

NO. 990-23333

IN RE: ASBESTOS LITIGATION) IN THE DISTRICT COURTS OF
MASTER ASBESTOS FILE) HARRIS COUNTY, TEXAS

DEFENDANT OWENS-CORNING FIBERGLAS CORPORATION'S
SUPPLEMENTAL RESPONSES TO PLAINTIFFS' INTERROGATORIES

Defendant, Owens-Corning Fiberglas Corporation ("OC"), by counsel, supplements and restates its responses to Plaintiffs' First Interrogatories to Defendants, as follows:

INTERROGATORY NO. 1:

Identify the registered name of answering defendant, as well as all prior names or predecessor entities by which defendant has existed.

RESPONSE TO INTERROGATORY NO. 1:

OC states that its registered name is and always has been Owens-Corning Fiberglas Corporation. OC further states that it does not have a "predecessor" as it understands the definition of that term.

INTERROGATORY NO. 2:

Identify all past and present divisions, subsidiaries or affiliated companies of the answering defendant, having any function which now or in the past engaged in any phase of mining, manufacturing, sale, supply, purchase, application, installation, relabeling, processing or distribution of asbestos or asbestos-containing products. With respect to each of such divisions, subsidiaries or companies, set forth with particularity the precise relationship with the answering defendant the dates thereof, and identify the nature and extent of such functions during the relevant periods of time in which such activities have or had occurred.



SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 2:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC no longer sells or distributes asbestos-containing products. Further, OC has never been in the business of mining, selling and/or distributing raw asbestos fibers.

With regard to those OC subsidiaries which were previously involved in the distribution of asbestos-containing products, OC states as follows:

The Mechanical Operating Division of OC was engaged in the manufacture of asbestos-containing Kaylo from May 1958 to November 1972 at OC's Berlin, New Jersey, plant. In addition, other divisions of OC were engaged in the manufacture and sale of other asbestos-containing insulation products at OC's Newark, Ohio; Bloomington, Illinois; Anderson, South Carolina; and Huntingdon, Pennsylvania, plants. See attached Exhibit A, a chart listing those asbestos-containing products previously manufactured and/or distributed by OC and the dates of each product's manufacture and/or distribution.

In 1950, OC created a subsidiary known as the Fiberglas Engineering and Supply Company. The Fiberglas Engineering and Supply Company (which subsequently became the Supply and Contracting Division and eventually the Contracting Division of OC) was engaged in the business of distributing the products of OC and others as well as in the contract application of these

products. Asbestos-containing insulation products of OC and others were among those products distributed and/or applied by various contract units in this division.

Additional information pertinent to the subject matter of this interrogatory would be located in OC's collection of documents related to asbestos as set forth below.

OC has collected numerous records and documents relating to asbestos generally. These documents are stored in OC's document library located in Richmond, Virginia.

The document library contains existing documents generated and/or received at OC's corporate headquarters in Toledo, Ohio; its technical center in Granville, Ohio; and its manufacturing facilities in Berlin, New Jersey; Bloomington, Illinois; Newark, Ohio; and Santa Clara, California. The library also contains certain files obtained from Fiberglas Engineering and Supply Company in San Francisco, California, and Seattle, Washington. Other documents relating to Fiberglas Engineering and Supply Company of San Francisco are maintained by the law firm of Popelka, Allard, McCowan & Bondonno in San Jose, California, pursuant to an agreement contained in Defendant OC's response to Plaintiffs' Request for Production in Heley, et al. v. Fibreboard, et al., June 10, 1989. Additional documents relating to OC's supply and contracting units may be in the possession of various OC trial counsel.

The library contains responsive, non-privileged materials generated before and during the time that OC manufactured asbestos-containing Kaylo insulation.

At a mutually convenient time, OC will make available for inspection by plaintiffs' counsel the non-privileged documents stored in its document library. Counsel for OC will provide an index, which sets forth the file titles of those files contained in each box, and personnel to assist plaintiffs' counsel in locating documents responsive to the discovery requests in this matter. OC will also make arrangements for copying documents which plaintiffs' counsel may select. Copying and shipping costs will be borne by plaintiffs, unless otherwise ordered by the Court.

OC's library includes documents that contain information which is considered to be proprietary and trade secret. Therefore, such documents will be produced only after the entry of an appropriate protective order.

OC has removed from the library any existing materials which it contends are protected from discovery as privileged attorney-client communications, attorney work product materials, or otherwise beyond the scope of permissible discovery. Each document removed as privileged has been substituted with an easily identifiable marker which describes the privileged document by document type, (e.g., memo, letter, note), date, author, recipient, subject matter, and basis for objection. These markers may be designated for copying in the same manner as non-

privileged documents. OC refers plaintiffs to attached Exhibit B, a copy of an index of those documents generated and/or received by OC prior to 1973 which OC claims are protected from discovery as attorney-client communications and/or attorney work product, and to attached Exhibit C, a copy of an index of those document generated and/or received by OC after 1972 which OC claims are protected from discovery as attorney-client communications and/or attorney work product.

Visits to the library may be scheduled through OC's local counsel.

INTERROGATORY NO. 3:

List by brand name [sic] all of your asbestos-containing products. Your asbestos-containing products includes all products which contain any amount of asbestos manufactured, sold, designed, supplied, distributed, mined, milled, relabeled, resold, processed, applied or installed [sic] by you or for you by others. By you and yours, Plaintiffs refer to Defendant, to all your predecessors in interest, (whether by purchase, merger, consolidation or otherwise), to all of your subsidiaries, divisions, joint ventures or affiliates. As to each product, state the following:

- a. type of product (e.g., acoustical [sic] plaster, fireproofing, etc.);
- b. the date the product first went into production;
- c. the last date the product was produced;
- d. the last date the product was sold;
- e. all manufacturing locations;
- f. dates of manufacture at each location;
- g. the percentage of asbestos (state if percentage is by volume or weight), and the dates and all reasons for any modification thereof;
- h. the type of asbestos;

- i. the specific source of asbestos with dates;
- j. the color, physical characteristic, and appearance of the product;
- k. a full and precise description of the package in which the product was sold, including, but not limited to, type of package, size, color(s), and writings thereon;
- l. all other names under which the product was sold;
- m. the number and dates of each patent or patent application as to the product;
- n. if the product continued to be produced after the deletion of asbestos, all reasons why the asbestos [sic] was deleted, the identity of the person who made the decision to delete the asbestos, and the date the product was first produced without the asbestos.
- o. if the product is no longer produced, all reasons it was discontinued, the identity of the person who made the decision to discontinue the product, the brand name of the replacement product, and the date the replacement product first went into production;
- p. a precise description of your identifying logo or initials and the dates of inclusion on the product;
- q. state during what period of time such product has been associated with defendant;
- r. identify all sales literature, including brochures, advertisements, pamphlets or other material describing such product, its uses and methods of application or installation.
- s. identify any warning labels, inserts or other writings provided with such product and with every such printed warning, state what period of time it has or had accompanied the product, the exact wording of the warning, any amendments made to the wording, where the warning was located on each product or packaging, and on what asbestos products the warning appear(ed);
- t. geographic distribution range of each such product.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 3:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

With regard to subparts (a) - (d), (g), (h), and (q), OC states that it manufactured asbestos-containing Kaylo insulation products from May 1958 to November 1972. OC distributed such products from April 1953 to April 1973, as indicated by a review of OC's collection of invoices for asbestos-containing Kaylo insulation products. OC also had limited involvement in the manufacture and/or distribution of other asbestos-containing products. See attached Exhibit A, a chart listing those asbestos-containing products previously manufactured and/or sold by OC.

For all types of asbestos-containing Kaylo which OC manufactured by the pan mold process (from 1958 to 1972), OC's formula generally included amosite asbestos, chrysotile asbestos, quicklime, silica, diatomaceous earth, clay, chromite, limestone and sodium silicate. For pan mold Kaylo, the approximate percentage of amosite as compared to chrysotile fibers varied between one-half and two-thirds of the total percentage of the asbestos content of Kaylo.

OC also manufactured asbestos-containing Kaylo 10 from 1970 to 1972 using the filter press process. The formula for filter press Kaylo 10 generally included chrysotile asbestos, celite, hydrated lime and alum.

The asbestos content of Kaylo 10 was approximately 15% ($\pm 3\%$) by weight; the asbestos content of Kaylo 20 was approximately 22% ($\pm 3\%$) by weight; and the asbestos content of Kaylo 17 was approximately 13% ($\pm 3\%$) by weight. Slight changes were made in the batch formulations continually throughout the period of time that OC manufactured asbestos-containing Kaylo in an attempt to improve the product. For precise information on asbestos content and type, OC refers plaintiff to its batch formulations which are located in OC's document library. OC will provide a compilation of such formulations upon request and at cost.

With regard to subparts (e) and (f), OC states that its asbestos-containing Kaylo insulation products were manufactured at its Berlin plant, P.O. Box 100, Berlin, New Jersey 08009, from May 1958 until November 1972, when OC ceased the production of asbestos-containing Kaylo products. OC's asbestos-containing Fyrcor product was manufactured at its Bloomington plant, 1111 West Perry Street, Bloomington, Illinois 61701, from April 1970 until November 1972, when OC ceased the production of Fyrcor. The Newark plant, Case Avenue, Newark, Ohio 43055, began operation as an OC facility in 1938 and produced a small quantity of asbestos-containing products including cements, sewn blankets, metal mesh blankets and Type II Mastic. OC's Anderson plant, Starr Road, P.O. Box 1367, Anderson, South Carolina 29622, which began operation in July 1951, produced a small quantity of asbestos-containing products including polyester resins and adhesives. OC's Huntingdon plant, 14th and Penn Streets, Post

Office Box 382, Huntingdon, Pennsylvania 16652, produced its asbestos-containing Continuous and Chopped Strand Mat.

