



IN RE: ASBESTOS LITIGATION

§ IN THE DISTRICT COURTS OF
§
§ DALLAS COUNTY, TEXAS

DEFENDANT UNION CARBIDE CORPORATION'S
SECOND SUPPLEMENTAL OBJECTIONS AND RESPONSES TO
PLAINTIFF'S MASTER INTERROGATORIES

COMES NOW, Defendant Union Carbide Corporation and makes and files its
Second Supplemental Objections and Responses to Plaintiffs' Master Interrogatories.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing
document has been forwarded to Plaintiffs' counsel of record, by hand delivery, on this 29th
day of November, 1995.

Kelly C. Caperton
KELLY C. CAPERTON

GENERAL OBJECTIONS

GENERAL OBJECTION NO. 1:

Union Carbide states that trial preparation and factual investigation are ongoing. Union Carbide's answers to these interrogatories are based on information known to Union Carbide at this time. Union Carbide reserves the right, however to make reference at the trial or at any hearing in this action to facts and documents not identified in these responses, the existence or relevance of which is later discovered by it or its counsel. By this reservation, Union Carbide does not in any way assume a continuing responsibility to update its responses to these interrogatories, and specifically objects to each of these interrogatories to the extent that they seek to impose any such continuing obligation upon Union Carbide.

GENERAL OBJECTION NO. 2:

Union Carbide objects to plaintiff's interrogatories in its entirety on the grounds that it is not reasonably framed in terms of the facts and subject matter of the present action, with the result that Union Carbide is called upon to speculate as to what information relevant to the present case, if any, may be deemed to fall within the scope of the interrogatories as phrased.

GENERAL OBJECTION NO. 3:

Union Carbide also objects to all interrogatories insofar as they would require the disclosure of information protected by the attorney-client privilege or work product doctrines.

GENERAL OBJECTION NO. 4:

Union Carbide objects to plaintiff's interrogatories on the grounds that it is overly broad, unduly burdensome and is not reasonably limited by either time or subject matter to information that is relevant to the products, if any, at issue in this case, and on the grounds that it is not reasonably calculated to lead to the discovery of admissible evidence. Therefore, Union Carbide will confine its answers to relevant products.

GENERAL OBJECTION NO. 5:

Union Carbide objects to this entire set of interrogatories to the extent that it calls for information about Union Carbide employees or premises, or policies pertaining to Union Carbide employees or premises. Inasmuch as the plaintiffs do not allege that they or their decedents were ever employed by Union Carbide or worked at any job site controlled by Union Carbide, such information is irrelevant and immaterial to matters at issue in this case.

INTERROGATORIES

INTERROGATORY NO. 1:

State the name, address, job title, length of time employed by Defendant, and a year-by-year list of all other positions, titles, or jobs held when working for Defendant of each person who has supplied any information used in answering these interrogatories.

RESPONSE TO NO. 1:

See General Objection No. 4. Union Carbide objects to this interrogatory as vague and ambiguous. Subject to its objections, Union Carbide responds as follows:

The responses to these interrogatories were prepared by counsel for Union Carbide Corporation based on information either contained in business records or provided

by present and former Union Carbide employees. In particular, John L. Myers, former Product and Production Manager for asbestos (Calidria) has provided much information. Sales and other business records used to respond to these interrogatories are under the control of Mrs. Elba Pozo, Custodian of Records, Kelley Drye & Warren, Two Stamford Plaza, Stamford, CT 06901.

INTERROGATORY NO. 2:

State whether or not you are a corporation. If so, state your correct corporate name, the state of your incorporation, the address of your principal place of business, the name and address of the person or entity authorized to accept service of process on your behalf, and whether or not you have ever held a Certificate of Authority to do business in the State of Texas.

RESPONSE TO NO. 2:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Union Carbide's principal place of business is:
Union Carbide Corporation
39 Old Ridgebury Road
Danbury, Connecticut 06817

Union Carbide Corporation was first incorporated in the State of New York on November 11, 1917 under the name of Union Carbide and Carbon Products. Union Carbide changed its name to Union Carbide Corporation in 1957, changed on July 3, 1989, to Union Carbide Chemicals & Plastics Co., Inc., and returned to Union Carbide Corporation in 1994.

The CT System Company at the following addresses are authorized to accept service on behalf of Union Carbide Corporation in the State of Texas:

CT System
Republic National Bank Building
Dallas, Texas 75201

and

CT System
811 Dallas Avenue
Houston, Texas 77002

INTERROGATORY NO. 3:

Has Defendant or any of its predecessor or subsidiary companies at any time engaged in the mining and subsequent sale of material containing asbestos fibers? If so, identify the location of the mine(s), the years of its operation, the type of asbestos mined and whether you sold any asbestos to any Defendants in the Dallas County asbestos litigation.

RESPONSE TO NO. 3:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide in the affirmative and states:

From 1963 through June 30, 1985 Union Carbide mined and milled at or near King City, California, a unique short-fiber chrysotile asbestos initially as "Union Carbide Asbestos" and then under the trade name Calidria (some distributors marketed Calidria under other trade names). Calidria was sold, both directly by Union Carbide and through distributors as raw asbestos, in pelletized and fibrous form in varying grades of purity of content. Calidria was not sold to the general public or to "end users". It was sold to

manufacturers for use in their products or production processes as a filler, reinforcer, opacifier, thixotrope (thickener) and the like. Calidria asbestos was not suitable for use as standard heat or frost insulation or, for instance, piping, due to its quality and composition, in particular, due to the short length of its fiber. Upon plaintiff's request, any sales records in Union Carbide's possession will be made available for inspection.

INTERROGATORY NO. 4:

Identify by name each product containing asbestos fibers that Defendant or any of its predecessor or subsidiary companies at any time manufactured or sold.

RESPONSE TO NO. 4:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

From 1963 through June 30, 1985 Union Carbide mined and sold a unique short-fiber chrysotile asbestos initially as "Union Carbide Asbestos" and then under the trade name Calidria (some distributors marketed Calidria under other trade names). Calidria was sold, both directly by Union Carbide and through distributors as raw asbestos, in pelletized and fibrous form in varying grades of purity of content. Calidria was not sold to the general public or to "end users". It was sold to manufacturers for use in their products or production processes as a filler, reinforcer, opacifier, thixotrope (thickener) and the like. Calidria asbestos was not suitable for use as standard heat or frost insulation or, for instance, piping, due to its quality and composition, in particular, due to the short length of its fiber.

Union Carbide sold its asbestos initially as Union Carbide Asbestos and then under the name "Calidria". Union Carbide, however, packaged Calidria asbestos for the Montello Corporation for sale under the tradenames of Visbestos, Super Visbestos, Telvis, Imcobest and Univis. Union Carbide also packaged Calidria for the ARCO company for sale under the name Arcovis, and for the International Mines and Chemical Company for sale under the name Surelift. Calidria was also sold domestically in limited quantities under the names Visquick and Oilbestos by distributors which Union Carbide is presently unable to identify. Union Carbide objects to responding to this interrogatory with respect to overseas sales on the grounds that such information is irrelevant and immaterial to matters at issue in this case.

Prior to 1976, Union Carbide manufactured Bakelite phenolics, which were molding compound resins. Bakelite phenolics were marketed by Union Carbide for use by manufacturers primarily to mold electronic parts and products such as switches, switch boxes, radios, and plug in receptacles. Most Bakelite phenolics did not contain asbestos. Bakelite was used in part, because it provides electrical insulation. The asbestos fiber in those Bakelite brands which contained it was fully encapsulated or mixed within or with other material. Except for research experimentation, Calidria was never contained in Bakelite resins.

Prior to late 1979, Union Carbide or one of its subsidiaries produced a tree sprout inhibitor called TRE-HOLD, which was used primarily to inhibit growth on telephone poles. TRE-HOLD contained a small quantity of asbestos bound in an asphalt carrier; the asbestos in TRE-HOLD was fully encapsulated.

Prior to August 1977, Union Carbide manufactured UDEL Polysulfone P6050, which was an asbestos-containing, high temperature, high rigidity thermoplastic molding material, used primarily in camera cases. The asbestos in UDEL Polysulfone P6050 was fully encapsulated.

Union Carbide formerly manufactured automotive radiator products under the names Prestone Antifreeze, Prestone Sealer Stop Leak and Prestone Heavy Duty Sealer. Asbestos ceased to be used as an additive in the antifreeze in 1971 and in the sealers in 1972. The fiber in these products was embedded within a liquid substance.

Until 1985, Union Carbide sold or leased acetylene cylinders which contained asbestos liners. The asbestos in the acetylene cylinder liners was encapsulated within liner materials and the liner materials were contained within a metal cylinder.

Union Carbide also manufactured a steel "scarfer" machine (used to remove blemishes and imperfections from steel), with parts which contained some asbestos. In the late 1950's or early 1960's, Union Carbide may also have experimented with certain asbestos-containing polyethylene and polystyrene products which would have only been sold in limited quantities on an experimental basis.

Union Carbide no longer manufactures or sells any of the above products. Union Carbide has never manufactured or distributed an asbestos-containing cement, pipe covering, cloth or the like.

INTERROGATORY NO. 5:

Identify by name each product containing asbestos fibers that Defendant or any of its predecessor or subsidiary companies at any time marketed or sold.

RESPONSE TO NO. 5:

See Union Carbide's response to Interrogatory No. 4, including the objections set forth therein. Union Carbide states that a small portion of the Bakelite products contained asbestos and were named BMZ-5250, BMM-5303, BMMC-2035, BMRS-2035, BMRS-5305, BMMA-5353, BMMA-5440 and BMMA-5441.

INTERROGATORY NO. 6:

If the answer to one or more of the last three interrogatories is in the affirmative or lists any products, state as to each named product the following:

- (a) As to each product, state whether such product was mined, manufactured, marketed, and/or sold. Bakelite was mined, manufactured and sold.
- (b) The names of the companies mining, manufacturing, marketing, and/or selling each product mined, manufactured, marketed, and/or sold.
- (c) The trade or brand name of each of those products mined, manufactured, marketed and/or sold.
- (d) The date each of the named products was placed on the market.
- (e) A description of the physical (chemical) composition of each of the named products, including the type of asbestos contained in the product and the percentage of asbestos put in each product. Product was a resin. All but one contained encapsulated short fiber asbestos. One contained mixed long fiber asbestos (limited dates).
- (f) The date each of the products was removed from the market and no longer sold or distributed and the reason or reasons therefor.

- (g) The date asbestos was removed from such products, if ever, and the reasons therefor.
- (h) A description of the physical appearance of each of the named products.
- (i) A detailed description of the intended uses of the named products.
- (j) Identify the last year that you sold each asbestos-containing product.

RESPONSE TO NO. 6:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

The following divisions or subsidiaries of Union Carbide operated the Calidria business during the course of its existence:

Corporate Divisions of Calidria (1963-1985)

(1963-1965)	Nuclear Division
(1965-1967)	Mining and Metals Division
(1967-1970)	Chemicals and Plastic Division
(1970-1984)	Mining and Metals Division
(1984-1985)	UMETCO, a wholly owned subsidiary of Union Carbide, through Calidria Corporation, a wholly owned subsidiary of UMETCO.

Calidria consisted of raw chrysotile asbestos in a unique short-fiber formulation which Union Carbide mined at or near King City, California. Calidria's chemical formula is $Mg_6(OH)_8Si_4O_{10}$. Union Carbide produced four grades of Calidria asbestos: standard, super

standard, high purity, and resin grade; the different grades reflect varying degrees of purity of content. Each grade was sold in both pelletized and fibrous form. In appearance, Calidria is grey (pelletized) or white (fibrous) in color and powdery in substance. The following is a representative listing and description of the various brands of Calidria mined and marketed by Union Carbide:

<u>PRODUCT SYMBOL</u>	<u>PRODUCT CODE</u>	<u>DESCRIPTION</u>
HPO	651001	High Purity, Open Fiber
HPO-C	651101	High Purity, Open Fiber
HPP	651601	High Purity, Pellets
HPP-JAP	651701	High Purity, Pellets, 4-Ply bags
R-G 110	652101	Resin-Grade, Open Fiber 15% +325
R-G 110-D	652201	Resin-Grade, Open Fiber, 15% +325
R-G 144	652501	Resin-Grade, Open Fiber
A-14	652801	Resin-Grade, Open Fiber
R-G 244	653001	Resin-Grade, Open Fiber
R-G 444-0	653301	Resin-Grade, Open Fiber, 10% Stearic
A-28	653601	Resin-Grade, Open Fiber, Silica Treated
SG-100	654001	Standard Grade, Pellets
SG-102	654201	Standard Grade, Pellets, 100-lb. bags
SG-130	654501	Standard Grade, Open Fiber, 30% +325
SG-144	654801	Standard Grade, Open Fiber, 45% +325
SG-200	655001	Super Standard Grade, Pellets
SG-210	655301	Super Standard Grade, Open Fiber, 15% +325
SG-444-0	655501	Standard Grade, Open Fiber, 5% Stearic, Hydrophobic
T-135-0	656001	High Purity, Open Fiber, Titanated, 35%, Anatase
T-135-P	656301	High Purity, Pellets, Titanated, 35%, Anatase
CG-100	656601	Coatings Grade, Pellets
CG-135-0	656801	Coatings Grade, Open Fiber, Titanated 35%, Rutile
CG-135-P	656901	Coatings Grade, Pellets, Titanated, 35%, Rutile
		Super-Visbestos
	657301	Super Standard Grade, Cracked Pellets Visbestos
	657601	Standard Grade, Open Fiber Oilbestos
	657001	Standard Grade, Open Fiber, 5% Stearic, Hydrophobic

Calidria, due to its unique physical properties, short fiber length in particular, was not suited for use in thermal or frost insulation.

