receive a **FREE BONUS** of a handsome binder to store back issues.

☐ H42760 **Law & Business Directory of Corporate Counsel, 1981/82 Edition**, and future editions on approval, \$110.

\$_____ ☐ **Check Enclosed** ☐ **Bill Me**

Firm _____

Name _____

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City _____

State _____

Zip _____

Telephone _____

Make checks payable to **Law & Business, Inc.** All seminar fees must be paid by opening session. Postage and handling added to book orders on credit. N.Y.S., N.J., D.C. residents must add sales tax on book orders. Please show street address; U.P.S. will not deliver to box numbers.

394

FMSI 17320

B U L L E T I N

N O. 7 2 9

January 5, 1982

HISTORICAL SALES PROGRAM

The historical sales program continues on a quarterly basis. Regional Members using the copyrighted FMSI Numbers for marketing their products in the United States may participate if they wish. The Institute is requesting details of pieces sold for the full twelve months of 1981 (the full calendar year 1981). The rules for reporting details remain unchanged. Please remember that you are to report cumulative figures for the full 12 months.

1. Quantities will be reported in pieces (not units). For roll linings, each foot of length will be one piece.
2. Our Accountants will report the names of the members from whom reports are received.
3. Total pieces in each group will be reported.
4. "Clutch Facings" does not include gear tooth discs, automatic transmission discs, or the 8-14" dia., (3/16 to 1/2" thick) asbestos composition discs.

While there is no change in your reporting to the Accountants, there will be a change in the form of the report to be rendered by the Accountants. Based on resolutions at the June 1976 membership meeting, for the annual report only, the Accountants will be asked to list the names of the members reporting in each product line. (On the quarterly reports, they have been listing only the members reporting without indicating who reported by product line). The data as filed will be confidential. Totals for each group will be shown and there is no way of determining quantities by individual members.

You will be receiving from Marshall Granger and Company, Certified Public Accountants, a form for completing this information. Please return it to:

Marshall Granger & Company, CPA
1600 Harrison Avenue
Mamaroneck, New York 10543

If you report, please have your figures in by February 15, 1982. If you do not wish to report these figures, no reply is necessary. Only those reporting figures will receive the industry totals when the data is summarized. A sample form and definitions are attached.

EWD/erc

Enc :

Distribution: Delegates & Alternates

Regional Members (paying
Active Members Dues)

E. W. Drislane

Executive Director

EXHIBIT "A"

STATISTICAL PROGRAM OF THE
FRICTION MATERIALS STANDARDS INSTITUTE, INC.

Mail to:

Marshall Granger & Co., CPA
1600 Harrison Avenue
Mamaroneck, NY 10543

* * * * *

See instructions for sales to other members.

Pieces sold to United States distributors, jobbers, private brands,
rebuilders, brake specialists, fleets, mass merchandisers, direct
consumers, government agencies, or other customers for use in the
United States replacement market:

12 MONTHS JANUARY 1, to DEC 31 1981

Brake linings less than 3/4" nominal
thickness (See explanation for
roll linings).

Brake blocks, nominal thickness
of 3/4" and over

Disc Brake Linings

Clutch Facings

Total Pieces

STATISTICS SUPPLIED BY

Signature

Company

Telephone Number

EXHIBIT "B"

DEFINITION FOR HISTORICAL SALES

PIECES

The reports will show pieces of friction material, in groups as shown:

<u>Group</u>	<u>Description</u>	<u>Normal Usage</u>
Brake Lining	Friction materials less than a nominal 3/4" thickness (See note on roll lining)	Normally, <u>one piece</u> to a shoe
Brake Blocks	Friction materials with a nominal thickness of 3/4" and over	Normally, <u>two pieces</u> to a shoe
Disc Brake Linings	Friction materials sold (for disc brakes) to be attached to the shoe, or sold as a unit molded, bonded or riveted to the shoe	Normally, <u>one piece</u> to a shoe
Clutch Facing	Friction materials of annular shape, or segments thereof	Normally, <u>two annular pieces</u> per clutch plate

Note: For roll lining only, consider each foot of length equals one piece.

REPLACEMENT SALES TO UNITED STATES MARKET

This reporting is for sales to the United States replacement market only. Do not include sales to other markets. This includes sales under the friction material manufacturer's own name or brand name used by the customer, to automotive warehouse distributors, jobbers, rebuilders, brake specialists, fleets, mass merchandisers, direct consumers, government agencies or other customers for use in the United States replacement market.

When a friction materials manufacturer is shipping to a vehicle manufacturer, brake manufacturer, or clutch manufacturer, but has no reasonable way of determining if the pieces are for original equipment replacement purposes, estimates will not be used - these pieces will not be reported. However, where a friction material manufacturer is shipping to a point known to be used for replacement, or where he stencils or otherwise identifies the pieces as being for replacement purposes, or where the shipments otherwise are obviously known to be for replacement, these pieces will be reported.

The member who sells to the type customer or user indicated above will report those pieces sold, even if purchased from another Active Member or Regional Member.

When you sell your friction materials to another Member (Active or Regional) do not report those sales. Materials sold to Licensee Members of the Institute for the replacement market should be included.

B U L L E T I N

N O. 7 2 8

January 4, 1982

APPLICATION FOR REGIONAL MEMBERSHIP - FRICCION, S. A., MEXICO

This is to advise the Membership that an application for Regional Membership has been received from Friccion, S. A., of Mexico. The applicant's address is:

Friccion, S. A.
Dalia 101-2,
Mexico 13, D.F.

Senor Victor Contreras Martinez, General Manager for Friccion, S.A., submitted the application.

Based on Friccion, S.A.'s letter of inquiry and their application, they are a friction materials manufacturer. Their application is for Regional Membership, without rights to use the Institute's copyrights and trademarks for marketing their products in the United States.

From the correspondence, Friccion, S.A. is primarily in the off-highway and truck end of the friction materials business. They state that they participate "...in the manufacture of brake linings, clutch facings, disc brakes and other friction materials for various applications in the construction industry, the oil industry, tractor wagons, light trucks, etc...."

The Friccion, S.A. application was accompanied by their check in the amount of US\$1,450. That amount is the full year fee for a Regional Member. The check was honored and the Institute holds these funds to be applied to the fee assuming the application is accepted.

The Membership Committee is now reviewing the application to determine if Friccion, S. A. is qualified for Regional Membership. If a Member has any background on Friccion, S. A.--positive or otherwise--that should be considered in accepting this application, we ask that it be sent to the Institute. Any relevant information of that nature will be passed on to the Board of Directors for their subsequent review of this application.

EWD/erc
Copy: Delegates & Alternates

E. W. Drislane
Executive Director

B U L L E T I N

N O. 7 2 7

October 5, 1981

HISTORICAL SALES PROGRAM

The historical sales program continues on a quarterly basis. Regional Members using the copyrighted FMSI Numbers for marketing their products in the United States may participate if they wish.

The Institute is requesting details of pieces sold for the first nine months of 1981 (9 months ending September 30, 1981). The rules for reporting details remain unchanged.

1. Quantities will be reported in pieces (not units). For roll linings, each foot of length will be one piece.
2. Our Accountants will report the names of the members from whom reports are received.
3. Total pieces in each group will be reported.
4. "Clutch Facings" does not include gear tooth discs, automatic transmission discs, or the 8-14" dia., (3/16 to 1/2" thick) asbestos composition discs.

The data as filed will be confidential. Totals for each group will be shown and there is no way of determining quantities by individual members.

You will receive from Marshall Granger and Company, Certified Public Accountants, a form for completing this information. Please return it to:

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Mamaroneck, NY 10543

If you report, please have your figures in by November 15, 1981. If you do not wish to report these figures, no reply is necessary. Only those reporting figures will receive the industry totals when the data is summarized. A sample form and definitions are attached.

EWD/erc

Enc:

Dist: Active Members-List C
Regional Members (paying
Active Members Dues)

E. W. Drislane

Executive Director

EXHIBIT "A"

STATISTICAL PROGRAM OF THE
FRICTION MATERIALS STANDARDS INSTITUTE, INC.

Mail to:

Marshall Granger & Co., CPA
1600 Harrison Avenue
Mamaroneck, NY 10543

* * * * *

See instructions for sales to other members.

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9 MONTHS JANUARY 1, to SEPTEMBER 30, 1981

Brake linings less than 3/4" nominal
thickness (See explanation for
roll linings).

Brake blocks, nominal thickness
of 3/4" and over

Disc Brake Linings

Clutch Facings

Total Pieces

STATISTICS SUPPLIED BY

Signature

Company

Telephone Number

EXHIBIT "B"

DEFINITION FOR HISTORICAL SALES

PIECES

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Clutch Facing	Friction materials of annular shape, or segments thereof	Normally, <u>two annular pieces</u> per clutch plate

Note: For roll lining only, consider each foot of length equals one piece.

REPLACEMENT SALES TO UNITED STATES MARKET

This reporting is for sales to the United States replacement market only. Do not include sales to other markets. This includes sales under the friction material manufacturer's own name or brand name used by the customer, to automotive warehouse distributors, jobbers, rebuilders, brake specialists, fleets, mass merchandisers, direct consumers, government agencies or other customers for use in the United States replacement market.

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When you sell your friction materials to another Member (Active or Regional) do not report those sales! Materials sold to Licensee Members of the Institute for the replacement market should be included.

B U L L E T I N

N O. 7 2 6

September 22, 1981

COUGAR AUTOMOTIVE CORPORATION, MONTREAL, CANADA

This is to advise the Membership that Cougar Automotive Corporation of Montreal, Canada has been accepted as a Regional Member of the Institute. Our BULLETIN NO. 719 of July 2, 1981 gave background information on Cougar Automotive.

The Board of Directors, acting on the recommendation of the Membership Committee, had earlier voted to accept Cougar Automotive's application. The Membership has now voted unanimously to accept this application. The Cougar Automotive membership will commence on October 1, 1981. Mr. Alexander Tabori is the Principal for Cougar. Their address is:

Cougar Automotive Corporation
6035 "M" Cote de Liesse Road
Montreal, Quebec H4T 1C6
Canada

The foregoing is sent as a matter of information.

EWD/erc
Copy-Delegates & Alternates

E. W. Drislane
Executive Director

BULLETIN

NO. 725

September 18, 1981

ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUEST FOR INFORMATION

ON NON-ASBESTOS CONTAINING DRUM BRAKE LININGS

At a meeting with the Asbestos Information Association and representatives of our industry, the EPA submitted a list of 11 questions entitled "Informational needs for friction products containing asbestos." After consideration of the questions, and based on the fact that the Institute had gathered information for EPA in 1980 on non-asbestos disc brake linings, the Asbestos Information Association forwarded these 11 questions to the Institute and asked that we prepare a response.

This request was reviewed by the Chairman of the Institute's Health and Environmental Affairs Committee, and the questions were sent to the Committee for review. We are enclosing a copy of those 11 questions with this bulletin.

As these questions seek information which appears to be proprietary in nature and based on the fact that the Institute's 1980 questionnaire on disc brake linings elicited only three responses, the Institute does not feel it appropriate to assist EPA in gathering this information. We are concerned with the confidentiality of the information which these questions ask. We have, therefore, advised the EPA that we do not intend to assist in this information gathering.

We have suggested that if they wish this information, they contact the individual friction materials manufacturers directly. We do not wish to in any way influence a Member in replying to this series of questions. At this time, we are simply alerting the Membership that EPA may contact manufacturers directly seeking the type information shown by the enclosed questions.

The foregoing is sent as a matter of information.

END/erc
cc-Delegates and Alternates
Active Members-List C

E. H. Drislane
Executive Director

DRAFT

6/22/81

Informational Needs for Friction Products Containing Asbestos

1. What are the basic ingredients under consideration for use in non-asbestos drum brakes? (Specific formulations are not necessary). The materials used to substitute for asbestos or those that reflect a net change are of particular interest.
2. What are the physical characteristics of fibrous materials that are used in place of asbestos in the non-asbestos formulations? For example, what is the fiber size and size distribution?
3. What are the performance characteristics and the problems associated with the use of substitute products for drum brakes containing asbestos? How do the proposed substitute non-asbestos drum brake linings compare with asbestos drum brake linings. (For example: expected wear, noise levels, etc.)
4. Where you are the original equipment supplier of a non-asbestos drum brake system please describe the design of the proposed non-asbestos linings and any asbestos used within the brake itself?. Present model year and application data for any of these systems that have been applied in the past.
5. Describe the historical development of non-asbestos drum brake linings with date and/or time from (1) initial research, (2) successful laboratory prototype to (3) proposed availability of commercial product. Also, estimate research and development cost for development of commercial non-asbestos drum brake linings (either in total or for each phase of development).
6. If a vehicle has non asbestos drum brakes as original equipment, what problems or advantages do you see in the use of asbestos drum brakes for replacement?
7. Are the composition and manufacture of non-asbestos drum brakes being developed by your company protected by patent? If so, what are the patent numbers?
8. What mechanisms are there for the transfer of this technology to other companies who manufacture drum brakes for vehicles? For example, would your company consider licensing of the technology to manufacture non-asbestos drum brakes?

9. Can non-asbestos drum brake products be manufactured in existing production facilities or will new facilities be required? Please estimate the capital and operating costs, and the availability and lead time associated with acquisition of the machinery and tooling.
10. What is the projected unit cost differential between drum brakes containing asbestos and non-asbestos substitutes for the part numbers listed in question 4 or any non-asbestos brakes under consideration for future application?
11. Based on your 1980 production, how much asbestos would be eliminated in a total conversion to non-asbestos drum brake linings?

BULLETIN

NO. 724

August 11, 1981

OSHA NOTICE CONCERNING ACCESS TO EMPLOYEE EXPOSURE AND MEDICAL RECORDS--
PARTIAL STAY; INTERPRETATIONS; NOTICE ON PROPOSED MODIFICATION OF
TRADE SECRETS PROVISION OF EMPLOYEE ACCESS RULES

The Department of Labor's Occupational Safety and Health Administration (OSHA) published a notice concerning access to employee exposure and medical records in the Federal Register of August 7, 1981. A copy of that notice is enclosed.

While the partial stay on OSHA's regulations on access to employee exposure and medical records applies to the flavor and fragrance industry, in the notice OSHA interpreted certain sections of the standard for all industry. This interpretation addressed the following parts of the standard:

1. The 15 day rule--time to provide information limited to "15 days"
2. The use of exposure records for "similarly situated" employees
3. Privileged records
4. Employee breach of confidentiality agreements

These interpretations should be helpful in applying the rules in the OSHA standard.

In addition, OSHA published a notice on possible modification of the trade secrets provision of the access to employee exposure and medical records standard. OSHA is seeking information on the problems associated with the access of records containing trade secrets and the handling of the confidentiality thereof.

The foregoing is sent as a matter of information.

END/erc

Enc:

cc-Delegates & Alternates
Health and Environmental
Affairs Committee
Active Members - List C

E. W. Drislane
Executive Director

federal register

Friday
August 7, 1981

Part IV

Department of Labor

**Occupational Safety and Health
Administration**

**Access to Employee Exposure and
Medical Records**

FRICION MATERIALS STANDARDS INSTITUTE
EAST 210 ROUTE 4
PARAMUS, N.J. 07652

DEPARTMENT OF LABOR

Occupational Safety and Health
Administration

29 CFR Part 1910

Access to Employee Exposure and
Medical Records; Partial Stay;
Interpretations

AGENCY: Occupational Safety and
Health Administration, Labor.

ACTION: Partial stay; interpretation of
standard.

SUMMARY: OSHA is hereby extending the partial administrative stay of the access to employee exposure and medical records, 29 CFR 1910.20, for the flavor and fragrance industries for six months, to February 15, 1982. In addition, OSHA is publishing interpretations of the records access standard concerning four issues which have been raised by interested persons as matters of continuing concern. These involve: (1) the 15-day rule for responses to access requests; (2) access to exposure records of "similarly situated" employees; (3) privileged records created solely in anticipation of litigation; and (4) employee breaches of trade secret confidentiality agreements.

DATE: The flavor and fragrance stay is extended to February 15, 1982.

FOR FURTHER INFORMATION CONTACT: John Marionik, Occupational Safety and Health Administration, Room N3608, U.S. Department of Labor, 200 Constitution Avenue, NW, Washington, D.C. 20210. Telephone (202) 523-8031.

SUPPLEMENTARY INFORMATION: The Occupational Safety and Health Administration (OSHA) is today publishing also in this Part IV of the *Federal Register* (FR Doc. 81-23164) a notice of proposed interim modification of the trade secrets provision of the records access standard, 29 CFR 1910.20(f). The background and explanation for the proposed action is fully explained in that document.

As explained in that document, OSHA is also seeking a six-month deferral of the briefing schedule in the litigation which is pending on union and industry challenges to the standard, *Industrial Union Department, AFL-CIO v. Marshall*, No. 80-1550 and consolidated cases, in order to decide whether, and to what extent, to propose modification of the standard and to initiate new rulemaking. During this six-month period, OSHA wishes, with the possible exception of modifying the trade secrets provision, to maintain the *status quo* with respect to the standard. For this

reason, OSHA is hereby extending the existing partial administrative stay for the flavor and fragrance industries until February 15, 1982 (see Appendix). This will enable OSHA to treat the issues presented by the flavor and fragrance industries as part of its overall review of the records access standard.

Concurrently, OSHA is hereby publishing the following interpretations with respect to four issues which have been raised by interested persons as matters of concern regarding the records access standard.

1. *The 15-day rule.* The standard requires that " * * * the employer shall assure that access is provided in a reasonable time, place, and manner, but in no event later than fifteen (15) days after the request for access is made." 29 CFR 1910.20(e)(1)(i). The use of the phrase "reasonable time, place, and manner" is intended to give employers some flexibility in responding to requests. For example, when a request is unusually broad or vague, the employer can ask for more detailed information in order to clarify the request. The preamble to the standard recognizes that what is a "reasonable" time will vary from situation to situation (45 FR 35272). Factors such as the location of requested records, the number of pending competing requests for records, the scope of a request and the availability of technical personnel necessary to process the request, are all relevant in determining what is a reasonable time. It is our expectation, however, that the vast majority of requests for records can be satisfied within 15 days, and the standard establishes this as a mandatory requirement.

Regardless of the literal wording of the standard, an employer cannot be compelled to perform an impossible task, and OSHA does not expect the impossible to be performed. Our field personnel have been instructed to enforce the "15 day" requirement of the standard as follows:

There may be a few isolated circumstances where there may be justification for not meeting the 15 working days limit (e.g., a large number of records must be photocopied and mailed across the country). Do not cite where the employer has compelling justification (he is doing all that he can to assure access) and has kept the employee and/or employee representative abreast of the situation. (Draft instruction dated August 25, 1980, Appendix A, pg. 5.)

Thus, as long as an employer is making a diligent, good faith effort to provide requested records as soon as possible, and is keeping the employee or employee representative informed of

any reasons for delay, OSHA will not cite for violations of the standard.

2. *Exposure records of "similarly situated" employees.* The standard requires that employees and designated representatives be provided access to "exposure records of other employees with past or present job duties or working conditions related to or similar to those of the employee." 29 CFR 1910.20(e)(2)(i)(B). The basic purpose of this requirement is to assure that an employee may obtain access to relevant exposure information of other employees in similar working conditions. Access to this information is necessary when monitoring has been conducted on a representative or sample basis where not all employees are personally monitored. See 45 FR 35272. The obligation on the employer is to conduct a good faith, diligent search for such records, but there is no intent that the search be "heroic" or unusually disruptive to the employer's operation. For example, if access to exposure records of other employees at the requesting employee's workplace adequately indicates the nature of the employee's exposure, access to records of other workplaces need not be provided. However, if adequate exposure records do not exist at the requesting employee's workplace, but are known to exist at some other workplace of the employer where similar work is performed, access to this information must be provided.

3. *Privileged records.* The question has been raised whether an employer must provide access to records which are created solely in anticipation of litigation and which are otherwise privileged from discovery under the prevailing rules of procedure or evidence. An example could be a medical opinion prepared for the employer for purposes of aiding the employer's case by a company physician after a workmen's compensation claim has been filed. It has been OSHA's interpretation that the standard does not contemplate coverage of such a record if the record would not otherwise be available to the employee or his attorney in the litigation. On the other hand, the mere fact that a medical record (see definition at 29 CFR 1910.20(c)(6)) not originally created in anticipation of specific litigation will ultimately be used as evidence in a private legal proceeding does not put it outside the scope of the standard.

4. *Employee breaches of confidentiality agreements.* The standard permits an employer to require, as a condition of access to trade secret information, that "The employee

* * * agree in writing not to use the trade secret information for the purpose of commercial gain and not to permit misuse of the trade secret information by a competitor or potential competitor of the employer." 29 CFR 1910(f)(3). This provision is intended to assure that an employer's statutory or common law remedies are effectively brought to the requesting employer's attention and to preserve an employer's rights in the event that an employee attempts to misuse protected trade secret information. 45 FR 35275. The question has been raised whether an employer is entitled to discipline an employee, including dismissal, for breach of an agreement, or rather is limited simply to a legal action for the contractual violation. It is OSHA's interpretation that the standard does not so limit the permissible sanctions available to the employer, and that disciplinary actions for breach of a confidentiality agreement are solely a matter of labor-management relations about which OSHA is strictly neutral.

(Secs. 6(b), 8(g), 84 Stat. 1593, 1600 (29 U.S.C. 655, 657); sec. 4 of the Administrative Procedure Act (5 U.S.C. 553))

Signed at Washington, D.C., this 4th day of August 1981.

Thorne G. Auchter,
Assistant Secretary of Labor.

Appendix—Administrative Stay for Flavor and Fragrance Industries

The Occupational Safety and Health Administration hereby extends, to the extent provided below, the administrative stay for employers in the fragrance or flavor and extract manufacturing industries. The stay also applies to employers who are customers of the fragrance or flavor and extract manufacturing industries to the extent that they receive from these industries substances which are subject to this stay. Accordingly, the effective dates of paragraphs (e)(2) and (g) of 29 CFR

1910.20 are hereby extended for these employers until February 15, 1982, with respect to their compliance obligations to provide access to records which would disclose the identity of trade secret substances meeting the definition of "toxic substance or harmful physical agent," as defined in 29 CFR 1910.20(c)(11), unless such substance to which employees are "exposed," as defined in 29 CFR 1910.20(c)(8), comes within one of the following categories:

- (1) highly toxic material;
- (2) carcinogen; and
- (3) reproductive toxin.

For the purposes of this administrative stay, the following definitions shall apply:

(1) "Carcinogen" means substance or mixture which is known to be a Potential Occupational Carcinogen as specified in 29 CFR 1990.103 and qualified in 29 CFR 1990.143-144; (45 FR 5282, *et seq.*, January 22, 1980) or as identified in a previous Occupational Safety and Health Administration regulation as a carcinogen (29 CFR Part 1910, Subpart Z).

(2) "Highly toxic material" means a substance or mixture that is known to kill within 14 days:

(i) At least half of a group of 10 or more albino rats weighing between 200 and 300 grams each, when administered orally at a single dose of 50 milligrams or less per kilogram of body weight (LD50); or

(ii) At least half of a group of 10 or more albino rabbits weighing between 2 and 3 kilograms each, tested at a dosage of 200 milligrams or less per kilogram of body weight, when administered by continuous contact with the bare skin for 24 hours (LD50); or

(iii) At least half of a group of 10 or more albino rats weighing between 200 and 300 grams each, tested at a concentration in air of 200 parts per million or less by volume of gas or vapor, or 2 milligrams or less per liter of

mist, fume, or dust when administered by continuous inhalation at a steady concentration for one hour or for four hours when there is difficulty maintaining a steady concentration (LD50).

(3) "Reproductive toxin" means a substance or mixture which is known to cause fetal wastage or undergrowth, malformation, growth retardation, or functional disorders in the products of mammalian conception, or prematurity or diminished fertility in mammals. For the purposes of this stay, it is immaterial whether a specific locus of action has been identified, assignment to this category being based upon the enumerated end-results.