The Bloomington, Illinois, plant was sold in 1982. The Berlin, New Jersey plant ceased operation in 1993. The other plants are still in operation producing nonasbestos-containing products.

With regard to subpart (j) and (r), OCC states that Kaylo block and Kaylo core were white; Kaylo 20 block and Kaylo 20 pipe were pink; and Kaylo pipe was grayish-white. OC also refers plaintiff to attached Exhibits D, E, F, G and H, product data and application information it provided to its customers.

With regard to subpart (i), OC objects specifically to the term "specific sources" as vague and ambiguous. Without waiving its objection, and assuming plaintiffs are seeking information regarding suppliers of raw asbestos, OC states that it does not have in its possession records dating before 1964 regarding the amount of asbestos purchased or used by OC. However, presently available records for the years 1964-1972 indicate that OC purchased 20,072 tons of asbestos during that time period for use in manufacturing insulation. OC purchased raw asbestos from the following companies:

Lake Asbestos of Quebec
120 Broadway
New York, NY 10005
(Sales Office)

approximately 1,095 tons of
Chrysotile -- Grades 4T-4, 7D-3,
and 6D-3

North American Asbestos
Corp.
150 N. Wacker Drive
Chicago, Illinois 60606
(As of 10/226/71)

approximately 11,786 tons of
Amosite - Grades W3, AW, GW, S-33,
GK, M, and K-3

Carey Canadian Mines, Ltd.
Box 190
E. Broughton Station
Quebec
(As of 1/330/69)

approximately 6,116 tons of
Chrysotile - Grades 6D-1, 7D-5,
4T-1, 4T-7, 7M-90, 7D-1, and 4D-1

Johns-Manville
J.M. Sales Corporation
P. O. Box 556
Cleveland, Ohio 44193
(As of 5/116/72)

approximately 75 tons of
Chrysotile - Grade 4D-28

OC is aware that at least one other asbestos distributor,
Ruberoid/GEAF Corporation, has claimed that it sold asbestos to
OC. OC also may have purchased asbestos from the U. S. Govern-
ment.

With regard to subpart (k) and (p), OC states that its
asbestos-containing Kaylo products were packaged in corrugated
containers. See attached Exhibits I, J, K and L, draw-
ings/photographs of packaging for OC's asbestos-containing
products. OC did not stamp the name of the company, its initials
or any identifying logo on its asbestos containing products.

With regard to subpart (l), OC also objects to this subpart
as being vague and ambiguous. Without waiving its objections and
assuming that plaintiffs are seeking information regarding
rebranding agreements between OC and other companies, OC states
that OC's asbestos-containing Kaylo was rebranded for Eagle-
Picher under the name "Hy-Lo" beginning around 1958/1960; the
date the rebrand ended is unknown at present. Asbestos-contain-

ing Kaylo was rebranded for Armstrong Cork under the name "Armstrong LK" insulation; at the present time, OC is not aware of the dates of these transactions.

OC had a rebrand agreement with the Pabco Division of Fibreboard Corporation between 1960 and the late 1960s or early 1970s by which Pabco's insulation was rebranded as "Kaylo" for OC. Also, Johns-Manville manufactured and rebranded insulation for OC during 1958-1960 (exact dates not known). Eagle-Picher manufactured and rebranded asbestos-containing cements for OC from approximately 1958-1968. Copies of the agreements between OC and Fibreboard Corporation (Pabco), Johns-Manville, and Eagle-Picher are attached as Exhibits M, N and O.

OC also distributed Owens-Illinois' asbestos-containing Kaylo insulation products from April 1953 to May 1958. See attached Exhibit P, a copy of the distribution agreement between OC and Owens-Illinois.

See also attached Exhibit A, a chart listing those asbestos-containing products previously manufactured and/or distributed by OC for additional information pertaining to these rebranded products.

With regard to subpart (n) and (o), OC states that it did not invent or design every asbestos-containing product that it manufactured and/or sold and does not have a compilation of all the information requested herein. However, see attached Exhibit Q, particularly Schedule B of the purchase agreement between OC and Owens-Illinois, for information regarding Kaylo patents

acquired by OC when it acquired the Berlin, New Jersey, Kaylo manufacturing plant from Owens-Illinois in May 1958, including patent numbers, inventor names, and issue dates. OC will provide copies of the patents listed on part 11 of Schedule B upon request and at cost.

In addition, OC later developed other patents relating to Kaylo. See attached Exhibit R.

The asbestos-containing Fyrcor product, originally known as Unarcoboard, was patented by Unarco Industries.

See also attached Exhibit S, a list of patents for OC's asbestos-containing resin products; attached Exhibit T, a list of patents for OC's asbestos-containing Continuous and Chopped Strand Mat product; and attached Exhibit U, a list of patents for OC's asbestos-containing roofing products.

With regard to subpart (n) and (o), OC generally states that in 1963, it began investigating the potential use of glass and other fibers in its asbestos-containing Kaylo products. The purpose of this research was to improve the impact, strength and other physical properties of Kaylo by using fibers which were being produced by OC. The research was not designed to eliminate asbestos from Kaylo and was not prompted by asbestos-related health concerns. This initial research was unsuccessful because the glass fibers then available were attacked by the alkali present in the manufacturing process, resulting in a loss of fiber integrity.

In November 1966, OC scientists met at its research center in Granville, Ohio. Evolving information about the health risks associated with asbestos exposure was discussed at this time. Although this issue was still being debated in the scientific community, OC officials decided that the prudent course of conduct would be to remove asbestos completely from its Kaylo products. Research on substitute fibers was initiated. In December of 1966, a label was placed on Kaylo packaging advising of health concerns and work practices. See Response No. 9.

The first step in the research to find a substitute fiber was to determine whether any commercially available fiber could be used in lieu of asbestos. The substitute fibers would have to be mixed into the batch and tolerate the manufacturing process which involved high alkali concentrations, high temperatures, and high pressure. Further, the finished product would have to perform adequately and maintain its integrity on extremely hot surfaces after installation.

Numerous fibers were tested including mineral wool, Kaowool, Fiberfax, potassium titanate, nylon, dacron, rayon, silk, linen, polyester, acrylic, Nomex, wool, bagasse, sisal, excelsior, jute, kemp, sawdust, straw, coconut fiber, corn cobs, peanut hulls, oat hulls, walnut shells, cotton linters, aspen wood fibers, pine wood fibers, Calsi-Crete wood fibers, unbleached kraft, bleached kraft, hardboard chips, softwood chips, bleached hardboard pulp, bleached softwood pulp, unbleached hardboard pulp, unbleached softwood, sulfate bleached softwood, sulfate bleached hardwood,

usutu, alpha cellulose, and metal fibers. Hundreds of experimental samples of products were produced and tested; none of these potential substitutes was found to be acceptable.

In 1970, OC developed a glass composition which could withstand the Kaylo manufacturing process; however, OC discovered during testing that the newly developed fiber did not adhere to the Kaylo material. Thus, even though the fibers survived the manufacturing process, they did not provide reinforcement to the product. The result was a weak and crumbling material.

OC tried a variety of techniques in an attempt to create a bond between the glass fibers and the Kaylo matrix. The problem faced by the OC researchers was the availability of an appropriate suspension agent. The primary function of chrysotile asbestos in Kaylo was to suspend the various materials during the manufacturing process. Without chrysotile, the glass fibers would settle out of the batch resulting in a nonuniform distribution of the reinforcing fiber. This difficulty was overcome in late 1971 when researchers discovered that certain wood pulps could serve as a suspension agent.

By early 1972, asbestos-free Kaylo was being produced for testing and test marketing at the Berlin, New Jersey, Kaylo manufacturing plant. The product was found to be acceptable, and full scale production began in November 1972.

Richard F. Shannon was in charge of the research efforts to locate a substitute for asbestos in OC's Kaylo products. At the present time, Mr. Shannon is retired. Others involved in this

project included Dana Bishop, retired; Jerry Helser, currently employed by OC; and Charles Schramm, retired. Numerous others were involved in this research effort throughout the entire company.

With regard to subpart (s), OC states that in 1964, at the suggestion of Eagle-Picher, OC agreed to the placement of a cautionary label on bags of OC-1100 (SC-30) and OC-660 (SC-40) cement manufactured by Eagle-Picher and rebranded for OC. These labels read as follows: "CAUTION:: This product contains asbestos fiber. Inhalation of asbestos in excessive quantities over long periods of time may be harmful. If dust is created when this product is handled, avoid breathing the dust. If adequate ventilation control is not possible, wear respirators approved by the U.S. Bureau of Mines for pneumoconiosis producing dust." See attached Exhibit V.

In December 1966, OC handstamped cautionary labels on containers of Kaylo insulation which read as follows: "This product contains asbestos fiber. If dust is created when this product is handled, avoid breathing the dust. If adequate ventilation control is not possible, wear respirator approved by the U. S. Bureau of Mines." Cartons with preprinted warnings were used after February 1967. No reproductions of the hand-stamped packages are available. However, attached Exhibit W accurately reflects the labeling stamped on all packages from December 1966 to November 1970.