Calidria consisted of raw asbestos which was marketed and sold by Calidria distributors to manufacturers or producers who incorporated and used Calidria in their products or production processes. Calidria was not sold by Union Carbide or, according to the best information available to Union Carbide, by Calidria distributors to consumers or other "end-users". The following is a representative list of different brands of Calidria asbestos and the applications for which they were marketed:

<u>Calidria Product</u>	<u>Applications</u>
SG-100	Vinyl-Asbestos Floor Tile
SG-130	Masonry Coatings
SG-200	Rubber Floor Tile
Super Visbestos	Drilling Muds
SG-210	Mastics Asphaltic Coatings
HPP	Rubber Sheet Goods Mineral Board (Japan) Paper (Japan)
HPO	Asphaltic Coatings, Adhesives
RG-110	Asphaltic Spray Coatings Aluminized Coatings Mastics, Caulks and Sealants
RG-144	Adhesives (Epoxy, Casim, Phenolics) Coatings Vinyl Plastics (High Build, Dip Coatings) Mastics, Caulks and Sealants (Vinyl, Butyl, Polysulfide, Bituminous)

RG-244

Polyester Resins
(Laminating, Gel Coats, Putties)
Caulks and Sealants (Vinyl,
Butyl, Acrylic, Polyurethane)
Coatings (Epoxy, Urethane, Asphaltic)

In addition to the different markets in which the Calidria products listed above were respectively sold, other brands of Calidria may have been sold within the same markets. Such brands of Calidria were distinguished on the basis of grade (purity of content), form (fibrous or pelletized) or chemical treatment, or a combination of the above.

Bakelite was the tradename for a phenolic resin manufactured by Union Carbide up until 1975. Most Bakelite did not contain asbestos. As to Bakelite which contained asbestos, the product was in granular resin form and in all but one type contained encapsulated short fiber asbestos which was not respirable due to encapsulation. One longer fiber product was manufactured for a short period of time and marketed without encapsulation. Manufacture and sale of any asbestos containing Bakelite ceased in 1975.

Bakelite was sold to various industrial companies as an ingredient in the manufacture of other finished products used mainly for thermoelectric purposes such as electrical switches, appliance handles, etc.

See also Union Carbide's responses to Interrogatories 4 and 5.

INTERROGATORY NO. 7:

Do any documents, including but not limited to written memoranda, specifications, recommendations, blueprints, or other written materials of any kind or character, relating to the design, preparation, or introduction into the market of the products listed in Interrogatory No. 6 still exist? If so, state:

- (a) A description of each such document.

- (b) The name, address, and job title of each person who currently has possession of each document, and where the documents are currently located.

RESPONSE TO NO. 7:

See General Objection No. 4. Union Carbide also objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Union Carbide further objects to this interrogatory on the grounds that it is vague, ambiguous and unclear. Subject to its objections, Union Carbide responds as follows:

Calidria was not an asbestos-containing product, but rather consisted of raw fiber sold in pelletized or fibrous form. See UCC's response to Interrogatory No. 6.

Union Carbide maintains a repository of asbestos-related documents at the offices of Kelley Drye & Warren. Some of the documents contain information about the mining and milling process. Upon Plaintiff's request, Union Carbide will make its Repository of Documents available to Plaintiff for review and replication at a suitable time and place.

Union Carbide's custodian of records for asbestos-related documents is Mrs. Elba Pozo, Kelley Drye & Warren, Two Stamford Plaza, Stamford, Connecticut 06901 and 5 Sylvan Way, Parsippany, New Jersey 07054.

INTERROGATORY NO. 8:

Before distributing, selling, or placing the products listed in your responses to Interrogatory Nos. 3-6 into the streams of commerce, were any tests conducted to determine

potential health hazards involved in the use of, or exposure to, the materials such as asbestos, contained in those products? If the answer is affirmative, state:

- (a) The names of the products tested and the date of each test.
- (b) The name, address, and job title of each person conducting the tests or involved with conducting the tests.
- (c) The results of the tests.

RESPONSE TO NO. 8:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Two studies of Calidria asbestos were made by the Chemical Hygiene Fellowship of Mellon Institute on behalf of Union Carbide:

1. The first study was entitled "The Fibrogenic Potential of Asbestos Products - Via Intraperitoneal Injection In Guinea Pigs, Rats and Rabbits and by the Intratracheal Route in the Rat". Although Union Carbide cannot represent that it knows the names of the persons who conducted the study, the following individuals did sign the study: Edwin R. Kinkhead, B.S., Research Assistant, Urbano C. Pozzani, M.S., Senior Fellow and Charles P. Carpenter, Ph.D., Assistant Administrative Fellow. Also, the following persons received an acknowledgment in the study:

Charles C. Hahn, B.S., Junior Fellow and John M. King, Ph.D., DVM, Fellow. The study was completed on July 8, 1966. The purpose of the study was to evaluate the degree of fibrogenicity of asbestos mined at Union Carbide's King City, California facility as compared with other forms of asbestos. A copy of the study's report will be supplied if requested.

2. The second study was entitled "Calidria Asbestos Resin Grade RG244, Tracheal Insufflation of Rat Lungs with Interpretation of Pathology After 20, 60, 90, and 180 Days". Although Union Carbide cannot represent that it knows the names of the persons who conducted the study, Charles P. Carpenter, Ph.D., Administrative Fellow, was the editor of the study's report. In addition, the following individuals were named as contributors to the study: D.L. Geary, Jr., E.R. Kinkhead, R.C. Myers and D.J. Nachreiner. The study was completed on September 3, 1971. The purpose of the study was to evaluate the degree of fibrogenicity of Union Carbide's RG244 as compared with other forms of asbestos. A copy of the study's report will be supplied if requested.

In addition to the above two tests, and in addition to chemical analyses of Calidria which Union Carbide may have undertaken, in the mid-1960's Union Carbide

cooperated with the Pneumoconiosis Research Unit of the Llandough Hospital in the United Kingdom to conduct a "trace element analysis" of asbestos and provided samples of Calidria asbestos for such analysis. Union Carbide may also have conducted "patch tests" to determine the impact, if any, of Calidria on skin and other soft tissue. Union Carbide is currently endeavoring to locate reports of these tests. Union Carbide also conducted abrasion tests of finished Bakelite products which contained asbestos.

INTERROGATORY NO. 9:

Do any documents, including but not limited to written memoranda, specifications, recommendations, blueprints, or other written materials of any kind or character, relating to the testing of the products referred to in Interrogatory No. 6 now exist?

If so, state:

- (a) A description of each such document.
- (b) The name, address, and job title of each person who currently has possession of each document, and where it is presently located.

RESPONSE TO NO. 9:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Union Carbide maintains in its Repository documents which may be responsive to this Interrogatory. The reports of the three tests referred to in Union Carbide's response to Interrogatory No. 8 are included in the Repository. Union Carbide's custodian of records

for asbestos-related documents is Mrs. Elba Pozo, Kelley Drye & Warren, Two Stamford Plaza, Stamford, Connecticut 06901.

INTERROGATORY NO. 10:

Did Defendant or any of its predecessor or subsidiary companies make any design changes or modifications as a result of those tests described in responses to Interrogatory No. 8? If the answer is affirmative, state:

- (a) The trade names of the products changed.
- (b) The nature of the changes made and the date of such changes or modifications.
- (c) The name, address, and job title of each person responsible for having caused a change to be made, or having made a change or modification.

RESPONSE TO NO. 10:

See general objection no. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds in the negative and states as follows:

Calidria always consisted of raw chrysotile asbestos, with a unique and short fiber physical configuration, sold in pelletized and fibrous form. The chemical formula has always been $Mg_6(OH)_8Si_4O_{10}$, and Calidria has always been tremolite free.

Bakelite products which both contained and did not contain asbestos were at times modified to meet particular customer needs and specifications.

See also Union Carbide's response to Interrogatory No. 6.

INTERROGATORY NO. 11:

After releasing the products listed in Interrogatory No. 6 to the public, were any tests conducted on them to determine potential health hazards resulting from the use of or exposure to the materials, such as asbestos, contained in those products? If the answer is affirmative, state:

- (a) The names of the products tested and the dates of such tests.
- (b) The name, address, and job title of each person who conducted those tests.
- (c) The results of those tests.
- (d) Whether, as a result of the tests, any products were removed from the market.
- (e) The names of all products removed from the market as a result of these tests.

RESPONSE TO NO. 11:

See Union Carbide's response to Interrogatories 8, 9 and 10, including the objections set forth therein.

INTERROGATORY NO. 12:

Do any documents, including written memoranda, specifications, recommendations, blueprints, or other written materials of any kind or character, relating to the potential health hazards of the products listed in Interrogatory No. 6 now exist? If so, state:

- (a) The name of each product.
- (b) A description of each document and how it relates to each product.

- (c) The name, address, and job title of each person who currently has possession of each document, and where it is presently located.

RESPONSE TO NO. 12:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad and unduly burdensome, as well as vague and ambiguous and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

See Union Carbide's response to Interrogatory No. 7.

Union Carbide maintains in its Repository documents which may be responsive to this Interrogatory. Upon Plaintiff's request, Union Carbide will make its Repository of Documents available to Plaintiff for review and replication at a suitable time and place.

Union Carbide's custodian of records for asbestos-related documents is Mrs. Elba Pozo, Kelley Drye & Warren, Two Stamford Plaza, Stamford, Connecticut 06901.

INTERROGATORY NO. 13:

Did Defendant or any of its subsidiary companies make any design changes as a result of the tests discussed in your response to Interrogatories No. 10 or 13? If the answer is affirmative, state:

- (a) The names of the products changed or modified.
- (b) The name, address, and job title of each person responsible for having made a change or modification.
- (c) The nature of the hazard or defect which resulted in such change or modification.

RESPONSE TO NO. 13:

See Union Carbide's responses to Interrogatories 6 and 10, including all objections set forth therein.

INTERROGATORY NO. 14:

Has Defendant or any of its predecessor or subsidiary companies at any time published or distributed any printed material, including brochures, pamphlets, catalogs, packaging or other written material or any kind or character containing any warnings concerning the possibility of injury resulting from the use of the asbestos-containing products listed in Interrogatory No. 6? If so, state: (a)

The names of each relevant product.

- (b) The exact wording of each warning statement on each printed material.
- (c) A description of the printed material other than the warning statement.
- (d) The method used to distribute the warning to persons likely to use the product.
- (e) The date each warning was first issued, distributed, or placed on packaging.
- (f) The name, address, and job title of each person responsible for having drafted or issued the warning.
- (g) The current location of any such printed material and the custodian thereof.
- (h) The form in which such literature or printed material can be accessed, ~, the manner in which such literature is indexed or stored.

RESPONSE TO NO. 14:

See general objection no. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Union Carbide objects to this interrogatory as vague and ambiguous. Subject to its objections, Union Carbide responds as follows:

Starting September 1, 1972 Union Carbide distributed Material Safety Data Sheets setting forth precautions and instructions for the proper and safe use of Calidria. In addition, listed below are brochures and documents which have been made available by Union Carbide to Union Carbide's Calidria customers, many of which contained information on potential hazards associated with excessive asbestos exposure and information as to how to control or avoid such hazards. Since Union Carbide sold the Calidria business in 1985, the material listed below has not been in use by Union Carbide. Except where the dates are stated herein, the time of publication and the author of each item is presently unknown.

1. GENERAL

- A. "Calidria" Booklet, John Crane
- B. Asbestos Fibers, R. Byrne
- C. Business Reply Card, John Crane
- D. Rubber Booklet, John Crane
- E. Grinding Asbestos Pellets, R. Byrne
- F. FDA Status - Asbestos in Paper.
- G. New Additives Induce Thixotropy - Reprint of John Myers
Speech.

- H. New Idria Chrysotile an Unusual Ore Yields. New Products, R. Woolery
- I. Cationic Asbestos for Waste Water Treatment, John Myers
- J. Asbestos Products for Oil Pollution Control, John Myers
- K. Zeta Potentials of Some Minerals.
- L. US Patent Office - Waste and Water Treatments, R. Woolery
- M. Mineralogy of the Coalinga Asbestos Deposit, Mumpton and Thompson
- N. Bulk Handling Demonstration
- O. Electron Micrograph Illustrations.
- P. Asbestos Magazine Reprinting - John Myers - Pellets.
- Q. Rubber World Reprint.
- R. Suggested Primer Sealer for Masonry and Weathered Roofing, 3JG-123B.
- S. Suggested Exterior White Hi-Build Flexible Coating, 3JG-124B.
- T. Suggested Exterior White Insulating Roof Coating, 3JG-121B.
- U. Suggested Weather-Barrier Roof Coating and Lagging Compound, E-1297.