A substance which comes within one of the enumerated hazard categories shall be subject to the access to records requirements of 29 CFR 1910.20 if the employee (or his/her designated representative) requesting the record is or has been exposed to:

(1) any amount or concentration of a substance, whether in pure form or as a constituent in a mixture, if it is a carcinogen or reproductive toxin; and

(2) any amount of a substance, whether in pure form or as a constituent in a mixture, if it is a highly toxic material in concentrations greater than 1.0% (by weight).

Except as set forth above, 29 CFR 1910.20 shall be in effect in all other respects. This administrative stay is issued with the understanding that substances which are considered "toxic substances" under the standard but exempt from disclosure under the stay are intended as food ingredients or cosmetics, subject to extensive Food and Drug Administration regulation and under work practices designed to minimize employee exposure.

[FR Doc. 81-2319 Filed 8-5-81; 12:06 pm]
BILLING CODE 4510-26-M

DEPARTMENT OF LABOR

Occupational Safety and Health
Administration

29 CFR Part 1910

[Docket No. H-112D]

Access to Employee Exposure and
Medical Records; Proposed Interim
Modification**AGENCY:** Occupational Safety and
Health Administration, Labor.**ACTION:** Notice and request for
comments on proposed interim
modification of standard.

SUMMARY: OSHA is hereby proposing to modify the trade secrets provision of the access to employee exposure and medical records standard, 29 CFR 1910.20(f), to permit employers to, include liquidated damages clauses or the like in confidentiality agreements which they may require of employee designated representatives prior to disclosing toxic substance information which is a trade secret. This notice solicits comments on the proposed modification. The notice also announces that OSHA has requested a six-month deferral of the briefing schedule from the U.S. Court of Appeals for the District of Columbia in the consolidated challenges to the records access standard, *Industrial Union Department, AFL-CIO v. Marshall*, No. 80-1550 et al.; to permit the Agency an opportunity to decide whether, and to what extent, to repropose a modified records access standard.

DATES: All data and comments must be received by September 21, 1981.

ADDRESS: All comments should be submitted to the Docket Officer, Docket No. H-112D, Occupational Safety and Health Administration, Room S6212, U.S. Department of Labor, 200 Constitution Avenue NW., Washington, D.C. 20210. Telephone (202) 523-7894.

FOR FURTHER INFORMATION CONTACT: John Martonik, Occupational Safety and Health Administration, Room N3608, U.S. Department of Labor, Washington, D.C. 20210. Telephone (202) 523-8031.

SUPPLEMENTARY INFORMATION: On May 21, 1980, the Occupational Safety and Health Administration (OSHA) issued its standard on Access to Employee Exposure and Medical Records, 29 CFR 1910.20; 45 FR 35212 et seq. The standard imposes three major obligations on employers. First, employers are required to preserve and maintain exposure and medical records pertinent to an employee's occupational exposure to toxic substances or harmful physical agents, 29 CFR 1910.20(d). Generally, employee exposure records and

analyses based on exposure or medical records must be retained for thirty years, 29 CFR 1910.20(d)(1)(ii) and (iii). Employee medical records must be retained for the duration of employment plus thirty years, 29 CFR 1910.20(d)(1)(i).

Second, throughout these time period the employer must assure access to pertinent exposure records by the exposed employee, fellow employees exposed or potentially exposed to similar job hazards, designated employee representatives, and OSHA, 29 CFR 1910.20(e). Access to medical records must also be assured to the employee who is the subject of the records and to OSHA. Likewise, access to medical records must be assured to an employee's designated representative, such as the employee's collective bargaining agent, but, because of the privacy interests involved, only if the employee has provided specific written consent for such access, 29 CFR 1910.20(e)(2)(ii)(B); cf. § 1910.20(c)(10). Employee and designated representative access must be provided at a reasonable time, place, and manner, but in no event later than fifteen (15) days after the request is made, 29 CFR 1910.20(e)(1). OSHA access must be provided immediately upon request, 29 CFR 1910.20(e)(3), but because of the personal privacy interests affected by access to medical records, OSHA's access to such records is further conditioned upon compliance with the procedures and protections which were simultaneously promulgated as 29 CFR Part 1913.

Third, upon entering into employment and annually thereafter, employees are entitled to be informed by their employers of their rights under the standard and of the requisite procedures for exercising those rights, 29 CFR 1910.20(g).

In issuing the standard, the Secretary considered its potential impact on trade secrets, 29 CFR 1910.20(f). Although identities of toxic substances, levels of exposure, and health status data may not be withheld, the employer may delete any other trade secret data which discloses manufacturing processes, or discloses the percentage of a chemical substance in a mixture. In addition, the provisions of the final standard permit employers to condition access to trade secrets upon basic written agreements not to misuse this information.

On May 21, 1980, the Industrial Union Department, AFL-CIO, petitioned the United States Court of Appeals for the District of Columbia Circuit to review the standard pursuant to Section 6(f) of the OSH Act, 29 U.S.C. 655(f), the statute's provision for exclusive court of appeals' pre-enforcement review of occupational safety and health

standards. *Industrial Union Dep't. AFL-CIO v. Marshall*, No. 80-1550. The Chemical Manufacturers Association and the National Chamber of Commerce later intervened in that lawsuit.

On July 18 and 21, 1980, a number of individuals and two trade associations, the Association of Diving Contractors and the Louisiana Chemical Association, petitioned the Fifth Circuit Court of Appeals under the same section 6(f) review provision. These cases were transferred to the D.C. Circuit under 28 U.S.C. 2112(a) and consolidated with the pending *IUD* case. In addition, there is an appeal pending in the Fifth Circuit Court of Appeals of a challenge to the standard which was brought in the Western District Court of Louisiana, and which the District Court dismissed for lack of subject matter jurisdiction. *Louisiana Chemical Association v. Bingham*, No. 80-3724.

The records access standard expressed OSHA's policy, which became formalized after a full rulemaking proceeding, that employees, their representatives, and OSHA need access to employer-maintained exposure and medical information in order to protect employee health and safety, and that this need is a proper subject for OSHA regulation. However, since the particular standard raises complex policy and legal questions concerning issues which in some cases were resolved based on a limited rulemaking record and which have not yet been fully reviewed in light of the current administration's policies, OSHA has asked the D.C. Circuit to defer the briefing schedule for an additional six months. The purpose of this request is to permit the Agency adequate time to scrutinize all aspects of the standard, including current enforcement experience; the issues raised by the litigation; petitions for modification of the standard from trade associations representing the flavor, fragrance and food manufacturing industries; and other comments on the standard that have been received from numerous interested persons. After this review, the Agency will decide whether, and to what extent, to propose modification of the standard. Any reproposal of a modified records access standard will be subject to complete rulemaking procedures.

In seeking this six-month deferral, OSHA is cognizant of the fact that the records access standard has been in effect for nearly a year for most affected industries, and, with the one possible exception discussed below, wishes to maintain the *status quo* during this period of administrative review of the standard. This means (a) continuation of the standard in effect, except as noted

below, and (b) an extension of the existing partial administrative stay for the flavor and fragrance industries until February 15, 1982 (See FR Doc. 81-23163 published also in this Part IV of the Federal Register).

The one area where OSHA believes some basis may exist for an interim modification of the standard during this review period involves designated representative access to trade secret information. As stated, the standard requires disclosure to employees and their designated representatives of the chemical identity of toxic substances, even if trade secret, but permits the employer to condition access to the trade secret upon a written agreement "not to use the trade secret information for the purpose of commercial gain and not to permit misuse of the trade secret information by a competitor or potential competitor of the employer." 29 CFR 1910.20(f)(3). In explaining this provision the preamble stated, "this provision is intended to enable employers to establish a basic contractual obligation not to misuse trade secret information, but may not be used as a pretext for more onerous requirements such as the posting of penalty bonds, liquidated or punitive damages clauses, or other preconditions." 45 FR 35275.

In its preliminary consideration of this matter, OSHA is satisfied that, with respect to employee access to trade secret information, no immediate change is necessary regarding the authorization of confidentiality agreements, as qualified by the preamble, to protect the employer's trade secret interests. This is so not only because breach of the agreement can lead to a judicial action resulting in monetary damages, but because such a breach can be treated as an internal disciplinary matter (see interpretation No. 4 in FR Doc. 81-23163 published also in this Part of the Federal Register). Disciplinary sanctions available to the employer should in almost all cases deter employees from misuse or negligent use of the information provided to them on a privileged basis. Furthermore, since many employees have access to trade secrets as part of their job, employers have considerable experience with the use of confidentiality agreements to protect trade secrets from unauthorized employee disclosure.

With respect to designated representative access to trade secret information, employers, unlike their relationship with employees, lack comparable disciplinary authority which can make basic confidentiality agreements, as contemplated by OSHA when it issued the standard, effective

deterrents to wrongful behavior. In the absence of disciplinary power, any prohibition on the use of meaningful preconditions to access, such as liquidated damages clauses, does not simply leave employers to their common law or private remedies, but may in fact seriously restrict the available remedies. Moreover, reasonable preconditions such as liquidated damages clauses, which are consistent with current business practice, would not appear to pose the same barrier to use of the access right for a union that it would for an individual employee, whose financial resources are presumably much less. Thus, the symmetry which OSHA tried to maintain between individual employee and designated representative access to trade secret information may in fact have left the employer considerably more vulnerable to possible misuse of disclosed trade secret information when required to provide access to such information to a designated representative.

OSHA believes that this vulnerability to potential misuse of trade secret information may constitute irreparable harm to the employer, who may be faced with the choice of disclosing a valuable trade secret to a designated representative without adequate protection or subjecting itself to an OSHA enforcement action for noncompliance with the standard. Accordingly, OSHA hereby proposes an interim modification of the standard to permit an employer to condition designated representative access to trade secret information upon the entering of confidentiality agreements which may incorporate protective devices such as reasonable liquidated damage clauses and the like.

If adopted, the proposed interim modification will not go into effect until after the close of a public comment period, which shall be open until September 21, 1981. OSHA hereby invites all interested persons to submit written comments, views, and data relating to this issue to help it determine whether the proposed action is warranted and, if so, what its precise form should be. In particular, OSHA solicits comments with respects to the following questions:

(1) What has been the experience under the records access standard with designated representative requests for access to records containing trade secrets? Have employers complied with such requests, and if so, what kinds of agreements have been entered into? Has there been misuse of disclosed information, e.g., unauthorized redisclosure? How does this experience

compare with employee access to such information? How effective is the sanction available under the National Labor Relations Act of depriving a union of access to future information for misuse of confidential business information. *NLRB v. Abell Co.*, 104 LRRM 2761, 2763 (4th Cir., July 2, 1980)?

(2) If additional conditions are permitted, how and by whom should disputes over the validity of a trade secret claim be resolved? Who or what body should resolve impasses over the terms of a confidentiality agreement and how formal or informal should such a mechanism be?

(3) What limitations, if any, should OSHA place upon the conditions available to an employer in order to keep them reasonable? Should distinctions be made between penalty bonds, which require an advance posting of money, and damage clauses, which do not; or between liquidated damages, which bear a relationship to anticipated losses, and punitive damages, which may go beyond such foreseeable losses? How readily could a union or other designated representative obtain a surety bond from a bondsman to assure against possible breach of a confidentiality agreement?

(4) Should OSHA specify what would constitute breach of a confidentiality agreement? For instance, should OSHA state that redisclosure by a local union to the international or to affected employees, under the same terms of the agreement, would be permitted, but that disclosure to a newspaper is not? Is it necessary to state that unauthorized negligent or intentional redisclosures would constitute a breach, but that a designated representative cannot be held to a standard of strict liability? How do other Federal agencies or state law address these matters in comparable situations?

All comments should be submitted in quadruplicate by September 21, 1981, to the OSHA Docket Officer, Docket No. H-112D, Room S6212, U.S. Department of Labor, 200 Constitution Avenue, NW, Washington, D.C. 20210; telephone (202) 523-7894. All comments received in response to this notice will be available for inspection and copying at the Docket Office.

(Secs. 6(b), 8(g), 84 Stat. 1593, 1600 (29 U.S.C. 655, 657); Sec. 4 of the Administrative Procedure Act (5 U.S.C. 553).

Signed at Washington, D.C., this 4th day of August 1981.

Thorne G. Auchter,

Assistant Secretary of Labor.

(FR Doc. 81-23164 Filed 8-5-81; 12:06 pm)

BILLING CODE 4510-26-M

B U L L E T I N

N O . 7 2 3

August 6, 1981

ENVIRONMENTAL PROTECTION AGENCY (EPA) STATEMENT OF CLARIFICATION ON
ASBESTOS EXPORT NOTIFICATION REQUIREMENTS UNDER TOXIC SUBSTANCES
CONTROL ACT (TSCA)

As the enclosed notice indicates, EPA published regulations interpreting requirements of TSCA in December 1980. Among the regulations were those concerning asbestos exports and the notification requirements.

It was originally conceivable, for example, that under a strict interpretation of the act that finished brake linings, or lined brake shoe assemblies, or axles with brakes mounted, or even vehicles with brakes could trigger the notification requirements of Section 12(b) of TSCA.

The Notice enclosed is an interpretation developed after a meeting with representatives of the Asbestos Information Association (AIA) on the notification requirements. It will be noted that the Statement of Clarification states: "Other examples of non-reportable asbestos-containing mixtures include.....brake linings...." Please read that section of this statement.

If bulk brake lining mixes are exported, rather than finished brake linings, they would be reportable under this interpretation of the Act. This is sent to the Membership as a matter of information.

END/erc

Enc:

cc-Delegates and Alternates

Health and Environmental Affairs

Committee

Active Members - List C

E. W. Drislane

Executive Director

B U L L E T I N

N O. 7 2 2

August 6, 1981

AMENDMENT OF CONSTITUTION AND BY LAWS

Resolutions were passed at the June 1981 meetings recommending amendment of the Institute's Constitution. Based on these resolutions, a notice was sent to the Delegates and Alternates on July 1, 1981 requesting completed ballots on two amendments to the Constitution.

ARTICLE III - MEMBERSHIP, Section 4, Election to Membership

This amendment in summary called for the election of applicants for membership in the Institute by the affirmative vote of two-thirds of the Members voting within thirty days from the date of mailing of ballots to the Membership. The earlier requirement was the affirmative vote of three-fourths of the Membership.

Ballots were sent to 21 Active Members. Ballots were returned by 19 Active Members, who unanimously voted to amend the Constitution in line with the ballot wording.

ARTICLE V- OFFICERS, Section 2, Election and term of Office

This amendment in summary would permit the election of a President and/or Vice President who was not a member of the Institute's Board of Directors. The earlier requirement was that the President and Vice President be Directors of the Institute.

Ballots were sent to 21 Active Members. Ballots were returned by 19 Active Members. Of these ballots, 18 voted to amend the Constitution in line with the ballot wording. One Member voted against the amendment with the following comment:

I agree that a Secretary and a Treagurer be appointed by the Board, but not the President and Vice President if not a Member of the Previous Year's Board of Directors. I can see future problems.

* * * * *

As amendment of the Institute's Constitution and By-Laws requires the affirmative vote of two-thirds of the Membership, the two amendments submitted to the Membership have been ratified. Accordingly, the Institute's Constitution and By-Laws have been amended effective August 1, 1981, and a copy of the Constitution and By-Laws as amended is enclosed for your information.

EVD/erc
Enc:
cc-Delegates & Alternates

E. U. Drislane
Executive Director

B U L L E T I N

N O. 7 2 1

August 6, 1981

ASBESTOS INFORMATION ASSOCIATION

ANNUAL INDUSTRY-GOVERNMENT CONFERENCE

Mr. Bob Pigg, Executive Director of the Asbestos Information Association addressed the Institute's Membership Meeting this past June. In his remarks, Mr. Pigg extended an invitation to our Members to attend the Industry-Government Conference hosted by the Asbestos Information Association.

True to his word, Mr. Pigg has sent along information on this Conference which will be held in Alexandria, Virginia (a few miles from Washington's National Airport) this September, and has invited Institute Members.

Enclosed are a reservations form (green) and a provisional program form (yellow) for the Conference. This Conference is sponsored by the AIA and the Institute is not involved with the program. If there are any questions concerning the conference, please direct your questions to the Asbestos Information Association (703-979-1150).

EWD/erc
Enc:

E. W. Drislane
Executive Director

cc-Delegates & Alternates
Health and Environmental Affairs Committee

B U L L E T I N

N O. 7 2 0

July 6, 1981

HISTORICAL SALES PROGRAM

The historical sales program continues on a quarterly basis. Regional Members using the copyrighted FMSI Numbers for marketing their products in the United States may participate if they wish.

The Institute is requesting details of pieces sold for the first six months of 1981 (6 months ending June 30, 1981). The rules for reporting details remain unchanged.

1. Quantities will be reported in pieces (not units)
For roll linings, each foot of length will be one piece.
2. Our Accountants will report the names of the members from whom reports are received.
3. Total pieces in each group will be reported.
4. "Clutch Facings" does not include gear tooth discs, automatic transmission discs, or the 8-14" dia., (3/16 to 1/2" thick) asbestos composition discs.

The data as filed will be confidential. Totals for each group will be shown and there is no way of determining quantities by individual members.

You will receive from Marshall Granger and Company, Certified Public Accountants, a form for completing this information. Please return it to:

Marshall Granger & Company, CPA
1600 Harrison Avenue
Mamaroneck, NY 10543

If you report, please have your figures in by August 15, 1981. If you do not wish to report these figures, no reply is necessary. Only those reporting figures will receive the industry totals when the data is summarized. A sample form and definitions are attached.

EWD/erc

Enc:

Dist: Active Members-List C

Regional Members (paying
Active Members Dues)

E. W. Drislane

Executive Director

EXHIBIT "A"

STATISTICAL PROGRAM OF THE
FRICTION MATERIALS STANDARDS INSTITUTE, INC.

Mail to:

Marshall Granger & Co., CPA
1600 Harrison Avenue
Mamaroneck, NY 10543

* * * * *

See instructions for sales to other members.

Pieces sold to United States distributors, jobbers, private brands, rebuilders, brake specialists, fleets, mass merchandisers, direct consumers, government agencies, or other customers for use in the United States replacement market:

6 MONTHS JANUARY 1, to JUNE 30, 1991

Brake linings less than 3/4" nominal
thickness (See explanation for
roll linings).

Brake blocks, nominal thickness
of 3/4" and over

Disc Brake Linings

Clutch Facings

Total Pieces

STATISTICS SUPPLIED BY:

SAMPLE
FORM

USE REPORTING FORM TO
BE SENT BY ACCOUNTANTS

Signature

Company

Telephone Number

EXHIBIT "B"

DEFINITION FOR HISTORICAL SALES

PIECES

The reports will show pieces of friction material, in groups as shown:

<u>Group</u>	<u>Description</u>	<u>Normal Usage</u>
Brake Lining	Friction materials less than a nominal 3/4" thickness (See note on roll lining)	Normally, <u>one piece</u> to a shoe
Brake Blocks	Friction materials with a nominal thickness of 3/4" and over	Normally, <u>two pieces</u> to a shoe
Disc Brake Linings	Friction materials sold (for disc brakes) to be attached to the shoe, or sold as a unit molded, bonded or riveted to the shoe	Normally, <u>one piece</u> to a shoe
Clutch Facing	Friction materials of annular shape, or segments thereof	Normally, <u>two annular pieces</u> per clutch plate

Note: For roll lining only, consider each foot of length equals one piece.

REPLACEMENT SALES TO UNITED STATES MARKET

This reporting is for sales to the United States replacement market only. Do not include sales to other markets. This includes sales under the friction material manufacturer's own name or brand name used by the customer, to automotive warehouse distributors, jobbers, rebuilders, brake specialists, fleets, mass merchandisers, direct consumers, government agencies or other customers for use in the United States replacement market.

When a friction materials manufacturer is shipping to a vehicle manufacturer, brake manufacturer, or clutch manufacturer, but has no reasonable way of determining if the pieces are for original equipment or replacement purposes, estimates will not be used - these pieces will not be reported. However, where a friction material manufacturer is shipping to a point known to be used for replacement, or where he stencils or otherwise identifies the pieces as being for replacement purposes, or where the shipments otherwise are obviously known to be for replacement, these pieces will be reported.

The member who sells to the type customer or user indicated above will report those pieces sold, even if purchased from another Active Member or Regional Member.

When you sell your friction materials to another Member (Active or Regional) do not report those sales! Materials sold to Licensee Members of the Institute for the replacement market should be included.

B U L L E T I N

N O . 7 1 9

July 2, 1981

COUGAR AUTOMOTIVE CORPORATION, MONTREAL, CANADA

This is to advise the Membership that an application for Regional Membership has been received from Cougar Automotive Corporation, of Montreal, Canada.

An application had been received earlier in June, but was returned to Cougar Automotive Corporation for additional data. The completed application has now been forwarded to the Membership Committee for its recommendations.

As background information, Cougar Automotive is manufacturing disc brake pads for worldwide distribution. As they have indicated they will be marketing their pads in the United States using the Institute's copyrights and trademarks, they will be charged the same fees as charged to United States resident Active Members. With their application, Cougar Automotive sent a check as a deposit for the first year's fee.

Cougar Automotive is now manufacturing disc brake pads and marketing them in the United States and Canada. Advertising has appeared in BRAKE AND FRONT END. We are aware of pads with the CGR edge code, which we understand are marketed by Cougar. One of the principals with Cougar had been with Distex-SNA (formerly Canadian Distex), a Regional Member of the Institute.

As indicated, the Membership Committee is now reviewing the application to determine if Cougar is qualified for Regional Membership. If a Member has any background on Cougar Automotive--positive or otherwise--that should be considered in accepting this application, we ask that it be sent to the Institute. Any relevant information of that nature will be passed on to the Board of Directors for their subsequent review of the application.

EWD/erc
Delegates & Alternates

E. W. Drislane
Executive Director

BULLETIN

NO. 713

July 10, 1981

ADDITIONS TO CROSS REFERENCES

This cross reference listing combines all cross reference additions for brake linings and clutch facings since the "Additions" of July 15, 1975. This includes our additions in BULLETIN NO. 599 of April 1977 and BULLETIN NO. 642 of February 20, 1979 and the additions we have accumulated since that time. With this issue, there are now three general cross-reference listings which cover all brake linings and clutch facings:

Original Cross Reference	September 1963
BULLETIN NO. 536	July 15, 1975
BULLETIN NO. 718	July 10, 1981

This listing does not include brake shoes for which the original listing was our BULLETIN NO. 540 of July 28, 1975. We have updated the brake shoe cross reference with a new bulletin covering all brake shoes since the 1975 BULLETIN. The two BULLETINS that now cover all brake shoes are:

BULLETIN NO. 540	July 28, 1975
BULLETIN NO. 717	July 10, 1981

We must caution that much of the cross-reference information is for original equipment linings and while many have the same part number for replacement service, many do not.