In November 1970, OC changed the Kaylo cautionary label to read: "CAUTION - Product contains asbestos fiber. Inhalation of dust in excessive quantities over long periods of time may be harmful. Avoid breathing dust. If adequate ventilation is not possible, wear respirators approved by the U. S. Bureau of Mines for pneumoconiosis producing dust." See attached Exhibit X.

After its purchase of the Bloomington, Illinois, plant from Unarco on April 15, 1970, OC continued to use the warning labels already printed on Unarcoboard (Fyrcor) packaging which read as follows: "CAUTION - This product contains asbestos fiber. Inhalation of asbestos in excessive quantities over long periods of time may be harmful. If dust is created when this product is handled avoid breathing the dust. If inadequate ventilation control is not possible, wear respirators approved by the U. S. Bureau of Mines for pneumoconiosis producing dusts." See attached Exhibit Y.

In May 1971, OC revised the Fyrcor warning to read: "WARNING - This product contains asbestos fibers. Inhalation of asbestos fibers in excessive quantities over long periods of time may be harmful. Avoid breathing the dust. If adequate ventilation control is not possible, wear respirators of a type approved by the U. S. Bureau of Mines for pneumoconiosis dusts." See attached Exhibit Z.

The author of the 1966 Kaylo cautionary label is presently unknown; however, J. M. Briley (retired) directed that the cautionary label be printed on Kaylo product cartons. Per

Saverstrom (retired) was involved in the change of Kaylo's cautionary label in 1970. The person responsible for the change of Pyrocor's label in 1971 is also unknown; however, Dr. Jon Konzen participated in this activity. OC did not author the warnings for OC-110 or OC-660 cements or the original warning for Unarcoboard.

The above described cautionary labels were directed to all users of those products.

By 1970, OC also provided Material Safety Data Sheets for its asbestos-containing Kaylo products upon request. These MSDS indicated the then recommended TLV for asbestos fibers and recommended leak or spill procedures and specific respirator and ventilation precautions for asbestos dust. See attached Exhibit AA.

Additionally, OC, on its own and through the National Insulation Manufacturers Association, prepared and disseminated to contractors, distributors, and insulators information regarding potential health hazards associated with asbestos-containing insulation. In 1968, NIMA published a pamphlet entitled "Recommended Health Safety Practices for Handling and Applying Thermal Insulation Products Containing Asbestos." This pamphlet was distributed at meetings of the Insulation Distributor Contractors National Association. OC also directly distributed the pamphlet to its branch managers, Supply and Contracting (S & C) supervisors, Home Building Products (HBP) supervisors, and S & C manag-

ers with instructions to review the matter with their salesmen. See attached Exhibit BB, a copy of this pamphlet.

OC also participated, through the educational and legislative committee of NIMA and at regional meetings of the IDCNA, in the presentation of health and safety programs to distributors and contractors. At those meetings, contractors and distributors: (1) were advised of the current status of health and safety activities pertinent to their businesses; (2) were given copies of the NIMA publications on health and safety practices and medical research literature; (3) discussed the contents of those publications; (4) discussed the merits of the proposed pre-employment and periodic physical examination programs on a cooperative employer-employee basis; (5) were urged to establish regional health and safety committees; and (6) were given an opportunity to ask questions of the experts. These NIMA programs were presented to contractors and distributors with the intention that they would instruct their employees accordingly.

In 1972, Donald Bradshaw, OC's Region Manager of Power and Process for the West Coast and Chairman of the National Insulation Contractor's Association's Occupational Health and Safety Committee, authored, along with other committee members, a pamphlet entitled, "Safety Reminders." See attached Exhibit CC. It is OC's present understanding that this pamphlet was disseminated to contractors, distributors, and insulators.

OC further refers plaintiffs to attached Exhibit DD, a pamphlet entitled "Caution: Asbestos Dust . . ." published by the

National Institute for Occupational Safety and Health. This pamphlet was distributed by OC to its asbestos worker employees on or around October 30, 1973.

OC also held meetings with the International Association of Heat and Frost Insulators and Asbestos Workers and the Glass Bottle Blowers. The meeting between OC and the president of the International Association of Heat and Frost Insulators and Asbestos Workers took place in the union's offices in Washington, D. C; the exact date of this meeting is unknown but OC believes it was before 1972. OC is uncertain as to the details regarding its meeting with the Glass Bottle Blowers. At these meetings, OC attempted to discuss the then-known health concerns regarding asbestos.

Also, OC management held meetings with the unions at OC's Berlin, New Jersey, manufacturing plant and made special presentations to employees to discuss those health concerns related to asbestos.

OC was involved in all of the above activities in order to ensure the safe use of its asbestos-containing products.

With regard to subpart (t), OC states that during the time period it sold asbestos containing products, the products were generally distributed throughout the United States.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 4:

Did you claim your asbestos product(s) to be safe, effective and/or easy to handle? If so, identify all documents, which have made such assertions, including, but not limited to, brochures of advertisements (radio, television or printed), and revisions thereof by publication(s) and date. Your asbestos products includes all products which contain any amount of asbestos manufactured, sold, designed, supplied, distributed, mined, milled, relabeled, resold, processed, applied or installed by you or for you by others.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 4:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

To the extent that plaintiffs are seeking information regarding warranties, OC states that it did not make any warranties with respect to its asbestos-containing products. OC further states that it did not advertise in the usual way via television or magazines, etc. However, during the time period in which OC manufactured asbestos-containing products, it provided product data and application information to purchasers. See attached Exhibits D, E, F, G and H.

To the extent that plaintiffs are seeking information regarding cautions or warnings that OCC may have distributed with its products, OC refers plaintiffs to Supplemental Response No. 3.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 5:

Did you specifically inform the purchaser or user of your products at the time your product was sold, installed, used, supplied or subsequently, [sic] that your products could cause lung cancer, asbestosis, and mesothelioma? If so, identify the document containing such information by date and location.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 5:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC objects to this interrogatory on the grounds that it is argumentative in that it assumes that OC had knowledge "at the time [its] product [were] sold, installed, used [or] supplied... that exposure to asbestos containing Kaylo insulation products could cause lung cancer, asbestosis, and mesothelioma." Without waiving its objections, OC refers plaintiffs to Supplemental Response No. 3 for information regarding its decision to place cautionary labels on its asbestos containing products; and to Supplemental Response No. 9 for information regarding OC's evolving knowledge regarding the potential health effects of these products.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 6:

Identify any and all labelling or relabelling agreements between answering defendant and other entities, including other Defendants concerning asbestos containing products and materials.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 6:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC refers plaintiffs to Supplemental Response No. 3 and specifically to Exhibits M, N, O and P.

INTERROGATORY NO. 7:

Have you ever mined asbestos? If so, as to each mine and type of asbestos produced there, state the following:

- a. the location;
- b. the dates of operation by you;
- c. the type (e.g., chrysotile, amosite, etc.) produced;
- d. the grade of each type of asbestos fiber produced, the percentage of each grade to the total fiber produced by year or other period, and the recommended use of the grade of fiber;
- e. the gross annual sales in dollars and in volume for each type and grade of asbestos fiber;
- f. a full and precise description of the package in which the asbestos fiber was sold, including, but not limited to, type of package, size, color(s), and writing thereon;
- g. all names under which the asbestos fiber was sold;
- h. the identity of all records reflecting the sale or transfer of said asbestos fiber;
- i. the identity of the present custodian of photographs of the burlap bags in which the asbestos fibers was stored and/or shipped;
- j. the address of each sales office and sales region for the sale of the asbestos fiber.
- k. the name of each authorized distributor of the asbestos fiber produced;

- l. the identity of each owner and operator of the mine prior to the date you first began operation of the mine, and the dates thereof, and
- m. the identity of each owner and operator of the mine subsequent to your ceasing operation of the mine.

RESPONSE TO INTERROGATORY NO. 7:

OC has never been in the business of mining raw asbestos fibers.

INTERROGATORY NO. 8:

Is answering defendant aware of the possible connection between exposure to asbestos or asbestos products and:

- a. Asbestosis?
- b. Lung cancer, all cell types?
- c. Mesothelioma?
- d. Colon cancer?
- e. Stomach cancer?
- f. Laryngeal cancer?
- g. Cancer of the Kidney?
- h. Cancer of the Esophagus?
- i. Other gastrointestinal cancers?
- j. Pneumoconiosis?

RESPONSE TO INTERROGATORY NO. 8:

OC objects to this interrogatory on the grounds that the information sought herein is more appropriately the subject of competent expert testimony. Without waiving its objections, OC is now aware of medical literature associating various health concerns with the inhalation of asbestos. According to medical

literature, inhalation of asbestos fibers over an extended period of time may cause asbestosis in some individuals.

OC recognizes that some individuals who have had excessive respiration of asbestos fibers for prolonged periods of time have been afflicted with mesothelioma. However, many cases of mesothelioma have been reported where there has been no exposure of the individual to asbestos fibers. Therefore, the most that can be said from a medical standpoint is that mesothelioma is not inconsistent with a history of respiration of asbestos fibers.

OC further states that the hypothesis that asbestos is causally related to lung cancer, other than mesothelioma, is not supported by controlled scientific studies. However, OC is aware of medical literature which indicates varying degrees of relationships between certain types of cancer and the inhalation of asbestos dust.

OC further refers plaintiffs to Response to Interrogatory No. 9.