II. RESIN GRADE PRODUCTS

- A. General.
 - 1. "Calidria" RG-144 & RG-244, John Myers
 - 2. Use of Cowles Dissolver, R. E. Byrne

3. "Calidria" RG Products for Vinyl Plastisol Sealant Applications.
 4. "Calidria" Asbestos for a High Build Dip Coating Plastisol NF-12.
 5. "Calidria" RG-144 & RG-244 Asbestos in PVC Plastisols.
 6. Rubber Research Elastomerics.
 7. Plasticizer Viscosity Control with "Calidria" Asbestos RG-244 & RG-144.
- B. RG-110 (Price Schedule).
1. Viscosity Control Agent for Asphaltic Compounds.
 2. Polyester Premixes Comparative Cost & Performance Data.
- C. RG144 (Price Schedule).
1. RG-144 Brochure, John Crane
 2. RG-144 Performance Data, John Crane
 3. RG-144 Product Characteristics.
 4. RG Asbestos Improves Thixotropic Properties of Highway Markers.
 5. PVP Reprint.
 6. Asbestos Beefs Up Plastics & Adhesives to Extend Their Use.
- D. RG-244 (Price Schedule).
1. RG-244 Brochure, John Crane

2. RG-244 Comparative Performance Characteristics, John Crane
3. RG-244 Product Characteristics & Specifications.
4. Ultrasonic Dispersion of RG-244, B. L. Ingalls
5. RG-244 as a Thixotrope for Polyester Resins, B. L. Ingalls
6. Polyester Putty & Patching Compounds.
7. "Epoxy Coal Tar Coatings."
8. "Chlorinated Rubber Roofing Compound", B. L. Ingalls
9. High Build Vinyl Maintenance Paints.
10. Zinc-Rich Primers.
11. Vinyl Coal Tar Formulation Suggestions.
12. Formulating Plastisol Sealants with Silane Adhesion Promoters.
13. RG-244 Health Brochure.

E. RG-600 Brochures.

1. Cost Effectiveness Optimization of Reinforced Polyolefins; 10/4/76 (Ancker & Leung).
2. RG-600 Inquiry Form, John Crane
3. Coupled Chrysotile Asbestos Reinforced Thermoplastics (Ancker).
4. RG-600 Request Form, John Crane

5. RG-600 Patent Literature - 3,939,278; December 23, 1975.
6. RG-600 Health Brochure.
7. Reinforced Polyolefins for Large Structural Foam Parts; 2/8-11/77, Michno
8. Structural Foam is Launched into an Era of Great Diversification; August 1976.

III. STANDARD GRADE PRODUCTS

A. General.

1. "Calidria" Asbestos Standard Grade Products, Typical Properties, John Myers

B. SG-100 (Price Schedule).

1. SG-100 "Calidria" Asbestos for Use in Vinyl and Asphalt Floor Coverings.
2. SG-100 Saves Up to One-Half (12) the Amount of Asbestos.
3. Flintkote Report.

C. SG-130 (Price Schedule).

D. SG-200SG200X (Price Schedule).

E. 1. SG-200SG-200X Product Characteristics.

F. 2. TJC Brochure.

3. UCAR Latex 153 for Water-Based Caulks and Sealants.
4. Typical Product Characteristics and Specifications SG-210.

5. Suggested Interior Texturing or Exterior Spackling Formulation (17-CHR-41).

IV. HIGH PURITY

A. General.

1. Effects of Chrysotile Asbestos Additions to Cellulosic Paper - RGW.
2. "Calidria" High Purity Asbestos for Porosity Control, Pinhole Reduction, and Improvement in Two-Sidedness.
3. Properties of Asbestos Suitable for Use in Cellulosic Paper, Naumann.
4. How High Purity Asbestos is Used for Pitch Control in Papermaking, Woolery.
5. Paper Trade Journal - Asbestos Product Aids Retention, Boosts Opacity and Disperses Pitch, Ingalls.
6. "Calidria" Asbestos for Paper Coatings.

B. High Purity Open (Price Schedule for HOP & HPP).

1. Typical Product Characteristics for HPO, John Myers.
2. The Trial of Calidria HOP in New Rochelle Water Pollution Control Plant.
3. Addition Rates for HOP in Primary Waste Treatment, John Myers.
4. Suggested Dark Green Acrylic Tennis Court Topcoat E-1400.

C. High Purity Pellets.

1. Typical Product Characteristics for HPP, John Myers.

V. TITANATED PRODUCTS

A. T-135 (Price Schedule).

1. T-135 Opacifying Agent.
2. "Calidria" Asbestos T-135 for Viscosity Control & Pigmentation.
3. T-135-0 for Spray Acoustic & Texture Compounds.
4. Chemical 26 Reprint - Checking Opacity.

VI. COATING GRADES

A. CG-135 (Price Schedule).

VII. DRILLING

A. Oil and Gas Journal Reprint.

In addition, the following material, some of which is listed above in the form of brochures, articles or addresses, has been prepared:

1. "Calidria Asbestos RG-244 - An Economical Effective Thickener and Thixotrope for Polyester Resins, Plastics, Epoxies, Phenolic Adhesives Organosols" 9/70.
2. "CALIDRIA Asbestos, Resin-Grade 144, An Effective Low Cost Thickening Agent and Thixotrope for Epoxy Resin Systems" - 7/71, John Crane.
3. "CALIDRIA Asbestos Resin-Grade - 144 and Resin-Grade 224", John Myers.

4. "CALIDRIA Asbestos, Low Cost Highly Effective Reinforcer and Filler for Rubber, Two Grades: High-Purity and T-135" - 10/70, John Crane.
5. "CALIDRIA Asbestos, a Unique and Versatile Fiber With Proven Applications as an Extender, Thickener, Reinforcer, Pacifier" 574.
6. "New Additives Induce Thixotropy, Provide Sag and Viscosity Control," presented by John L. Myers to Western Coatings Technology Society Meetings in Denver, Los Angeles, San Francisco, Portland, Seattle, and Vancouver, in May 1969.
7. "Asbestos," by Robert E. Byrne, Jr., Area Manager, CALIDRIA Asbestos Marketing and Technology, Mining and Metals Division, Union Carbide Corporation, published March, 1972 in Modern Plastics Encyclopedia, McGraw-Hill, Inc.
8. "Calidria Asbestos Pellets" by John L. Myers, Former Product and Production Manager for Union Carbide's Calidria Operation, published October 1971 in Asbestos, reprinted by Union Carbide.

VIII. HEALTH AND SAFETY

- A. General.
 1. "Material Safety Data" for CALIDRIA Asbestos published September 1, 1972 and revised September 1, 1976 by Union Carbide Corporation.

2. "Chrysotile Asbestos in Plastics," presented May 14, 1974 at the 32nd annual technical conference of the Society of Plastics Engineers at San Francisco, by John L. Myers, Marketing Manager, Asbestos, Union Carbide.
 3. "Handling Asbestos - Chrysotile Asbestos in Plastics," June 16, 1975, by John L. Myers, Marketing Manager Asbestos Union Carbide.
 4. "Grinding CALIDRIA Asbestos Pellets," by Robert E. Byrne, Jr., Area Manager, CALIDRIA Asbestos, Marketing and Technology, Mining and Metals Division, Union Carbide Corporation.
 5. Brochure "'Calidria' Asbestos Pellets Health and OSHA Information" Published November 1, 1977 by Metals Division, Union Carbide Corporation, Niagara Falls, New York.
 6. "Consumer Safety in Plastics System Containing Bound Asbestos Fibers presented on November 9, 1977 at the NATEC Meeting of the Society of Plastics Engineers at Denver by Dr. H.B. Rhodes, Manager Marketing Services-Asbestos, Union Carbide.
 7. "What You Should Know About Asbestos and Health," published by the Asbestos Information Association, disseminated by Union Carbide.
- B. RG-244.

1. Brochure "'CALIDRIA' Asbestos RG-244 - Health and OSHA Information," published February 1, 1975 and revised October 1, 1977 by Marketing and Technology Department, Mining and Metals Division, Union Carbide Corporation, Niagara Falls, New York.
2. "'CALIDRIA' Asbestos RG-244 - Typical Chemical Analysis," date of publication unknown.

IX. AIA [Asbestos Information Association] MATERIAL

- A) In addition to the above, Union Carbide made the following documents and brochures, which were prepared and published by the Asbestos Information Association, available to Calidria customers:
 1. Testimony by George W. Wright, M.D. before U.S. Dept. of Labor, Occupational Safety & Health Hearing on Proposed Occupational Asbestos Standard, March 14-17, 1972.
 2. Testimony by J. Corbett McDonald, M.C. - same as above.
 3. OSHA Regulations - 6/7/72.
 4. EPA Regulations - 4/6/73.
 5. NY Times Article and Rebuttals (Article - 1/21/73, Rebuttals - 2/25/73).
 6. AIA Response to the Wall Street Journal - 6/15/72.
 7. "Airborne Asbestos" National Research Council, 1971.
 8. "Airborne Asbestos" - Summary.

9. "Airborne Asbestos" - References.
10. Asbestos Bulletin (Asbestos Information Committee, London - 9/72).
11. CIBA GEIGY - UK 2/72.
12. QAMA Folder
13. WHO Report - 10/72
14. Target Health Hazard Fact Sheet (SILICA)
15. "Asbestos Has Its Defenders" - The Journal of Commerce, 4/20/73
16. "The Familiar Aroma of Panic" - Editorial, Plastics Technology 3/73
17. Dust Counting - S. G. Bayer, R. D. Zummalde, T. A. Brown - Feb. 1969 U.S. Dept. of Health, Education and Welfare
18. Dust Monitoring Equipment & Costs - 2/19/73
19. AIA - "Protecting The Asbestos Worker"
20. AIA - "Asbestos and Health"
21. AIA - "The Asbestos Information Association/North America"
22. AIA - "Asbestos and Health Questions and Answers"
23. AIA - "What Asbestos Is: How and Where It Is Used"
24. The Northern Miner - "Asbestos Completely Exonerated etc." - 4/19/73
25. Partnership for Prevention - "The Insulation Industry Hygiene Research Program" - 4/70
26. Asbestos - Reprint from National Safety News - 10/73

27. AIA Answer to TIME magazine - 2/1/74
28. AIA/"What Every Employee Should Know About Asbestos" -2/74
29. AIA Response to "Consumers Research" - 1/28/74
30. "Asbestos Health Question Perplexes Experts," C&EN - 12/10/73
31. Disputes on the Safety of Asbestos - New Scientist 3/7/74
32. JLM Speech (SPE Paper)
33. RG-244 Health Booklet
34. Asbestos in the Atmosphere - AIA/NA
35. Asbestos in Water - AIA/NA
36. Asbestos & Silica Dust in the Drywall Industry. Part 1 - Nov/Dec. 1975, Dr. Rhodes.
37. Asbestos & Silica Dust in the Drywall Industry. Part 2 - Jan./Feb. 1976, Dr. Rhodes.
38. Detection of Chrysotile Asbestos in Airborne Dust from Thermosetting Resin Grinding. 1975, Faulring.
39. AIA/NA Molding & Fabrication of Asbestos-Containing Plastic Products, Work Practices
40. Instructions for Sampling of Airborne Asbestos Fibers
41. Procedure for Pump Calibration used for Monitoring of Asbestos Dust Emissions
- B) The following information pamphlets were mailed to Calidria customers beginning in 1977:
 1. "Calidria Asbestos SG-130 and SG-210" sales brochure (1968).

2. "Safe Use of Calidria RG244" (February 1973).
3. "Calidria Asbestos RG-600 Health and OSHA Information" (February 1, 1975).
4. "Calidria Asbestos RG 244 Health and OSHA Information" (October 1, 1977).
5. "Calidria Asbestos Pellets Health and OSHA Information" (November 1, 1977).
6. Letter to Calidria Customers with health and safety enclosures (October 24, 1977).
7. Letter to Calidria distributors with health and safety enclosures (September 10, 1979).
8. Letter to Calidria customers with health and safety enclosures (August 20, 1979).
9. Letter to Calidria Customers with health and safety enclosures (October 1, 1980).
10. Letter to Calidria Customers with health and safety enclosures (November 23, 1981).
11. Letter to Calidria Customers with health and safety enclosures (December 9, 1981). During the early days of Union Carbide's Calidria business (which began in 1963), medical and industrial health officials at Union Carbide issued asbestos toxicology reports which were distributed to sales and other appropriate personnel. Warning labels were added to Calidria packages in

1968 and toxicological information first appeared in sales literature in that year. Material Safety Data Sheets were mailed to Calidria customers beginning in 1972. AIA/NA information pamphlets were made available to customers starting in 1972 and were mailed to customers beginning in 1977 at the latest.