EWD/erc
Distribution: Active Members -
List E
Regional Members

E. W. Drislane
Executive Director

<u>Part #</u>	<u>FMSI NO.</u>
164-12304	8039

BENDIX

<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>
327,871	7097A(I)	2,235,206	7024B(O)	3,205,820	2162 (s)
327,872	7097A(O)	2,238,490	7024B(I)	3,205,821	2162 (s)
1,153,201	7054 (I)	2,238,491	7024B(I)	3,205,823	2162 (s)
1,153,202	7054 (O)	2,238,492	7024B(I)	3,205,825	2162 (I)
1,153,216	7053 (I)	2,238,703	7081A(I)	3,205,826	2162 (I)
1,153,217	7053 (I)	2,238,704	7081A(I)	3,205,827	2162 (I)
1,153,218	7053 (O)	2,238,746	7081A(I)	3,205,908	2012FT(s)
1,153,228	7041 (O)	2,238,747	7081A(I)	3,206,313	2161TT(s)
1,153,228	7098 (O)	2,238,756	7082A(O)	3,206,315	2161TT(I)
1,153,229	7041 (I)	2,238,757	7082A(O)	3,206,317	2089AT(s)
1,153,263	7083B(O)	2,238,759	7082A(O)	3,206,319	2089AT(I)
1,153,264	7083B(I)	2,238,760	7082A(I)	3,206,673	1350
1,153,266	7072B(I)	2,238,762	7082A(I)	3,206,679	1350
1,153,267	7083B(O)	3,202,730	2163T(s)	3,206,749	1349
1,153,276	7099	3,202,733	2163T(I)	4,150,390	7108 (o)
1,153,278	7097A	3,203,525	2135T(s)	4,150,393	7108 (O)
1,153,282	7098 (I)	3,203,529	2135T(I)	4,150,394	7108 (O)
1,153,283	7098 (I)	3,204,834	2144BT(s)	4,150,395	7108 (I)
2,235,205	7024B(O)	3,204,836	2144BT(I)		

BORG & BECK*

<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>
165-10006	8025A	165-10346	791	165-10532	1005B
165-10173	1037F	165-10347	791	165-10559	788
165-10262	1092A	165-10435	1005A	165-10576	9035
165-10263	1095	165-10436	1006B	178-10185	791
165-10301	1275	165-10519	1061	178-10186	791

CHEVROLET

<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>
357,883	2159TT	367,550	2073T	459,731	1337
357,884	2159TT	457,767	7053 (I)	477,285	9035*
361,767	1337	457,768	7053 (I)	3,927,129	10,015*
367,549	2073T	457,769	7053 (O)		

CHRYSLER

<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>
3,880,815	7017A (I)	3,880,868	7018A (I)	5,204,324	1315
3,880,816	7017A (O)	3,880,869	7018A (O)	5,204,325	1315
3,880,818	7017A (I)	3,880,870	7018A (I)	5,204,333	1315
3,880,819	7017A (O)	3,880,873	7018A (O)	5,204,334	1315
3,880,864	7018A (I)	5,204,304	1315	5,204,467	1315
3,880,865	7018A (I)	5,204,305	1315	5,204,468	1315
3,880,866	7018A (O)	5,204,309	1315		
3,880,867	7018A (O)	5,204,316	1315		

DATA*

Part # FMSI NO.
114-C-305 1267

DELCO-MORAINE

Part #	FMSI NO.	Part #	FMSI NO.	Part #	FMSI NO.
2,633,693	7055	18,003,252	2164 (L)	18,006,216	7089 (O)
5,474,999	2117TT(s)	18,003,314	7071	18,006,221	7089 (I)
18,000,210	2177TT(1)	18,003,541	7084A(O)	18,006,222	7089 (I)
18,002,701	7055	18,003,643	7084A(I)	18,006,372	2164 (s)
18,003,117	7070A (I)	18,004,409	7070B(I)	18,008,334	7070C(O)
18,003,118	7070A (O)	18,004,409	7070C(I)		
18,003,191	2117ATT(1)	18,004,413	7070B(O)		

EATON

Part #	FMSI NO.	Part #	FMSI NO.	Part #	FMSI NO.
B-1724	4515	1,000,751	4223A	1,003,815	4311J
B-1727	4552	1,000,752	4223A	1,004,051	4311J
B-1729	4552	1,000,863	4570	1,004,631	4311J
B-1731	4515	1,001,041	4317G	1,004,634	4311J
B-1794	4375	1,001,042	4317G	1,004,713	4311J
B-1831	4591	1,001,084	4223A	1,004,749	4311J
B-1904	4591	1,001,085	4311J	1,005,082	4527C
B-1909	4551	1,001,096	4527C	1,005,083	4527C
B-1910	4551	1,001,097	4527C	1,005,265	4311J
B-1990	4375	1,001,349	4223A	1,005,732	4311J
B-2240	4470	1,001,363	4311J	1,005,734	4311J
43,087	4570	1,001,861	4223A	1,005,737	4223A
43,908	4317G	1,001,915	4311J	1,005,738	4223A
44,608	4317C	1,001,918	4311J	1,005,740	4317G
47,317	4570	1,001,953	4311J	1,005,768	4570
53,747	4317G	1,002,380	4311J	1,005,769	4570
53,749	4317G	1,002,681	4527C	1,005,770	4570
57,355	4317G	1,002,682	4527C	1,005,890	4223A
72,728	4570	1,002,962	4317G	1,006,076	4311J
72,729	4570	1,002,994	4317G	1,006,186	4674
1,000,239	4527C	1,003,084	4527C	1,006,187	4674
1,000,240	4527C	1,003,085	4527C	1,006,188	4674
1,000,241	4527C	1,003,269	4311J	1,006,189	4674
1,000,717	4311J	1,003,281	4311J	1,006,241	4223A

FORD

Part #	FMSI NO.	Part #	FMSI NO.	Part #	FMSI NO.
C-87Z-2284-L	4646	D-5DA-2285-AA	2135AT(1)	D-50A-2284-AA	2161TT(s)
D-4VA-2285-AA	2081TT(1)	D-5DA-2285-BA	2135AT(1)	D-50A-2284-BA	2161TT(s)
D-4VA-2285-BA	2081TT(1)	D-5DA-2285-CA	2135AT(1)	D-50A-2284-CA	2161TT(s)
D-4VA-2285-CA	2081TT(1)	D-5SA-2284-AA	2081TT(s)	D-6DA-2284-AA	2135AT(s)
D-5DA-2284-AA	2135T (s)	D-5SA-2284-BA	2081TT(s)	D-6DA-2284-EA	2135AT(s)
D-5DA-2285-AA	2135T (1)	D-5SA-2284-CA	2081TT(s)	D-6DA-2284-CA	2135AT(s)

*Clutch Facing

FORD (Cont'd)

<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>
D-60A-2019-DA	7054 (I)	D-8BC-2285-AA	2151T (I)	D-9ZC-2022-AB	7083B (O)
D-60A-2018-DA	7054 (O)	D-8BC-2285-BA	2151T (I)	D-9ZC-2021-DA	7083A (O)
D-60A-2285-AA	2161TT(I)	D-8BC-2285-CA	2151T (I)	D-9ZC-2022-CA	7083B (I)
D-60A-2285-BA	2161TT(I)	D-9AC-2021-AA	7082A (O)	D-9ZC-2022-DA	7083A (I)
D-60A-2285-CA	2161TT(I)	D-9AC-2022-AA	7082A (I)	D-9ZC-2C106-BA	7083B (O)
D-8BC-2021-AA	7072A (I)	D-9AC-2284-DA	2089AT(s)	D-9ZC-2C106-CA	7083A (O)
D-8BC-2021-AB	7072A (O)	D-9AC-2285-DA	2089AT(I)	D-9ZL-7549-A	1061*
D-8BC-2021-CA	7072B (O)	D-8BC-2284-CA	2151T (s)	D-9ZL-7549-A	1032A*
D-8BC-2022-AB	7072A (O)	D-9AC-2284-CA	2161TT(s)	D-9ZL-7549-B	1061*
D-8BC-2284-AA	2151T (s)	D-9AC-2285-CA	2161TT(I)	E-1EC-2021-AA	7106A
D-8BC-2284-BA	2151T (s)	D-9BC-2022-AA	7072B (I)		

INTERNATIONAL HARVESTER

<u>Part #</u>	<u>FMSI NO.</u>
233,007R91	2085
389,430C97	10,014*

KELSET-HAYES

<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>
96933	7041 (I)	101590	7072B(I)
96934	7041 (O)	101640	7083B(O)
96934-02	7098 (O)	101643	7083B(I)
100492	7085 (I)	104449-01	7098 (I)
100497	7085 (O)	104449-02	7098 (I)

LONG*

<u>Part #</u>	<u>FMSI NO.</u>
C-42-128	1442*
C-42-229	1280*
C-42-230	1181A*
C-42-232	11,010*
C-42-233	1244A*

ROCKFORD*

<u>Part #</u>	<u>FMSI NO.</u>
CL-12391-24	10,014
CL-12391-148	10,014

*Clutch Facing

Part #	FMSI NO.	Part #	FMSI NO.	Part #	FMSI NO.
<u>2240 Series</u>					
A-1821	4623	I-3182	17,743	Q-3241	4514G
A-2471	17,741	J-3208	4549C	Q-3267	4515G
A-2289	4561B	J-3234	4549C	Q-3371	17,743
A-2575	4654	J-3333	4551E	Q-3397	4551E
A-2783	4515E	J-3390	4549C	Q-3553	4551E
A-2965	4515G	J-3598	4551E	Q-3557	4551E
A-3199	4514G	K-1987	4623	Q-3813	4644B
A-3459	4549C	K-2637	4644A	R-2566	4592A
E-1978	4621	K-2819	4655	R-3060	4514G
B-2290	4561B	K-3053	4514G	R-3138	4514G
B-3290	4514G	K-3209	4549C	R-3216	4549C
B-3408	4514G	K-3235	4549C	R-3242	4514G
B-3460	4549C	K-3329	4551E	R-3268	4515G
C-1823	4623	L-1832	4673	R-3372	17,743
C-1979	4621	L-1988	4623	R-3398	4551E
C-3201	4549C	L-2638	4644A	R-3554	4551E
C-3409	4514G	L-2716	4653	R-3658	4551E
C-3487	4549C	L-2820	4655	R-3736	4551C
D-1533	4514G	L-3054	4514G	S-3061	4514G
D-1824	4623	L-3210	4549C	S-3139	4514G
D-1980	4621	L-3340	4551E	S-3217	4644A
D-2656	17,741	L-3704	4551E	S-3269	4665
D-2812	4541B	M-1833	4673	S-3373	4665
D-3202	4549C	M-1989	4623	S-3399	4666
D-3488	4549C	M-2821	4655	S-3737	4551C
E-1539	4514G	M-3055	4514G	T-2646	4654
E-1981	4621	M-3211	4549C	T-2802	4653
E-2553	4592A	M-3341	4551E		
E-3203	4549C	M-3705	4551E	T-3062	4514G
E-3489	4551E	N-1834	4673	T-3140	4514G
F-2632	4541B	N-1990	4623	T-3166	4514C
F-3204	4549C	N-2822	4653	T-3218	4644A
F-3490	4551E	N-3056	4514G	T-3270	4665
G-2451	17,731A	N-3212	4549C	T-3374	4666
G-2555	4398B	N-3342	4551E	T-3400	4666
G-2815	4655	N-3420	4549C	T-3738	4551C
G-3205	4549C	N-3472	4644A	U-2387	17,731A
H-2816	4655	P-3058	4514G	U-2647	4654
H-3180	17,743	P-3214	4549C	U-2803	4653
H-3206	4549C	P-3344	4551E	U-3037	4665
H-3388	4549C	P-3422	4549C	U-3063	4514G
H-2596	4551E	P-3474	4644A	U-3141	4514G
J-2558	4541B	P-3812	4644B	U-3167	4514G
J-2584	4398B	Q-3059	4514G	U-3219	4644A
J-2818	4655	Q-3215	4549C	U-3739	4551C

ROCKWELL (Cont'd)

<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>
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2240 Series (Cont'd)

V-2804	4611	X-3248	4551C	Z-3250	4551C
V-3012	4665	X-3378	17,743A		
V-3038	4665	X-3456	4644A		
V-3194	17,743	Y-2287	4561B		
V-3220	4644A	Y-2859	4667		
V-3272	4666	Y-2963	4644A		
W-2103	17,745	Y-3197	4514G		
W-3013	4666	Y-3249	4551C		
W-3039	4666	Y-3327	17,743		
W-3247	4551C	Z-2288	4561B		
W-3273	4666	Z-2574	4654		
W-3455	4644A	Z-2782	4515E		
X-2806	4227E	Z-2860	4667		
X-2962	4644A	Z-2964	4515G		
X-3040	4666	Z-3198	4514G		

2740 Series

A-1301	4633B	M-455	1139B	T-4076	17,744
A-1691	1297	M-1755	4668	U-333	17,742
A-2055	4669	M-2067	4669	U-2101	4611
A-3485	1108	N-456	1139B	V-334	17,742
B-1302	4633B	N-690	17,742	V-2102	4611
B-1692	1297	N-1756	4668	W-335	17,742
B-2056	4669	N-2063	4669	W-2103	4611
B-3486	1108	P-458	1139B	X-2052	4669
C-1693	1297	P-692	17,742	X-5146	17,737
C-2057	4669	P-1758	4668	Y-2053	4669
D-1694	1297	P-2096	4611	Z-2054	4669
D-2058	4669	Q-459	1139B		
E-2059	4669	Q-1473	1297		
E-5127	4515E	Q-1759	4668		
F-2060	4669	Q-2097	4611		
F-5128	4515E	Q-4073	17,744		
G-2061	4669	R-1474	1297		
H-164	4560	R-1760	4668		
H-2062	4669	R-2098	4611		
J-166	4560	R-4074	17,744		
J-1570	1261	S-1761	4668		
J-2064	4669	S-2099	4611		
K-2065	4669	S-4075	17,744		
L-454	1139B	T-332	17,742		
L-2066	4669	T-2100	4611		

July 10, 1961

STANDARD FORGE 1 AXLE

<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>
213,132	4536A	213,136	4591A
213,133	4536B	213,137	4591A
213,134	4661	213,140	4660
	4661A	213,141	4660
213,135	4661		
	4661A		

TEVES

<u>Part #</u>	<u>FMSI NO.</u>
26.5109-0001.1	7097A(O)
26.5109-0003.1	7097A(I)

WAGNER

<u>Part #</u>	<u>FMSI NO.</u>	<u>Part #</u>	<u>FMSI NO.</u>
FD-101810	1345A	FD-45280	1255
FD-101917	1345	FE-97766A	2151T(s)
FD-20421A	1254	FE-97769A	2151T(1)

BULLETIN

NO. 717

July 10, 1981

CROSS REFERENCE ADDITIONS - BRAKE SHOES

This is a supplement to our original cross reference listing for brake shoes, the original listing being BULLETIN NO. 540 of July 28, 1975. This Supplement includes all shoes since the 1975 listing, including those listed in BULLETIN NO. 600 of April 18, 1977, and BULLETIN NO. 641 of February 20, 1979.

In summary, all shoe cross reference information to date is in either original BULLETIN NO. 540 or this BULLETIN.

BENDIX

<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>
321,591	314	2,238,698	D150(I)	3,205,798	474
321,599	316	2,238,699	D150(I)	3,205,822	475
1,153,203	D120	2,238,705	D149(I)	3,206,215	481
1,153,211	D119(I)	2,238,706	D149(I)	3,206,269	482
1,153,212	D119(O)	3,201,924	152	3,206,270	482
1,153,277	D172	3,202,576	263	3,206,674	501
2,230,362	D129(O)	3,202,583	264	3,206,675	501
2,230,363	D129(O)	3,204,378	316L	3,206,744	500(F)
2,238,147	D89 (I)	3,204,379	316R	3,206,752	500(R)
2,238,147	D129(I)	3,204,478	263	4,150,391	D184(O)
2,238,148	D89 (I)	3,204,502	264	4,150,392	D184(O)
2,238,148	D129(I)	3,204,692	314L	4,150,396	D184(I)
2,238,658	D150(O)	3,204,693	314R	4,150,397	D184(I)
2,238,661	D150(O)	3,205,797	474		

CHEVROLET

<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>
355,893	451	357,885	449	457,772	D119(G)
355,889	452	361,764	447	3,987,472	442
357,866	450	457,771	D119(I)		

CHRYSLER

<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>
3,638,329	D123(O)	3,880,862	D85(I)	5,204,469	476
3,638,331	D123(I)	3,880,863	D85(O)	75,061,059	396
3,880,633	445	4,126,773	D170		
3,880,634	446	5,204,308	476		

July 10, 1981

DELCO-MORATNE

<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>
468,685	473	18,001,617	462	18,003,475	487
2,621,184	D122(I)	18,002,224	472	18,003,544	D153(O)
2,623,691	D121(I)	18,002,492	D138(O)	18,005,798	D153(I)
2,623,696	D121(O)	18,002,762	D138(I)	18,006,215	D162(O)
5,472,307	D122(O)	18,002,762	D154(I)	18,006,223	D162(I)
18,000,176	448	18,002,763	D138(I)	18,006,224	D162(I)
18,001,568	462	18,002,763	D154(I)		

FORD

<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>
C20A-2220-G	152	D9AC-2220-AA	481	D9ZC-2C089-BA	D182(O)
D3AA-2220-DB	264	D9AC-2220-BA	482	D9ZC-2C097-AB	D151(I)
D3AA-2220-EB	263	D9AC-2220-DA	482	D9ZC-2C097-BA	D182(I)
D5RY-2200-B	471	D9AC-2B114-AB	D150(O)	E1EC-2220-AC	500(F)
D6RY-2200-A	470	D9AC-2B300-AB	D150(I)	E1EC-2220-BB	501
D7TZ-2201-A	D76	D9AC-2C089-AB	D150(O)	E1EC-2220-CC	500(R)
D8BC-2B114-AC	D140(O)	D9BC-2B300-BA	D152(I)	E1EC-2B114-AB	D179(O)
D8BC-2B114-AC	D152(O)	D9BC-2C097-BA	D152(I)	E1EC-2B114-AC	D179(O)
D8BC-2B300-AD	D140(I)	D9TZ-2001-A	488	E1EC-2C097-AB	D179(I)
D8BC-2C089-AC	D140(O)	D9ZC-2B114-AB	D151(O)	E1EC-2C097-AC	D179(I)
D8BC-2C089-AC	D152(O)	D9ZC-2B114-BA	D182(O)		
D8BC-2C097-AD	D140(I)	D9ZC-2C089-AB	D151(O)		

KELSEY-HAYES

<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>
099932	D152(O)	100498	D155(O)	101212	D151(I)
099932	D140(O)	101167	D150(O)	101639	D182(O)
099939	D140(I)	101172	D150(I)	101642	D182(I)
100493	D155(I)	101206	D151(O)	101671	D152(I)

TEVES

<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>
26.5104-0001.1	D170	26.5104.0002.1	D179(I)	26.5104-0003.1	D179(O)

WAGNER

<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>	<u>Part</u>	<u>FMSI NO.</u>
FE32,462	455	FE85,053C	491	FE98,140	490
FE32,479	463	FE88,633	458		

BULLETIN

NO. 716

May 22, 1981

1981 AUTOMOTIVE DATA BOOK

The Printer, Tweddle Litho Company, has shipped copies of the "1981 Automotive Data Book" to those Members who had placed orders earlier. Shipments started earlier this week.

In our BULLETIN NO. 705 of January 21, 1981, we had estimated 60,000 copies of a 112 Page Book. Fortunately, we had more orders (75,000) and the page count actually dropped to 96 pages. With these two changes in a favorable direction, the final price has been reduced to:

Basic Price: \$500.00/M
Punching: 15.50/M

You may wish to advise your Purchasing Department of this change. As these catalogs are fresh off the press, we have not received any information on overruns, if there are any. However, if there are additional copies beyond those ordered available, we will let the Members know. Should you wish additional copies, please place your order on the Institute.

We will be happy to provide one or two copies of the "1981 Automotive Data Book" to any Member on a no charge basis, on request. Should you wish a copy, please let us know.

EWD/erc	E. W. Drislane
cc-Active Members - List D	Executive Director
Delegates and Alternates	
Data Book & Technical Committee	
Regional Members	

B U L L E T I N

N O. 7 1 5

April 30, 1981

QUESTIONNAIRE ON SUGGESTIONS FOR
THE HEALTH AND ENVIRONMENTAL AFFAIRS COMMITTEE

In an attempt to determine areas of possible assistance to the Members, the Institute's Health and Environmental Affairs Committee is seeking answers from the Membership on possible actions to be taken by the Committee.

This bulletin is being sent to the Institute's Delegates and Alternates as well as to the Health and Environmental Affairs Committee. It is suggested that the Delegate (or the Alternate in the Delegate's absence) either respond to the questionnaire or refer the questionnaire to the party at his company who works on health and environmental affairs. We're looking for one reply only for each Member company.

In order to give the Membership some background on the Health and Environmental Affairs Committee, we are enclosing:

1. Review of Projects and Activities of the Committee since 1970
2. Health and Environmental Affairs Committee Charter
3. Background information on the expertise of six Members of the Committee

This questionnaire was drafted by the Health and Environmental Affairs Committee and has been reviewed by both Legal Counsel and the Board of Directors. We ask that you reply by June 1, 1981, so that the replies can be assembled for review by the Board of Directors. The replies will not be attributed to individual Member companies.

EWD/erc

Enc.

cc-Delegates and Alternates

Health and Environmental Affairs Committee

E. W. Drislane

Executive Director

CITATIONS BY REGULATORY AUTHORITIES (Continued)

- | | <u>YES</u> | <u>NO</u> |
|--|--------------------------|--------------------------|
| 9. Would your company be willing to provide the Committee with copies of citations received from regulatory agencies, along with information on how these citations were resolved? (Names and certain details could be deleted). | ☐ | ☐ |

OTHER OCCUPATIONAL SAFETY AND HEALTH AREAS

- | | | |
|--|--------------------------|--------------------------|
| 10. Should the Institute involve itself with other toxic and/or hazardous materials in the friction materials business such as lead, barium, etc.? | ☐ | ☐ |
| 11. Should the Institute involve itself with occupational safety problems such as fire safety and emergency evacuation procedures? | ☐ | ☐ |
| 12. If interested in other toxic and/or hazardous materials, or fire safety procedures, would your company contribute input to the Committee in these areas? | ☐ | ☐ |

COMMENTS:

By: _____

Company: _____

Date: _____

REVIEW OF PROJECTS AND ACTIVITIES OF COMMITTEE

1970

The "Occupational Safety and Health Act of 1970 became law on December 29, 1970. This was otherwise known as the Williams-Steiger Act.

1971

Mr. William Reitze of Johns-Manville Corporation was invited to address the Institute's Annual Meeting. Mr. Reitze talked on OSHA and projected its far-reaching effects on American industry, and particular the asbestos products industry. Members were sent a copy of the Act.

Mr. Greenen, President of the Institute called for creation of a committee to address the problems that could arise from OSHA.

The Asbestos Study Committee had an organization meeting on September 15, 1971. First members were: E. P. Stefl, Raybestos-Manhattan-Chairman, J.C Henning, World Bestos Co., E.H. Feierabend, Abex, W.B. Reitze, Johns-Manville, W. Spurgeon, Bendix and J.B. Graham, Carlisle.

The Illinois Pollution Control Board proposed regulations on asbestos including: "The use of asbestos in the brake lining of vehicles manufactured after January 1, 1975 and sold for use in Illinois is prohibited."

Institute coordinated several individual Member responses directly to the Illinois Pollution Control Board, including a scholarly response from the British Friction Materials Council. Subsequently, the proposed ban on asbestos containing brake linings was dropped.

The EPA released their emission standards for asbestos, beryllium and mercury.

OSHA released their emergency temporary standards for asbestos in late 1971

1972

The Institute's Committee held a demonstration session on means for monitoring asbestos fibers in the workplace. Mr. Reitze made the demonstration.

Distributed to Members the OSHA standards for exposure to asbestos dust, to be effective July 7, 1972. (5 fibers TWA eff. 7/7/72; 2 fibers TWA eff. 7/1/76)

Institute circulated a Committee drawn survey on labelling practices, and interpretation of OSHA standards on "locked-in" asbestos in friction materials.

1973

Advised Members on results of labelling practice survey.

1973 (Continued)

Sent Membership a list of independent laboratories which conduct asbestos counts.

Distributed copies of EPA "National Emission Standards for Hazardous Air Pollutants (Asbestos). Essentially "no visible emissions."

Cooperated with EPA Contractors on technical and economic impacts on manufacturers from proposed effluent guidelines for asbestos products manufacturers.

1974

Sent recommendations to Asbestos Information Association (AIA) on their comments to OSHA on proposed revisions to the asbestos standard.

Provided input to AIA on their "Work Practices for Users and Fabricators of Asbestos Friction Materials."

Commented directly to EPA on their National Emissions Standards for Asbestos.

1975

Wrote to Representative Fenwick supporting her efforts on release of chrysotile asbestos from the stockpile to manufacturers.

Distributed to Members the NIOSH Recommended Interim Practices for Asbestos Brake and Clutch Servicing.

OSHA published its proposed revisions to the asbestos standard (This is the 0.5 Fiber TWA level).

The Institute's Committee reviewed the proposed OSHA changes and recommended comments by individual members on the OSHA standard proposals. The Members were sent 8 points to consider in their comments.

Committee organized and sponsored a seminar on asbestos attended by over 50 individuals from Member companies. Presentations by Johns-Manville, OSHA, AIA and certain vendors.