INTERROGATORY NO. 9:

If your answer to the above interrogatory, as to any or all of its sub-parts, is affirmative, identify:

- a. When and how defendant first learned of such connections;
- b. If knowledge was obtained by attendance at any conference, lecture, convention, symposium or meeting, identify such meeting and provide the identity of person attending or documents obtained;
- c. If knowledge was obtained from medical or scientific studies, or any other published work, identify same;

- d. If otherwise obtained, identify manner of receipt of document or communication.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 9:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC is now aware of medical literature associating various health concerns with the inhalation of certain asbestos fibers. However, there was no specific date as to when OC became aware of all of the relationships between various types of exposure to asbestos dust and various health concerns. Likewise, there was no specific date as to when OC became aware of the relationship between exposures to Kaylo dust and various health concerns. OC's knowledge of the potential health aspects of asbestos exposure, particularly its awareness with respect to its Kaylo insulation product, was accumulated through the years from numerous sources, including the medical and scientific community, unions, medical and scientific literature, and OC employees.

In the early 1940s, some OC employees became aware of reports of asbestosis and asbestos corns associated with prolonged overexposure to heavy concentrations of asbestos fibers in the asbestos textile manufacturing industry. Employees learned of these reports from published medical studies such as W. C. Dreesen, et al., "A Study of Asbestosis in the Asbestos Textile Industry," Public Health Bulletin No. 241, August 1938, and A. J. Lanza, et al., "Effects of the Inhalation of Asbestos Dust on the

Lungs of Asbestos Workers," Public Health Reports, Vol. 50, No. 1., January 1935. See attached Exhibit EE, a copy of the Dreesen study from OC's files (Bates numbered 01 5011 0514-0648); attached Exhibit FF (Bates numbered 01 500 0072-0084), a copy of the Lanza Study received by OC in 1941; and attached ~~Exhibit~~ GG (Bates numbered 01 500 0062-0064), correspondence related to OC's receipt of the Lanza Study. The Dreesen study noted that only a few doubtful cases of asbestosis could be found where dust levels were kept below a threshold limit value (TLV) of five million particles per cubic foot of air (MPPCF). The study reported that if dust could be kept below that level (by simple engineering and housekeeping methods such as proper ventilation and work area clean-up), new cases of asbestosis would not appear. In 1946, the American Conference of Governmental Industrial Hygienists (ACGIH) adopted the TLV of five MPPCF as its recommended standard.

A study of asbestos pipe coverers in Navy vessels entitled "A Health Survey of Pipe Covering Operations in Constructing Naval Vessels" was published by W.E. Fleischer, et al. in the January 1946 issue of the Journal of International Hygiene and Toxicology, 28, 9-16. This study, subsequently reported in the April 1946 issue of the Industrial Hygiene Digest, found that the conclusions drawn regarding health effects in the asbestos textile industry could not be applied to pipe covering on board Navy ships and that pipe covering was not as dangerous occupation. See attached Exhibit HH, a copy of the April 1946 issue of the

Industrial Hygiene Digest, and attached Exhibit II, a copy of an affidavit of Marianne Kaschak of the Industrial Hygiene Foundation. As a member of the IHF, OC likely received this digest report.

In the early 1940s, certain OC employees also became aware of a study of New York Navy Yard asbestos insulation workers by Captain Ernest Brown, M.D. Dr. Brown concluded that, even with a maximum working period of exposure of 17 years, no cases of asbestosis were found among the insulators that he studied. See attached Exhibit JJ (Bates numbered 01 501 0965-0968), a copy of a letter dated 3/9/42 from Dow Chemical to OC transmitting an excerpt from Captain Brown's study and related correspondence.

In April 1953, OC began to distribute a hydrous calcium silicate reinforced with asbestos, called Kaylo, which was manufactured by Owens-Illinois. OC began to manufacture this insulation product in May 1958 when it purchased the Berlin, New Jersey, Kaylo manufacturing plant from Owens-Illinois.

In 1956, before purchasing the Kaylo manufacturing plant from Owens-Illinois, OC inquired into the information that Owens-Illinois had regarding the health aspects of the Owens-Illinois Kaylo product. OC was informed that a study, conducted by the Trudeau Foundation of Saranac Lake, New York, and published in 1955, showed that animals, if exposed for a prolonged period of time to extraordinarily heavy concentrations of Kaylo dust, could develop a mild asbestosis reaction. However, OC was informed at the same time that Owens-Illinois' experience in its manufactur-

ing plant, including x-ray results, revealed no lung changes of any kind that could be attributed to the occupational exposure to Kaylo. See attached Exhibit KK (Bates numbered 01 118 0108), a letter from W. G. Hazard to Ira Brought dated 6/12/56.

Certain other documents in OC's historical files, which OC believes it received from Owens-Illinois in 1958, informed OC that Owens-Illinois had never received any complaints from any user reflecting any health or physical impairment on the part of people handling Kaylo material. Owens-Illinois had thus concluded, based on its experiences in the factories and in the field and its consideration of the Saranac Lake report, that the actual health effects on those handling Kaylo was considered to be small. OC refers plaintiffs to attached Exhibit LL (Bates numbered 01 501 1348-1352), a draft of a pamphlet and correspondence relating to the health aspects of Kaylo prepared by Owens-Illinois in 1952, which OC believes it received when it purchased the Berlin, New Jersey Kaylo manufacturing plant from Owens-Illinois in 1958. See also attached Exhibit MM, a collection of documents pertaining to the Saranac Laboratory's testing of Kaylo which are in OC's files and which OC believes it received with or shortly after the purchase of the Berlin, New Jersey plant (Exhibit MM consists of 12 documents, Bates numbered as follows: 01 501 1354-1355; 01 501 1353; 01 034 0001-0032; 01 501 1343-1344; 01 501 1347; 01 501 1441; 01 035 0498-0530; 01 501 1439-1440; 01 501 1345-1346; 01 501 1348-1352; 01 501 1405-1406; 01 501 1331-1331).

In the early 1960s, an industrial hygienist at the Union Carbide Company, Robert Peele, had studied Kaylo and concluded that: (1) the fabrication of Kaylo block insulation produced negligible health effects; (2) the environmental condition in evidence during the fabrication of Kaylo block insulation was not hazardous to health; and (3) Kaylo block insulation could be fabricated safely at Union Carbide's Construction Insulation Shop. OC refers plaintiffs to copies of the Peele studies attached as Exhibit NN (Report 62-IH-1-G-1 consisting of 15 pages) and Exhibit OO (Report 63-IH-3-G-1 consisting of 14 pages).

Documents in OC's historical files indicate that at least by May 16, 1963, Robert Peele discussed his test results with William A. Lotz of OC Product Testing. OC refers plaintiffs to attached Exhibit PP, a copy of a June 20, 1963, memorandum from William Lotz to J. K. Boynton (Bates numbered 01 007 0303-0304).

Entries from Robert Peele's daily calendar secured by OC in the course of litigation further indicate that Robert Peele (1) met with Robert Estep of OC on April 30, 1963, and discussed Union Carbide's dust analysis tests and research techniques (see attached Exhibit QQ; (2) spoke to Robert Estep on May 1, 1963, and set up a meeting for May 16, 1963, with Estep and William Lotz (see attached Exhibit PP; and (3) met with Estep and Lotz on May 16, 1963, to discuss the best techniques for conducting air analysis (see attached Exhibit SS.

During the approximate period of 1964-1966, OC became aware of new developments concerning potential problems with asbestos insulating materials, particularly reports authored by Dr. Irving J. Selikoff which were presented as part of proceedings conducted by the New York Academy of Sciences and published in the Annals of the New York Academy of Science on December 31, 1965. These articles, as they related to prolonged use and exposure to asbestos insulating materials and potential lung disease, were questioned by certain OC employees with regard to their application to the product Kaylo. It was felt that Kaylo, a calcium silicate, could not have been involved to any appreciable extent in the studies because the studies involved men who had entered the insulation trade before 1943 and Kaylo was not manufactured until 1943, and according to Owens-Illinois, not commercially produced until 1948. In addition, the fact that the asbestos in Kaylo was altered physically and chemically during the autoclaving process raised the issue as to whether or not the alteration changed the possible cancer inducing tendencies of the original asbestos. OC refers plaintiffs to attached Exhibit TT (Bates numbered 01 007 0287-0291), a copy of Selikoff's article, "Asbestos Exposure and Neoplasia," published in the April 6, 1964 edition of the Journal of the American Medical Association, and attached Exhibit UU (Bates numbered 01 007 0286), a memorandum to F. H. Edwards from W. L. Taylor, dated 4/22/64 relating thereto.

As of the mid-1960s, no worker's compensation cases had been filed by employees of the Berlin, New Jersey, Kaylo manufacturing

pplant. In October 1966, certain OC employees became aware of a
ppotential claim by a Massachusetts insulation worker who claimed
aalmost exclusive handling of Kaylo and alleged lung disease. OC
rrefers plaintiffs to attached ~~E~~xhibit VV (Bates numbered 01 039
11471-1472), correspondence regarding this claim.

Shortly thereafter, notwithstanding the fact that there was
sstill doubt among OC employees as to whether Kaylo could cause
lung disease, OC made the decision to place cautionary labels on
KKaylo cartons and to remove asbestos from Kaylo as quickly as
ppossible. This decision was implemented in December 1966. OC
rrefers plaintiffs to attached ~~E~~xhibit WW (Bates numbered 01 037
00330-0402), minutes of OC's Industrial and Commercial Division's
RResearch and Development Review on November 7, 1966, which
rrelates to these actions.

OC ceased the manufacture of asbestos-containing Kaylo and
Unarcoboard in 1972; attached ~~E~~xhibit A lists the dates that OC
ceased the manufacture and/or distribution of other asbestos-
containing products.