The health and safety literature made available and disseminated by Union Carbide to its Calidria customers warned of possible serious adverse health effects associated with the excessive inhalation of asbestos fiber, advised customers on ways to control or avoid such hazards, including the use of respirators as a way to avoid the hazards. In addition to the dissemination of health and safety information, Union Carbide took active steps to help insure that Calidria was handled and used in a clean and safe manner and environment: Union Carbide employed shrink-wrap, tight-fitting packaging to prevent leakage, spillage, or dust emission during the shipment of Calidria. Union Carbide also developed pelletized forms of Calidria which would reduce dust emission; and starting in 1972, Union Carbide offered to take dust counts of the premises of Calidria customers in order to help them maintain a safe working environment, a service which many Calidria customers utilized (Calidria was not sold to the general public or other "end-users", but rather was marketed only to manufacturers or producers who used Calidria in their products or production processes). Dr. Harry Rhodes, an industrial hygienist, supervised Union Carbide's dust monitoring program.

A listing of Bakelite related publications and other written material distributed to customers will be made available on request. Upon plaintiff's request, Union Carbide will

make copies of results of such dust counts available to the plaintiff for review and duplication at a suitable time and place.

INTERROGATORY NO. 15:

Before 1970, had you received notice that any individual or individuals, other than those Plaintiffs who have filed personal injury actions in Texas State Courts is or are claiming or has or have claimed an injury as a result of using asbestos products manufactured and/or sold by your company or any of its predecessors or subsidiaries before 1970? If so, state:

- (a) The name and address of each claimant.
- (b) The date of notice of each claim.
- (c) A description of the claim.
- (d) The type of injuries allegedly sustained.
- (e) The name and address of each attorney who represents each individual making a claim.
- (f) The style and court number of each claim.
- (g) The disposition of each claim that has been settled or taken to judgment.

RESPONSE TO NO. 15:

See General Objections 4 and 5. Union Carbide also objects to this Interrogatory on the grounds that it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Union Carbide was first named in a lawsuit alleging injury from exposure to asbestos-containing products in 1970. Union Carbide maintains records including a complete print out

of all asbestos-related suits naming Union Carbide Corporation. Suit records are in the custody of Mrs. Virginia Ruszczyk, at Kelley Drye & Warren's Stamford CT office previously identified. Upon Plaintiff's request, Union Carbide will make a computer listing of all cases available for review at a suitable time and place.

INTERROGATORY NO. 16:

Were your asbestos products distributed, marketed, packaged, labeled and/or sold by companies other than your own? If the answer is affirmative, list the names and addresses of each of those companies, and the products in question.

RESPONSE TO NO. 16:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Yes. See Union Carbide's response to Interrogatory Nos. 4 & 17.

INTERROGATORY NO. 17:

Did you or any of your predecessors, successors, or subsidiaries have any distributors or sales representatives of asbestos products in the States of Alabama, Florida, Mississippi, Oregon, Washington, Georgia, Tennessee, Arkansas, Texas and Virginia? If so, state:

- (a) The name and address of each such distributor or sales representatives.
- (b) The years in which such company or person distributed, marketed, or sold your products.
- (c) What products were distributed, marketed, or sold and in what years.

RESPONSE TO NO. 17:

See general objection no. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Approximately three-quarters of Calidria sales were made directly by Union Carbide. Distributors accounted for the remaining approximate 25% of all Calidria sales. Union Carbide, however, no longer mines or sells Calidria and thus no longer maintains Calidria distributors. The following is a list of former Calidria distributors which Union Carbide has been able to identify:

Presently Known Former Calidria Distributors (1963-1985)

- 1) Allied Resin Corporation
- 2) American Industrial Chemical Corporation
- 3) Bouffard Associates
- 4) A.T. Callas Company
- 5) D. & F. Distributing, Inc.
- 6) Harrisons & Crosfield (Canada)
- 7) Harrisons & Crosfield (Pacific)
- 8) Lenape Chemicals, Inc.
- 9) Technical Petroleum Company
- 10) Technical Products, Inc.
- 11) Montello, Inc.
- 12) Harwick Chemical Corp.

- 13) Plastex, Inc.
- 14) Union Carbide International
- 15) Western Chemical & Manufacturing Company
- 16) McKesson Chemicals, Inc.
- 17) Apperson Chemicals, Inc.
- 18) Amsco Division - Union Oil Company of Calif.
- 19) Hamblet & Hayes Co.
- 20) Marco Chemical Division - W. R. Grace & Company
- 21) Wonder State Industries
- 22) The Permutit Co., Inc.
- 23) Van Waters and Rogers
- 24) Ambrosia Industrial, Inc.
- 25) Southern Fiberglas Supply

The following may have been distributors in the states of Alabama, Florida, Mississippi, Oregon, Washington, Georgia, Arkansas, Texas and Virginia:

D & F Distributing, Inc.

Harrisons & Crosfield (Pacific)

Lenape Chemicals, Inc.

Montello, Inc.

INTERROGATORY NO. 18:

List each employee (including only physicians and/or hygienists) who has acted in a medical advisory capacity to your company at any time during the past 40 years, including, but not limited to, physicians and industrial hygienists, and the current address, telephone

number and job title of each of those individuals and who has, had or may have had any knowledge regarding the hazards of asbestos.

RESPONSE TO NO. 18:

See general objection no. 4. Union Carbide further objections to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Union Carbide objects to this interrogatory as vague and ambiguous. Subject to its objections, Union Carbide responds as follows:

Union Carbide consulted various experts in the medical and industrial hygiene professions concerning precautions that should be followed by persons involved in the use or handling of Union Carbide's Calidria asbestos. During the early days of Union Carbide's Calidria business, industrial hygienists at Union Carbide issued asbestos toxicology reports which were distributed to sales and other appropriate personnel. The advice of the experts was incorporated, as appropriate, on Calidria warning labels and in the safety literature that Union Carbide made available and disseminated to its Calidria customers.

Union Carbide's various divisions employ Industrial Hygienists for their respective facilities and premises. C.C. Smith currently serves as Vice President in charge of Union Carbide's of Community and Employee Health, Safety and Environmental Protection Department which is primarily responsible for establishing corporate HS&EP standards and for assessing business group performance against those standards and applicable governmental requirements. During the period of the Calidria business, Dr. Harry Rhodes, an industrial hygienist, supervised Union Carbide's dust count program. During the period of the Bakelite business at Bound Brook, New Jersey, Wm. Doyles Neal was Union Carbide's industrial hygienist at that plant.

See also Union Carbide's response to Interrogatory No. 49, below.

INTERROGATORY NO. 19:

Does Defendant have in its possession any books, pamphlets, memoranda, or written materials of any kind or character that would indicate that asbestos fibers, when inhaled, can be hazardous to the health of human beings? If so, state:

- (a) The name of each such publication.
- (b) The date of publication and the names of the author and publisher (if any).
- (c) The date received by Defendant, if known.
- (d) The name, job title, and address of each person who currently has possession of each publication and its present location.

RESPONSE TO NO. 19:

See General Objection No. 4. Union Carbide also objects to this interrogatory on the grounds that it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Union Carbide further objects to this interrogatory on the grounds that it is vague, ambiguous, and unclear. Subject to its objections, Union Carbide responds as follows:

Union Carbide's knowledge concerning potential health hazards possibly associated with excessive asbestos fiber inhalation developed gradually. Sources of information as to possible health concerns of which Union Carbide is presently aware included general and scientific literature on the topic and reports or memoranda by Union Carbide employees. Upon the plaintiff's request, copies of such reports and memoranda, which Union Carbide has located, will be made available at a suitable time and place for

review and duplication by the plaintiff.

Union Carbide's custodian of records for asbestos-related documents is Mrs. Elba Pozo, Kelley Drye & Warren, Two Stamford Plaza, Stamford, Connecticut 06901.

See also Union Carbide's response to Interrogatory No. 14.

INTERROGATORY NO. 20:

Has Defendant or any of its subsidiary or predecessor companies at any time been a member of any trade organization or association that published or disseminated any documents or information relating to the hazards of asbestos comprised of other manufacturers, miners, marketers, and/or sellers of asbestos products? If so, state:

- (a) The name and address of each such association or organization.
- (b) The dates during which Defendant or any of its subsidiaries or predecessors were members.
- (c) The names and dates of any publications, minutes, or reports published, written, or disseminated by any of the named associations or organizations.
- (d) Whether any of those publications are still in your possession, and if so:
 - (i) A description of the publications, including the date.
 - (ii) The current location of such publications.
 - (iii) The custodian of such publications.
 - (iv) The method or manner in which such publications are maintained.

RESPONSE TO NO. 20:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Union Carbide was a member of the Industrial Health Foundation, the American Industrial Health Association and Asbestos Information Association/North America. Union Carbide may also have cooperated with work undertaken by the Pneumoconiosis Research Council of the United Kingdom, The Organization Resources Recovery Organization, and the Insulation Industry Hygiene Research Program. Union Carbide or Union Carbide personnel also participated in activities of the National Safety Council. Union Carbide has no presently available record of association with any other organization listed in the plaintiff's interrogatory.

Union Carbide presently can find no documents relating to the IHF in its files. With respect to AIA documents, see Union Carbide's response to Interrogatory 14. Union Carbide also has in its possession a copy of at least one edition of the newsletter published by the Insulation Industry Hygiene Research Program. In addition, Union Carbide possesses files which may contain miscellaneous correspondence to or from the AIA or other organizations. Upon plaintiffs' request, Union Carbide will make such relevant, non-privileged files available for review and replication at a suitable time and place.

INTERROGATORY NO. 21:

Identify by name and location each plant or manufacturing facility in which the products listed in your answers to Interrogatory Nos. 3-6 were manufactured, assembled, or

prepared for sale or marketing, specifying which plants produced each item, the dates each plant is or was in operation, and the time span during which each named item was produced or manufactured.

RESPONSE TO NO. 21:

See General Objection No. 4. Union Carbide also objects to this interrogatory on the grounds that it is overly broad, unduly burdensome and is not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Calidria was mined and milled at or near King City, California. See Union Carbide's response to Interrogatories 6 and 10. Bakelite was principally manufactured in Bound Brook, New Jersey.

INTERROGATORY NO. 22:

Have printed sales materials been prepared by Defendant or any of its subsidiary or predecessor companies or their agents for purposes of marketing or advertising products containing asbestos? If so, state:

- (a) The name, address, and job title of each person or entity who prepared such materials.
- (b) The name, address, and job title of each person who currently has possession of such materials and their present location.
- (c) The date the materials were prepared.
- (d) The media used to disseminate the sales materials.

RESPONSE TO NO. 22:

See General Objection No. 4. Union Carbide further objects to this interrogatory on the grounds it is overly broad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

According to Union Carbide's best available information, Union Carbide had for its Metal Division (including Calidria), a Public Relations employee who may have engaged an outside advertising agent for some of its business dealings. During the period of time in which Union Carbide mined and sold its short fiber Calidria asbestos, John Crane was the Public Relations person in the Metals Division. Mr. Crane has since left Union Carbide.

In addition, Union Carbide also employed many sales people.

During the early days of Union Carbide's Calidria business (which began in 1963), medical and industrial health officials at Union Carbide issued asbestos toxicology reports which were distributed to sales and other appropriate personnel. Warning labels were added to Calidria packages in 1968 and toxicological information first appeared in sales literature in that year. Material Safety Data Sheets were mailed to Calidria customers beginning in 1972. AIA/NA information pamphlets were made available to customers starting in 1972 and were mailed to customers beginning 1977 at the latest.

The health and safety literature made available and disseminated by Union Carbide to its Calidria customers warned of possible serious adverse health effects associated with the excessive inhalation of asbestos fiber, advised customers on ways to control or avoid such hazards, including the use of respirators as a way to avoid the hazards. In addition to the dissemination of health and safety information, Union Carbide took active steps to help

insure that Calidria was handled and used in a clean and safe manner and environment: Union Carbide employed shrink-wrap, tight-fitting packaging to prevent leakage, spillage, or dust emission during the shipment of Calidria; Union Carbide also developed pelletized forms of Calidria which would reduce dust emission; and starting in 1972, Union Carbide offered to take dust counts of the premises of Calidria customers in order to help them maintain a safe working environment, a service which many Calidria customers utilized (Calidria was not sold to the general public or other "end-users", but rather was marketed only to manufacturers or producers who used Calidria in their products or production processes). Dr. Harry Rhodes, an industrial hygienist, supervised Union Carbide's dust monitoring program.

Upon plaintiff's request, Union Carbide will make copies of results of such dust counts available to the plaintiff for review and duplication at a suitable time and place.

See also Union Carbide's response to Interrogatories 7 and 14.

INTERROGATORY NO. 23:

Have any written or printed materials or instructions of any kind or character been prepared by Defendant or any of its subsidiary or predecessor companies or their agents indicating how asbestos products should be used and maintained? If so, state:

- (a) The name, address, and job title of each person who prepared such materials or instructions or assisted in their preparation.
- (b) The name, address and job title of each person who currently has possession of such materials or instructions and their present location.

- (c) The dates of distribution or use and the manner in which such materials or instructions were distributed to purchasers of Defendant's products or those of its subsidiaries or predecessors.
- (d) The year each such written material or instruction was prepared and disclosed to potential consumers.