1976

Based on Committee recommendations, the Institute commented directly to OSHA objecting to several sections of OSHA's proposals for revision to the asbestos standard.

Worked with AIA and their contractors on their response to the OSHA proposals.

Updated the list of laboratories for asbestos counts and consulting, and advised the Membership.

1977

Committee drafted a one page "Recommended Procedures for Reducing Asbestos Dust During Brake Servicing." This was first published in Institute catalogs in 1977 and was released to the automotive trade press. The release appeared in several trade publications.

Dr. H.C. Lewinsohn of Raybestos-Manhattan addressed our Annual Meeting on the "Medical Aspects of Occupational Exposure to Asbestos."

Reviewed and commented on the Abt Associates "Trainer's Guide for Brake Shop Managers." This was to be a guide prepared under contract for OSHA.

1978

Met at Mount Sinai Hospital with Dr. Selikoff and Dr. Nicholson as well as industry Members concerning the NIOSH contract to investigate the health hazards in brake repair shops.

Legal Counsel reviewed the Consumer Product Safety Act and advised that brake lining would not be regulated under that act.

Updated our list of laboratories providing asbestos fiber counts and consulting services.

Committee prepared and the Institute published booklet "Friction Materials Work Practices Guide." Institute sold over 40,000 copies.

1979

Advised Members on manufacturers and laboratories with products or services for controlling asbestos--consultation, respirators, vacuum equipment.

Committee reviewed an industry sponsored "Asbestos Health Hazards Compensation Act." Objected to the industry group on the prominent place they gave friction materials manufacturers as regards worker exposures. Friction materials manufacturers were later dropped to a less objectionable class.

Contacted EPA's Office of Toxic Substances on voluntary actions in control of asbestos in brake repair--labelling and education.

Revised the Institute's write-up on "Recommended Procedures for Reducing Asbestos Dust During Brake Servicing" for our catalogs.

The Committee responded to the EPA on their Advance Notice of Proposed Rule-making on Asbestos Products with emphasis on the IIT Research Institute's Report--took exception to the selection of friction materials for control based on their allegations of heavy population exposure.

1980

Met with EPA's Office of Toxic Substances to rewrite their request for information on non-asbestos friction materials.

Gathered data on non-asbestos disc brake linings and answered EPA's Office of Toxic Substances request for information.

Worked with AIA on questionnaire on labelling practices and training programs relating to asbestos.

Mr. Bob Figg of the Asbestos Information Association (AIA) addressed the Institute's June Meeting.

Sent Membership information on industrial hygiene consultants, regulations on access to employee medical records, and other OSHA actions.

HEALTH & ENVIRONMENTAL AFFAIRS COMMITTEE CHARTER

I. General Responsibility

Responsible for the monitoring of existing and proposed worldwide Federal, State and Provincial legislation, regulations and literature on safety, health and environmental matters affecting members of the Friction Materials Standards Institute and the proposal of Institute positions on these matters.

II. Specific Responsibilities

- . Develop action plans and position papers on Safety, Health, and Environmental Protection matters for approval and direction of the FMSI Board of Directors.
- . Provide direct coordination with the Asbestos Information Association Committees of Concern to FMSI.
- . Develop and administer a continuing education program for the members of the Institute.
- . Monitor the membership's experience with meeting regulatory requirements in order to provide technical assistance.
- . Establish and maintain a working relationship with Federal, State, Trade and other agencies and organizations.

COMIITTEE MEMBERS - OCCUPATIONAL AND ENVIRONMENTAL EXPERTISE

J. W. Armstrong, CSP, PE

Employees accident protection, OSHA appeals and compliance, workers compensation cost control, industrial health and hygiene, fire protection, air, water and solid waste control (EPA), industrial security, consumer product safety and international safety and health regulations.

R. L. Armer

Plant Engineering, Project Management-Environmental, Materials Development.

W. E. Milligan

Safety Manager - lead, noise and asbestos control, mechanical guarding, employee training, workers compensation, medical surveillance.

J. O. Pearson

Safety Engineering, local exhaust ventilation (engineering) and industrial hygiene (Certified by ABIH).

C. H. Borcharding

Industrial hygiene, air, water and solid waste. Some expertise in plant engineering (primarily processes and ventilation design), safety engineering, Board Certified in industrial hygiene and safety.

D. E. Stone

Plant and manufacturing engineering, maintenance engineering, design and application of industrial exhaust systems and collectors, management of environmental affairs - EPA, OSHA, TSCA, RCRA, etc.

March 1981

B U L L E T I N

N O. 7 1 4

April 8, 1981

DECLARATION RE PRODUCT CATEGORIES

FOR

FEE FORMULA BASIS

According to our Constitution and By-Laws, the Fee Formula for Active Members must be reviewed annually. Data on categories is accumulated and reported to a Fee Formula Committee and to the Board of Directors who then make recommendations on the fee schedule to the Membership.

As a member may be engaged in a category one year and not the following(or the reverse) declaration must be filed annually in order to arrive at a proper fee formula and category assessment.

At the June 1975 meeting, the Board of Directors resolved that category filing information will no longer be confidential. This change was reviewed by Counsel and put into effect for fiscal 1976-77. All categories in which your firm is engaged must be reported. Category filing information will be assembled and reported in summary form to the Membership.

Would you kindly complete and return one copy of the attached form to the Institute Office. We will prepare a summary to assist the Fee Formula Committee and the Board of Directors in establishing the fee formula for the fiscal year starting July 1, 1981.

Filing categories are unchanged from these of recent years. Refer to the "Explanation of Category Filing" attached to the form. If you have questions, please give me a call.

Kindly return your declaration by May 12, 1981. A stamped return envelope is enclosed with the Delegate's copy.

EWD/erc
Encs:
Dist: Delegates & Alternates

E. W. Drislane
Executive Director

Friction Materials Standards Institute, Inc.
E-210 Route 4
Paramus, New Jersey 07652

Gentlemen:

In response to Bulletin 714 of April 8, 1981 concerning the declaration of information to be used in determining the fees, our company is engaged as follows:

<u>Category</u>	<u>We sell to the domestic replacement market:</u>
Brake Linings - Under 3/4" Nominal, Including Disc Brake Linings	☐
Brake Blocks - 3/4" Nominal or over	☐
Clutch Facings	☐
Brake Shoes - New Unlined, Including New Unlined Disc Brake Shoes	☐

Affix an "X" in the square to the right of the category or categories your company is engaged in.

Signature _____

Company _____

Date _____

Kindly return declaration to the Institute Office by May 12, 1981.

EXPLANATION OF CATEGORY FILING

General - A member must be engaged in at least one of the first three categories, in order to be a member. The number of categories checked is used to determine the fees paid during the next fiscal year. Any member not filing this information correctly will be assessed the full fee for all categories.

Confidentiality - The fee category information is no longer confidential. The data will be reviewed by the Board of Directors to determine its reasonableness. Summary results will be distributed to the Membership.

"Our Company is Engaged as follows:" - If a member manufactures and sells, purchases and sells, or both purchases and manufactures, and sells the product indicated in the replacement market, he is "engaged" in that category. In other words, if he sells that product he is engaged in that category. Further, the replacement market includes automotive, industrial, and off road equipment--where Friction Materials Standards Institute, Inc. performs a service, either through cataloguing, assignment of copyrighted FMSI numbers, or the maintaining of prints. If a member sells a certain product type, but only to market where FMSI does not provide services, he does not report that category. Where a member sells a certain product only to a market where there are FMSI services available, but he declines to use these services, he must report that category.

Brake Lining - Under 3/4" Nominal, Including Disc Brake Linings - This includes linings whether loose, attached to shoes, or in roll form, sold to market where the FMSI numbering system is available.

Brake Blocks and Disc Brake Linings - 3/4" Nominal and Over - This includes brake blocks, whether loose or attached to shoes, sold to markets where the FMSI numbering system is available. The 3/4" nominal includes tapered blocks with a maximum thickness of approximately .700", with minimum thickness below .500". This also includes disc brake linings 3/4" and over, measuring lining thickness only at its thickest point. When measuring a lined shoe, to determine lining thickness, measure from the top of the shoe.

Clutch Facings - This includes loose facings or facings attached to plates, sold to markets where the FMSI numbering system is available.

Brake Shoes - New Unlined, Including New Unlined Disc Brake Shoes - This category includes new and unlined shoes (whether drum or disc type) which are sold as new and unlined shoes in the replacement market. If all the new and unlined shoes are sold as lined shoe assemblies, do not report this category.

FRICTION MATERIALS STANDARDS INSTITUTE, INC., E-210 ROUTE 4, PARAMUS, N.J. 07652

B U L L E T I N

N O. 7 1 3

April 3, 1981

INSTITUTE COMMENTS ON EPA'S PROPOSALS FOR REPORTING AND RECORDKEEPING

In January the Institute sent the Membership a copy of the Federal Register Notice of January 26, 1981, with its proposals for reporting and recordkeeping for asbestos products manufacturers. After this notice was mailed, we had two member inquiries asking if the Institute would be commenting on these proposals.

We then asked the Membership for comments and subsequently prepared a letter of comments through the Institute's Health and Environmental Affairs Committee. The final draft was approved by Mr. Armstrong, the Committee Chairman, and copies were then circulated to the Board of Directors. The proposed comments circulated to the Board were then mailed to the Environmental Protection Agency on March 25, 1981. They requested comments by March 27, 1981.

A copy of the Institute's comments to the EPA are enclosed.

EWD/erc

Enc:

cc-Delegates and Alternates

Active Members - List C

E. W. Drislane

Executive Director

FRICITION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

MAR 25 1981

Ms. Joni Repasch
Document Control Officer
Office of Pesticides and Toxic Substances (TS-793)
Environmental Protection Agency
Room E-447
401 M Street, S.W.
Washington, DC 20460

Subject: Document Control Number OPTS 84004
Environmental Protection Agency Proposal on Asbestos;
Reporting and Recordkeeping Requirements

Dear Ms. Repasch:

The Friction Materials Standards Institute is a trade association which includes most of the brake lining and clutch facing manufacturers in the United States. We have other Members worldwide. As friction materials manufacturers, most of our Members use asbestos as a major constituent in their products. Our comments on these proposals represent the viewpoints of most of our asbestos-using Members.

General Comments

While we will address specific sections of the proposals on reporting and recordkeeping later in this letter, we question the timing and necessity of the proposed requirements. We are familiar with Section 8 of the Toxic Substances Control Act (Public Law 94-469). We understand that this section can require our Members to maintain records and submit reports in great detail, where that information is necessary to regulate substances that may present an unreasonable risk of injury to health or the environment. The friction materials industry agrees that there are health hazards from asbestos in the workplace. These have been addressed by the Occupational Safety and Health Administration (OSHA) and we anticipate further regulation in that area. We do not believe it has been shown there is an unreasonable risk of injury to health or the environment from the sale or use of our products because of the following facts:

1. Asbestos fibers are locked-in to the product in its finished form.
2. There is less than 1% asbestos in the wear debris from used friction materials.
3. Small exposure levels in the general environment have not been established as presenting an unreasonable risk of injury to health and the environment.

FMSI 17368

We refer you to the enclosed paper "Asbestos & Health in the Friction Material Industry," prepared by the Asbestos International Association in London, England. It summarizes what is known concerning asbestos exposure in the friction material industry, as well as what is known on exposure to friction material wear debris in the general environment. This position paper supports our contention that while asbestos does present a risk to those occupationally exposed, this exposure is now controlled, and that environmental exposure does not present an unreasonable risk--if it presents a risk at all--to the general public.

The Institute suggests that before applying the reporting and recordkeeping requirements of Section 8 of the Act, that EPA demonstrate that asbestos-containing friction materials may in fact present an unreasonable risk. We recommend that action of the type proposed by this notice be deferred until reasonable people can demonstrate the need for the costly and detailed records that in many cases go beyond the needs of the Agency. This proposed regulation would place one more burden on our Members, and particularly the United States manufacturers supplying brake linings, clutch facings and other friction articles to its already depressed automotive, construction, and industrial customers as well as to the energy related industry.

The proposed requirements would not only be burdensome to our Members, but in most cases it is difficult to see how the information can be put to use by the EPA. It calls for a complete documentary on asbestos beyond the needs for purposeful regulation, if indeed that regulation is necessary. Our industry stands ready to help with information-gathering even where the need has not been adequately shown, if the EPA can sharply reduce the amount of information, the old information, information which is mostly confidential, and extraneous information apparently being requested for support of parties other than the Office of Toxic Substances. In fact we suggest that much of the information is available from other Government agencies and it may be of value to have Interdepartmental exchanges between the Government agencies concerned with the asbestos issue.

Section 763.65 - Who must report

In Paragraph (f) the proposals exempt "small manufacturers, processors, or importers as defined in Section 763.65(m)." We agree with the exemption of small manufacturers or processors who employ no more than 10 full-time employees. There seems something inconsistent with the maintaining of jobs in the United States by the exempting of importers, who may be importing from factories with 1,000 employees outside of the United States, where a United States factory with more than 10 employees is not exempt.

One "small importer" could be responsible for more friction products, or other products for that matter, in the United States market than a medium-size United States manufacturer, but the importer would be exempt where the United States manufacturer would not. This exemption would be more equitable if based on dollar value, tonnage, pieces or other like index.

Section 763.70(a) - Customer Lists

Several Members indicate that they will invoke claims of confidentiality on distribution of these lists outside their organizations. We question the need for telephone number and technical contact for each customer. In many cases this information is not available. In other cases, this can create an adversary relationship between a customer and a manufacturer. Claims of confidentiality for this type information are valid, as almost all of our Members are interested in lists of his competitor's customers. We would suggest the EPA reconsider the confidentiality of this type information. We further believe the detail requested should not be required if provision of these lists is actually written into the final rules.

Section 763.71 - Schedule for Reporting

The schedule for reporting by our Members, who are all Primary Processors and Bulk Asbestos Importers, and in many cases are Secondary Processors, is unduly harsh. Rather than the 60 days required in sub-sections (a) and (c), and the 30 days required in sub-section (b), we recommend a standard 90 days schedule. Our Members have facilities at more than one location, and records are in many cases at a location other than the Factory. A 90 day requirement is more realistic when one considers the considerable detail asked by this proposal. Further, many of our Members do not have ready access to in-house Professionals to review and approve reports before submission. Our Members are entitled to have their reports reviewed by Outside Safety, Health and EPA Consultants, Legal Counsel, and other Professionals as to its adequacy and to assure that our Members are not harmed by their reporting.

Form B(2) - Quantity of Bulk Asbestos Imported.

The comments on Form B(2) apply to Form B(3) - Quantity of Bulk Asbestos Obtained. Our major concern is with Form B(2), as almost all our Members use Canadian chrysotile.

All Members of the Institute import asbestos, primarily from Canada. The EPA form asks for quantities of asbestos, by type, and chrysotile by grade. The form lists quantities for 10 years, from 1971 through 1980. In most cases, the older the records the more difficult the search. Some Members no longer have data from which to develop quantities before 1976. As the EPA is asking for information on asbestos emissions at the present time, we question the need for 10 years of data, and particularly that of more than two or three years ago. If the EPA were to have information on current consumption that should give sufficient information for estimating current exposures without the extra work involved in going back over ten years. We suggest, if the data is considered actually of value, that the EPA limit the request to that for 1930.

The notice asks for details on types of asbestos and grades of chrysotile. We understand the EPA is searching for information on other types of asbestos, but question the need for grades of chrysotile. This involves considerable searching of records on the part of our Members, if in fact the information exists. We do not believe that anyone to this time has alleged or inferred that the hazards of asbestos are dependent on the grade of chrysotile. We

suggest that the form be revised to ask only on quantities of chrysotile, and that reference to grades be removed.

Form C - Primary Processor Production

Our comments on Form C apply in most cases to Form D - Secondary Processor Production. Many of our Members are Secondary Processors in attaching linings to steel shoes or where they perform other assembly operations. We again state that the older the information is, the more difficult it is to develop. We suggest that production figures for the last year only, 1980, be used. These are available. The manufacturer's efforts in compliance with the requirements of this form would be reduced in almost the proportion that the years are removed. Again, we believe the EPA is searching for current exposure information, and that while history is interesting, the requirement to gather it is not necessary to the task.

Still further, in the instructions for this form, under "End Product Shipped," the form calls for information listing the trade name under which the product is marketed, and calls for a listing of all "private brands" under which the product is sold. We fail to see where listing of trade names or "private brands" is pertinent to developing information on emissions or exposures to asbestos. This information is much more difficult to develop for posting to forms such as these. It would multiply the combinations which would have to be listed, when the only relevant information is a product listing such as we suggest below: Drum Brake Lining (light-medium vehicle), etc.

On Page 8225 of the Federal Register notice, "Typical Terms for Products Made From Bulk Asbestos" are listed. Ten different terms are listed under Friction Materials. Most of those are not relevant to exposures in the general environment. We suggest reducing the 10 terms to 7 as follows:

- Drum Brake Linings (light-medium vehicle)
- Disc Brake Pads (light-medium vehicle)
- Brake Blocks (heavy vehicle)
- Disc Brake Pads (heavy-vehicle)
- Clutch Facings (all applications)
- Automatic Transmission Friction Components (automotive)
- Friction Materials (industrial and commercial)

There are no woven disc or drum brake linings for light vehicle use.

For other applications, we question whether information on molded versus woven is pertinent to the question of exposure to asbestos in the general environment. We feel there is but limited usage of asbestos-containing friction materials in consumer products. Still further, all units of measure should be "Pieces."

We question particularly whether information on quantities sold under "Private Labels" will be available even in recent years, without painstaking one-by-one analysis of individual invoices. In addition, there may be claims of confidentiality in this area.

Form H - Summary of Current Worker Exposure

This particular section of the reporting form would cause an undue burden for large facilities which have several hundred workers and a diversity of production operations. Records on worker exposure levels are not maintained in a manner which would permit easy retrieval of the data requested.

To simplify this section, it is recommended that Column 2 - Total Person Hours Per Year at TWA, and Column 3 - Number of Measurements Used, be eliminated as this data serves no useful purpose and is extremely time intensive in its preparation.

Form K - Pollution Control Equipment

We question the need for the Month and Year under the "When Installed" column. Some installations go in over a long period--in some cases as long as 12 months from delivery to final usage. Do you wish the date ordered? The date delivered? The date installed? The date first used? The date put into use on a full-time basis? The year of installation should be sufficient. We believe a definition should be presented so as to clarify what is wanted or needed.

Where there is more than one piece of pollution control equipment, even where there are two, three or more installed, the form calls for a separate listing. We suggest that the form be redesigned to permit listing of any quantity of a particular piece of equipment where that equipment is identical to another piece. The quantities could be listed per piece of equipment, with a total column for all equipment of that same type. The purpose of our recommendation is to reduce the paper work burden.

* * * * *

We question the need for this proposed reporting from manufacturers of friction materials based on the reasons stated under our "General Comments." We suggest a deferral of the proposals on reporting and recordkeeping until reasonable people can demonstrate the need.

We suggest that if the reporting and recordkeeping requirements in this proposal will not be deferred that the proposal be revised to simplify and reduce the paper work burden on our industry. This can be done in three ways:

1. Cancel the study of history--ask for information for 1980 only.
2. Reduce the detail--such as grades of chrysotile, month and year of installation, etc.

Ms. Joni Repasch
Environmental Protection Agency

-5-

3. Eliminate or re-write the proposal on information requests where confidentiality will likely be claimed

Respectfully submitted,

FRICION MATERIALS STANDARDS INSTITUTE

EWD/erc

Enc: Asbestos & Health in the
Friction Material Industry

E. W. Drislane
Executive Director

B U L L E T I N

N O. 7 1 2

April 1, 1981

HISTORICAL SALES PROGRAM

The historical sales program continues on a quarterly basis. Regional Members using the copyrighted FMSI Numbers for marketing their products in the United States may participate if they wish.

The Institute is requesting details of pieces sold for the first three months of 1981 (quarter ending March 31, 1981). The rules for reporting details remain unchanged.

1. Quantities will be reported in pieces (not units).
For roll linings, each foot of length will be one piece.
2. Our Accountants will report the names of the members from whom reports are received.
3. Total pieces in each group will be reported.
4. "Clutch Facings" does not include gear tooth discs, automatic transmission discs, or the 8-14" dia., (3/16 to 1/2" thick) asbestos composition discs.

The data as filed will be confidential. Totals for each group will be shown and there is no way of determining quantities by individual members.

You will receive from Marshall Granger and Company, Certified Public Accountants, a form for completing this information. Please return it to:

Marshall Granger & Company, CPA
1600 Harrison Avenue
Mamaroneck, New York 10543

If you report, please have your figures in by May 15, 1981. If you do not wish to report these figures, no reply is necessary. Only those reporting figures will receive the industry totals when the data is summarized. A sample form and definitions are attached.

EWD/ere

E. W. Drislane

Enc:

Executive Director

Distribution: Active Members-List G

Regional Members (paying
Active Members Dues)

EXHIBIT "A"

STATISTICAL PROGRAM OF THE
FRICTION MATERIALS STANDARDS INSTITUTE, INC.

Mail to:

Marshall Granger & Co., CPA
1600 Harrison Avenue
Mamaroneck, New York 10543

* * * * *

See instructions for sales to other members.

Pieces sold to United States distributors, jobbers, private brands, rebuilders, brake specialists, fleets, mass merchandisers, direct consumers, government agencies, or other customers for use in the United States replacements market:

3 MONTHS JANUARY 1, to MARCH 31, 1981

Brake linings less than 3/4" nominal
thickness (See explanation for
roll linings).

Brake blocks, nominal thickness
of 3/4" and over.

Disc Brake Linings

Clutch Facings

Total Pieces

~~STATISTICS~~ SUPPLIED BY:

SAMPLE
FORM

USE REPORTING FORM TO
BE SENT BY ACCOUNTANTS

Signature

Company

Telephone Number

EXHIBIT "B"

DEFINITION FOR HISTORICAL SALESPIECES

The reports will show pieces of friction material, in groups as shown:

<u>Group</u>	<u>Description</u>	<u>Normal Usage</u>
Brake Lining	Friction materials less than a nominal 3/4" thickness (See note on roll lining)	Normally, <u>one piece</u> to a shoe
Brake Blocks	Friction materials with a nominal thickness of 3/4" and over	Normally, <u>two pieces</u> to a shoe
Disc Brake Linings	Friction materials sold (for disc brakes) to be attached to the shoe, or sold as a unit molded, bonded or riveted to the shoe	Normally, <u>one piece</u> to a shoe
Clutch Facing	Friction materials of annular shape, or segments thereof	Normally, <u>two annular pieces</u> per clutch plate

Note: For roll lining only, consider each foot of length equals one piece.

REPLACEMENT SALES TO UNITED STATES MARKET

This reporting is for sales to the United States replacement market only. Do not include sales to other markets. This includes sales under the friction material manufacturer's own name or brand name used by the customer, to automotive warehouse distributors, jobbers, rebuilders, brake specialists, fleets, mass merchandisers, direct consumers, government agencies or other customers for use in the United States replacement market.

When a friction materials manufacturer is shipping to a vehicle manufacturer, brake manufacturer, or clutch manufacturer, but has no reasonable way of determining if the pieces are for original equipment or replacement purposes, estimates will not be used - these pieces will not be reported. However, where a friction material manufacturer is shipping to a point known to be used for replacement, or where he stencils or otherwise identifies the pieces as being for replacement purposes, or where the shipments otherwise are obviously known to be for replacement, these pieces will be reported.

The member who sells to the type customer or user indicated above will report those pieces sold, even if purchased from another Active Member or Regional Member.

When you sell your friction materials to another Member (Active or Regional) do not report those sales! Materials sold to Licensee Members of the Institute for the replacement market should be included.

BULLETIN

NO. 711

March 9, 1981

MATERIAL SAFETY DATA SHEETS

On May 23, 1980, the Occupational Safety and Health Administration (OSHA) published final regulations covering access to employee exposure and medical records. Contained in the regulation is a reference to "Material Safety Data Sheets."

Several member companies have received requests for Material Safety Data Sheets covering friction material product lines from purchasing agents of their customers. The health and Environmental Affairs Committee of the Institute has reviewed the situation in order to provide members with information on this subject.