Additional information pertinent to the subject matter of
this interrogatory would be contained in OC's files related to
asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 10:

With regard to any knowledge obtained subsequent to that
identified in the above interrogatory, and up until the time that
OC ceased to sell and/or manufacture asbestos products, identi-
fy:

- a. All documents or other communications, oral or written, concerning the casual [sic] connection between exposure to asbestos or asbestos products and diseases, and identify [sic] of persons so communicating;
- b. Did answering defendant obtain from or transmit any such information to other defendants in this case? If so, identify:
 1. manner of receipt or communication for each contact;
 2. all documents and persons involved.

RESPONSE TO INTERROGATORY NO. 10:

OC objects to this interrogatory to the extent that it seeks information protected from discovery as attorney-client communications and/or attorney work product. Without waiving its objections, OC states that it does not have a compilation of the information requested herein. Such information, to the extent that it exists, would be located in OC's document library referred in Response to Interrogatory No. 2.

OC further refers plaintiffs to Response to Interrogatory No. 8 and Supplemental Response No. 9.

INTERROGATORY NO. 11:

As to any knowledge possessed by answering defendant at any time referred to in answers to the preceding three interrogatories did you educate your employees, distributors, or purchasers about the hazards known to you and any safety precautions [sic] necessary to guard against cancer and other diseases arising from the use and handling of your asbestos containing products? If so, identify:

- a. When and in what manner customers, insulators, non-employee factory workers and the general public were so informed;
- b. Documents communicating or otherwise disseminating such information [sic];

- c. Programs initiated or sponsored to establish or promote safety procedures, methods of usage of asbestos containing products;
- d. Published articles or reports by employees (present or prior), including those of medical directors, scientists, engineers or other professionals;
- e. Symposia or lectures sponsored for the benefit of asbestos workers and/or the general public.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 11:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

Although OC is now aware of medical literature associating various health concerns with the inhalation of certain asbestos fibers, there was no specific date as to when OC became aware of all of the relationships between various types of exposure to asbestos dust and various health concerns. Likewise, there was no specific date as to when OC became aware of the relationship between exposures to Kaylo dust and various health concerns. OC's knowledge of the health aspects of asbestos exposure, particularly its awareness with respect to its Kaylo insulation product, was accumulated through the years from numerous sources, including the medical and scientific community, unions, medical and scientific literature, and OC employees (see Supplemental Response No. 9).

In late 1966, although the health risks associated with asbestos exposure were still being debated in the scientific community, OC officials decided that the prudent course of

conduct would be to remove asbestos completely from its Kaylo products. OC initiated research on substitute fibers and, in December 1966, placed a label on containers of Kaylo advising of health concerns and recommended work practices. OC refers plaintiffs to Response No. 3 and the exhibits proffered therein for information regarding its decision to place cautionary labels on its asbestos containing products and issue warnings to customers and insulators using its asbestos containing products, and for information regarding OC's research on substitute fibers.

With regard to its own employees OC states that Paul Scheuerle, then plant manager at OC's Berlin, New Jersey, Kaylo manufacturing plant, gave an educational program to the plant employees in 1971. See attached Exhibit XX. Mr. Scheuerle is no longer employed by OC.

OC also conducted programs regarding respirator use. OC does not have a compilation of information regarding the dates and locations of these programs; however, respirators were recommended and made available to those OC employees working in areas where the environment was dusty to protect them from the inhalation of dust particles, including the inhalation of asbestos dust.

Respirators were available in all contracting units from shortly after their formation.

In addition, respirators were available to employees of OC's Berlin, New Jersey, Kaylo manufacturing plant when OC purchased the plant from Owens-Illinois in May 1958. At the time of the

purchase, Owens-Illinois had a respirator program in place; OC continued this program and supplemented employees' knowledge with an educational program in 1971. See attached Exhibit XX, an outline of this educational program which includes a discussion of the Berlin plant respirator program. See also attached Exhibit YY, a copy of the Berlin, New Jersey, manufacturing plant safety rules which refers specifically to the use of respirators.

Respirators were available to employees of OC's Bloomington, Illinois, Unarcoboard (Fyrcor) manufacturing plant when OC purchased the plant from Unarco in April 1970.

In late August 1970, OC required operators of the Asbestos Fiber Feeder, Slurry Mixer and Unarcoboard Press in the Bloomington plant to wear respirators while those pieces of equipment were running. The use of respirators was originally intended as a temporary measure until safe air conditions were achieved. This requirement was extended by Dr. Jon L. Konzen to include all personnel entering the asbestos operation area. Instructions were given to plant employees regarding use and maintenance of the respirators.

By mid-November 1970, the respirator program was fully functional and the majority of the workers were complying the requirement.

OC purchased respirators from Mine Safety Appliances in Pittsburgh, Pennsylvania, and from other sources. The respirators that OC purchased were approved by the U.S. Bureau of Mines.

Additionally, OC, on its own and through the National Insulation Manufacturers Association, prepared and disseminated to contractors, distributors, and insulators information regarding potential health hazards associated with asbestos-containing insulation. In 1968, NIMA published a pamphlet entitled "Recommended Health Safety Practices for Handling and Applying Thermal Insulation Products Containing Asbestos." This pamphlet was distributed at meetings of the Insulation Distributor Contractors National Association. OC also directly distributed the pamphlet to its branch managers, Supply and Contracting (S & C) supervisors, Home Building Products (HBP) supervisors, and S & C managers with instructions to review the matter with their salesmen. See attached Exhibit BB, a copy of this pamphlet.

OC also participated, through the educational and legislative committee of NIMA and at regional meetings of the IDCNA, in the presentation of health and safety programs to distributors and contractors. At those meetings, contractors and distributors: (1) were advised of the current status of health and safety activities pertinent to their businesses; (2) were given copies of the NIMA publications on health and safety practices and medical research literature; (3) discussed the contents of those publications; (4) discussed the merits of the proposed pre-employment and periodic physical examination programs on a cooperative employer-employee basis; (5) were urged to establish regional health and safety committees; and (6) were given an opportunity to ask questions of the experts. These NIMA programs

were presented to contractors and distributors with the intention that they would instruct their employees accordingly.

In 1972, Donald Bradshaw, OC's Region Manager of Power and Process for the West Coast and Chairman of the National Insulation Contractor's Association's Occupational Health and Safety Committee, authored, along with other committee members, a pamphlet entitled, "Safety Reminders." See attached Exhibit CC. It is OC's present understanding that this pamphlet was disseminated to contractors, distributors, and insulators.

OC further refers plaintiff to attached Exhibit DD, a pamphlet entitled "Caution: Asbestos Dust . . .", published by the National Institute for Occupational Safety and Health. This pamphlet was distributed by OC to its asbestos worker employees on or around October 30, 1973.

OC also held meetings with the International Association of Heat and Frost Insulators and Asbestos Workers and the Glass Bottle Blowers. The meeting between OC and the president of the International Association of Heat and Frost Insulators and Asbestos Workers took place in the Union offices in Washington, D. C. The exact date of this meeting is unknown; however, OC believes it was before 1972. OC is uncertain as to the details regarding its meeting with the Glass Bottle Blowers. At these meetings, OC attempted to discuss the then-known health concerns regarding asbestos.

Also, OC management held meetings with the unions at OC's Berlin, New Jersey, manufacturing plant and made special presen-

tations to employees to discuss those health concerns related to asbestos.

In addition, OC's Medical Department sponsored health programs and conducted medical surveillance. (See Supplemental Response No. 18).

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 12:

When, before 1972, and by what manner were you first aware of the health hazards relating to exposure to asbestos or asbestos products for insulators, plasterers, pipefitters, boilermakers, operators, sheet metal workers, helpers, drywall finishers, mechanics, carpenters, shipfitters, machinist and bystanders exposed to inhalers.

RESPONSE TO INTERROGATORY NO. 12:

OC refers plaintiffs to Response to Interrogatory No. 9.

INTERROGATORY NO. 13:

Did you perform, direct to be performed, finance, sponsor or receive the results of any studies or tests concerning potential health hazards involved with the use of asbestos containing materials? If so, identify such studies or tests and state:

- a. When, where and at what intervals such studies were performed;
- b. Were such studies in writing or reported at a later date in writing;
- c. Were the results of such studies published or otherwise disseminated? If so, state to whom and when;
- d. Who performed such studies;
- e. What were the results of such studies;

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 13:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC offers the following overview of those tests, studies, and surveys of which it was aware before 1974 which pertain to the potential health effects of asbestos-containing Kaylo.

Before OC purchased the Berlin, New Jersey, Kaylo manufacturing plant from Owens-Illinois, Owens-Illinois sponsored studies on Kaylo. These studies were conducted at the Trudeau Foundation located in Saranac Lake, New York.

In 1956, before its acquisition of the Kaylo manufacturing plant from Owens-Illinois, OC inquired into the information that Owens-Illinois had regarding the health aspects of Owens-Illinois' Kaylo product. OC was informed that a study at Saranac Lake, published in 1955, showed that animals, if exposed for a prolonged period of time to extraordinarily high concentrations of Kaylo dust, could develop a mild asbestosis reaction. However, OC was informed at the same time that Owens-Illinois' experience in the Kaylo manufacturing plants, including x-ray results of its employees, revealed no lung changes of any kind that could be attributed to the occupational exposure to Kaylo. See attached Exhibit KK (Bates numbered 01 118 0108), a letter from W. G. Hazard to Ira Broughton dated 6/12/56.