RESPONSE TO NO. 23:

See Union Carbide's responses to Interrogatories 6, 7, 14, 22 and 50, including all of the objections set forth therein.

INTERROGATORY NO. 24:

Does Defendant have insurance policies that might cover the claims made by Plaintiffs in these cases? If so, list the name of each insurance carrier, the amount of initial coverage, amount of coverage remaining at the present time, and the effective dates of each policy. (If properly answered, this Interrogatory need not be supplemented as to the remaining amount of coverage).

RESPONSE TO NO. 24:

See General Objection No. 4. Union Carbide objects to this interrogatory as vague and ambiguous. Subject to these objections, and without making any admission with respect to the plaintiff's claims, Union Carbide also responds as follows: Union Carbide possesses sufficient insurance coverage to enable it to cover the plaintiff's claims.

INTERROGATORY NO. 25:

As to the disease asbestosis, state:

- (a) The date on which Defendant or its subsidiary or predecessor first learned that such disease was caused by inhalation of asbestos fibers by humans.
- (b) How Defendant became aware of the existence of the disease.
- (c) Who within the company first discovered, recognized or understood the adverse consequences or effects of the disease and/or of asbestos exposure.
- (d) What information was disseminated within Defendant's company or its subsidiary or predecessor regarding such adverse consequences or effects.
- (e) Whether any such information is still maintained by Defendant or its subsidiary or predecessor in any written form.
- (f) Who is the custodian of such information.
- (g) The date on which you first received knowledge or information that asbestosis was caused by inhalation of asbestos fibers.

RESPONSE TO NO. 25:

See General Objections No. 4 and 5. Union Carbide also objects on the grounds that it is overly broad, vague, ambiguous, and not reasonably calculated to lead to the discovery of admissible evidence. Union Carbide also objects to this interrogatory to the extent that it calls on Union Carbide to render an expert medical response. Subject to its objections, Union Carbide responds as follows:

Union Carbide recognizes that the excessive inhalation of asbestos fiber may be associated with the development of serious and potentially fatal disease. Union Carbide states that any asbestos fiber which is encapsulated would not pose such danger because the fiber would not be respirable. Union Carbide also understands that the onset and development of such disease in a person may be related to and affected by, among other factors, the particular type of fiber that is inhaled, cigarette smoking, and environmental conditions, in addition to the person's medical history and condition.

Union Carbide's knowledge concerning potential health hazards possibly associated with excessive asbestos fiber inhalation developed gradually. Sources of information as to possible health concerns of which Union Carbide is presently aware included general and scientific literature on the topic and reports or memoranda by Union Carbide employees. Upon the plaintiff's request, copies of such reports and memoranda, which Union Carbide has located, will be made available at a suitable time and place for review and duplication by the plaintiff.

See also Union Carbide's response to Interrogatories 7, 14 and 50.

INTERROGATORY NO. 26:

As to the disease lung cancer, state:

- (a) The date on which Defendant or its subsidiary or predecessor first learned that such disease was caused by inhalation of asbestos fibers by humans.
- (b) How Defendant or its subsidiary or predecessor became aware of the disease and its relationship to asbestos exposure.

- (c) Who within the company or its subsidiary or predecessor first discovered or recognized the adverse consequences or effects of asbestos exposure.
- (d) What information was disseminated within Defendant's company or its subsidiary or predecessor regarding such adverse consequences or effects.
- (e) Whether any such information is still maintained by Defendants or its subsidiaries or predecessors in a written form.
- (f) Who is the custodian of such information.
- (g) The date on which you first received knowledge or information that lung cancer was caused by inhalation of asbestos dust and fibers.

RESPONSE TO NO. 26:

See General Objections No. 4 and 5. Union Carbide also objects on the grounds that it is overly broad, vague, ambiguous, and not reasonably calculated to lead to the discovery of admissible evidence. Union Carbide also objects to this interrogatory to the extent that it calls on Union Carbide to render an expert medical response. Subject to its objections, Union Carbide responds as follows:

Union Carbide recognizes that the excessive inhalation of asbestos fiber may be associated with the development of serious and potentially fatal disease. Union Carbide states that any asbestos fiber which is encapsulated would not pose such danger because the fiber would not respirable. Union Carbide also understands that the onset and development of such disease in a person may be related to and affected by, among other factors, the particular type of fiber that is inhaled, cigarette smoking, and environmental conditions, in addition to the person's medical history and condition.

Union Carbide's knowledge concerning potential health hazards possibly associated with excessive asbestos fiber inhalation developed gradually. Sources of information as to possible health concerns of which Union Carbide is presently aware included general and scientific literature on the topic and reports or memoranda by Union Carbide employees. Upon the plaintiff's request, copies of such reports and memoranda, which Union Carbide has located, will be made available at a suitable time and place for review and duplication by the plaintiff.

See also Union Carbide's response to Interrogatories 7, 14 and 50.

INTERROGATORY NO. 27:

As to pleural disease, pleural thickening or pleural plaques, state:

- (a) The date on which Defendant or its subsidiary or predecessor learned such disease was caused by inhalation of asbestos fibers by humans.
- (b) How Defendant or its subsidiary or predecessor became aware of the disease and that it was caused by exposure to asbestos.
- (c) Who within the company or its subsidiary or predecessor first discovered or recognized the adverse consequences or effects of asbestos exposure.
- (d) What information was disseminated within Defendant's company or its subsidiary or predecessor regarding such adverse consequences or effects.
- (e) Whether any such information is still maintained by Defendant or its subsidiary or predecessor in a written form.
- (f) Who is the custodian of such information.

RESPONSE TO NO. 27:

See General Objections No. 4 and 5. Union Carbide also objects on the grounds that it is overly broad, vague, ambiguous, and not reasonably calculated to lead to the discovery of admissible evidence. Union Carbide also objects to this interrogatory to the extent that it calls on Union Carbide to render an expert medical response. Subject to its objections, Union Carbide responds as follows:

Union Carbide recognizes that the excessive inhalation of asbestos fiber may be associated with the development of serious and potentially fatal disease. Union Carbide states that any asbestos fiber which is encapsulated would not pose such danger because the fiber would not be respirable. Union Carbide also understands that the onset and development of such disease in a person may be related to and affected by, among other factors, the particular type of fiber that is inhaled, cigarette smoking, and environmental conditions, in addition to the person's medical history and condition.

Union Carbide's knowledge concerning potential health hazards possibly associated with excessive asbestos fiber inhalation developed gradually. Sources of information as to possible health concerns of which Union Carbide is presently aware included general and scientific literature on the topic and reports or memoranda by Union Carbide employees. Upon the plaintiff's request, copies of such reports and memoranda, which Union Carbide has located, will be made available at a suitable time and place for review and duplication by the plaintiff.

See also Union Carbide's response to Interrogatories 7, 14 and 50.

INTERROGATORY NO. 28:

As to the disease mesothelioma, state:

- (a) The date on which Defendant or its subsidiary or predecessor first learned such disease was caused by inhalation of asbestos fibers by humans.
- (b) The date on which Defendant first suspected that mesothelioma was caused by inhalation of asbestos dust and fibers.
- (c) How Defendant or its subsidiary or predecessor became aware of the disease and that it was caused by exposure to asbestos.
- (d) Who within the company or its subsidiary or predecessor first discovered or recognized the adverse consequences or effects of asbestos exposure.
- (e) What information was disseminated within Defendant's company or its subsidiary or predecessor regarding such adverse consequences or effects.
- (f) Whether any such information is still maintained by Defendants or its subsidiary or predecessor in a written form.
- (g) Who is the custodian of such information.
- (h) Whether Defendant agrees that there is no known medical cure for mesothelioma.

RESPONSE TO NO. 28:

See General Objections No. 4 and 5. Union Carbide also objects on the grounds that it is overly broad, vague, ambiguous, and not reasonably calculated to lead to the discovery of admissible evidence. Union Carbide also objects to this interrogatory to the extent that it calls on Union Carbide to render an expert medical response. Subject to its objections, Union Carbide responds as follows:

Union Carbide recognizes that the excessive inhalation of asbestos fiber may be associated with the development of serious and potentially fatal disease. Union Carbide states that any asbestos fiber which is encapsulated would not pose such danger because the fiber would not be respirable. Union Carbide also understands that the onset and development of such disease in a person may be related to and affected by, among other factors, the particular type of fiber that is inhaled, cigarette smoking, and environmental conditions, in addition to the person's medical history and condition.

Union Carbide's knowledge concerning potential health hazards possibly associated with excessive asbestos fiber inhalation developed gradually. Sources of information as to possible health concerns of which Union Carbide is presently aware included general and scientific literature on the topic and reports or memoranda by Union Carbide employees. Upon the plaintiff's request, copies of such reports and memoranda, which Union Carbide has located, will be made available at a suitable time and place for review and duplication by the plaintiff.

See also Union Carbide's response to Interrogatories 7, 14 and 50.

INTERROGATORY NO. 29:

As to gastro-intestinal cancer, laryngeal cancer, pharyngeal cancer or lymphatic cancer, state:

- (a) The type of cancer and the date on which Defendant or its subsidiary or predecessor first learned that such diseases were caused by inhalation of asbestos fibers by humans.
- (b) What cancers has the Defendant or its subsidiary or predecessor become aware can be caused by exposure to asbestos fibers?

- (c) The date on which Defendant first suspected other cancers were caused by asbestos inhalation.
- (d) Who within the company or its subsidiary or predecessor first discovered the adverse consequences or effects of asbestos exposure.
- (e) What information was disseminated with Defendant's company or its subsidiary or predecessor regarding such adverse consequences or effects.
- (f) Whether any such information is still maintained by Defendant or its subsidiary or predecessor in a written form.
- (g) Who is the custodian of such information.

RESPONSE TO 29:

See General Objections No. 4 and 5. Union Carbide also objects on the grounds that it is overly broad, vague, ambiguous, and not reasonably calculated to lead to the discovery of admissible evidence. Union Carbide also objects to this interrogatory to the extent that it calls on Union Carbide to render an expert medical response. Subject to its objections, Union Carbide responds as follows:

Union Carbide recognizes that the excessive inhalation of asbestos fiber may be associated with the development of serious and potentially fatal disease. Union Carbide states that any asbestos fiber which is encapsulated would not pose such danger because the fiber would not be respirable. Union Carbide also understands that the onset and development of such disease in a person may be related to and affected by, among other factors, the particular type of fiber that is inhaled, cigarette smoking, and environmental conditions, in addition to the person's medical history and condition.

Union Carbide's knowledge concerning potential health hazards possibly associated with excessive asbestos fiber inhalation developed gradually. Sources of information as to possible health concerns of which Union Carbide is presently aware included general and scientific literature on the topic and reports or memoranda by Union Carbide employees. Upon the plaintiff's request, copies of such reports and memoranda, which Union Carbide has located, will be made available at a suitable time and place for review and duplication by the plaintiff.

See also Union Carbide's response to Interrogatories 7, 14 and 50.

INTERROGATORY NO. 30:

Does Defendant contend that asbestos products can be manufactured or designed so as to eliminate all potential health hazards to persons working with or exposed to them? If the answer is affirmative, explain in detail, and attach any studies or surveys on which this answer is based.

RESPONSE TO NO. 30:

See General Objection No. 4. Union Carbide also objects to this Interrogatory on the grounds that it is overly broad and unduly burdensome, especially insofar as it calls for Union Carbide to respond with respect to products it did not manufacture or sell. Subject to its objections, Union Carbide responds as follows:

See Union Carbide's response to Interrogatory 3. Calidria was not an "asbestos product", but rather consisted of raw chrysotile asbestos with a unique short fiber physical form sold in both fibrous and pelletized states. Union Carbide sold Calidria to manufacturers and producers for use in their products, or production processes. Union Carbide provided customers with information on how to handle asbestos without creating dusty conditions and

to avoid potential hazards. Union Carbide states that any asbestos fiber which is encapsulated would not pose such danger because the fiber would not be respirable.

During the early days of Union Carbide's Calidria business (which began in 1963), medical and industrial health officials at Union Carbide issued asbestos toxicology reports which were distributed to sales and other appropriate personnel. Warning labels were added to Calidria packages in 1968 and toxicological information first appeared in sales literature in that year. Material Safety Data Sheets were mailed to Calidria customers beginning in 1972. AIA/NA information pamphlets were made available to customers starting in 1972 and were mailed to customers beginning in 1977 at the latest.

The health and safety literature made available and disseminated by Union Carbide to its Calidria customers warned of possible serious adverse health effects associated with the excessive inhalation of asbestos fiber, advised customers on ways to control or avoid such hazards, including the use of respirators as a way to avoid the hazards. In addition to the dissemination of health and safety information, Union Carbide took active steps to help insure that Calidria was handled and used in a clean and safe manner and environment: Union Carbide employed shrink-wrap, tight-fitting packaging to prevent leakage, spillage, or dust emission during the shipment of Calidria. Union Carbide also developed pelletized forms of Calidria which would reduce dust emission; and starting in 1972, Union Carbide offered to take dust counts of the premises of Calidria customers in order to help them maintain a safe working environment, a service which many Calidria customers utilized (Calidria was not sold to the general public or other "end-users", but rather was marketed only to manufacturers or producers who used Calidria in their products or production

processes). Dr. Harry Rhodes, an industrial hygienist, supervised Union Carbide's dust monitoring program.