Material Safety Data Sheets were originally applicable to federal supply contractors and companies supplying materials in the Maritime trade, including ship building, ship repairing and ship breaking.

There is currently movement in the states of California and New York to make the utilization of Material Safety Data Sheets mandatory. As a result of the above activity, many companies have already adopted the position of creating MSDS on a voluntary basis. Attached is a copy of OSHA's Form 20 (MSDS) which may be used to accommodate customer requests for product data. For more details on the MSDS, the United States Department of Labor's booklet, OSHA 2265, is available from OSHA regional offices. A list of regional offices is attached.

The Institute considered the possibility of developing standard MSDS for member companies but determined there are too many product lines and not enough information related to ingredients to undertake this task. As a result, it was felt that member companies should be aware of the pending requirements and the existence of the OSHA forms in order to prepare their own responses to customer requests.

EWD/erc

Enc:

cc-Delegates & Alternates

HEA Committee

Active Members - List C

Regional Members (US Dues)

Licantsees

E. W. Drislane

Executive Director

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME		EMERGENCY TELEPHONE NO.	
ADDRESS (Number, Street, City, State, and ZIP Code)			
CHEMICAL NAME AND SYNONYMS		TRADE NAME AND SYNONYMS	
CHEMICAL FAMILY		FORMULA	

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H ₂ O=1)	
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER			
APPEARANCE AND ODOR			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE	
EFFECTS OF OVEREXPOSURE	
EMERGENCY AND FIRST AID PROCEDURES	

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE		
INCOMPATIBILITY <i>(Materials to avoid)</i>			
HAZARDOUS DECOMPOSITION PRODUCTS			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR		

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	
WASTE DISPOSAL METHOD	

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION <i>(Specify type)</i>		
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL <i>(General)</i>	OTHER
PROTECTIVE GLOVES		EYE PROTECTION
OTHER PROTECTIVE EQUIPMENT		

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	
OTHER PRECAUTIONS	

U. S. DEPARTMENT OF LABOR

Regional Offices for
Occupational Safety and Health

REGION I (CT,ME,MA,NH,RI,VT)
JFK Federal Bldg.
Room 1804 Government Center
Boston, MA 02203
Telephone: (617) 223-6712

REGION VI (AR,LA,NM,OK,TX)
555 Griffin Square, Room 602
Dallas, TX 75202
Telephone: (214) 749-2477

REGION II (NY,NJ,PR,VI,CZ)
Room 3445, 1 Astor Plaza
1515 Broadway
New York, NY 10036
Telephone: (212) ~~971-5941~~
944-3426

REGION VII (IA,KS,MO,NE)
911 Walnut Street, Room 3000
Kansas City, MO 64106
Telephone: (816) 758-5861

REGION III (DE, DC,MD,PA,VA,WV)
15220 Gateway Center
3535 Market Street
Philadelphia, PA 19104
Telephone: (215) 596-1201

REGION VIII (CO,MT,ND,SD,UT,WY)
Federal Bldg., Room 15010
1961 Stout Street
Denver, CO 80202
Telephone: (303) 837-3883

REGION IV (AL,FL,GA,KY,MS,NC,
SC,TN)
1375 Peachtree Street, N.E.
Suite 587
Atlanta, GA 30309
Telephone: (404) 526-3573

REGION IX (CA,AZ,NV,HI)
Box 36017
450 Golden Gate Avenue
San Francisco, CA 94102
Telephone: (415) 556-0586

REGION V (IL,IN,MN,MI,OH,WI)
230 South Dearborn Street
32nd Floor
Chicago, IL 60604
Telephone: (312) 353-4716

REGION X (AK,ID,OR,WA)
Federal Office Bldg., Room 6048
909 First Avenue
Seattle, WA 98174
Telephone: (206) 442-5980

BULLETIN

NO. 710

March 9, 1981

ASBESTOS AND CURRENT EPA REQUIREMENTS
REGULATING HAZARDOUS WASTE DISPOSAL

Because of the concern of Members as to EPA requirements for hazardous waste disposal, the Institute's Health and Environmental Affairs Committee wishes to advise on two points: (1) Asbestos and products or waste materials containing asbestos are not now specifically named and included in the regulations governing the disposal of hazardous wastes promulgated by the EPA under the Resource Conservation and Recovery Act of 1976 (RCRA). (2) However, other substances used in the manufacture of friction products may be covered by the EPA's hazardous waste rules, as well as friction products and manufacturing process wastes which contain these substances or which test out as exhibiting any of the four hazardous waste "characteristics" established by EPA.

While the regulations as originally published specifically listed asbestos in its raw form as a hazardous waste, it was later "temporarily" removed from the list by EPA in a subsequent notice (Federal Register, Vol.45, No. 229, page 78533 of November 25, 1980). In the current regulations, asbestos is no longer listed as a "toxic," and therefore hazardous, waste substance. We are informed that the EPA has--at least temporarily--deferred control of asbestos to the regulations in the National Emissions Standards for Hazardous Air Pollutants (NESHAPS).

However, the definitions of hazardous waste and the listing of other wastes as hazardous wastes shall apply. A waste may be considered hazardous if it is listed in 40 CFR 261, Subpart D and/or meets the characteristics of hazardous waste (ignitability, corrosivity, reactivity and EP toxicity) as specified in 40 CFR 261, Subpart C. Friction Materials manufacturers should be aware that some heavy metals, including lead and barium, when found in certain concentrations in a waste and when tested using a specified method, may make the waste a hazardous waste and therefore, subject to the Resource Conservation and Recovery Act. It is up to the waste "generator" (normally the manufacturer or processor) to determine if his waste is, for such reasons, in fact a hazardous waste under the EPA regulations.

A copy of Title 40, Code of Federal Regulations, Part 261 - Identification and Listing of Hazardous Waste, as published in the Federal Register of May 19, 1980, is enclosed. As noted above, asbestos was subsequently removed from the list found in Part 261.33 (f), on page 33126.

END/erc

Enc:

cc-Delegates & Alternates

H&EA Committee

Active Members-List C

Regional Members (USDues)

Licensees

E. W. Drislane

Executive Director

Appendix VII—Basis for Listing
Appendix VIII—Hazardous Constituents

Authority: Secs. 1006, 2002(a), 3007, and 3002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912, 6921 and 6922).

Subpart A—General

§ 261.1 Purpose and scope.

(a) This Part identifies those solid wastes which are subject to regulation as hazardous wastes under Parts 262 through 265 and Parts 122 through 124 of this Chapter and which are subject to the notification requirements of Section 3010 of RCRA. In this Part:

(1) Subpart A defines the terms "solid waste" and "hazardous waste," identifies those wastes which are excluded from regulation under Parts 262 through 265 and 122 through 124 and establishes special management requirements for hazardous waste produced by small quantity generators and hazardous waste which is used, re-used, recycled or reclaimed.

(2) Subpart B sets forth the criteria used by EPA to identify characteristics of hazardous waste and to list particular hazardous wastes.

(3) Subpart C identifies characteristics of hazardous waste.

(4) Subpart D lists particular hazardous wastes.

(b) This Part identifies only some of the materials which are hazardous wastes under Sections 3007 and 7003 of RCRA. A material which is not a hazardous waste identified in this part is still a hazardous waste for purposes of those sections if:

(1) In the case of Section 3007, EPA has reason to believe that the material may be a hazardous waste within the meaning of Section 1004(5) of RCRA.

(2) In the case of Section 7003, the statutory elements are established.

§ 261.2 Definition of solid waste.

(a) A solid waste is any garbage, refuse, sludge or any other waste material which is not excluded under § 261.4(a).

(b) An "other waste material" is any solid, liquid, semi-solid or contained gaseous material, resulting from industrial, commercial, mining or agricultural operations, or from community activities which:

(1) Is discarded or is being accumulated, stored or physically, chemically or biologically treated prior to being discarded; or

(2) Has served its original intended use and sometimes is discarded; or

(3) Is a manufacturing or mining by-product and sometimes is discarded.

(c) A material is "discarded" if it is abandoned (and not used, re-used, reclaimed or recycled) by being:

(1) Disposed of; or

(2) Burned or incinerated, except where the material is being burned as a fuel for the purpose of recovering usable energy; or

(3) Physically, chemically, or biologically treated (other than burned or incinerated) in lieu of or prior to being disposed of.

(d) A material is "disposed of" if it is discharged, deposited, injected, dumped, spilled, leaked or placed into or on any land or water so that such material or any constituent thereof may enter the environment or be emitted into the air or discharged into ground or surface waters.

(e) A "manufacturing or mining by-product" is a material that is not one of the primary products of a particular manufacturing or mining operation, is a secondary and incidental product of the particular operation and would not be solely and separately manufactured or mined by the particular manufacturing or mining operation. The term does not include an intermediate manufacturing or mining product which results from one of the steps in a manufacturing or mining process and is typically processed through the next step of the process within a short time.

§ 261.3 Definition of hazardous waste.

(a) A solid waste, as defined in § 261.2, is a hazardous waste if:

(1) It is not excluded from regulation as a hazardous waste under § 261.4(b); and

(2) It meets any of the following criteria:

(i) It is listed in Subpart D and has not been excluded from the lists in Subpart D under §§ 260.20 and 260.22 of this Chapter.

(ii) It is a mixture of solid waste and one or more hazardous wastes listed in Subpart D and has not been excluded from this paragraph under §§ 260.20 and 260.22 of this Chapter.

(iii) It exhibits any of the characteristics of hazardous waste identified in Subpart C.

(b) A solid waste which is not excluded from regulation under paragraph (a)(1) of this section becomes a hazardous waste when any of the following events occur:

(1) In the case of a waste listed in Subpart D, when the waste first meets the listing description set forth in Subpart D.

(2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

Subpart A—General

Sec.

261.1 Purpose and scope.

261.2 Definition of solid waste.

261.3 Definition of hazardous waste.

261.4 Exclusions.

261.5 Special requirements for hazardous waste produced by small quantity generators.

261.6 Special requirements for hazardous waste which is used, re-used, recycled or reclaimed.

Subpart B—Criteria for Identifying the Characteristics of Hazardous Waste and for Listing Hazardous Wastes

261.10 Criteria for identifying the characteristics of hazardous wastes.

261.11 Criteria for listing hazardous waste.

Subpart C—Characteristics of Hazardous Waste

261.20 General.

261.21 Characteristic of ignitability.

261.22 Characteristic of corrosivity.

261.23 Characteristic of reactivity.

261.24 Characteristic of EP toxicity.

Subpart D—Lists of Hazardous Wastes

261.30 General.

261.31 Hazardous wastes from non-specific sources.

261.32 Hazardous wastes from specific sources.

261.33 Discarded commercial chemical products and associated off-specification materials, containers and spill residues.

Appendices

Appendix I—Representative Sampling Methods

Appendix II—EP Toxicity Test Procedures

Appendix III—Chemical Analysis Test Methods

Appendix IV—[Reserved for Radioactive Waste Test Methods]

Appendix V—[Reserved for Infectious Waste Treatment Specifications]

Appendix VI—[Reserved for Etiologic Agents]

in Subpart D is first added to the solid waste.

(3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in Subpart C.

(c) Unless and until it meets the criteria of paragraph (d):

(1) A hazardous waste will remain a hazardous waste.

(2) Any solid waste generated from the treatment, storage or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust or leachate (but not including precipitation run-off), is a hazardous waste.

(d) Any solid waste described in paragraph (c) of this section is not a hazardous waste if it meets the following criteria:

(1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in Subpart C.

(2) In the case of a waste which is a listed waste under Subpart D, contains a waste listed under Subpart D or is derived from a waste listed in Subpart D, it also has been excluded from paragraph (c) under §§ 260.20 and 260.22 of this Chapter.

§ 261.4 Exclusions.

(a) *Materials which are not solid wastes.* The following materials are not solid wastes for the purpose of this Part:

(1) (i) Domestic sewage; and

(ii) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.

(2) Industrial wastewater discharges that are point source discharges subject to regulation under Section 402 of the Clean Water Act, as amended.

[Comment: This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.]

(3) Irrigation return flows.

(4) Source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 *et seq.*

(5) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.

(b) *Solid wastes which are not hazardous wastes.* The following solid wastes are not hazardous wastes:

(1) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. "Household waste" means any waste material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels.)

(2) Solid wastes generated by any of the following and which are returned to the soils as fertilizers:

(i) The growing and harvesting of agricultural crops.

(ii) The raising of animals, including animal manures.

(3) Mining overburden returned to the mine site.

(4) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels.

(5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.

§ 261.5 Special requirements for hazardous waste generated by small quantity generators.

(a) Except as otherwise provided in this section, if a person generates, in a calendar month, a total of less than 1000 kilograms of hazardous wastes, those wastes are not subject to regulation under Parts 262 through 265 and Parts 122 through 124 of this Chapter, and the notification requirements of Section 3010 of RCRA.

(b) If a person whose waste has been excluded from regulation under paragraph (a) of this Section accumulates hazardous wastes in quantities greater than 1000 kilograms, those accumulated wastes are subject to regulation under Parts 262 through 265 and Parts 122 through 124 of this Chapter, and the notification requirements of Section 3010 of RCRA.

(c) If a person generates in a calendar month or accumulates at any time any of the following hazardous wastes in quantities greater than set forth below, those wastes are subject to regulation under Parts 262 through 265 and Parts 122 through 124 of this Chapter, and the notification requirements of Section 3010 of RCRA:

(1) One kilogram of any commercial product or manufacturing chemical intermediate having the generic name listed in § 261.33(e).

(2) One kilogram of any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met

specifications, would have the generic name listed in § 261.33(e).

(3) Any containers identified in § 261.33(c) that are larger than 20 liters in capacity;

(4) 10 kilograms of inner liners from containers identified under § 261.33(c);

(5) 100 kilograms of any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in § 261.33(e).

(d) In order for hazardous waste to be excluded from regulation under this section, the generator must comply with § 262.11 of this Chapter. He must also either treat or dispose of the waste in an on-site facility, or ensure delivery to an off-site treatment, storage or disposal facility, either of which is:

(1) Permitted by EPA under Part 122 of this Chapter, or by a State with a hazardous waste management program authorized under Part 123 of this Chapter;

(2) In interim status under Parts 122 and 265 of this Chapter; or.

(3) Permitted, licensed, or registered by a State to manage municipal or industrial solid waste.

(e) Hazardous waste subject to the reduced requirements of this section may be mixed with non-hazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations identified in this section, unless the mixture meets any of the characteristics of hazardous waste identified in Subpart C.

§ 261.6 Special requirements for hazardous waste which is used, re-used, recycled or reclaimed.

(a) Except as otherwise provided in paragraph (b) of this section, a hazardous waste which meets either of the following criteria is not subject to regulation under Parts 262 through 265 or Parts 122 through 124 of this Chapter and is not subject to the notification requirements of Section 3010 of RCRA until such time as the Administrator promulgates regulations to the contrary:

(1) It is being beneficially used or re-used or legitimately recycled or reclaimed.

(2) It is being accumulated, stored or physically, chemically or biologically treated prior to beneficial use or re-use or legitimate recycling or reclamation.

(b) A hazardous waste which is a sludge, or which is listed in Subpart D, or which contains one or more hazardous wastes listed in Subpart D; and which is transported or stored prior

to being used, re-used, recycled or reclaimed is subject to the following requirements with respect to such transportation or storage:

- (1) Notification requirements under Section 3010 RCRA.
- (2) Part 292 of this Chapter.
- (3) Part 263 of this Chapter.
- (4) Subparts A, B, C, D and E of Part 264 of this Chapter.
- (5) Subparts A, B, C, D, E, G, H, I, J and L of Part 265 of this Chapter.
- (6) Parts 122 and 124 of this Chapter, with respect to storage facilities.

Subpart B—Criteria for Identifying the Characteristics of Hazardous Waste and for Listing Hazardous Waste

§ 261.10 Criteria for identifying the characteristics of hazardous waste.

(a) The Administrator shall identify and define a characteristic of hazardous waste in Subpart C only upon determining that:

- (1) A solid waste that exhibits the characteristic may:
 - (i) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or
 - (ii) Pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed; and
- (2) The characteristic can be:
 - (i) Measured by an available standardized test method which is reasonably within the capability of generators of solid waste or private sector laboratories that are available to serve generators of solid waste; or
 - (ii) Reasonably detected by generators of solid waste through their knowledge of their waste.

§ 261.11 Criteria for listing hazardous waste.

(a) The Administrator shall list a solid waste as a hazardous waste only upon determining that the solid waste meets one of the following criteria:

- (1) It exhibits any of the characteristics of hazardous waste identified in Subpart C.
- (2) It has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity (rat) of less than 50 milligrams per kilogram, an inhalation LC 50 toxicity (rat) of less than 2 milligrams per liter, or a dermal LD 50 toxicity (rabbit) of less than 200 milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness. (Waste

listed in accordance with these criteria will be designated Acute Hazardous Waste.)

(3) It contains any of the toxic constituents listed in Appendix VIII unless, after considering any of the following factors, the Administrator concludes that the waste is not capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed:

- (i) The nature of the toxicity presented by the constituent.
- (ii) The concentration of the constituent in the waste.
- (iii) The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in paragraph (a)(3)(vii) of this section.
- (iv) The persistence of the constituent or any toxic degradation product of the constituent.
- (v) The potential for the constituent or any toxic degradation product of the constituent to degrade into non-harmful constituents and the rate of degradation.
- (vi) The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems.

(vii) The plausible types of improper management to which the waste could be subjected.

(viii) The quantities of the waste generated at individual generation sites or on a regional or national basis.

(ix) The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent.

(x) Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent.

(xi) Such other factors as may be appropriate.

Substances will be listed on Appendix VIII only if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic or teratogenic effects on humans or other life forms.

(Wastes listed in accordance with these criteria will be designated Toxic wastes.)

(b) The Administrator may list classes or types of solid waste as hazardous waste if he has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in Section 1004(5) of the Act.

(c) The Administrator will use the criteria for listing specified in this section to establish the exclusion limits referred to in § 261.5(c).

Subpart C—Characteristics of Hazardous Waste

§ 261.20 General.

(a) A solid waste, as defined in § 261.2, which is not excluded from regulation as a hazardous waste under § 261.4(b), is a hazardous waste if it exhibits any of the characteristics identified in this Subpart.

[Comment: § 262.11 of this Chapter sets forth the generator's responsibility to determine whether his waste exhibits one or more of the characteristics identified in this Subpart.]

(b) A hazardous waste which is identified by a characteristic in this subpart, but is not listed as a hazardous waste in Subpart D, is assigned the EPA Hazardous Waste Number set forth in the respective characteristic in this Subpart. This number must be used in complying with the notification requirements of Section 3010 of the Act and certain recordkeeping and reporting requirements under Parts 262 through 265 and Part 122 of this Chapter.

(c) For purposes of this Subpart, the Administrator will consider a sample obtained using any of the applicable sampling methods specified in Appendix I to be a representative sample within the meaning of Part 260 of this Chapter.

[Comment: Since the Appendix I sampling methods are not being formally adopted by the Administrator, a person who desires to employ an alternative sampling method is not required to demonstrate the equivalency of his method under the procedures set forth in §§ 260.20 and 260.21.]

§ 261.21 Characteristic of Ignitability.

(a) A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

- (1) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a flash point less than 60°C (140°F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-83-79, or a Setaflash Closed Cup Tester, using the test method specified in ASTM standard D-3278-78, or as determined by an equivalent test method approved by the Administrator under the procedures set forth in §§ 260.20 and 260.21.¹

¹ ASTM Standards are available from ASTM, 1916 Race Street, Philadelphia, PA 19103.

(2) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

(3) It is an ignitable compressed gas as defined in 49 CFR 173.300 and as determined by the test methods described in that regulation or equivalent test methods approved by the Administrator under §§ 260.20 and 260.21.

(4) It is an oxidizer as defined in 49 CFR 173.151.

(b) A solid waste that exhibits the characteristic of ignitability, but is not listed as a hazardous waste in Subpart D, has the EPA Hazardous Waste Number of D001.

§ 261.22 Characteristic of corrosivity.

(a) A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:

(1) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using either the test method specified in the "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" ² (also described in "Methods for Analysis of Water and Wastes" EPA 600/4-79-G20, March 1979), or an equivalent test method approved by the Administrator under the procedures set forth in §§ 260.20 and 260.21.

(2) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55°C (130°F) as determined by the test method specified in NACE (National Association of Corrosion Engineers) Standard TM-01-59 ³ as standardized in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," or an equivalent test method approved by the Administrator under the procedures set forth in §§ 260.20 and 260.21.

(b) A solid waste that exhibits the characteristic of corrosivity, but is not listed as a hazardous waste in Subpart D, has the EPA Hazardous Waste Number of D002.

² This document is available from Solid Waste Information, U.S. Environmental Protection Agency, 26 W. St. Clair Street, Cincinnati, Ohio 45268.

³ The NACE Standard is available from the National Association of Corrosion Engineers, P.O. Box 986, Katy, Texas 77450.

§ 261.23 Characteristic of reactivity.

(a) A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

(1) It is normally unstable and readily undergoes violent change without detonating.

(2) It reacts violently with water.

(3) It forms potentially explosive mixtures with water.

(4) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(5) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(6) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

(7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

(8) It is a forbidden explosive as defined in 49 CFR 173.51, or a Class A explosive as defined in 49 CFR 173.53 or a Class B explosive as defined in 49 CFR 173.58.

(b) A solid waste that exhibits the characteristic of reactivity, but is not listed as a hazardous waste in Subpart D, has the EPA Hazardous Waste Number of D003.

§ 261.24 Characteristic of EP Toxicity.

(a) A solid waste exhibits the characteristic of EP toxicity if, using the test methods described in Appendix II or equivalent methods approved by the Administrator under the procedures set forth in §§ 260.20 and 260.21, the extract from a representative sample of the waste contains any of the contaminants listed in Table I at a concentration equal to or greater than the respective value given in that Table. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering, is considered to be the extract for the purposes of this section.

(b) A solid waste that exhibits the characteristic of EP toxicity, but is not listed as a hazardous waste in Subpart D, has the EPA Hazardous Waste Number specified in Table I which corresponds to the toxic contaminant causing it to be hazardous.

Table I.—Maximum Concentration of Contaminants for Characteristic of EP Toxicity—Continued

EPA hazardous waste number	Contaminant	Maximum concentration (milligrams per liter)
D004	Arsenic	5.0
D005	Barium	100.0
D006	Cadmium	1.0
D007	Chromium	5.0
D008	Lead	5.0
D009	Mercury	0.2
D010	Selenium	1.0
D011	Silver	5.0
D012	Endrin (1,2,3,4,10,10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8a-octahydro-1,4-endo, endo-5,8-dimethano naphthalene)	0.02
D013	Endrin (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer)	0.4
D014	Methoxychlor (1,1,1-Trichloro-2,2-bis-(p-methoxyphenyl)ethane)	10.0
D015	Toxaphene (C ₁₂ H ₈ Cl ₆ , Technical chlorinated camphene, 87-89 percent chlorine)	0.5
D016	2,4-D, (2,4-Dichlorophenoxyacetic acid)	10.0
D017	2,4,5-TP Silver (2,4,5-Trichlorophenoxypropionic acid)	1.0

Subpart D—Lists of Hazardous Wastes

§ 261.30 General.

(a) A solid waste is a hazardous waste if it is listed in this Subpart, unless it has been excluded from this list under §§ 260.20 and 260.22.

(b) The Administrator will indicate his basis for listing the classes or types of wastes listed in this Subpart by employing one or more of the following Hazard Codes:

Ignitable Waste	(B)
Corrosive Waste	(C)
Reactive Waste	(F)
EP Toxic Waste	(E)
Acute Hazardous Waste	(D)
Toxic Waste	(T)

Appendix VII identifies the constituent which caused the Administrator to list the waste as an EP Toxic Waste (E) or Toxic Waste (T) in §§ 261.31 and 261.32.

(c) Each hazardous waste listed in this Subpart is assigned an EPA Hazardous Waste Number which precedes the name of the waste. This number must be used in complying with the notification requirements of Section 3010 of the Act and certain recordkeeping and reporting requirements under Parts 262 through 285 and Part 122 of this Chapter.