Documents from OC's historical files, which OC believes it received from Owens-Illinois around the time of OC's acquisition

of the Berlin, New Jersey plant, informed OC that Owens-Illinois had never received any complaints from any user reflecting any health or physical impairment on the part of people handling Kaylo material. Owens-Illinois had thus concluded, based on its experiences in the factories and in the field and its consideration of the Saranac Lake report, that the actual hazard to the health of those handling Kaylo was considered to be small. OC refers plaintiffs to attached Exhibit LL (Bates numbered 01 501 1348-1352), a draft of a pamphlet and correspondence relating to the health aspects of Kaylo, prepared by Owens-Illinois in 1952, which OC believes it received in 1958. See also attached Exhibit MM, a collection of documents pertaining to the Saranac Laboratory's testing of asbestos-containing Kaylo which were in OC's historical files and which OC believes it received shortly after it acquired the Berlin, New Jersey, Kaylo manufacturing plant (Exhibit MM consists of 12 documents, Bates numbered as follows: 01 501 1354-1355; 01 501 1353; 01 034 0001-0032; 01 501 1343-1344; 01 501 1347; 01 501 1441; 01 035 0498-0530; 01 501 1439-1440; 01 501 1345-1346; 01 501 1348-1352; 01 501 1405-1406; 01 501 1319-1331). OC may have in its possession other documents of the type inquired of herein which OC received after litigation began and in the course of discovery.

OC further states that it conducted a survey of its workers in the Berlin, New Jersey, Kaylo manufacturing plant which was concluded in December 1970. See attached Exhibit ZZ.

During the period of time in which OC manufactured asbestos-containing Kaylo products, dust level counts were taken for asbestos at the Berlin, New Jersey, Kaylo manufacturing plant by Aetna in 1961, 1963, 1965, 1967, 1969, and 1972; by Bradley in 1968 and 1969; and by Clayton in 1970, 1971, 1972, and 1973. See attached Exhibits AAA, BBB and CCC, which include copies of the results of some of those surveys. During this time period, the New Jersey Department of Labor and Industry also periodically conducted industrial hygiene inspections, including dust level counts for asbestos, at the Berlin plant. OC refers plaintiffs to attached Exhibit DDD, a collection of documents which OC counsel obtained in the course of litigation from the New Jersey Department of Labor and Industry pertaining to such inspections.

Industrial hygiene surveys, consisting of dust counts, were conducted during the fabrication of Kaylo block insulation on December 11, 1961, February 25, 1963, and in March 1963 at Union Carbide's Construction Insulation Shop in Charleston, West Virginia, by Robert Peele, an Industrial Hygienist for Union Carbide. As a result of his surveys, Mr. Peele concluded that 1) the fabrication of Kaylo block insulation produced negligible health effects; 2) the environmental condition in evidence during the fabrication of Kaylo block insulation was not hazardous to health; and 3) Kaylo block insulation could be fabricated safely at Union Carbide's Construction Insulation Shop. OC refers plaintiffs to copies of the Peele studies attached as Exhibit NN

(Report 62-IH-1-G-1 consisting of 15 pages) and ~~Exhibit~~ 00
(Report 63-IH-3-G-1 consisting of 14 pages).

Documents in OC's historical files indicate ~~that~~ at least by May 16, 1963, Robert Peele discussed his test results with William A. Lotz of OC Product Testing. OC refers ~~p~~plaintiffs to attached Exhibit PP, a copy of a June 20, 1963, ~~m~~emorandum from William Lotz to J. K. Boynton (Bates numbered 01 0007 0303-0304).

Entries from Robert Peele's daily calendar ~~se~~secured by OC in the course of litigation further indicate that Robert Peele (1) met with Robert Estep of OC on April 30, 1963, and ~~d~~iscussed Union Carbide's dust analysis tests and research ~~t~~techniques (see attached Exhibit QQ); (2) spoke to Robert Estep on ~~M~~ay 1, 1963, and set up a meeting for May 16, 1963, with Estep and William Lotz (see attached Exhibit RR); and (3) met with ~~E~~step and Lotz on May 16, 1963, to discuss the best techniques ~~f~~or conducting air analysis (see attached Exhibit SS).

Dust surveys were performed at power plants in Montour, Pennsylvania, on January 15, 1973, and in Peachbottom, Pennsylvania, on January 16 and 17, 1973; and at a shipyard in San Diego, California, on June 26 and 27, 1973. These ~~surveys~~ were done by G. E. Devitt, Chief Industrial Hygienist, Owens-Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659. Results of these surveys were communicated to OC's Contracting Division. See attached Exhibit EEE, the results of those ~~surveys~~ conducted at Montour, Pennsylvania; Peachbottom, Pennsylvania; and San Diego, California.

OC further states that certain OC resins previously described contained small amounts of calidria, purchased from the Union Carbide Corporation. The resins contained less than .6% of calidria. Union Carbide conducted an industrial hygiene survey in December 1973 to evaluate any fiber release which resulted from sanding and sawing of the plastic into which this resin was made. This survey indicated that no detectable asbestos was released.

In addition, in the course of litigation OC has become aware of the following studies pertaining to the potential health effects of Kaylo:

In August and September 1966, the industrial hygiene department of Bath Iron Works conducted surveys of the dust released when cutting various pipecovering materials. See attached Exhibit FFF, the study results from the test dated August 19, 1966 and Exhibit GGG, the results of the test dated September 12, 1966. After concluding these surveys, Bath Iron Works decided to use Kaylo pipecovering on future projects, because it was less dusty than other asbestos-containing pipecovering.

In 1967, industrial hygienists at DuPont evaluated total dust generated by fabricating, handsawing, and filing Kaylo. Dust counts from fabricating Kaylo with a band saw and a hand saw resulted in a negligible amount of total dust, defined as less than 100 particles per cubic foot. Filing of Kaylo resulted in a trace amount of total dust, defined as greater than 5,000 particles per cubic foot but less than .2% of the TLV.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 14:

During the time period that you manufactured, sold, supplied, applied, distributed or installed asbestos containing products, what tests have been performed by any governmental agency, body, commission or health organization including, but not limited to, the U.S. Public Health Service, OSHA, or NIOSH, in your plants or on job sites owned or controlled by you concerning: specific hazards associated with the use and handling of asbestos and asbestos products; any restrictions in use of same; requirements for medical [sic] surveillance and examinations for your workers, dust monitoring or availability of safety equipment? If such findings were made, identify:

- a. The date or dates of such findings and by which organization or entity such findings were made;
- b. The form in which such findings were made and, if written, the exact wording of same or location in regulation, order, bulletin, report or other writing;
- c. What steps were taken to comply with such findings and the dates when such acts of compliance occurred;
- d. How users of or bystanders exposed to asbestos or asbestos containing products were informed or [sic] such findings and if such information was written identifying same.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 14:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC does not have a compilation of all the information requested herein, however OC refers plaintiffs to Supplemental Responses No. 3 and 13 and specifically to the industrial hygiene

inspections conducted by the New Jersey Department of Labor at OC's Berlin, New Jersey Kaylo manufacturing plant.

Additional information pertinent to the subject matter of this interrogatory would be located in OC's files related to asbestos, as described in Supplemental Response No. 2.

INTERROGATORY NO. 15:

During the time that you manufactured, sold, designed, supplied, distributed, mined, milled, relabeled, resold, processed, applied or installed asbestos containing products, did you perform, direct to be performed, finance, sponsor or receive the results of any dust monitoring tests at job sites where asbestos-containing products were being applied and/or removed? If so, state:

- a. The date and location of the first such test;
- b. When, where and at what intervals subsequent tests were performed;
- c. Who performed such tests;
- d. Where the results of such tests are maintained;
- e. What steps were taken by you to improve results of such tests, and dates when such improvements were made.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 15:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC refers plaintiffs to Supplemental Response No. 13 and Exhibits AAA, BBB, CCC and DDD.

Additional information pertinent to the subject matter of this interrogatory may be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 16:

If your answer to the above interrogatory is in the negative, state your reasons for not performing dust monitoring tests.

RESPONSE TO INTERROGATORY NO. 16:

OC refers plaintiffs to Supplemental Responses to Interrogatories Nos. 13 and 15.

INTERROGATORY NO. 17:

During the time that Defendant sold, manufactured, designed, supplied, distributed, mined, milled, relabeled, resold, processed, applied or installed asbestos containing products, did the Defendant ever have any inspectors or anyone from your company or hired by your company whose job it was to go to areas where your asbestos containing products were being used, removed or installed to make a dust level count? If so, state when this procedure started, the purpose of such procedure and the findings and what action, if any, was taken in response to the findings, and attach results.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 17:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC objects to this interrogatory as overly broad and burdensome. OC also objects to use of the term "inspectors" as being ambiguous. Without waiving its objections, OC refers plaintiffs to Supplemental Response Nos. 13 and 15, and the exhibits proffered therein.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 18:

During the time the Defendant manufactured, sold, designed, supplied, distributed, mined, milled, relabeled, resold, processed, applied, or installed asbestos containing products, identify any medical examination programs offered or sponsored by answering defendant or its insurance carrier(s) for employees of its insured handling or otherwise exposed to asbestos and asbestos products. With respect to each program; state:

- a. Manner of communication with employees about such program;
- b. Whether examination was mandatory or optional;
- c. What percentage of workers permitted to undergo such examination participated;
- d. What percentage of workers were found to have asbestosis or mesothelioma;
- e. With respect to (d), what percentage of such workers were paid disability or workmen's compensation benefits or for whose benefit medical expenses were paid to undergo treatment for such conditions.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 18:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

Following its purchase of the Berlin, New Jersey, Kaylo manufacturing plant in May 1958, OC continued the program previously instituted by Owens-Illinois of providing periodic chest x-rays as part of the plant's preventive health program. By 1971, OC's periodic health screening program included other testing procedures and examinations by plant physicians. Although OC ceased the manufacture of asbestos-containing products in November 1972, OC continued these procedures for Berlin employees until 1993 when the plant closed.