Upon plaintiff's request, Union Carbide will make copies of results of such dust counts available to the plaintiff for review and duplication at a suitable time and place.

INTERROGATORY NO. 31:

Describe in detail the types of packages or packaging which Defendant or any of its subsidiary or predecessor companies used for asbestos material or products, listing the dates each type of package was used, a physical description of each type of package, and providing a description of any printed material or trademarks that appeared thereon.

RESPONSE TO NO. 31:

See General Objection No. 4. Union Carbide objects to this interrogatory as vague and ambiguous. Subject to its objections, Union Carbide responds as follows:

Calidria asbestos was mostly transported in plastic or Kraft type paper bags, although some Calidria had been shipped in bulk in railroad hopper cars. Each bag contained the following information: Union Carbide's corporate name and address, the net weight of material supplied, the applicable grade of asbestos, the lot number identification, and, starting in 1968 a cautionary statement. At the request of some customers, a limited amount of Calidria asbestos was sold in plain Kraft bags, which contained only the cautionary statement. Unless the customer requested otherwise, between approximately the mid-1970's and June 1985 all Kraft bags containing Calidria asbestos were individually shrink wrapped (encased by a tight fitting plastic film); an entire pallet containing a number of such bags was also completely covered with the tight fitting plastic film.

See also Union Carbide's response to Interrogatory No. 50.

INTERROGATORY NO. 32:

Has Defendant or any of its subsidiary or predecessor companies at any time entered into a "rebranding" agreement with any other company, either as buyer or seller, concerning asbestos materials or asbestos products? If so, state, as to each such agreement:

- (a) The name of the company manufacturing the asbestos products.
- (b) The trade name affixed to those products.
- (c) The periods of time covered by each such agreement.
- (d) The volume, in dollar amount, of each transaction.
- (e) The initial purchaser of the products.

RESPONSE TO NO. 32:

See General Objection No. 4. Union Carbide also objects to this interrogatory on the grounds that it is overly broad, unduly burdensome and is not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

No. See Union Carbide's response to Interrogatories 4 and 5.

Union Carbide sold its asbestos initially as Union Carbide Asbestos and then under the name "Calidria". Union Carbide, however, packaged Calidria asbestos for the Montello Corporation for sale under the tradenames of Visbestos, Super Visbestos, Telvis, Imcobest and Univis. Union Carbide also packaged Calidria for the ARCO company for sale under the name Arcovis, and for the International Mines and Chemical Company for sale under the name Surelift. Calidria was also sold domestically in limited quantities under the names Visquick and Oilbestos by distributors which Union Carbide is presently unable to identify. Union Carbide objects to responding to this interrogatory with respect to overseas

sales on the grounds that such information is irrelevant and immaterial to matters at issue in this case.

INTERROGATORY NO. 33:

List the name and address of each company from which Defendant or its subsidiary or predecessor purchased materials or asbestos products which Defendant sold or distributed in any form, stating the form of the materials, the dates of such purchases, and the ultimate disposal of such materials.

RESPONSE TO NO. 33:

Not applicable.

INTERROGATORY NO. 34:

Does Defendant or any of its subsidiaries or predecessor currently have possession of any writings or contracts on those rebranding agreements set forth in the answer to Interrogatory No. 32? If the answer is affirmative, state:

- (a) The name, address, and job title of each person having custody of each of those documents and their current location.
- (b) A brief description of each such document, including the dates and the parties signatory.

RESPONSE TO NO. 34:

Not applicable. See Union Carbide's response to Interrogatory No. 32, including the objections incorporated therein.

INTERROGATORY NO. 35:

Prior to 1968, did any person file a claim against a Worker's Compensation carrier covering Defendant or any of its subsidiaries or predecessors alleging that he/she contracted a disease from inhaling asbestos fibers? If so, provide:

- (a) A list of the claims, including each claimant's name, address and the date each claim was filed, and including the caption and jurisdiction of the claim.
- (b) The disease alleged in each such claim.
- (c) A brief summary of the disposition of each such claim.
- (d) The name, address and title of the person having custody of the records pertaining to each such claim.

RESPONSE TO NO. 35:

See General Objection No. 5. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to the discovery of admissible evidence.

INTERROGATORY NO. 36:

Did Defendant or any of its subsidiaries or predecessors maintain written minutes of corporate meetings, either board of directors, departmental, or otherwise, which reflect discussions pertaining to any subject matter related to asbestos, asbestos health hazards or asbestos products? If so, for each such set of minutes, state:

- (a) The dates of each such meeting.
- (b) The general subject matter discussed at each meeting.
- (c) Who was in attendance at each meeting.

- (d) Where and by whom the written minutes are presently maintained.
- (e) By whom the minutes were taken and put into final format.
- (f) Whether the minutes were abstracted and reports disseminated to other individuals, and if so, the names and job titles of those individuals.

RESPONSE TO NO. 36:

See General Objections Nos. 4 and 5. Union Carbide further objects to this Interrogatory on the grounds that it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Union Carbide maintains minutes from its Board of Directors. After a reasonable review of these minutes up through the date Union Carbide sold its King City mine and mill in June 1985, the minutes reflect no responsive references.

INTERROGATORY NO. 37:

Do you or any of your subsidiaries, including foreign business entities, currently manufacture any products containing asbestos? If so, state:

- (a) As to each product, whether such product is mined, manufactured, and/or marketed or sold.
- (b) The names and addresses of the companies mining, manufacturing, marketing, and/or selling each of those products.
- (c) The trade or brand name of each of those products mined, manufactured, marketed, and/or sold.
- (d) The date each of the named products was placed on the market.

- (e) A description of the physical (chemical) composition of each of the named products, including the type of asbestos contained in the product.
- (f) A description of the physical appearance of each product and its packaging.
- (g) A detailed description of the intended uses of each of the named products.
- (h) Whether there are any warning labels on said products or containers regarding potential asbestos-related health hazards.

RESPONSE TO NO. 37:

See General Objection No. 4. Union Carbide also objects to this interrogatory on the grounds that it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Union Carbide also objects to this Interrogatory on the grounds that it calls for information not relevant to this case. Subject to its objections, Union Carbide responds as follows:

No.

INTERROGATORY NO. 38:

State whether you or any of your predecessors and/or subsidiaries maintain, from 1940 through the present or for any portion thereof, copies of invoices, shipping documents, bills of lading, purchase orders, or other documents of a similar nature relating to the mining, manufacture, marketing, sale or distribution of asbestos products. If so, state:

- (a) The location of such documents.
- (b) The name and address of the custodian of the documents.

- (c) The format in which the documents are kept, ~, hard copy, microfilm, microfiche, etc.
- (d) In what form the documents can be accessed, ~ by state, by product, etc., and if by product, whether kept according to asbestos or non-asbestos.

RESPONSE TO NO. 38:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Union Carbide possesses copies of invoices of Calidria sales made by Union Carbide to Calidria customers. Union Carbide also maintains a computer data base of such sales. Since Union Carbide sold its Calidria business in 1985, Union Carbide, at present, can make no representation as to the completeness of its records. The aforementioned constitute the most complete records of Calidria sales currently available to Union Carbide. Union Carbide lacks, however, a record of sales made by Calidria distributors, who accounted for approximately 25% of all Calidria sales. Union Carbide's extensive investigation has not disclosed any records of sales of Bakelite products. The investigation continues.

Upon plaintiff's request, Union Carbide will make its sales records available to the plaintiff for review and duplication at a suitable time and place.

See also Union Carbide's response to Interrogatory No. 7.

INTERROGATORY NO. 39:

Will you call company representatives as witnesses at the trial of any of these cases? If so, list:

- (a) The name, address, and job title of each company representative who may be called.
- (b) A summary of the testimony expected to be given by each such witness.
- (c) List any and all previous times that the named witnesses have either given deposition or trial testimony in an asbestos-related case, including the jurisdiction, style of the case, case number, date of testimony, and the name of the attorney taking the deposition for the Plaintiffs in that case.

RESPONSE TO NO. 39:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Union Carbide objects to this interrogatory as vague and ambiguous. Subject to its objections, Union Carbide responds as follows:

Discovery is ongoing and, to date, Union Carbide has not determined which witnesses, if any, it may call at trial of these cases.

See also response to Interrogatory No. 39 in Union Carbide's responses to Plaintiffs' Master Interrogatories previously filed with this Court.

INTERROGATORY NO. 40:

Have Defendant or its subsidiaries or predecessors ever acquired through purchase, reorganization, or merger another corporation, company, or business which manufactured, sold, processed, distributed, or contracted or supplied products containing asbestos? If so, for each such entity, state:

- (a) Full and correct name;
- (b) Principal place of business;
- (c) State of incorporation;
- (d) Date of acquisition by Defendant;
- (e) Whether or not the business entity was ever authorized to transact business in the State of Texas;

RESPONSE TO NO. 40:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

In 1976 Union Carbide acquired another company which prior to its acquisition by Union Carbide had manufactured a line of mastic sealants, coatings and adhesives, some of which contained small quantities of asbestos. The asbestos fiber in those products was encapsulated by binder ingredients in the production process. The company sold the division which produced these products and ceased producing all asbestos containing products (except for TRE-HOLD, a tree sprout inhibitor) prior to Union Carbide's acquisition of the company. Union Carbide also acquired the Bakelite Corporation which had manufactured the

Bakelite phenolic. See Union Carbide's response to Interrogatory No. 3. Other companies, in particular the Magnolia Welding Supply Company, Inc. and Gas Technics Gases & Equipment Centers of Eastern Pennsylvania, Inc., acquired by Union Carbide may also have sold asbestos products.

INTERROGATORY NO. 41:

Was each of your asbestos products generally expected to reach, or packaged to reach, the consumer or user, without substantial change in the condition in which it was sold? If not, with respect to any such product, explain in what way the Defendant claims its products were altered or substantially changed after sale or distribution and before reaching the user.

RESPONSE TO NO. 41:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Calidria was not an asbestos product but rather consisted of raw chrysotile, asbestos with a unique short fiber configuration, sold in pelletized and fibrous forms. Calidria was sold by Union Carbide and by Union Carbide distributors to manufacturers and producers for use in their products or production processes as a fiber, reinforcer, opacifier, thixothrope (thickener) and the like.

Bakelite was not sold to consumers but rather to manufacturers which used Bakelite in manufacturing other finished products.

See also Union Carbide's response to Interrogatory No. 31.

INTERROGATORY NO. 42:

For each asbestos-containing product identified in response to Interrogatory No. 6, identify all foreseeable users such as insulators, helpers, pipefitters, welders, machinists, plasterers, drywall finishers, carpenters, boilermakers, shipwrights and riggers, etc. of any of Defendant's asbestos-containing products.

RESPONSE TO NO. 42:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Calidria was not an asbestos product but rather consisted of raw chrysotile, asbestos with a unique short fiber configuration, sold in pelletized and fibrous forms. Calidria was sold by Union Carbide and by Union Carbide distributors to manufacturers and producers for use in their products or production processes as a fiber, reinforcer, opacifier thixothrope (thickener) and the like.

Bakelite was not sold to consumers but rather to manufacturers which used Bakelite in manufacturing other finished products.

See also Union Carbide's response to Interrogatories 6 and 41.

INTERROGATORY NO. 43:

Based upon the material contents of your asbestos-containing products, the method of manufacturing, and the method of application, can such products be generally applied without liberating asbestos fibers into the air?

- (a) If there is a different answer concerning different products manufactured, sold, distributed, or used by your company, then specify the different products by precise manufacturer's name and popular name.
- (b) If there is a difference in your answer depending on the year or years in which a particular product was used, then specify in detail what year or years you are referring to and the specific products you are referring to and year involved.

RESPONSE TO NO. 43:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

In general, Bakelite was a phenolic resin sold to manufacturers. Some contained asbestos in the form of fibers fully encapsulated and not respirable.

Calidria was not an asbestos product but rather consisted of raw chrysotile asbestos with a unique short fiber configuration, sold in pelletized and fibrous forms. Calidria was sold by Union Carbide and by Union Carbide distributors to manufacturers and producers for use in their products or production processes as a fiber, reinforcer, opacifier thixothrope (thickener) and the like. See also Union Carbide's response to Interrogatory No. 31.

During the early days of Union Carbide's Calidria business (which began in 1963), medical and industrial health officials at Union Carbide issued asbestos toxicology reports which were distributed to sales and other appropriate personnel. Warning labels were

added to Calidria packages in 1968 and toxicological information first appeared in sales literature in that year. Material Safety Data Sheets were mailed to Calidria customers beginning in 1972. AIA/NA information pamphlets were made available to customers starting in 1972 and were mailed to customers beginning in 1977 at the latest.