(d) Certain of the hazardous wastes listed in § 261.31 or § 261.32 have exclusion limits that refer to § 261.5(c)(5).

§ 261.31 Hazardous waste from nonspecific sources.

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
Generic:		
F001	The spent halogenated solvents used in degreasing, tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and the chlorinated fluorocarbons and sludges from the recovery of these solvents in degreasing operations.	(T)
F002	The spent halogenated solvents, tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2,2-tetrafluoroethane, o-dichlorobenzene, trichlorofluoromethane and the still bottoms from the recovery of these solvents.	(T)
F003	The spent non-halogenated solvents, xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, n-butyl alcohol, cyclohexanone, and the still bottoms from the recovery of these solvents.	(U)
F004	The spent non-halogenated solvents, creosote and creosote acid, nitrobenzene, and the still bottoms from the recovery of these solvents.	(T)
F005	The spent non-halogenated solvents, methanol, toluene, methyl ethyl ketone, methyl isobutyl ketone, carbon disulfide, isobutanol, pyridine and the still bottoms from the recovery of these solvents.	(U, T)
F006	Wastewater treatment sludges from electroplating operations.	(T)
F007	Spent plating bath solutions from electroplating operations.	(U, T)
F008	Plating bath sludges from the bottom of plating baths from electroplating operations.	(U, T)
F009	Spent stripping and cleaning bath solutions from electroplating operations.	(U, T)
F010	Quenching bath sludge from oil baths from metal heat treating operations.	(U, T)
F011	Spent solutions from salt bath pot cleaning from metal heat treating operations.	(U, T)
F012	Quenching wastewater treatment sludges from metal heat treating operations.	(T)
F013	Flotation tailings from selective flotation from mineral metals recovery operations.	(T)
F014	Cyanidation wastewater treatment tailing pond sediment from mineral metals recovery operations.	(T)
F015	Spent cyanide bath solutions from mineral metals recovery operations.	(U, T)
F016	Dewatered air pollution control scrubber sludges from coke ovens and blast furnaces.	(T)

§ 261.32 Hazardous waste from specific sources.

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
Wood Preservation: K001		
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.	(T)
Inorganic Pigments:		
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)
K003	Wastewater treatment sludge from the production of molybdenum orange pigments.	(T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments.	(T)
K005	Wastewater treatment sludge from the production of chrome green pigments.	(T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).	(T)
K007	Wastewater treatment sludge from the production of iron blue pigments.	(T)
K008	Oven residue from the production of chrome oxide green pigments.	(T)
Organic Chemicals:		
K009	Distillation bottoms from the production of acetaldehyde from ethylene.	(T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene.	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	(T)
K012	Still bottoms from the final purification of acrylonitrile in the production of acrylonitrile.	(T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile.	(T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	(T)
K015	Still bottoms from the distillation of benzyl chloride.	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.	(T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	(T)
K018	Heavy ends from fractionation in ethyl chloride production.	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production.	(T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene.	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.	(T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	(T)
K026	Stripping still tails from the production of methyl ethyl pyridine.	(T)
K027	Centrifuge residue from toluene diisocyanate production.	(T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	(T)
K029	Waste from the product stream stripper in the production of 1,1,1-trichloroethane.	(T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
Pesticides:		
K031	By-products salts generated in the production of MSMA and cacodylic acid.	(T)
K032	Wastewater treatment sludge from the production of chlordane.	(T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	(T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
K035	Wastewater treatment sludges generated in the production of creosote.	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	(T)
K037	Wastewater treatment sludges from the production of disulfoton.	(T)
K038	Wastewater from the washing and shipping of phorate production.	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	(T)
K040	Wastewater treatment sludge from the production of phorate.	(T)
K041	Wastewater treatment sludge from the production of tosephene.	(T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	(T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D.	(T)
Explosives:		
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	(T)
K045	Spent carbon from the treatment of wastewater containing explosives.	(T)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	(T)
K047	Pink/red water from TNT operations.	(T)
Petroleum Refining:		
K048	Dissolved air flotation (DAF) float from the petroleum refining industry.	(T)
K049	Slip oil emulsion solids from the petroleum refining industry.	(T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T)
K051	API separator sludge from the petroleum refining industry.	(T)
K052	Tank bottoms (feeded) from the petroleum refining industry.	(T)
Leather Tanning/Finishing:		
K053	Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearing.	(T)

§ 261.32 Hazardous waste from specific sources.—Continued

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
K054	Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; no beamhouse; through-the-blue; and shearing.	(T)
K055	Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; no beamhouse; and through-the-blue.	(T)
K056	Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; no beamhouse; through-the-blue; and shearing.	(T)
K057	Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; no beamhouse; through-the-blue; and shearing.	(T)
K058	Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.	(T, F)
K059	Wastewater treatment sludges generated by the following subcategory of the leather tanning and finishing industry: hair save/non-chrome tan/retan/wet finish.	(F)
Iron and Steel:		
K060	Ammonia still lime sludge from coking operations.	(T)
K061	Emission control dust/sludge from the electric furnace production of steel.	(T)
K062	Spent pickle liquor from steel finishing operations.	(F, T)
K063	Sludge from lime treatment of spent pickle liquor from steel finishing operations.	(T)
Primary Copper: K064	Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production.	(T)
Primary Lead: K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.	(T)
Primary Zinc:		
K066	Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production.	(T)
K067	Electrolytic anode slimes/sludges from primary zinc production.	(T)
K068	Cadmium plant leach residue from cadmium from primary zinc production.	(T)
Secondary Lead: K069	Emission control dust/sludge from secondary lead smelting.	(T)

§ 261.33 Discarded Commercial Chemical Products, Off-Specification Species, Containers, and Spill Residues Thereof.

The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded:

(a) Any commercial chemical product, or manufacturing chemical intermediate having the generic name listed in paragraphs (e) or (f) of this section.

(b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in paragraphs (e) or (f) of this section.

(c) Any container or inner liner removed from a container that has been used to hold any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraph (e) of this section, unless:

(1) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

(2) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

(3) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.

(d) Any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any commercial chemical product or manufacturing chemical

intermediate having the generic name listed in paragraphs (e) or (f) of this section.

[Comment: The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in . . ." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in paragraphs (e) or (f). Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in paragraphs (e) or (f), such waste will be listed in either §§ 261.31 or 261.32 or will be identified as a hazardous waste by the characteristics set forth in Subpart C of this Part.]

(e) The commercial chemical products or manufacturing chemical intermediates, referred to in paragraphs (a) through (d) of this section, are identified as acute hazardous wastes (H) and are subject to the small quantity exclusion defined in § 261.5(c). These wastes and their corresponding EPA Hazardous Waste Numbers are:

Hazardous waste No.	Substance *
1000 see P058	
1081 see P057	
(Acetate)phenylmercury see P062	
Acetone cyanohydrin see P069	
P001	3-(alpha-Acetylbenzoyl)-4-hydroxycoumarin and salts
P002	1-Acetyl-2-thiourea
P003	Acrolein
	Agaric see P067
	Agrocin GN 5 see P062
	Alizarin see P068
	Alkalin see P066

—Continued

Hazardous waste No.	Substance *
P004	Aldrin
	Alginic acid see P082
P005	Allyl alcohol
P006	Aluminum phosphide (R)
	ALVIT see P037
	Aminocyclohexane see P084
P007	5-(Aminomethyl)-3-isoxazole
P008	4-Aminopyridine
	Ammonium metavanadate see P119
P009	Ammonium picrate (R)
	ANTHRAQUINONE see P082
	ANTHRACENE see P073
	AQUATHAL see P086
	ARETTI see P020
P010	Asaric acid
P011	Asaric pentoxide
P012	Asaric trioxide
	Asfomycin see P001
	AVITROL see P006
	Azidene see P064
	AZOPHOS see P081
	Azophos see P081
	BANTU see P072
P013	Barium cyanide
	BASENITE see P020
	BCME see P016
P014	Benzenebital
	Benzocaine see P080
P015	Beryllium dust
P016	Bis(2-chlorophenyl) ether
	BLADUR-M see P071
P017	Bromocyclohexane
P018	Brucine
P019	2-Butanone peroxide
	BUFEN see P082
	Butaphene see P020
P020	2-sec-Butyl-4,6-dinitrophenol
P021	Calcium cyanide
	CALDON see P020
P022	Carbon disulfide
	CERESAN see P082
	CERESAN UNIVERSAL see P082
	CHEMOX GENERAL see P020
	CHEMOX P.E. see P020
	CHEM-TOL see P090
P023	Chloroacetaldehyde
P024	p-Chloroaniline
P025	1-(p-Chlorobenzoyl)-5-methoxy-2-methylindole-3-acetic acid
P026	1-(p-Chlorophenyl)thiourea
P027	3-Chloropropionitrile
P028	alpha-Chloroaniline
P029	Copper cyanide
	CRETOL see P108
	Coumadin see P001
	Coumadin see P001
P030	Cyanides

FMSI 17388

Hazardous Waste No.	Substance ¹
U001	AAF see U005
U002	Acetaldehyde
U003	Acetone (I)
U004	Acetonitrile (I,T)
U005	Acetophenone
U006	2-Acetylaminofluorene
U007	Acetyl chloride (C,T)
U007	Acrylamide
	Acrylene tetrachloride see U009
	Acrylene trichloride see U029
U008	Acrylic acid (I)
U009	Acrylonitrile
	AEROTENS TT see U028
	3-Amino-6-(p-oxazolidophenyl)-1H-1,2,4-triazole, hydrazide see U011
U010	6-Amino-1,1a,2,3,4a,8a-hexahydro-6-(hydroxymethyl)-6-methoxy-6-methylcarbamate aziridine(2,3,4) pyrrole(1,2-a) indole-4, 7-dione (ester)
U011	Amitrole
U012	Aniline (I)
U013	Asbestos
U014	Auramine
U015	Azaserine
U016	Benz(c)acridine
U017	Benzal chloride
U018	Benz(a)anthracene
U019	Benzene
U020	Benzenesulfonyl chloride (C,F)
U021	Benzidine
	1,2-Benzisothiazolin-3-one, 1,1-dioxide see U022
	Benzo(a)anthracene see U018
U022	Benzo(a)pyrene
U023	Benzofluoride (C,F,T)
U024	Bis(2-chloroisopropyl)methane
U025	Bis(2-chloroethyl) ether
U026	N,N-Bis(2-chloroethyl)-2-naphthylamine
U027	Bis(2-chloroisopropyl) ether
U028	Bis(2-ethylhexyl) phthalate
U029	Bromomethane
U030	4-Bromophenyl phenyl ether
U031	n-Butyl alcohol (I)
U032	Calcium chromate
	Carbolic acid see U188
	Carbon tetrachloride see U211
U033	Carbonyl fluoride
U034	Chloral
U035	Chlorambucil
U036	Chloroane
U037	Chlorobenzene
U038	Chlorobutadiene
U039	p-Chloro-m-cresol
U040	Chlorodifluoromethane
U041	1-Chloro-2,3-epoxypropane
	CHLOROETHENE HU see U026
U042	Chloroethyl vinyl ether
U043	Chloroethene
U044	Chloroform (I,T)
U045	Chloromethane (I,T)
U046	Chloromethyl methyl ether
U047	2-Chloronaphthalene
U048	2-Chlorophenol
U049	4-Chloro-o-tolidine hydrochloride
U050	Chrysene
	C.I. 23080 see U073
U051	Cresole
U052	Cresole
U053	Crotonaldehyde
U054	Cresylic acid
U055	Cumene
	Cyanomethane see U003
U056	Cyclohexane (I)
U057	Cyclohexanone (I)
U058	Cyclophosphane (I)
U059	Daunomycin
U060	DDD

Hazardous Waste No.	Substance ¹
U061.....	DOT
U062.....	Dialite
U063.....	Dibenz(a,h)anthracene Dibenz(a,h)anthracene see U063
U064.....	Dibenz(a,i)pyrene
U065.....	Dibromochloromethane
U066.....	1,2-Dibromo-3-chloropropane
U067.....	1,2-Dibromomethane
U068.....	Dibromomethane
U069.....	Di-n-butyl phthalate
U070.....	1,2-Dichlorobenzene
U071.....	1,3-Dichlorobenzene
U072.....	1,4-Dichlorobenzene
U073.....	3,3'-Dichlorobenzidine
U074.....	1,4-Dichloro-2-butene 3,3'-Dichloro-4,4'-diaminobiphenyl see U073
U075.....	Dichlorodifluoromethane
U076.....	1,1-Dichloroethane
U077.....	1,2-Dichloroethane
U078.....	1,1-Dichloroethylene
U079.....	trans-Dichloroethylene
U080.....	Dichloromethane
U081.....	Dichloromethylbenzene see U017
U082.....	2,4-Dichlorophenol 2,6-Dichlorophenol
U083.....	1,2-Dichloropropane
U084.....	1,3-Dichloropropane
U085.....	Dipropylbutane (I,T)
U086.....	1,2-Diethylnthalane
U087.....	0,0-Diethyl-S-methyl ester of phosphorodithioic acid
U088.....	Diethyl phthalate
U089.....	Diethylstilbestrol
U090.....	Dihydroazole
U091.....	3,3'-Dimethoxybenzidine
U092.....	Dimethylamine (I)
U093.....	p-Dimethylaniline;azobenzene
U094.....	7,12-Dimethylbenz(a)anthracene
U095.....	3,3'-Dimethylbenzidine
U096.....	alpha,alpha-Dimethylbenzylhydroperoxide (P)
U097.....	Dimethylcarbamoyl chloride
U098.....	1,1-Dimethylhydrazine
U099.....	1,2-Dimethylhydrazine
U100.....	Dimethylsiloxazirine
U101.....	2,4-Dimethylphenol
U102.....	Dimethyl phthalate
U103.....	Dimethyl sulfoxide
U104.....	2,4-Dinitrophenol
U105.....	2,4-Dinitrotoluene
U106.....	2,6-Dinitrotoluene
U107.....	Di-n-octyl phthalate
U108.....	1,4-Dioxane
U109.....	1,2-Diphenylhydrazine
U110.....	Dipropylamine (I)
U111.....	Di-n-propylnitrosamine EDC see U114 1,4-Epoxybutane see U213
U112.....	Ethyl acetate (I)
U113.....	Ethyl acrylate (I)
U114.....	Ethylaluminumchlorosulfate
U115.....	Ethylene oxide (I,T)
U116.....	Ethylene thiourea
U117.....	Ethyl ether (I,T)
U118.....	Ethylmethacrylate
U119.....	Ethyl methanesulfonate Ethylnitrite see U003 Firmixer T23P see U236
U120.....	Fluorobenzene
U121.....	Fluorochloromethane
U122.....	Formaldehyde
U123.....	Fomite acid (C,T)
U124.....	Furan (I)
U125.....	Furfural (I)
U126.....	Glycidylaldehyde
U127.....	Hexachlorobenzene
U128.....	Hexachlorobutadiene
U129.....	Hexachlorocyclopentadiene
U130.....	Hexachlorocyclohexadiene
U131.....	Hexachloroethane
U132.....	Hexachlorophene
U133.....	Hydrazine (R,T)
U134.....	Hydrofluoric acid (C,T)
U135.....	Hydrogen sulfide Hydrobenzene see U188
U136.....	Hydroxydimethyl amine oxide 4,4'-(Imidicarbonyl)bis(N,N-dimethyl)aniline see U014
U137.....	Indeno(1,2,3-cd)pyrene
U138.....	Iodomethane
U139.....	Iron Oxidant
U140.....	Isobutyl alcohol

Hazardous Waste No.	Substance ^a
U141.	Isochlorole
U142.	Krypton
U143.	Lazocarpine
U144.	Lead acetate
U145.	Lead phosphate
U146.	Lead subacetate
U147.	Maleic anhydride
U148.	Maleic hydrazide
U149.	Malononitrile
	MEK Peroxide <i>see</i> U160
U150.	Merphalen
U151.	Mercury
U152.	Methacrylonitrile
U153.	Methanethiol
U154.	Methanol
U155.	Methacrylonitrile
	Methyl alcohol <i>see</i> U154
U156.	Methyl chloroacetate
	Methyl chloroform <i>see</i> U228
U157.	3-Methylchlorobenzene
	Methyl chloroformate <i>see</i> U158
U158.	4,4'-Methylene-bis-(2-chloroaniline)
U159.	Methyl ethyl ketone (MEK) (L7)
U160.	Methyl ethyl ketone peroxide (P7)
	Methyl iodide <i>see</i> U168
U161.	Methyl isobutyl ketone
U162.	Methyl methacrylate (P7)
U163.	N-4-Methyl-N'-nitro-N-nitrosoguanidine
U164.	Methylnitrilacetyl
	Mitomycin C <i>see</i> U010
U165.	Naphthalene
U166.	1,4-Naphthoquinone
U167.	1-Naphthylamine
U168.	2-Naphthylamine
U169.	Nitrobenzene (L7)
	Nitrobenzyl <i>see</i> U168
U170.	4-Nitrophenol
U171.	2-Nitropropane (R)
U172.	N-Nitrosodipropylamine
U173.	N-Nitrosodimethylaniline
U174.	N-Nitrosodimethylaniline
U175.	N-Nitrosodipropylamine
U176.	N-Nitrosodipropylamine
U177.	N-Nitrosodipropylamine
U178.	N-Nitrosodipropylamine
U179.	N-Nitrosodipropylamine
U180.	N-Nitrosodipropylamine
U181.	5-Nitro-o-toluidine
U182.	Paraldehyde
	PCNB <i>see</i> U185
U183.	Pentachlorobenzene
U184.	Pentachloroethane
U185.	Pentachloronitrobenzene
U186.	1,3-Pentadiene (R)
	Perc <i>see</i> U210
	Perchloroethylene <i>see</i> U210
U187.	Phenacetin
U188.	Phenol
U189.	Phosphorous sulfide (R)
U190.	Phthalic anhydride
U191.	2-Picoline
U192.	Pronamide
U193.	1,3-Propene sulfone
U194.	n-Propylamine (R)
U195.	Pyridine
U196.	Quinone
U197.	Racemine
U200.	Racemine
U201.	Racemine
U202.	Saccharin
U203.	Saltone
U204.	Selenic acid
U205.	Selenium sulfide (P7)
	Shiva <i>see</i> U228
U206.	Streptozotocin
	2,4,5-T <i>see</i> U232
U207.	1,2,4,5-Tetrachlorobenzene
U208.	1,1,1,2-Tetrachloroethane
U209.	1,1,2,2-Tetrachloroethane
U210.	Tetrachloroethane
	Tetrachloroethylene <i>see</i> U210
U211.	Tetrachloroethane
U212.	2,3,4,6-Tetrachlorophenol
U213.	Tetrahydrofuran (R)
U214.	Thallium (I) acetate
U215.	Thallium (I) carbonate
U216.	Thallium (I) chloride
U217.	Thallium (I) nitrate
U218.	Thioacetamide
U219.	Thiourea
U220.	Toluene
U221.	Toluenediamine
U222.	o-Toluidine hydrochloride

Hazardous Waste No.	Substance ¹
U223	Toluene diisocyanate
U224	Toxaphene
	2,4,5-TP see U223
U225	Tribromomethane
U226	1,1,1-Trichloroethane
U227	1,1,2-Trichloroethane
U228	Trichloroethane
	Trichloroethylene see U228
U229	Trichlorofluoromethane
U230	2,4,5-Trichlorophenol
U231	2,4,6-Trichlorophenol
U232	2,4,5-Trichlorophenoxyacetic acid
U233	2,4,5-Trichlorophenoxypropionic acid alpha, alpha, alpha-Trichlorotoluene see U233
	TRI-CLENE see U228
U234	Trinitrobenzene (R,T)
U235	Tris(2,3-dibromopropyl) phosphate
U236	Trypan blue
U237	Ureol mustard
U238	Urethane
	Vinyl chloride see U043
	Vinylidene chloride see U079
U239	Xylene

¹ The Agency included those trade names of which it was aware; an omission of a trade name does not imply that it is not hazardous. The material is hazardous if it is listed under its generic name.

BULLETIN

NO. 709A

March 5, 1981

SEMI-METALLIC DISC BRAKE LININGS ON VEHICLES IN NORTH AMERICAN MARKET

This is a correction to BULLETIN NO. 709, our notice on usage of semi-metallic disc brake lining on cars sold in the North American market.

We incorrectly listed the General Motors X Cars as taking FMSI 7070B on the 1981 models. The X Cars (Skylark, Citation, Omega and Phoenix) took FMSI 7070B at the beginning of the 1981 model year, but were switched to FMSI 7070C effective November 1, 1980. FMSI 7070C is the same as FMSI 7070B, except that 2 rivet holes were added in the outer segment. FMSI 7070C can retrofit all 7070B applications.

The correct listing is as follows:

	<u>FMSI LINING - FRONT</u>
<u>BUICK</u>	
1981(late), Skylark (Power Brakes)	7070C
1981(late), Skylark (Manual Brakes)	7070C(I)
1981(early)-80, Skylark (Power Brakes)	7070B
1981(early)-80, Skylark (Manual Brakes)	7070B(I)
<u>CHEVROLET</u>	
1981(late), Citation (Power Brakes)	7070C
1981(late), Citation (Manual Brakes)	7070C(I)
1981(early)-80, Citation (Power Brakes)	7070B
1981(early)-80, Citation (Manual Brakes)	7070B(I)
<u>OLDSMOBILE</u>	
1981(late), Omega (Power Brakes)	7070C
1981(late), Omega (Manual Brakes)	7070C(I)
1981(early)-80, Omega (Power Brakes)	7070B
1981(early)-80, Omega (Manual Brakes)	7070B(I)
<u>PONTIAC</u>	
1981(late) Phoenix (Power Brakes)	7070C
1981(late) Phoenix (Manual Brakes)	7070C(I)
1981(early)-80, Phoenix (Power Brakes)	7070B
1981(early)-80, Phoenix (Manual Brakes)	7070B(I)

E. W. Drislane
Executive Director

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SEMI-METALLIC DISC BRAKE LININGS ON VEHICLES IN NORTH AMERICAN MARKET

This bulletin indicates where, to the best of our knowledge, semi-metallic disc brake linings are installed as original equipment on vehicles sold in the North American market. Our first bulletin on this subject was BULLETIN NO. 680 of April 30, 1980. This bulletin includes all information from BULLETIN NO. 680 plus information received since then--primarily 1981 application information with a few prior year additions. This list cannot be considered all inclusive and there may be some changes of which the Institute is not aware. Also, it should be emphasized that in some years the usage of semi-metallic material was on an option basis. This is particularly true in the police and taxi area where buyers could order fleets with a heavy duty option. Publication of this listing infers no preference or standard as regards usage of semi-metallic materials.