Following its purchase of the Bloomington, Illinois, manufacturing plant of the Chembest Division of Unarco Industries in April 1970, Dr. George B. McNeely conducted baseline physical examinations of the plant population. Chest x-rays of all plant employees were also taken. Those employees with existing and/or potential health problems were notified accordingly. Examinations were then offered annually to all active plant employees. OC sold the Bloomington plant in 1982.

Since its organization in January 1968, OC's Medical Services Department has recommended to management pre-placement and periodic medical surveillance programs of OC manufacturing employees who may have been exposed to asbestos. These programs have included in-plant medical examinations, and, if necessary, consultations with appropriate specialists. The purpose of such medical examinations was to detect existing lung changes in OC's employees.

OC further states that, in 1970, it conducted an epidemiological survey of employees in its Berlin, New Jersey, Kaylo manufacturing plant. OC refers plaintiffs to attached Exhibit 22.

With regard to the employees of its Supply and Contracting Division, OC points out that contract employees were not permanent employees of OC, but were hired frequently from local union halls for particular jobs or on an "as needed" basis.

OC further states that it participated in medical examination programs for insulators. In the 1960s, OC participated in

the Western States Asbestos Health Plan, Occupational Health Program. During the 1970s, OC was involved in many attempts to set up medical examination programs for insulators. OC initially used the examination services of outside organizations and, in 1973, OC, itself, retained medical personnel to examine all of its contracting employees.

The following doctors were consulted on a periodic basis from 1973 to 1987 to conduct examinations of contract unit employees (the Contracting Division was sold in February 1987):

Richard K. Bath, M.D.
1124 Carew Towers
Cincinnati, OH

Alexander Greer, M.D.
West 104th Fifth_
Spokane, WA 99204

Willis Taylor, M.D.
West Side Family Health
Center
700 N. High School Road
Indianapolis, IN

Leon A. Sealey, M.D.
Northwest Industrial
Medical Clinic
1500 First Avenue, South
Seattle, WA 98101

Sutter Clinic, Inc.
819 Locust Street
St. Louis, MO 63101

William D. Forney, M.D.
425 W. Bannack
Boise, ID 83702

Drs. Vanthoff, Yost,
Kempers & Vroon
ATTN: Dr. Richmond
50 College S.E.
Grand Rapids, MI

Rodman Wilson, M.D.
3300 Providence Drive
Suite 301
Anchorage, AL 99504

Robert D. Helferty, M.D.
Industrial Medical Center
PC, Inc.
1116 Ann Arbor Street
P.O. Box 3310
Flint, MI 48503

John J. Krygier, M.D.
511 S. W. 10th Street
Portland, OR

Dr. Benjamin Schneider
123 E. Market Street
Danville, PA

National Medical
Consultants Inc. (Clinic)
Suite 414 Fox Ridge Tower
Mission, KS 66202

Dr. Gordon Neilson
Page Medical Center
800 Elm
Page, AZ

Maurice Johnstorn, M.D.
Kelsey-Seybold Clinic
6624 Fannin Street
Houston, TX 77025

Dr. Roy Hardmann
5432 I.H. 35
Austin, TX 78744

Dr. Arnold Albert
1028 South Alamo
San Antonio, TX

Dr. Patrick Claancy
400 "O" Street
Sacramento, CA 95814

Dr. J. J. Applegarth
384 Post Street
San Francisco, CA 94102

Dr. A. V. Swanberg
610 7th Street
Kalispell, MT 59901

Dr. Melvin Bechtel
10804 Prairie Hills Drive
Omaha, NE 68144

B. Dwight Culver, M.D.
College of Medicine
Dept. of Community &
Environmental Medicine
Med. Surg. II -- Room 367
University of California
Irvine, CA

Dr. Kaare Lovall
Family Medicine Clinic
Bldg.
2132 N. Cedar
Holt, MI 48842

Riverside Clinic
ATTN: W. McCauley, Adm.
8445 E. Jefferson
Detroit, MI 48214

OC refers plaintiffs to Supplemental Response No. 24 and the tables proffered therein for information responsive to subparts (d) and (e) of this interrogatory.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 19:

Does the Defendant have or has it ever had, a Medical department, and/or a research department and/or an Industrial Hygiene department. If so, give the date upon which such Medical [sic] department and/or Industrial Hygiene department was established, and whether or not such department has operated continuously since being established.

- a. Name each director, chief or head of your Medical department and/or Industrial Hygiene department year by year with the first year you had a director or such department. Give the last known address of each.

- b. State in detail the duties, responsibilities and purpose of such department(s);

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 19:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

Dr. Jon L. Konzen was hired on January 15, 1968, as OC's Corporate Medical Director. He was promoted to the position of Vice President, Medical and Health Affairs, Owens-Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659 in November 1985. He remained in this position until December 31, 1992.

Dr. Jean Arnold Chapman served as Corporate Medical Director from November 11, 1985, until February 29, 1988.

Dr. Michael G. Holthouser was Director, Corporate Medical Services from June 1988 until January 31, 1991.

Dr. David C. Deubner was Director, Corporate Medical Services from December 16, 1991 until December 31, 1993.

Dr. Jon W. Lee became Director, Corporate Medical Services on January 1, 1994.

The Medical Director's responsibilities include: (1) overseeing the development of scientific and medical knowledge concerning the health effects of products made and sold by OC, materials used in OC's manufacturing process, and new products and processes under development; (2) designing and managing

medical research programs; and (3) representing the company in matters concerning health effects.

Dr. D. J. Billmaier was hired as Assistant Corporate Medical Director on December 30, 1974. He remained in this position through August 29, 1980. Dr. Billmaier was replaced by Dr. Rufus W. Miller, who served in this position from November 10, 1980, until September 1984. Dr. Miller was succeeded by Dr. Kenneth Gould, who was hired in September 1984 and employed through August 1985. The position of Assistant Corporate Medical Director has been vacant since August 1985.

Dr. S. K. Remley, Corporate Staff Physician, was employed from February 5, 1979, until December 31, 1989. He was replaced by Dr. Michael I. Sarver, who was employed from March 26, 1990, to June 15, 1991, as Manager, Corporate Medical Programs.

The duties and responsibilities of this position were to provide medical services for Toledo employees, to conduct preplacement and periodic examinations, to diagnose and treat illnesses or injuries, to advise supervisors and management on medical aspects of employees' problems, and to implement preventative health programs.

OC's Berlin, New Jersey, manufacturing facility used the services of Dr. H. C. Schwartz (deceased) from 1958 to 1970. Dr. John McNally was employed at the Berlin facility from April 27, 1970, to October 1978. Dr. Priscillano Parilla was employed at the Berlin facility from November 1978 until August 1982. Dr. Ercole J. Liberi was employed as the plant physician for the

Berlin plant from September 1982 until 1993 when the plant was closed. These doctors performed pre-employment and periodic physical examinations.

OC's Bloomington, Illinois, manufacturing facility used the services of Dr. George B. McNeely, 2302 E. Oakland Avenue, Bloomington, Illinois, from April 1970 to July 1977; Dr. N. Lee Still, 2103 E. Washington, Bloomington, Illinois, from July 1977 to July 1978; and Dr. James A. Bilyeau, 1 Medical Hills Avenue, Bloomington, Illinois, from July 1978 until 1982, when the plant was sold. These doctors conducted pre-employment and periodic physical examinations and were employed on a contract basis.

The following doctors read chest x-rays, conducted medical examinations, and consulted with employees at the Berlin, New Jersey, and Bloomington, Illinois, manufacturing plants:

<u>Physician/Consultant and Last Known Address</u>	<u>Date</u>	<u>Plant</u>
Richard M. Sprock, M.D. 350 Kings Highway, E. Haddonfield, NJ	1961-1964	Berlin
E. Spencer Paissley, M.D. 501 White Horse Pike Haddon Heights, NJ 08035	1969-1974	Berlin
I.T. Higgins, M.D. School of Public Health University of Michigan Ann Arbor, MI 48104	1969-1970	Berlin
George Wright, M.D. (Retired) 460 S. Marion Parkway Parklane Apartments Denver, CO 80209	1971	Berlin to Bloomington

Dr. Harold Manuson Institute of Indus. Health University of Michigan Ann Arbor, MI 48104	1958 to approx. 1961	Berlin
Walter Whitehouse, M.D. Institute of Industrial Health University of Michigan Ann Arbor, MI 48104	1958-1961	Berlin
Paul Scholtens, M.D. Institute of Industrial Health University of Michigan Ann Arbor, MI 48104	1958-1961	Berlin
Theodore Dietchek, M.D. Institute of Industrial Health University of Michigan Ann Arbor, MI 48104	1958-1961	Berlin
Drs. Goldenberg, Keinle, Steeb, Schaupp, Limacaco & Petrovich (Radiology Group) West Jersey Hospital Berlin, NJ	1965-1982	Berlin
Dr. C. R. Johnson Professional Health Services (Mobile Van Testing)	1974-1993 (plant closed)	Berlin
Joseph W. Sokolowski, Jr., M.D. and Irwin Spirn 1916 E. Malton Pike Cherry Hill, NJ	1974-1993 (plant closed)	Berlin
Dr. Chauncey McGeorge 66 Tanner Street Haddonfield, NJ	1982-1993 (plant closed)	Berlin
Bloomington Radiology Bloomington, IL	1970-1978	Bloomington
St. Joseph's Hospital Radiology Department Bloomington, IL	1974-1978	Bloomington

James Bilyeau, M.D.
1 Medical Hills Drive
Bloomington, IL

1978-1982
(plant sold) Bloomington

OC refers plaintiffs to Supplemental Response No. 18 for a listing of physicians who conducted examinations of contracting employees from 1973 to 1987, when the division was sold.