The health and safety literature made available and disseminated by Union Carbide to its Calidria customers warned of possible serious adverse health effects associated with the excessive inhalation of asbestos fiber, advised customers on ways to control or avoid such hazards, including the use of respirators as a way to avoid the hazards. In addition to the dissemination of health and safety information, Union Carbide took active steps to help insure that Calidria was handled and used in a clean and safe manner and environment: Union Carbide employed shrink-wrap, tight-fitting packaging to prevent leakage, spillage, or dust emission during the shipment of Calidria. Union Carbide also developed pelletized forms of Calidria which would reduce dust emission; and starting in 1972, Union Carbide offered to take dust counts of the premises of Calidria customers in order to help them maintain a safe working environment, a service which many Calidria customers utilized (Calidria was not sold to the general public or other "end-users", but rather was marketed only to manufacturers or producers who used Calidria in their products or production processes). Dr. Harry Rhodes, an industrial hygienist, supervised Union Carbide's dust monitoring program.

Upon plaintiff's request, Union Carbide will make copies of results of such dust counts available to the plaintiff for review and duplication at a suitable time and place.

INTERROGATORY NO. 44:

Was it a foreseeable use of your asbestos-containing products that they may have been removed, stripped, or replaced at some time after installation?

RESPONSE TO NO. 44:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds in the negative and states:

Calidria was not an asbestos product but rather consisted of raw chrysotile asbestos with a unique short fiber configuration, sold in pelletized and fibrous forms. Calidria was sold by Union Carbide and by Union Carbide distributors to manufacturers and producers for use in their products or production processes as a fiber, reinforcer, opacifier thixothrope (thickener) and the like. The Bakelite phenolic resin was not a finished product but sold to manufacturers for use in making their finished products.

See also Union Carbide's response to Interrogatory No. 31.

INTERROGATORY NO. 45:

Before 1970, did you or your subsidiaries or predecessor(s) ever arrange for any labor inspectors, insurance company inspectors or anyone from your company to go to job sites where your products were being used or installed to make or take dust level counts? If so, state when this procedure started, the purpose of such procedures, and all results of such procedures.

RESPONSE TO NO. 45:

See General Objections No. 4 and 5. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Starting in 1972, Union Carbide offered to take dust counts of the premises of Calidria customers in order to help them maintain a safe working environment, a service which many Calidria customers utilized. Union Carbide would then advise customers of results and state the rules to minimize or maintain a dust free environment. Dr. Harry Rhodes, an industrial hygienist, supervised Union Carbide's dust monitoring program.

Upon plaintiffs request, Union Carbide will make copies of such dust counts available to the plaintiff for review and duplication at a suitable time and place.

INTERROGATORY NO. 46:

If Defendant performed or had performed any dust level counts, what action, based on the results, did your company take?RESPONSE TO NO. 46:

See Union Carbide's responses to Interrogatories No. 14 and No. 45, including the objections set forth therein.

INTERROGATORY NO. 47:

Has your company or its subsidiaries or predecessor(s) ever conducted or caused to be conducted any studies designed to assist in minimizing or eliminating the inhalation of asbestos dust and fibers by those exposed to the use of your company's products? If so, give the following:

- (a) Name of the person or firm conducting such studies;

- (b) The date the studies began and the date they were completed;
- (c) Any publication or other written dissemination of the results of the studies;
- (d) The nature of any action to eliminate or minimize the inhalation of asbestos dust fibers;

RESPONSE TO NO. 47:

See General Objection No. 4. Union Carbide also objects to this interrogatory on the grounds that it is overly broad, unduly burdensome and is not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Calidria was not an asbestos-containing product, but rather consisted of raw chrysotile fiber sold in pelletized and fibrous form. Among the several unique physical properties of Calidria which each tend to render, Calidria is not hazardous are the extreme shortness of the fiber and the lack of tremolite contamination.

Nevertheless, Union Carbide took many steps to allow customers to minimize the overt dust from Calidria.

During the early days of Union Carbide's Calidria business (which began in 1963), medical and industrial health officials at Union Carbide issued asbestos toxicology reports which were distributed to sales and other appropriate personnel. Warning labels were added to Calidria packages in 1968 and toxicological information first appeared in sales literature in that year. Material Safety Data Sheets were mailed to Calidria customers beginning in 1972. AIA/NA information pamphlets were made available to customers starting in 1972 and were mailed to customers beginning in 1977 at the latest.

The health and safety literature made available and disseminated by Union Carbide to its Calidria customers warned of possible serious adverse health effects associated with the excessive inhalation of asbestos fiber, advised customers on ways to control or avoid such hazards, including the use of respirators as a way to avoid the hazards. In addition to the dissemination of health and safety information, Union Carbide took active steps to help insure that Calidria was handled and used in a clean and safe manner and environment: Union Carbide employed shrink-wrap, tight-fitting packaging to prevent leakage, spillage, or dust emission during the shipment of Calidria. Union Carbide also developed pelletized forms of Calidria which would reduce dust emission; and starting in 1972, Union Carbide offered to take dust counts of the premises of Calidria customers in order to help them maintain a safe working environment, a service which many Calidria customers utilized (Calidria was not sold to the general public or other "end-users", but rather was marketed only to manufacturers or producers who used Calidria in their products or production processes). Dr. Harry Rhodes, an industrial hygienist, supervised Union Carbide's dust monitoring program.

Upon plaintiff's request, Union Carbide will make copies of results of such dust counts available to the plaintiff for review and duplication at a suitable time and place.

INTERROGATORY NO. 48:

Does your company have, has it ever had, or have your predecessor(s) or subsidiaries ever had, a Research Department? If so, give the year such Research Department was established, and whether or not such Research Department has operated continuously since being established. State also:

- (a) The amount of time and money expended each year on research concerning asbestos or asbestos-containing products?
- (b) What percentage of gross sales did your company or its predecessor(s) spend on research concerning the health effects of asbestos?
- (c) State in detail the purposes, duties, and responsibilities of such Research Department.

RESPONSE TO NO. 48:

See General Objections No. 4 and 5. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Calidria consisted of raw chrysotile fiber mined by Union Carbide and was not an "asbestos-containing" product. Studies and evaluations on the unique properties of Calidria may have been conducted at Union Carbide's Tarrytown and Tuxedo, New York facilities, as well as King City mine site and elsewhere. Dr. Mumpton and Dr. Neumann, and Mr. Slim Thompson as well as Dr. Tom Hall and John Myers may have been involved or have information about these studies or information.

In addition, Bound Brook maintained an R & D department, last headed by Carlo Martino. If the plaintiff desires additional information about physical or chemical evaluations of the Calidria fiber, Union Carbide will make its document repository available to the plaintiff, subject to any objections on relevancy.

See also Union Carbide's responses to Interrogatories No. 6, No. 8 and No. 61.

INTERROGATORY NO. 49:

Does your company have, or has it ever had, or have your predecessor(s) or subsidiaries ever had, a Medical Department? If so, state:

- (a) The year such Medical Department was established;
- (b) Whether or not such Medical Department has operated continuously since being established;
- (c) The name of each director, chief, or head of your Medical Department year by year, beginning with the first year you had a Medical Director or Medical Department, and the last known address and phone number of each;
- (d) State the duties and responsibilities of such Medical Department.

RESPONSE TO NO. 49:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Union Carbide objects to this interrogatory as vague and ambiguous. Subject to its objections, Union Carbide responds as follows:

Union Carbide's Medical Department was formally organized in 1939. Prior to that Union Carbide and Union Carbide facilities consulted physicians as appropriate upon need. The medical directors at Union Carbide have included the following individuals for the years respectively indicated below:

(1) Girard Cranch
[1938-1945]

(4) Thomas A. Lincoln
[1978-1985]

(2) Thomas Nale
[1945-1963]

(5) T. Guy Fortney
[1985-1989]

(3) John J. Welsh
[1963-1978]

(6) Jean B. Case
[1989-Present]

The present duties of Union Carbide's medical director include coordination of all of Union Carbide's medical programs, including employee physical examination programs; recommendations with respect to medical policies, standards and procedures; and administration of medical services at Union Carbide's corporate headquarters, a corporate epidemiology program, a medical program for employees traveling overseas and an alcoholism prevention and treatment program. The medical director reports to the corporate Vice President in charge of Union Carbide's Community and Employee Health, Safety and Environmental Protection Department.

In addition, Dr. Hilton Lewinsohn served as Medical Director, Chemicals & Plastics Group. Dr. Lewinsohn is a recognized expert in asbestos-related medical matters and pathologies. Union Carbide also maintained a medical office at Bound Brook.

INTERROGATORY NO. 50:

Did your company or its predecessor(s) or subsidiaries ever place any warning directly on any of its asbestos-containing product or on their packaging. If so, identify the product(s) and year said warning was first applied.

RESPONSE TO NO. 50:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to

the discovery of admissible evidence. Union Carbide objects to this interrogatory as vague and ambiguous. Subject to its objections, Union Carbide responds as follows:

Union Carbide had used two cautionary statements on its Calidria packaging: The first cautionary statement was used from June 22, 1968 through May 1972, and read as follows: "Warning: Breathing dust may be harmful. Do not breathe dust." The second cautionary statement was prescribed by OSHA in 1972 and was first printed on Calidria packaging in June of that year and was used by Union Carbide until the sale of the Calidria mine and mill in 1985; this second cautionary statement read as follows: "Caution. Contains asbestos fibers. Avoid creating dust. Breathing asbestos dust may cause serious bodily harm."

INTERROGATORY NO. 51:

Did your company or its predecessor(s) or subsidiaries ever stamp or place the name of the company, its initials, or any identifying logo on any of its asbestos-containing products? If so, please state the name brand names of such products, a description of such stamp or logo and the dates such were placed on the referred products.

RESPONSE TO NO. 51:

See General Objection No. 4. Union Carbide also objects to this interrogatory on the grounds that it is overly broad, unduly burdensome and is not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

No. Calidria consisting of raw chrysotile, with a unique short fiber configuration, sold in fibrous and pelletized form. Bakelite was a phenolic resin as previously described. These products were thus not subject to such imprinting.

INTERROGATORY NO. 52:

Has your company, or your predecessor(s) or subsidiaries, ever devised a research plan to develop, or actually developed or had developed, a product which did not contain asbestos and which could be substituted for one or more of your asbestos-containing products? If so, state the date that such research plan was begun and when such asbestos-free product was first placed on the market.

RESPONSE TO NO. 52:

See General Objection No. 4. Union Carbide also objects to this interrogatory on the grounds that it is overly broad, unduly burdensome and is not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Not applicable. Calidria was not an asbestos-containing product, but rather consisted of raw chrysotile fiber, with a unique short fiber configuration. Calidria was sold to manufacturers and producers for use in their products or production processes.

The vast majority of Bakelite did not contain asbestos and customers were free to select which type they preferred to use in manufacturing operations.

INTERROGATORY NO. 53:

Did your company or its predecessor(s) or subsidiaries ever recall any products containing asbestos from the market or stream of commerce? If so, state:

- (a) All details of such recall;
- (b) The name of the product recalled, including the reason for the recall and the names and current addresses of those individuals who determined that it should take place;

- (c) The dates of recall;
- (d) The purpose for the recall.

RESPONSE TO NO. 53:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

No. See Union Carbide's response to Interrogatory No. 52.

INTERROGATORY NO. 54:

Before 1970, did you ever manufacture or sell products which did not contain asbestos and which could be substituted for your asbestos-containing products? If so, state the date such asbestos-free products were first placed on the market.

RESPONSE TO NO. 54:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

No. See Union Carbide's response to Interrogatory No. 52.

INTERROGATORY NO. 55:

Have any products you identified in your response to Interrogatory Nos. 52 and 54 not performed as intended? Please list all such products that have not performed as intended.

RESPONSE TO NO. 55:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. UCC further objects to this interrogatory on the grounds that it is vague, ambiguous and unclear. Subject to its objections, Union Carbide responds as follows:

Not applicable. See Union Carbide's response to Interrogatory No. 52.

INTERROGATORY NO. 56:

Did your company or its predecessor(s) or subsidiaries ever make, order, or arrange for any industrial hygiene surveys regarding asbestos or asbestos-containing dust? If so, give the date of such surveys and state who, or what entity, was responsible for completion of such surveys.

RESPONSE TO NO. 56:

See Union Carbide's responses to Interrogatories No. 8 and No. 45, including the objections set forth therein.

INTERROGATORY NO. 57:

As to either the threshold limit values or maximum allowable concentrations of both asbestos dust and total dust provided by the American Conference of Governmental Industrial Hygienists, state:

- (a) The year in which Defendant or any predecessor(s) or subsidiaries were first advised of such limits or concentrations;
- (b) The name of the employee or official of the company receiving such advice;

(c) How Defendant received notice of such limits or concentrations.