	FMSI LINING NUMBER	
	FRONT	REAR
<u>AMERICAN MOTORS</u>		
1981-80, Spirit, Concord 4's	7026A(O)	
1981-80, Spirit, Concord, Eagle 6's	7027A(O)	
1979, AMX	7027A(O)	
1978, Concord Police, Taxi	7027A(O)	
1976-75, Matador Police	7013A	
<u>BUICK</u>		
1981, LeSabre (11"rears), Wagons	723A	
1981, Riviera	7070A	7070A
1981-80, Buick Electra, Police, Taxi	728A	
1981-80, Regal, Century	7070A	
1981-80, Skylark (Power Brakes)	7070B	
1981-80, Skylark (Manual Brakes)	7070B(I)	
1980-79, Riviera	7070A	
1980-76, Skyhawk	7053	
1979-78, Regal, Century (Power Brakes)	7070A	
1979-78, Regal, Century (Manual Brakes)	7070A(O)	
1979-76, Skylark	728A(O)	
1977-76, Century (Manual Brakes)	723A(O)	
1977-76, Buick Police	728A	
1975-73, Apollo (Manual Brakes)	728A(O)	
<u>CADILLAC</u>		
1981, Eldorado	7070A	
1981, Seville	7070A	
1980-79, Eldorado (Diesel)	7070A	
1980-79, Seville (Diesel)	7070A	
1981-68, Commercial	728A	
<u>CHEVROLET</u>		
1981, Impala, Caprice (11" rears), Wagons	728A	
1981-75, Chevrolet Police, Taxi	728A	
1981-80, Monte Carlo, Malibu	7070A	
1981-80, Citation (Power Brakes)	7070B	

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FORD TRUCK

1981-75, Bronco	708	
1980-76, E-250, F-250 (LD), E-350, F-350	7054 (I)	
1981-80, E-250 School Bus	7054	
1981-76, 800, 900 Series	7041	
1980-76, F-100 (4x4)	788	
1980-77, F-150 (4x4)	788	
1973-76, F-250 (Lt)	788	

GMC TRUCK

1981-78, Caballero	7070A	
1981-79, C-, K-, P-2500	728A or	
	7084A	
1981-79, C-, P-3500	7084A or	
	7081A	
1981-79, K-3500	7081A	
1981-79, P-3500 (JF-9)	7081A	7081A
1981-79, G-3500	728A or	
	7084A or	
	7081A	
1978-76, C-, K-, P-2500	723A	
1978-76, C-, G-, P-3500	723A	

INTERNATIONAL HARVESTER

1981, School Bus and Commercial (Option)	7108	7108
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PACK TRUCK

1981-80, Certain Models with air brakes	7023	
1981-78, Certain Models with hydraulic brakes	7041	

MERCURY

1981, Zephyr	7072B	
1981, Cougar	7072B	
1981, Capri 6's and 8's	7083B	
1981-80, Cougar XR7	7072B	
1981-79, Mercury Police, Taxi	7082A	
1980-78, Zephyr Police, Taxi	7072B	
1980-79, Zephyr 8's	7072B	
1980-79, Capri 8's Turbo 4	7083B	
1980, Capri 6's	7083B	
1980-76, Monarch Police, Taxi	7027A	
1979-78, Cougar Police, Taxi	7013A	
1978-76, Mercury Police	7013A	7038A

OLDSMOBILE

1981, Delta 88 (11" rears), Wagons	728A	
1981-80, Oldsmobile 98, Police, Taxi	723A	
1981-79, Toronado	7070A	
1981-80, Cutlass	7070A	
1981-80, Omega (Power Brakes)	7070B	
1981-80, Omega (Manual Brakes)	7070B(I)	
1980-76, Starfire	7053	
1979-78, Cutlass (Power Brakes)	7070A	
1979-78, Cutlass (Manual Brakes)	7070A(O)	
1978-76, Omega	723A(O)	
1979-76, Toronado	728A(O)	
1977-76, Cutlass (Manual Brakes)	728A(O)	
1977-76, Oldsmobile Police	728A	
1975-69, Oldsmobile Commercial	728A	
1975-74, Toronado	728A	
1975-73, Omega (Manual Brakes)	723A(O)	

FMSI LINING NUMBER	
FRONT	REAR

CHEVROLET (Cont.)

1981-80, Citation (Manual Brakes)	7070B(I)	
1981-80, Chevette	7089 (O)	
1981-76, Camaro	728A(O)	
1980-76, Monza	7053	
1979-78, Monte Carlo, Malibu (Power Brakes)	7070A	
1979-78, Monte Carlo, Malibu (Manual Brakes)	7070A(O)	
1979-76, Nova	728A(O)	
1979-77, Nova Police	723A	
1977-76, Malibu (Manual Brakes)	728A(O)	
1977-76, Vega	778	
1975-73, Nova (Manual Brakes)	728A(O)	

CHEVROLET TRUCK

1981-78, El Camino	7070A	
1981-79, C-, K-, P-20	728A or	
	7084A	
1981-79, C-, P-30	7084A or	
	7081A	
1981-79, K-30	7031A	
1981-79, P-30 (JF-9)	7081A	7031A
1981-79, G-30	728A or	
	7084A or	
	7081A	
1978-76, C-, K-, P-20	728A	
1978-76, C-, G-, P-30	728A	

CHRYSLER

1981-79, Chrysler Police, Taxi	7017	
1981-78, Cordoba Police	7017	
1981-77, Le Baron Police, Taxi	7017	
1978-76, Chrysler Police, Taxi	7019	

DODGE

1981, Aries	7097A	
1981-78, Omni	7074A	
1981-79, St. Regis Police, Taxi	7017	
1981-77, Diplomat Police, Taxi	7017	
1980-77, Aspen Police, Taxi	7017	
1978-77, Monaco Police, Taxi	7018	
1977, Royal Monaco Police, Taxi	7019	

DODGE TRUCK

1978-76, Mini Bus	7020A	
1976, W-300	7024A	

FORD

1981, Fairmont	7072B	
1981, Granada	7072B	
1981, Mustang 6's and 8's	7083B	
1981-80, Thunderbird	7072B	
1981-79, Ford Police, Taxi	7082A	
1980-78, Fairmont Police, Taxi	7072B	
1980-79, Fairmont 6's	7072B	
1980-79, Mustang 8's and Turbo 4	7083B	
1980-79, Fiesta	7064 (O)	
1980, Mustang 6's	7083B	
1980-76, Granada Police, Taxi	7027A	
1979-78, LTD II Police, Taxi	7013A	
1978, Ford Police	7013A	7039A
1977-76, Ford Police	7013A	

FRONT

REAR

PLYMOUTH

1981,	Reliant	7097A
1981-78,	Horizon	7074A
1981-80,	Gran Fury Police, Taxi	7017
1980-77,	Volare Police, Taxi	7017
1978,	Fury Police, Taxi	7018
1977,	Gran Fury Police	7019

PONTIAC

1981,	Catalina, Bonneville (11" rears), Wagons	728A
1981-80,	Pontiac Police, Taxi	728A
1981-80,	LeMans, Grand Prix	7070A
1981-80,	Phoenix (Power Brakes)	7070B
1981-80,	Phoenix (Manual Brakes)	7070B(I)
1981-76,	Firebird (drum rears)	728A(O)
1981-79,	Firebird (organic disc rears)	728A
1980-76,	Sunbird	7053
1979-78,	LeMans, Grand Prix (Power Brakes)	7070A
1979-78,	LeMans, Grand Prix (Manual Brakes)	7070A(O)
1979-78,	Phoenix	728A(O)
1977-76,	Ventura	728A(O)
1977-76,	LeMans (Manual Brakes)	728A(O)
1977-76,	Pontiac Police	728A
1977-76,	Astre	778
1975-73,	Ventura (Manual Brakes)	728A(O)

TOYOTA

1981-80,	Corolla Coupe, Hardtop, Liftback	7099
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VOLKSWAGEN

1980-79,	Rabbit, Scirocco	7087
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(I) - Inner Lining only

(O) - Outer Lining only

The data shown in this bulletin has been supplied by original equipment manufacturers and other sources, and while we believe that such information is correct, the Institute cannot and does not accept any responsibility or liability for errors or omissions, or harm resulting therefrom.

The data shown in this bulletin indicates dimensions only, and in no way refers to quality of any materials that may be embodied or used in the product or particular application, and moreover SINCE FIELD CONDITIONS AND OTHER FACTS MAY NECESSARILY VARY FROM ONE APPLICATION TO ANOTHER, FRICTION MATERIALS SUPPLIERS AND INSTALLERS SHOULD RELY ULTIMATELY AND SOLELY UPON THEIR OWN EXPERTISE AND JUDGMENT, AS TO QUALITY AND DIMENSIONAL SIZE. Under no circumstances should replacement items be modified in the field instead of obtaining a proper sized item from a supplier. If such items are modified in the field to fit, the Institute specifically disclaims all liability and responsibility for any harm resulting therefrom.

If any error or omission is noted in this bulletin, it should be reported immediately to the Friction Materials Standards Institute, E-210, Route 4, Paramus, New Jersey 07652

EWD/erc

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E. W. Drislane

Executive Director

BULLETIN

NO. 708

February 18, 1981

EPA PROPOSALS ON REPORTING AND RECORDKEEPING RELATING TO ASBESTOS

On January 29, 1981 the Institute sent out BULLETIN NO. 706 entitled "Environmental Protection Agency (EPA) Proposals for Reporting and Record-keeping for Asbestos Manufacturers, Importers and Processors." We included with the mailing copies of Pages 8200-8214 of the Federal Register notice. In addition, several members requested and received copies of the additional 35 pages of forms.

The Institute has been asked if it plans to comment to the EPA on these proposed regulations. The Institute has taken no steps in this direction at this time. I reviewed this question with Mr. Armstrong, Chairman of our Health and Environmental Affairs Committee, this morning.

We are asking for input from the Membership, as well as from the Committee, which could form the basis for comments by the Institute. Any member who wishes to give input to the Institute should send its comments to the Institute by March 10, 1981. While EPA's notice requests comments by March 27, 1981, that date may be postponed. However, at this time, that is their deadline.

If you wish to give the Institute Office comments, they should be specific and address specific sections of the EPA's proposals. One should cite specific paragraphs, specific forms, definitions, confidentiality provisions, and the like. Also, in commenting to the EPA it is important not to just be against something, but to give a reason why it is cumbersome, not necessary, redundant, too costly, or the like.

For example, where EPA asks on its forms for 10 years of data on asbestos imports, why not just the 1980 figure? Where it asks for grades of chrysotile, why not just totals of chrysotile? The time savings for these changes would be considerable. Why is the old data needed for EPA purposes? EPA should be dealing with emissions currently. Etc.

It would then be the Institute's intention to consolidate, brief, or expand on the comments working with the Health and Environmental Affairs Committee and its Chairman. If Members wish to comment, please have their written comments into the Office by March 10, 1981.

EWD/erc

E. W. Drislane
Executive Director

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Affairs Committee
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B U L L E T I N

N O. 7 0 7

February 17, 1981

1981 SUPPLEMENT TO THE 1980 BRAKE SHOE IDENTIFICATION CATALOG

The contract for the printing of the "1981 Supplement to the 1980 Brake Shoe Identification Catalog" has been awarded to:

Corley Printing Co.
9304 Page Boulevard
St. Louis, MO 63132

This Supplement will contain 32 pages with self-cover.

On an estimate of the total order being 30,000 copies of this 32 page book, the price is:

\$181.00/1

\$ 4.00/1 additional for five hole punching

If there is a change in the price per thousand due to a change in number of pages or to change in order quantities, or for author's alterations, you will be notified.

Please forward all orders to the Institute Office. Do Not send them to the printer. (British Council and FMSI Canada members send to your respective associations). This is our only means of checking the total quantities ordered and the price charged, as well as whether only members are ordering.

All orders for more than 200 copies should be made out to Corley Printing Co. and state punching and shipping instructions. Orders for 200 copies or less should be made out to the Institute. If applicable, please advise any special instructions necessary to ship through your customs.

Kindly forward your orders so that they reach the Institute Office by March 20, 1981.

EWD/erc

E. W. Drislane
Executive Director

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B U L L E T I N

N O. 7 0 6

January 29, 1981

ENVIRONMENTAL PROTECTION AGENCY (EPA) PROPOSALS FOR REPORTING
AND RECORDKEEPING FOR ASBESTOS MANUFACTURERS, IMPORTERS AND PROCESSORS

The EPA's Office of Toxic Substances has proposed requirements for asbestos products manufacturers, importers and processors on the reporting on asbestos usage. These proposals are authorized in Section 3 (a) of the Toxic Substances and Control Act (TSCA). To indicate how far-reaching these reporting requirements are, one can note the following from the first page of the proposed rules:

Importers include those persons who import asbestos in bulk form, or as part of any product. Thus, persons who import automobiles that contain asbestos brake linings are "manufacturers" of asbestos for purposes of TSCA.

A brake lining or clutch facing manufacturer in the United States would be a primary processor as he uses raw asbestos in the friction product. He would also be a secondary processor when he assembles brake linings to shoes. A party who imports lined or unlined shoes would be a "manufacturer" as indicated above. A rebuilder who purchased brake linings for assembly would be a secondary processor. For more authoritative definitions, please refer to Page 8213 of the January 26, 1981 Federal Register, copy enclosed.

The Institute is enclosing the notice as it appeared in the Federal Register of January 26, 1981. We have enclosed Pages 8200-8214 only. The forms that are referred to take an additional 35 pages (to Page 8249). If Members wish a copy of these additional pages, please request them of the Institute Office.

It should be noted at this time that this notice is a proposal. As noted, the EPA will accept written comments relative to this proposal which are submitted on or before March 27, 1981.

While this is a far-reaching rule if adopted, a rule of this nature would be expected based on the reading of TSCA and the initiatives that the Office of Toxic Substances has already taken in the asbestos area.

END/erc
Enc:

E. W. Drislane
Executive Director

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B U L L E T I N

N O . 7 0 5

January 21, 1981

ORDERS FOR THE 1981 AUTOMOTIVE DATA BOOK

The contract for the printing of the "1981 Automotive Data Book" has been awarded to:

Tweddle Litho Company
24000 Harper Avenue
St. Clair Shores, MI 48080

It is believed that it will contain 112 pages plus cover.

On an estimate of the total order being 60,000 copies of a 112 page book, the preliminary price is:

\$573.00 per M
17.50 per M additional for five hole punching

If there is a change in the price per thousand due to a change in number of pages or to changes in order quantities, or for author's alterations, you will be notified.

Please forward all orders to the Institute Office. Do not send them to the printer. (British Council and FMSI Canada members send to your respective associations). This is our only means of checking the total quantities ordered and the price charged, as well as whether only members are ordering.

The orders should be made out to Tweddle Litho Company, and should state punching and shipping instructions. If you have special instructions such as "no cover" please indicate if you wish "no stitch" and "no trim." If applicable, please advise any special conditions for shipping through your customs.

Please forward your orders so that they reach the Institute Office by March 1, 1981.

END/erc

E. W. Drislane
Executive Director

BULLETIN

N O. 7 0 4

January 5, 1981

HISTORICAL SALES PROGRAM

The historical sales program continues on a quarterly basis. Regional Members using the copyrighted FMSI Numbers for marketing their products in the United States may participate if they wish.

The Institute is requesting details of pieces sold for the full twelve months of 1980 (the full calendar year 1980). The rules for reporting details remain unchanged. Please remember that you are to report cumulative figures for the full 12 months.

1. Quantities will be reported in pieces (not units). For roll linings, each foot of length will be one piece.
2. Our Accountants will report the names of the members from whom reports are received.
3. Total pieces in each group will be reported.
4. "Clutch Facings" does not include gear tooth discs, automatic transmission discs, or the 8-14" dia., (3/16 to 1/2" thick) asbestos composition discs.

While there is no change in your reporting to the Accountants, there will be a change in the form of the report to be rendered by the Accountants. Based on resolutions at the June 1976 membership meeting, for the annual report only, the Accountants will be asked to list the names of the members reporting in each product line. (On the quarterly reports, they have been listing only the members reporting without indicating who reported by product line).

The data as filed will be confidential. Totals for each group will be shown and there is no way of determining quantities by individual members.

You will be receiving from Marshall Granger and Company, Certified Public Accountants, a form for completing this information. Please return it to:

Marshall Granger & Company, CPA
1600 Harrison Avenue
Mamaroneck, New York 10543

If you report, please have your figures in by February 15, 1981. If you do not wish to report these figures, no reply is necessary. Only those reporting figures will receive the industry totals when the data is summarized. A sample form and definitions are attached.

EWD/erc
Enc:

E. W. Drislane
Executive Director

Distribution: Active Members-List G
Regional Members (paying
Active Members Dues)

FMSI 17400

STATISTICAL PROGRAM OF THE
FRICTION MATERIALS STANDARDS INSTITUTE, INC.

Mail to:

Marshall Granger & Co., CPA
1600 Harrison Avenue
Mamaroneck, New York 10543

* * * * *

See instructions for sales to other members.

Pieces sold to United States distributors, jobbers, private brands, rebuilders, brake specialists, fleets, mass merchandisers, direct consumers, government agencies, or other customers for use in the United States replacement market:

12 MONTHS JANUARY 1, to DECEMBER 31, 1980

Brake linings less than 3/4" nominal
thickness (See explanation for
roll linings).

Brake blocks, nominal thickness
of 3/4" and over.

Disc Brake Linings

Clutch Facings

Total Pieces

STATISTICS SUPPLIED BY:

Signature

Company

Telephone Number

SAMPLE
FORM

USE REPORTING FORM TO
BE SENT BY ACCOUNTANTS

EXHIBIT "B"

DEFINITION FOR HISTORICAL SALES

PIECES

The reports will show pieces of friction material, in groups as shown:

<u>Group</u>	<u>Description</u>	<u>Normal Usage</u>
Brake Lining	Friction materials less than a nominal 3/4" thickness (See note on roll lining)	Normally, <u>one piece</u> to a shoe
Brake Blocks	Friction materials with a nominal thickness of 3/4" and over	Normally, <u>two pieces</u> to a shoe
Disc Brake Linings	Friction materials sold (for disc brakes) to be attached to the shoe, or sold as a unit molded, bonded or riveted to the shoe	Normally, <u>one piece</u> to a shoe
Clutch Facing	Friction materials of annular shape, or segments thereof	Normally, <u>two annular pieces</u> per clutch plate

Note: For roll lining only, consider each foot of length equals one piece.

REPLACEMENT SALES TO UNITED STATES MARKET

This reporting is for sales to the United States replacement market only. Do not include sales to other markets. This includes sales under the friction material manufacturer's own name or brand name used by the customer, to automotive warehouse distributors, jobbers, rebuilders, brake specialists, fleets, mass merchandisers, direct consumers, government agencies or other customers for use in the United States replacement market.

When a friction materials manufacturer is shipping to a vehicle manufacturer, brake manufacturer, or clutch manufacturer, but has no reasonable way of determining if the pieces are for original equipment or replacement purposes, estimates will not be used - these pieces will not be reported. However, where a friction material manufacturer is shipping to a point known to be used for replacement, or where he stencils or otherwise identifies the pieces as being for replacement purposes, or where the shipments otherwise are obviously known to be for replacement, these pieces will be reported.

The member who sells to the type customer or user indicated above will report those pieces sold, even if purchased from another Active Member or Regional Member.

When you sell your friction materials to another Member (Active or Regional) do not report those sales! Materials sold to Licensee Members of the Institute for the replacement market should be included.

B U L L E T I N

N O. 7 0 3

December 11, 1980

INSTITUTE ACTIVITIES IN THE TRADE PRESS

At the June 1980 Meeting, the subject of press releases on Institute affairs was discussed. The Institute Office was asked to inform Members on press releases and their publication in the trade press.

The Institute sent two public relations releases to the trade press since the June Meetings. They were: (1) Election of Officers at the June 1980 Meetings and (2) Honoring of Mr. Moalli, Past President of the Institute. We also coordinated a response by Mr. Carrigan to questions posed by WAREHOUSE DISTRIBUTION. In addition, the Institute advised the press on the untimely death of Joe Greenen.

While the Institute sends its releases to over 25 publications, we only receive four publications on a regular basis. As a result, we do not see the printing of some of our releases, and we asked that Members send in releases that they see concerning the Institute.

Copies of press releases concerning the Institute that were received are enclosed. These include all releases received since the June 1980 Meetings. The "flip-side" reproduces Mr. Carrigan's interview.

The foregoing is for your information

END/erc

cc- Delegates & Alternates

Active Members - List A

Regional Members - Active Member Dues

E. W. Drislane

Executive Director

FRICION MATERIALS STANDARDS INSTITUTE, INC.

Gordon A. Carrigan, of S. K. Wellman Corporation, was elected President of the Friction Materials Standards Institute and Francis E. Messier, Automotive Aftermarket Operations, Bendix Corporation, was elected Vice President. The elections took place at a special meeting called because of the earlier resignations of Ronald R. Moalli as President and Ronald L. Cutler as Vice President. Other FMSI officers include Treasurer—William C. Messier, of the Bendix Friction Materials Division, and Secretary—Edward W. Drislane, of FMSI.

ASBESTOS - June 1980

REELECTED PRESIDENT of the Friction Materials Standards Institute is Gordon A. Carrigan of the S.K. Wellman Corp. The rest of the Institute's new officers are VP James L. Mellow of Nuturn Corp., treasurer William Simon, Brassbestos Mfg. Co. and secretary Edward W. Drislane of the Institute office . . .

BRAKE & FRONT END - September 1980

Friction Materials Standards Institute — **RONALD R. MOALLI**, former president of the group, was honored for his years of service to the friction materials industry and FMSI . . .

BRAKE & FRONT END - November 1980

Syd Tilden of Permafuse Corporation discussed "SAE Brake Standard and Recommended Practices." Ed Drislane of the Friction Materials Standards Institute gave an overview of FMSI's activities. A "Review of Asbestos and its Future" was presented by Ed Fenner from Johns Manville. "The Import Brake Shoe Market" was highlighted by Bjarne Qvale of European Parts Exchange and Willy Webb of Repco.

APRA INSTITUTE ROUND-UP
August 1980



Ed Drislane gives an overview of FMSI's activities.

Carrigan re-elected as president of FMSI

During this year's annual meeting of the Friction Materials Standards Institute, Gordon A. Carrigan of the S. K. Wellman Corp. was re-elected as president.

Other officers elected were: James L. Mellow, Nuturn Corp., vice president; William Simon, Brassbestos Manufacturing Co., treasurer; Edward Drislane, Friction Materials Standards Institute, secretary.

WAREHOUSE DISTRIBUTION
October 1980

The Friction Materials Standards Institute recently elected a new slate of officers. Gordon A. Carrigan of the S.K. Wellman Corp. was re-elected president. New vice president is James L. Mellow of Nuturn Corp.; treasurer, William Simon of Brassbestos Mfg. Co., and secretary, Edward W. Drislane of the Institute office.

HEAVY DUTY MARKETING
September/October 1980



GORDON A. CARRIGAN, President,
Friction Materials Standards Institute, Inc.,
S. K. Wellman Corporation,
Bedford, OH

Friction Materials Standards Institute, Inc.

"While there are various figures on the sales penetration of imported cars in the United States, and declines in production and sales of U.S. manufactured vehicles, a reasonable figure would be that imports are now taking about 25 percent of the U.S. passenger car market. Also, sales of domestic manufacturers have declined by up to 33 percent from those of a year ago.

"While there is an important direct effect on those manufacturers who participate in the original equipment market, the effects on friction materials aftermarket suppliers are not so pronounced. Most friction materials manufacturers in the United States have been providing disc and drum brake linings and clutch facings for popular imported cars for many years. Just about all friction materials manufacturers in the aftermarket have brake lining capabilities in this area, and have been supplying these materials. With that in mind, there has been only a moderate effect in the aftermarket.

"Passenger cars and light trucks will ordinarily be relined two to four times after wear-out of the original equipment material. This, of course, can vary significantly, depending upon service. For example, vehicles in heavy traffic and urban areas should have faster wear-out than their rural counterparts. Also, it should be noted that the aftermarket for brake linings is significantly larger than the O.E. markets.

"It is only in those import car areas where owners customarily bring their vehicles back to the sell-

ing dealers that the friction material used for replacement will be from the vehicle country of origin. Those that are returned to the mass marketer, the corner garage and other more typical reline areas, will probably be purchasing their material from distributors, rebuilders and others who are purchasing friction materials made in North America.

"While estimates are difficult, it could be estimated that less than 10 percent of aftermarket brake linings sold in the U.S. market for passenger cars is being provided by off-shore suppliers. This may not take into account sales by North American friction materials manufacturers who may purchase some of their requirements from overseas. Any effect here would be inconclusive as regards trade balances because of U.S. manufacturer participants in overseas markets.

"While the effects of imported car penetration in the North American markets are probably not a major concern to the friction materials aftermarket, current domestic difficulties with unemployment, high interest rates, high gasoline costs and the like have taken their toll.

"There are areas of dislocation in the domestic friction materials aftermarket which are probably related to reducing inventories, slower collections on major accounts and the like that have contributed to measurable reduction in aftermarket friction materials sales. However, it is not felt that import car sales are the significant force behind these difficulties.

B U L L E T I N

N O. 7 0 2

November 25, 1980

FEDERAL REGULATORY AGENDA IMPACTING ASBESTOS USAGE

The United States Regulatory Council publishes a calendar on significant regulatory initiatives twice a year--in May and November. Two of the more significant regulations listed in the November calendar were those by (1) OSHA and its plans for revision of the Standard for Occupational Exposure to Asbestos, and (2) EPA and its Office of Toxic Substances Control plans for restricting the commercial and industrial use of asbestos.