RESPONSE TO NO. 57:

See General Objections 4 and 5. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Moreover, to the extent the interrogatory seeks a scientific definition, it improperly seeks without foundation to require an expert opinion. Inasmuch as the plaintiffs do not allege that they or anyone for whom they state a claim were ever employed by Union Carbide or at any job site controlled by Union Carbide, such information is irrelevant and immaterial to matters at issue in this case. Subject to its objections, Union Carbide responds as follows:

During the time that Union Carbide operated its Calidria business (1963-1985), Union Carbide was aware of and recognized the early (pre-1972 OSHA Standard) Threshold Limit Value set forth by the American Conference of Governmental Industrial Hygienists (ACGIH) and the later Threshold Limit Value established by OSHA in 1972. Union Carbide included the early ACGIH Threshold Limit Value in toxicological reports distributed to Calidria sales personnel and disseminated the later OSHA standard to Calidria customers in material safety data sheets, and AIA and other health and safety literature made available or sent to Calidria customers. Union Carbide also offered to take air samples of the premises of Calidria customers. In evaluating whether a sample met the Threshold Limit Value, Union Carbide has maintained that when uncertainty existed as to distinguishing non-asbestos from asbestos particles, all particles should be counted.

Dr. Harry Rhodes, an industrial hygienist, supervised Union Carbide's dust monitoring program for Calidria customers.

See also Union Carbide's response to Interrogatory no. 14.

INTERROGATORY NO. 58:

Were the threshold limit values or maximum allowable concentrations inquired about in Interrogatory No. 63 for total dust, and not asbestos dust alone?

RESPONSE TO NO. 58:

See Union Carbide's response to Interrogatory No. 57, including all of the objections set forth therein.

INTERROGATORY NO. 59:

State in detail what tests, if any, Defendant ever made with regard to the quantity, quality, or threshold limit values of asbestos dust or particles to which workers were exposed while using, working with or around, or installing your asbestos-containing products.

RESPONSE TO NO. 59:

See Union Carbide's response to Interrogatories 8, 14, 25 and 57, including all of the objections set forth therein.

INTERROGATORY NO. 60:

Please state the following with respect to each expert witness you that you may call during trial of these cases. Please designate with specificity the expert witnesses that you may call, including:

- (a) The name, address, and job classification of each such expert witness;
- (b) The subject matter on which the expert is expected to testify;
- (c) The substance of the facts and opinions to which the expert is expected to testify and a summary of the grounds for each opinion;

- (d) Whether any person identified in subparagraph (a) above has provided a report or other documentation to you, and if so, identify and produce each such document or report;
- (e) Identify all documents that you have provided to each person identified in response to subparagraph (a) above;
- (f) Describe in detail the education and work history of, and identify any books, treatises, articles, published and unpublished reports, studies or other scholarly works authored by any individual identified in response to subparagraph (a) above. Alternatively, in lieu of said response, attach a copy of a resume or curriculum vitae and a list of publications to your answers.

RESPONSE TO NO. 60:

See Preliminary Statement and General Objections, which are incorporated herein as if fully rewritten. Objection the interrogatory is overly broad given the parameters and subject matter of this case. Further objecting, the information requested is not relevant. Also, the interrogatory exceeds the scope of permissible discovery under T.R.C.P. 166b(2)(e) and 166b(3). Further objecting, the question seeks information already in the possession of Plaintiffs, or the reason any such information is not already in the possession of Plaintiffs is because Plaintiffs did not timely provide information and materials to Defendant in a timely manner. Subject to the foregoing objections, defendant incorporates herein by reference Defendant's List of Expert Witnesses and Defendant's Designation of Deposition Testimony (including all supplements), all filed or to be filed in this case.

Subject to the foregoing objections and without waiving same, see General Objection No. 4. Union Carbide objects to this interrogatory on the grounds that it purports to call for disclosure of information protected by the attorney-client privilege and work product doctrine. Union Carbide further objects on the grounds that this interrogatory improperly and prematurely seeks the disclosure of experts in contravention to the statutory procedures of discovery. Subject to its objections, Union Carbide responds as follows: Discovery is ongoing and, to date, Union Carbide has not yet determined which expert witnesses, if any, it will call at a trial of this case. Union Carbide may call, use or rely on the following:

The discovery process and Union Carbide's own investigation are still ongoing. Union Carbide, so far, has retained no expert for this case. Union Carbide has not yet determined which experts, if any, it will call or consult with at or for a trial of this case, or

what material any such experts would rely upon. In the past Union Carbide has consulted with many experts about its Calidria product. They include the following, some of whom are kept on a general retainer:

Dr. Hilton Lewinsohn, Hartford, CT	(MD)
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Dr. Ed Ilgren Bryn Mawyr, PA	(Mineralogist)
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Dr. Mark Van Baalen Harvard University Cambridge, MA	(Mineralogist)
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Dr. Allen Gibbs Pathology Department Landough Hospital Penarth, Glamorgan UK CFC I XX	(Pathologist)
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Professor Fred Pooley School of Engineering Dept. of Mining & Minerals University of Wales P.O. Box 917 Cardiff, Wales CF21XH	(Mineralogist)
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Fred A. Mumpton Rockport, New York	(Geologist)
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Eric Chatfield
Carlo Martino
Wm. Douglas Neal

The above experts will be able to testify about either the unique physical properties of the Calidria asbestos, such as its short fiber length and lack of tremolite or other contamination, or the lack of health hazards from exposure to Calidria or both.

See also response to Interrogatory No. 60 in Union Carbide's responses to Plaintiffs' Master Interrogatories previously filed with this Court.

INTERROGATORY NO. 61:

Please state the name, present address and present telephone number, along with the experience and qualifications, if applicable, of each and every person, known to Defendant or to Defendant's agents, having knowledge of facts relevant to these cases involving, but not limited to:

- (a) Identification of asbestos-containing products to which each and every individual Plaintiff, separate and distinct from all other Plaintiffs within the group, allegedly was exposed or facts disputing the identification of asbestos-containing products in this case.
- (b) Each and every individual Plaintiff's, separate and distinct from all other Plaintiffs within the group, alleged damages, injuries and/or facts disputing each and every Plaintiff's alleged damages and/or injuries;
- (c) The negligence of any person or entity other than Defendant which Defendant contends was a cause of each and every individual Plaintiff's, separate and distinct from all other Plaintiffs within the group, alleged injuries and/or damages;
- (d) Each of Defendant's defenses enumerated in Defendant's last filed Answer in each of these cases.

RESPONSE TO NO. 61:

See Preliminary Statement and General Objections, which are incorporated herein as if fully rewritten. Objection the interrogatory is overly broad, vague, ambiguous, unnecessarily expensive, harassing, and annoying. Objection the question seeks irrelevant information and information protected by the work product exemption. Objection the

Interrogatory exceeds the scope of permissible discovery pursuant to T.R.C.P. 166b. Subject to the foregoing objections, Defendant reserves the right to supplement this answer, subject to all objections now raised or that can be raised if information later becomes available. Defendant incorporates herein by reference Defendant's List of Potential Witnesses, Designation of Deposition Testimony, and Designation of Expert Witnesses (which includes all supplements designations), all filed or to be filed in this case.

Subject to the foregoing objections and without waiving same, see General Objection No. 4. Union Carbide objects to this interrogatory as vague and ambiguous. Subject to its objections, Union Carbide responds as follows:

The responses to these interrogatories were prepared by counsel for Union Carbide Corporation based on information either contained in business records or provided by present and former Union Carbide employees. In particular, John L. Myers, former Product and Production Manager for asbestos (Calidria) has provided much information. Sales and other business records used to respond to these interrogatories are under the control of Mrs. Virginia Ruszczyk, Custodian of Records, Kelley Drye & Warren, Two Stamford Plaza, Stamford, CT 06901. John Myers has been involved in various aspects of Union Carbide Corporation's Calidria asbestos business since 1966, and has familiarity with many facets of the business and of the Calidria product. From 1970-1981, Mr. Myers held the Metals Division position of Marketing Manager - [for] asbestos. From 1981 until June 30, 1985, he served in the Metals Division as Product and Production Manager - [for] asbestos. John Myers is no longer employed by Union Carbide. John Myers was first employed by Union Carbide in May 1951.

In addition, the discovery process and Union Carbide's own investigation are ongoing. As a result, Union Carbide may yet identify individuals familiar with the particular facts of this case. See also response to Interrogatory No. 60.

See also response to Interrogatory No. 61 in Union Carbide's responses to Plaintiffs' Master Interrogatories previously filed with this Court.

INTERROGATORY NO. 62:

Please identify documents which will be used at time of trial, (Exhibit List, Deposition List), which are relevant to each of Defendant's enumerated defenses in Defendant's last filed Answer.

RESPONSE TO NO. 62:

See Preliminary Statement and General Objections, which are incorporated herein as if fully rewritten. Objection this interrogatory is overly broad, vague, ambiguous, unduly burdensome, unnecessarily expensive, harassing, and annoying. Objection the question seeks information protected by the work product, witness statements, party communications, and expert exemptions of T.R.C.P. 166b and the attorney-client privilege of T.R.C.E. 503. Subject to and without waiving the foregoing objections, Defendant incorporates herein by reference Defendant's Designation of Exhibits, Deposition Testimony, Potential Fact Witnesses and Expert Witnesses (including all supplemental designations) filed or to be filed in this case. Defendant incorporates herein by reference all responses to discovery served by all Plaintiffs in this case. Defendant expressly reserves the right to use all documents covered by all authorizations and releases Defendant(s) has/have requested Plaintiff(s) to provide to Defendant(s). Defendant expressly reserves the right to use all documents filed, designated or relied upon by other Defendants or by Plaintiffs in this case.

Subject to the foregoing objections and without waiving same, see General Objection No. 4. Union Carbide objects to this interrogatory as vague and ambiguous. Subject to its objections, Union Carbide responds as follows:

Discovery is ongoing and, to date, Union Carbide has not determined which documents, if any, will be used at time of trial in these cases. Union Carbide may use one or more documents from the following collections:

Exhibits

- (1) Invoices for sales made to facilities.
- (2) Sample Warning Labels used on Calidria packages.
- (3) Various brochures and other literature relating to health and safety disseminated to Union Carbide Calidria customers.
- (4) Bakelite literature.

Union Carbide has not completed its determination of witnesses, if any, it will call or exhibits it will introduce at a trial in this case and reserves the right to amend and supplement the above list of witnesses and exhibits.

See also response to Interrogatory No. 62 in Union Carbide's responses to Plaintiffs' Master Interrogatories previously filed with this Court.

INTERROGATORY NO. 63:

When, if ever, did Defendant or any of its predecessors-in-interest first receive a copy of the article entitled "A Health Survey of Pipe Covering Operations in Constructing Naval Vessels", published in January, 1946 in the Journal of Industrial Hygiene & Toxicology, and authored by W. Fleischer and P. Drinker, et al ("the Fleischer-Drinker Report")?

- (a) Identify the name and position of the employee or officer who received same;
- (b) Please produce all documents generated by Defendant which discuss or in any way reference the "Fleischer-Drinker" study prior to 1968;
- (c) Please produce all documents upon which your responses above are based;
- (d) Please identify the name(s) and address(es) of any person(s) who can verify your above response;
- (e) Did Defendant ever rely on the Fleischer-Drinker Report in whole or in part as a basis that Defendant's asbestos products could be used in the workplace without risk of asbestos-related health impacts to the consumer and/or bystander;
- (f) If so, please produce every document which evidences in any way that Defendant relied on the Fleischer-Drinker Report in whole or in part for the proposition stated in Interrogatory No. 63(a) above;
- (g) If your answer to 63(e) is yes, when was the first date Defendant relied on the Fleischer-Drinker report in whole or in part for the proposition stated in 63(e) above?

RESPONSE TO NO. 63:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its obligations, Union Carbide responds as follows:

Union Carbide was never in the business of selling asbestos containing products to naval ship yards. After a reasonable review of its files, Union Carbide can presently only confirm that from and after July 1982, when Dr. Hilton Lewinsohn joined Union Carbide's staff, it possessed the article entitled "A Health Survey of Pipe Covering Operations and Constructing Naval Vessels" by Fleischer, Vilis, Galle and Drinker.

INTERROGATORY NO. 64:

When, if ever, did Defendant or any of its predecessors-in-interest first receive a copy of the article entitled "A Study of Asbestos in the Asbestos Textile Industry", published in 1938 in Public Health Bill, No. 241, U.S. Public Health Service and authored by W. (c) Dreessen ("the Dreessen Report")?

- (a) Identify the name and position of the employee or officer who received same;
- (b) Please produce all documents generated by Defendant which discuss or in any way reference the "Dreessen" study prior to 1968;
- (c) Please produce all documents upon which your responses above are based;
- (d) Please identify the name(s) and address(es) of any person(s) who can verify your above response;
- (e) Did Defendant ever rely on the Dreessen Report in whole or in part as a basis that Defendant's asbestos products could be used in the workplace without risk of asbestos-related health impacts to the consumer and/or bystander;

- (f) If so, please produce every document which evidences in any way that Defendant relied on the Dreessen Report in whole or in part for the proposition stated in Interrogatory No. 63(a) above;
- (g) If your answer to 63(e) is yes, when was the first date Defendant relied on the Dreessen report in whole or in part for the proposition stated in 63(e) above?

RESPONSE TO NO. 64:

See General Objection No. 4. Union Carbide further objects to this Interrogatory on the grounds it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to its objections, Union Carbide responds as follows:

Union Carbide was never in the business of selling asbestos containing products to textile industries, and can find no record of having obtained this article.