Copies of these agendas are enclosed. Neither notice reveals anything new as regards OSHA or EPA plans, but there are dates listed which may be of interest. These notices are forwarded to keep the Membership current as regards regulatory plans of these two Bureaus.

EWD/erc
Copy - Delegates & Alternates
Active Members - List C
Health & Environmental
Affairs Committee

E. W. Drislane
Executive Director

FRICION MATERIALS STANDARDS INSTITUTE, INC.

FR NOV. 14, 1980 — OSHA AGENDA ON A STANDARD FOR OCCUPATIONAL EXPOSURE TO ASBESTOS

DOL—OSHA

Standard for Occupational Exposure to Asbestos (29 CFR 1910.1001*)

Legal Authority

Occupational Safety and Health Act of 1970, 29 U.S.C. § 655.

Reason for Including This Entry

The Occupational Safety and Health Administration (OSHA) thinks this regulation is necessary to protect workers from the carcinogenic risks and other adverse health effects associated with exposure to asbestos.

Statement of Problem

A preliminary report indicated that 2.3 to 2.5 million employees have some degree of occupational exposure to asbestos. Of this total, 180,000 to 400,000 are in the construction industry and the remaining 2.1 million are in general industry. A significant number of these employees are exposed to airborne asbestos levels at or near OSHA's existing permissible exposure limit (2,000,000 fibers per cubic meter). This limit was established in 1972 for the limited purpose of reducing the incidence of asbestosis, rather than cancer.

The National Institute for Occupational Safety and Health (NIOSH) and other sources have provided data to OSHA which indicate that the present OSHA exposure limit may be inadequate to protect workers from asbestos-related disease. Exposure to asbestos can cause asbestosis (a diffuse, nonmalignant, scarring of the lungs), lung cancer, and mesothelioma (a cancer of the chest and abdominal cavity linings of exposed workers). Recent epidemiologic evidence indicates these diseases may be induced at very low levels of exposure, and experimental data in animals suggest that all forms of asbestos present a health hazard.

OSHA is developing a proposal to revise the current standard for occupational exposure to asbestos. The regulation would set a permissible exposure limit (PEL) for employee exposure to asbestos, and affected industries would have the opportunity to implement control measures to achieve the PEL for their operations in the most

cost-effective manner. Failure to promulgate new regulations will prolong the occurrence of disease, disability, and mortality associated with asbestos exposures.

Alternatives Under Consideration

The Agency is currently considering two alternative PELs: (A) a 500,000 fiber per cubic meter (fiber/m³) 8-month time-weighted average (TWA) with a 5,000,000 fiber/m³ ceiling (above which no employee may be exposed) and (B) a 100,000 fiber/m³ TWA with a 500,000 fiber/m³ ceiling. For each of these alternatives, other revisions to current provisions for engineering and work practice controls, hygiene facilities, medical surveillance, respirators, training, etc., may be included in the proposed regulations.

Studies indicate that all commercially available forms of asbestos are cancer-causing agents. Some scientists argue that all asbestos materials, therefore, should be regulated equally. Others believe that different asbestos forms display varying degrees of toxicity and that OSHA should develop separate standards based on data associated with each specific asbestos mineral. OSHA will consider the merits of each of these regulatory options.

Still another approach is to establish regulations for asbestos on the basis of the feasibility of compliance for different industries. Specific requirements of the standard would differ according to the feasibility of various control measures in different industries or processes, such as construction versus general industry.

We do not anticipate issuing an NPRM until late Winter 1980, and currently have no preferred alternative.

Summary of Benefits

Sectors Affected: Workers and establishments in manufacturing, retail trade, construction and service industries which produce or use asbestos-containing products; users of these products; establishments manufacturing substitutes for asbestos or asbestos-containing products; and the general public.

Affected industries include the primary manufacturers of asbestos products; secondary fabricators in the automobile aftermarket, shipbuilding and repair, and elsewhere; and the construction industry. The primary manufacturers are largely grouped in Standard Industrial Classification (SIC) Code 3292 (asbestos products), and many of these establishments also perform some secondary fabrication. Shipbuilding and repair is included in SIC Code 3731. The automobile aftermarket includes establishments which repair, resurface, and repackage such friction parts as brake shoes and clutch faces. The establishments involved are located in SIC Code 55 (automotive dealers and gasoline stations), SIC Code 3714 (motor vehicle parts and repair), and SIC Codes 7538 and 7539 (general automotive repair shops, and automotive repair shops not elsewhere classified). Other secondary fabricators are located in SIC Code 3293 (gaskets, packing, and sealing devices), and in many other SIC Codes too numerous to list here. Construction (SIC Codes 15-17) will also be affected where asbestos-containing products are used, such as roofing felt, asbestos-cement pipe, asbestos-cement siding, and some forms of floor tile.

Establishments which produce substitutes for asbestos or asbestos-containing products will also be affected. Although a complete enumeration of such substitutes and their respective SIC Codes is not included here, a partial listing is as follows: Substitutes for asbestos itself, in various uses, include fibrous glass (SIC Code 322), mica (SIC Code 329), graphite-carbon fibers (SIC Code 329), nylon (SIC Code 228), polypropylene (SIC Code 282), and others. A large number of substitutes also exist for asbestos-containing products. Iron or polyvinyl chloride pipe (produced in SIC Codes 33 and 307) can be substituted for asbestos-cement pipe. Substitutes for asbestos-cement siding include vinyl, aluminum, and wood siding; substitutes for vinyl-asbestos floor tile include pure vinyl tile, carpeting, and hardwood flooring.

The direct benefit we expect from controlling exposure to asbestos is a reduction in the incidence and prevalence of the health effects cited in "Statement of Problem." OSHA has not

yet completed an analysis of the benefits expected by reducing exposures to any of the alternative levels being considered. However, because of the large numbers of workers exposed, and the accumulated evidence on the toxicity of even low levels of asbestos exposure, the numbers are expected to be large. Such reductions in mortality and morbidity will result in reduced pain and suffering for employees, and in savings in medical expenses and lost output which would otherwise occur.

Indirect benefits from controlling asbestos exposures to either of the alternative levels will include reductions in the burden placed on such public support programs as Medicare and Medicaid, Welfare, and Worker's Compensation. In addition, improved worker health and safer working conditions are likely to reduce employee turnover and raise labor productivity. Finally, further controlling asbestos exposures will stimulate a search for asbestos substitutes and for alternatives to asbestos-containing products, and it will induce employers to innovate improved control technologies. With less asbestos and fewer asbestos products used, consumers will benefit as incidental asbestos exposures will decline.

Summary of Costs

Sectors Affected: Workers and establishments in manufacturing, retail trade, construction, and service industries which produce or use asbestos-containing products; and consumers of these products.

The costs of the regulatory options being considered are largely the capital and operating expenses which the regulated firms will incur in order to comply. Because these cost increases may raise the prices of asbestos-containing products, the quantity demanded of such products may decline. Higher prices of asbestos products would result in a switch to presently unregulated substitutes. To the extent that some of the substitutes have adverse health or safety effects, these

will also be costs of the regulation. The extent of this substitution is under investigation and quantitative estimates are presently unavailable.

A preliminary evaluation of the potential impact on industry of regulation of asbestos was reported in the previous *Calendar of Federal Regulations* (45 FR 36971, May 30, 1980). This evaluation is currently being updated by OSHA.

Indirect costs attributable to additional regulation hinge on the estimated impact of the use of substitute products and their likely consequences for health, safety, and product quality. Costs associated with the most stringent alternative could result in a significant use of substitutes for asbestos fibers and asbestos-containing products. The extent of this substitution is under investigation by OSHA and quantitative estimates are presently unavailable. We are also evaluating the health and safety effects of likely substitutes but, again, no qualitative or quantitative estimates can be ventured at this time.

Related Regulations and Actions

Internal: We are planning to modify the existing OSHA standard for asbestos, found at 29 CFR 1910.1001 of the Agency's General Industry Standards, which specifies an 8-hour time-weighted average of 2,000,000 fibers/m³. Other provisions of the standard address monitoring, medical surveillance, training, respirators, recordkeeping, protective clothing, and methods of compliance.

On October 7, 1975, OSHA published a notice proposing to revise the current asbestos standard and to reduce the PEL to 500,000 fibers/m³ (40 FR 3392). We are performing analyses of the economic and technological impact of that and alternative exposure levels.

External: Regulatory measures are under consideration by the Environmental Protection Agency (EPA) and the Consumer Product Safety Commission (CPSC). EPA/CPSC published an ANPRM for asbestos use

In October 1979, EPA currently has a national emission standard for asbestos (38 FR 8820) and CPSC regulates uses of asbestos in certain consumer products.

Active Government Collaboration

An OSI/Environmental Protection Agency/Consumer Product Safety Commission task group will coordinate development of an appropriate regulatory response to possible health hazards associated with asbestos. Information-sharing activities with other governmental agencies, such as the National Institute for Occupational Safety and Health, Food and Drug Administration, and Department of Agriculture, are underway.

Timetable

NRPM—Late Winter 1980.

Regulatory Analysis—Winter 1980.

Public Hearing—Following NRPM.

Public Comment Period—

Approximately 30-60 days following NRPM.

Final Rule—Winter 1981.

Final Rule Effective—To be determined.

Available Documents

"Occupational Exposure to Asbestos," NRPM (40 FR 47652 October 7, 1975), and comments received in response to the NRPM (OSHA Docket No. H-033).

"Criteria for a Recommended Standard . . . Occupational Exposure to Asbestos" (NIOSH-HEW, 1975); updated Criteria Document (1978).

"Workplace Exposure to Asbestos: Review and Recommendations" (NIOSH-OSHA), April, 1980.

These documents are available by mail and for review and copying at the OSHA Technical Data Center, Room S-6212, 200 Constitution Avenue, N.W., Washington, DC 20210. A fee is usually charged for copies of these documents.

Agency Contact

Bailus Walker, Director
Directorate of Health Standard
Programs
U.S. Department of Labor-OSHA
Washington, DC 20210
(202) 523-7075

FR NOV. 24, 1980 - EPA OFFICE OF TOXIC SUBSTANCES

AGENDA FOR ASBESTOS

EPA-OPTS

Title

Rules Restricting the Commercial and Industrial Use of Asbestos Fibers (40 CFR Part 763)

Legal Authority

Toxic Substances Control Act (TSCA), 15 U.S.C. §§ 2601 and 2605.

Reason for Including This Entry

The Environmental Protection Agency (EPA) has included this action because of its potential economic impact on the asbestos industry. The economic cost of the rule will probably exceed \$100 million. We may prohibit a large portion of the domestic production and importation of asbestos-containing products into the United States.

Statement of Problem

Epidemiological studies have established that exposure to asbestos fibers can contribute to increased risk of lung damage (asbestosis) and human cancer of several kinds.

EPA is concerned that in spite of past governmental regulation of asbestos, millions of Americans may be exposed to levels of asbestos that significantly increase the risk of contracting asbestos-related diseases. (Past regulations are cited below under Related Regulations and Actions.) Currently, more than two million workers are exposed to asbestos fibers (at levels higher than background) in their places of employment. In addition, the 159 million Americans who live in urban areas may be exposed to asbestos fiber levels that significantly increase the risk of contracting asbestos-related diseases. EPA is concerned that asbestos fiber emissions from the mining, milling, processing, or distribution of asbestos or from the use, misuse, or disposal of asbestos-containing products might cause significant pollution of urban air.

It is difficult to estimate the number of people who will contract asbestos-related diseases at current exposure levels. Data on mortality rates are available for workers who are exposed to asbestos fiber levels considerably higher than general population exposures. EPA will extrapolate to predict risks for the general population.

EPA is conducting this regulatory program because the Agency is not convinced that existing regulations have adequately protected the public. These regulations have focused on limited aspects of the asbestos exposure problem, such as worker exposures, air emissions from manufacturing facilities,

and some consumer products.

Regulation under the Toxic Substances Control Act (TSCA) would eliminate unreasonable human health risks from all asbestos-related activities. The comprehensive mandate of TSCA enables EPA to reduce health risk from sources that are difficult to control through medium-specific or source-specific regulation authorized under other Federal authorities. Under TSCA, EPA is currently investigating the cumulative effects of exposure to asbestos throughout its life cycle in commercial and industrial products from mining and milling through processing, product manufacturing, use, and disposal. Our preliminary studies indicate substantial continuing exposure of millions of people to the ever growing inventory of asbestos sources. As a result of this study, the Agency expects to promulgate rules to prevent and reduce any unreasonable risks that are identified.

Alternatives Under Consideration

EPA is considering the following alternative actions: (A) prohibiting the manufacture, processing, distribution in commerce, and importation of asbestos for all nonessential asbestos uses; (B) restricting the quantity of fibers that could be mined and imported, or processed annually in the United States, thus allowing the marketplace to determine which products and uses to eliminate; (C) developing other marketplace regulatory strategies; (D) requiring labeling of asbestos containing products; (E) regulating under laws other than TSCA; and (F) taking no regulatory action.

EPA's choice of a regulatory program will depend on the seriousness of the risks and the identification of the major sources of exposure. EPA suspects that much of the asbestos to which the public is exposed comes from emissions caused by mining, milling, and processing asbestos fibers; emissions resulting from the use of asbestos-containing products may not be as significant. In that case, EPA would want to reduce risks from mining, milling, and processing as much as possible (alternative A). A disadvantage of alternative A would be that both the affected industry and EPA would be involved in extensive exemption proceedings.

Alternative B is a possible substitute for alternative A. The allocation of quotas could be a very difficult process and could result in some inequities within the industry. Further, at this time it is not clear that the economic impact of such an approach would be any less than alternative A. The major advantage

of alternative B over alternative A is that the marketplace would decide which uses of asbestos should continue.

Alternative C involves developing other marketplace strategies. A disadvantage of both alternatives B and C is that since they have never been attempted before, the implementation problems are unknown. Also, there would be no guarantee of eliminating products that present a particularly high health risk. For example, if a product with fibers that are easily released commands a relatively high price, it might remain in the marketplace much longer than if it were regulated specifically. However, if necessary, a market strategy could be modified to eliminate this problem.

EPA is considering imposing a labeling requirement (alternative D) either in addition to or in lieu of other requirements. A labeling rule would have considerably less economic impact than alternatives A, B, or C, and it would also provide less direct protection to public health. Alternative D, if implemented alone, would increase awareness of the hazards of asbestos and would increase recognition of products that can cause these health risks. However, it would not force any reduction in exposure to asbestos fibers.

EPA is considering either regulating under other Federal laws administered by EPA or not regulating in deference to other Federal agencies (alternative E). Several comments on the ANPRM (44 FR 60056, October 17, 1979) indicated that industry does not consider TSCA to be appropriate authority for regulating asbestos and that further Federal regulation, if needed, should be implemented under other laws, particularly the Occupational Safety and Health Act (OSH Act). Although the Occupational Safety and Health Administration (OSHA) has announced its intention to lower its workplace standard to 0.1 fiber per cubic centimeter, OSHA lacks the legislative mandate to address the problem of asbestos exposure outside of the workplace. EPA action to restrict production and importation of products containing asbestos may be necessary to complement the OSHA workplace standard for airborne asbestos.

Any action by the Consumer Product Safety Commission (CPSC) would not affect production of industrial asbestos-containing products, and these production processes may cause significant fiber emissions.

A combination of EPA actions under the Clean Air Act, Clean Water Act, Safe Drinking Water Act, Resource Conservation and Recovery Act, and other laws might significantly reduce

asbestos-related risks. However, the EPA Administrator might find that it is in the public's interest to regulate under TSCA because the limited mandate of these other laws results in continued risk from asbestos.

Alternative F, taking no regulatory action, would benefit the asbestos industry since it would incur no costs. However, there would also be no reduction in the exposure to asbestos in the United States.

Summary of Benefits

Sectors Affected: Establishments and workers in the asbestos industry (including asbestos mining and asbestos product manufacturing); the general public; and establishments that manufacture asbestos substitutes.

At this early stage of development of EPA's rule, it is difficult to estimate benefits in quantitative terms. Regulation will decrease the incidence of asbestosis and lung cancer in the United States, thereby decreasing the number of worker-days lost due to worker sickness, increasing space available in hospitals, and decreasing costs due to illness and premature death.

EPA regulation of asbestos should increase demand for substitutes such as fiberglass, ceramic fibers, polyvinylchloride, and ductile iron pipe. Therefore, manufacturers and distributors of substitutes should benefit from regulation.

Summary of Costs

Sectors Affected: Establishments and workers in the asbestos industry (including asbestos mining and asbestos product manufacturers); and their suppliers; importers of asbestos and asbestos products; and users of asbestos products.

Because EPA has not completed its analysis of economic effects, cost estimates are not available. Asbestos mines and asbestos processors will be forced to reduce production, and many processors will be forced out of the asbestos business. EPA plans to regulate in a manner that will allow asbestos processors time to convert to substitutes. Small businesses may seek aid from the Small Business Administration to obtain capital to convert. It is too early to predict the effect of regulation on employment. EPA hopes that jobs lost from the asbestos industry will be offset by jobs gained in the substitutes industries. Substitute products generally cost more than asbestos-containing products, and these costs will be passed on to consumers.

Related Regulations and Actions

Internal: EPA has established National Emission Standards for Hazardous Air Pollutants for several asbestos sources under the Clean Air Act, 42 U.S.C. § 7401 *et seq.* EPA is developing effluent guidelines regulating wastewater discharges of asbestos under the Federal Water Pollution Control Act, 33 U.S.C. § 1251 *et seq.*, as amended in 1972 and 1977. It is also considering additional regulation of asbestos in drinking water under the Safe Drinking Water Act, 42 U.S.C. § 3006 *et seq.*

The Agency is developing a rule to require surveys to determine whether asbestos hazards are present in public schools because of deteriorating insulation. EPA is also considering requiring appropriate corrective measures where it finds hazards (see 44 FR 54676, September 20, 1979). Other existing asbestos sources that the Agency may control in the future include public buildings where asbestos was used as an insulation or decorative material and merchant ships where asbestos is widely used as insulation.

EPA regulations directed specifically to asbestos are found in 40 CFR Part 61 (air) and Parts 129 and 427 (water).

External: EPA and CPSC both published ANPRMs on October 17, 1979 in the Federal Register (44 FR 60053). These ANPRMs were prefaced by a Joint Statement of Cooperation signed by the EPA Administrator and the CPSC Chairman. The statement indicated how the two agencies will cooperate and direct their regulatory efforts to minimize reporting requirements and other burdens on industry, and to improve overall public health. EPA is planning to promulgate a rule under § 8(a) of TSCA to require manufacturers and processors of asbestos fibers to submit economic and exposure information. EPA has proposed a rule under § 8(d) of TSCA requiring industry to submit unpublished health and safety studies relating to asbestos. CPSC is planning to issue a general order requiring manufacturers and private labelers of some categories of consumer products to submit information on the use of asbestos in those products. CPSC will not require the submission of information already submitted to EPA.

OSHA plans to lower its workplace standard for asbestos exposure (8-hour time-weighted average) from 2 f/cc (fibers per cubic centimeter) to 0.1 f/cc. This action is in response to a recommendation in April 1980 by the joint National Institute for Occupational Safety and Health (NIOSH)-OSHA Asbestos Work Group that "a new

occupational standard be promulgated which is designed to eliminate nonessential asbestos exposures, and which requires the substitution of less hazardous and suitable alternatives where they exist."

Asbestos regulations promulgated in the past by other agencies are as follows:

CPSC—16 CFR Parts 1145, 1304, and 1305; OSHA—29 CFR Part 1910; FDA—21 CFR Parts 121, 128, 133, and 191; DOT—49 CFR Parts 170-189; MSHA—30 CFR Parts 55, 57, and 71.

Active Government Collaboration

To maximize the effectiveness of this proposed rule, EPA is coordinating either directly or through the Interagency Regulatory Liaison Group (IRLG) with the Occupational Safety and Health Administration (OSHA), the Consumer Product Safety Commission (CPSC), the Food and Drug Administration (FDA), the Mine Safety and Health Administration (MSHA), and the Department of Transportation (DOT).

In July, 1980, EPA and the Consumer Product Safety Commission (CPSC) cooperated in sponsoring and organizing a 3-day workshop on substitutes for various uses of asbestos in commercial and industrial products. About 500 persons attended the workshop, which was designed to increase industry's awareness of substitutes for asbestos and to expand EPA's and CPSC's data base. EPA was the lead agency in coordinating the workshop.

Timetable

NPRM—August 1981.

Regulatory Analysis—Draft Regulatory Analysis, August 1981; final version, August 1982.

Public Hearing—December 1981, Washington, DC.

Public Comment Period—August 1981-December 1981.

Final Rule—August 1982.

Final Rule Effective—September 1982.

Available Documents

ANPRM for Asbestos-Containing Materials in School Buildings, 44 FR 54676, September 20, 1979.

ANPRM for Commercial and Industrial Use of Asbestos Fibers, 44 FR 60056, October 17, 1979.

Comment period extended, 44 FR 73127, December 17, 1979.

Agency Contact

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U.S. Environmental Protection Agency
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BULLETIN

NO. 701

November 18, 1980

INSTITUTE MEMBERSHIP CHANGES

REVESTIMIENTOS ESPECIALES MOLDEADOS, S.A. (REMSA) OF SPAIN

This is to advise that the ballots have been received and counted on the application filed by Revestimientos Especiales Moldeados, S.A. (REMSA) of Pamplona, Spain. There were 17 ballots received, with 16 in favor of accepting the application and one ballot against acceptance. The one negative ballot did not indicate any reason for rejection of the application.

Receipt of these affirmative ballots meets the requirement for approval of an application for Regional Membership as stated in the Institute's Constitution and By-Laws. Background on the application by REMSA was sent to the Membership in a bulletin on September 16, 1980 and was explained further to the Membership when the ballots were mailed.

BARNES GROUP--RAYMOND MERCHANDISE DIVISION OF CORRY, PENNSYLVANIA

Early in October, the Raymond Merchandise Division of Barnes Group Inc. applied to serve as a Licensee of the Institute. The Barnes Group is a New York Stock Exchange listed corporation of substantial size. Their Spring Division manufactures springs used in automotive parts including brake assemblies. They were eligible to serve as a Licensee based on provisions in our Constitution and By-Laws.

Background information was processed through our Membership Committee which voted unanimously to accept Barnes Group Inc. as a Licensee of the Institute. The Board of Directors then reviewed the application and background information on Barnes Group and accepted them as a Licensee. As Licensee type Membership can be accepted by the Board of Directors, their ballots were final.

It is the intention of the Raymond Merchandise Division of Barnes Group Inc. to get into the manufacture of brake shoes for disc brakes. However, their manufacture of parts used in the assembly of brakes already qualifies them to serve as a Licensee of the Institute. This is to advise you that the application filed by Raymond Merchandise of the Barnes Group has been accepted. Their Licensee status is effective as of this date.

The foregoing is sent to the Institute Membership as a matter of information.

EWD/lmc
CC: Delegates & Alternates

E. W. Drislane
Executive Director

BULLETIN

NO. 700

November 18, 1980

BOOK ENTITLED "SOURCEBOOK ON ASBESTOS DISEASES:
MEDICAL, LEGAL AND ENGINEERING ASPECTS"

In a recent mailing, the Garland STPM Press of New York City advertised a publication entitled "Sourcebook on Asbestos Diseases: Medical, Legal and Engineering Aspects." This publication is described in the attached brochure from the publishers. They promote the book with suggestions "how to prosecute, defend and avoid lawsuits" in the asbestos area. In their description of the book they indicate that "asbestos probably accounts for nearly one out of five cancers detected in humans each year." This, of course, is the allegation made by Secretary Califano which has been subject to heated dispute. Most responsible scientific sources do not endorse the Califano statement.

I'm passing along the information that I received along with a form for purchasing this book. As indicated above, there may be some bias in the book but it may be of interest to those who are looking for information on the legal aspects of the asbestos controversy. The Institute in no way endorses or supports this particular publication but is sending this information to the Membership for its consideration. The Institute is not involved in any way with the publisher. This information is sent for your information.

E. W. Drislane
Executive Director

CC: Delegates and Alternates
Active Members - List C
Health and Environmental Affairs Committee