Gerald Devitt was hired by OC as an Industrial Hygienist in August 1970. He subsequently became Chief Industrial Hygienist and remained in that position until his retirement on October 31, 1986.

Charles W. Axten was hired as Manager of Industrial Hygiene on July 14, 1986, and held that position until mid-1988, when he became the Director of Occupational Safety and Health. Mr. Axten remained in that position until August 31, 1990. Klaus D. Rosinski became the Director of Occupational Safety and Health on November 1, 1990 and subsequently became a Product and Environmental Health Consultant.

J. Kenneth Conover was hired as an Industrial Hygienist in August 1986 and was promoted to Supervisor of Industrial Hygiene on June 1, 1988. He then served as Senior Program Specialist, Occupational Health and Safety until April 30, 1992.

F. W. Lichtenberg was hired as a technical information specialist in April 1975 and later served as an Industrial Hygienist from March 1977 until June 30, 1980.

Regina Brown served as an Industrial Hygienist for OC from June 15, 1980, until January 1, 1982.

Michael J. Guisfredi was hired in February 1978 as a Technologist Hygienist and became a Staff Industrial Hygienist in February 1987. He was a Senior Specialist, Occupational Health and Safety, and presently serves as a Lead Specialist, Occupational Health and Safety.

J. David Lawson was hired as a Staff Industrial Hygienist on July 7, 1986, and subsequently served as a Lead Specialist, Occupational Health and Safety until September 13, 1991.

Kathleen A. Johnson was hired as a Staff Industrial Hygienist in July 1987 and is currently a Senior Specialist, Occupational Health and Safety on a part-time basis.

Bruce A. Karas was hired as a Staff Industrial Hygienist on September 6, 1988, and was a Senior Specialist, Occupational Health and Safety. He currently serves as a Lead Specialist, Occupational Health and Safety.

John M. Horwarth was hired as a Staff Industrial Hygienist on September 12, 1988, and was a Senior Specialist, Occupational Health and Safety. He subsequently served as a Lead Specialist, Occupational Health and Safety until December 17, 1992.

M. Lynn Kessinger served as a Lead Specialist, Occupational Health and Safety from November 16, 1989 to May 31, 1991.

C. Terry Moore (deceased) was hired as a Lead Specialist, Occupational Health and Safety on December 1, 1989.

Jeff Labelle was hired as a Specialist, Occupational Health and Safety on January 2, 1992.

John Embelton was hired as a Specialist, Occupational Health and Safety on January 29, 1992.

Jonathan Hellerstein was hired as a Lead Specialist, Occupational Health and Safety on August 3, 1992.

Dan Delozier was hired as a Specialist, Occupational Health and Safety on June 1, 1993.

Frank Cereghini presently serves as Manager, Occupational Health and Safety.

OC's industrial hygienists are and have been responsible for the recommendation of programs relating to the industrial hygiene of its employees.

Additionally, OC states that it has had a Research and Development Department since 1938. The purposes and responsibilities of this department are to provide research, development and engineering of high technological competence in order to support and improve existing business activities and to develop the technological basis for new business ventures.

Games Slayter was hired as the Vice President of Research and Development on November 1, 1938 and remained in that position until December 31, 1963. He was replaced by John H. Thomas, who held the position until 1968. Dr. R. C. Doban became the department's supervisor in 1974 and remained in that position until December 1988. Michael G. Griffith became Vice-President of Technology on January 23, 1989, and remains in that position at present.

INTERROGATORY NO. 20:

Identify all asbestos related trade organizations, associations, or other entities including, but not limited to the Gypsum Association, Vermiculite Institute, Asbestos Textile Institute, Industrial Hygiene Foundation, Magnesia Insulation Manufacturers Association, National Insulation Manufacturers Association, Asbestos Information Association, National Insulation Contractors Association, Thermal Insulation Manufacturers Association, Quebec Asbestos Manufacturers Association, Quebec Asbestos Producers Association to which you have belonged or in which you have participated and as to each respective organization, identify the dates of membership or participation.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 20:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC has been a member of the following organizations for the years stated:

National Insulation Manufacturers Association, Inc. (1958 to February 1973), 441 Lexington Ave., New York, New York 10017;

Thermal Insulation Manufacturers Association (February 1973 to present), 7 Kirby Plaza, Mt. Kisco, New York 10549;

National Mineral Wool Association (1969 to present), 382 Springfield Ave., Summit, New Jersey 07901;

Industrial Hygiene Foundation of America and, its successor, Industrial Health Foundation (1942 to 1950 and 1953 to June 30, 1992), 34 Penn Circle West, Pittsburgh, Pennsylvania 15206;

National Insulation Contractors Association and, its successor, National Insulation & Abatement Association (1967 to present), 99 Canal Center Plaza, Alexandria, Virginia 22314

American Society for Testing & Materials (dates of membership unknown), 1916 Race Street, Philadelphia, Pennsylvania 19103;

National Safety Council (July 1943 to present), 444 N. Michigan Avenue, Chicago, Illinois 60611; and

North American Insulation Manufacturers Association (January 1992 to present), 44 Canal Center Plaza, Suite 310, Alexandria, Virginia 22314.

Safe Building Alliance (1984 to 1988), 655 15th Street, N.W., Suite 1200, Metropolitan Square, Washington, D.C. 20005.

To the best of its knowledge, OC has never been a member of the Gypsum Association, Vermiculite Institute, Asbestos Textile Institute, Asbestos Information Association, Quebec Asbestos Manufacturers Association, Quebec Asbestos Producers Association and Magnesia Insulation Manufacturers Association

OC further states that individual OC employees may have been members of various other organizations of which OC is unaware.

See attached Exhibits HHH, III and JJJ, copies of various NIMA meeting minutes.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 21:

Identify any documents, not currently on file in the Master Asbestos File of Harris County, either received by you from those trade organizations, associations or other entities identified in the preceding interrogatory or else submitted by you to those

trade associations, organizations or other entites that relate to any relationship between asbestos exposure and disease.

RESPONSE TO INTERROGATORY NO. 21:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC states that it does not have a compilation of all the information requested herein. However, OC refers plaintiffs to Exhibits HHH, III and JJJ, copies of various NIMA meeting minutes.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 22:

Identify all agreements, oral or written, between you, any of the other defendants in this lawsuit, and/or other organizations, associations or other entities identified in your answer to Interrogatory No. 20 and/or any medical or scientific foundations, not currently on file in the Master Asbestos File of Harris County, relating to the standardization of:

- a. Specifications for paper or burlap bags, or other packaging to be used for the transport and/or storage of asbestos-containing products during the time that you manufactured, sold, distributed, or applied asbestos-containing products.
- b. Warning or caution labels to be applied to asbestos products and/or their packaging, cartons, containers, or boxes during the time that you manufactured, sold, distributed, or applied asbestos-containing products.
- c. Methods of dissemination of public relation information to defendant's purchasers, advertisers, distributors, factory workers, contractors, insulators, users, consumers of asbestos products and/or the general public pertaining to asbestos health hazards.

- d. Safety equipment and/or protective clothing to be utilized while handling defendant's asbestos products.
- e. Medical program related to asbestos health hazards to be offered or sponsored by defendant.

RESPONSE TO INTERROGATORY NO. 22:

OC states that it does not have a compilation of the information requested herein. Such information, to the extent that it exists, may be contained in OC's documents library proffered in Supplemental Response to Interrogatory No. 3.

INTERROGATORY NO. 23:

Did you direct to be performed, sponsor, finance or receive the results of any studies or tests performed by the Saranac Lake Laboratory to the Trudeau Foundation relating to asbestos exposure and its effects upon human life? If so, identify:

- a. All documents summarizing findings or results of those studies or tests which you have in your possession or control;
- b. All communications, oral or written, between answering defendant and Saranac personnel including, but not limited to, Gerrit W. H. Schepers, M.D. and George Wilbur Wright, M.D.;
- c. All documents relating to Saranac studies received or submitted by you whether directly, through associated or predecessor companies, through other companies, or through trade associations, organizations or other entities;
- d. All recommendations or findings of such studies relating to:
 - 1. adequacy or inadequacy of threshold limit values.
 - 2. substitution of materials other than asbestos.
- e. Whether documents and/or communications identified in answers to (a) - (d) of this Interrogatory are maintained.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 23:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to this interrogatory as follows:

To the best of its knowledge, OC did not finance, assist or participate in asbestos-related studies conducted by or for The Trudeau Foundation at Saranac Lake; however OC refers plaintiff to attached Exhibit MM, a collection of documents regarding asbestos studies conducted by the Saranac Laboratory of the Trudeau Institute which were in OC's historical files and which OC believes it received shortly after OC acquired the Berlin, New Jersey, Kaylo manufacturing plant from Owens-Illinois in 1958.

(Exhibit MM consists of 12 documents, Bates numbered as follows:

01- 501 1354-1355; 01 501 1353; 01 034 0001-0032; 01 501 1343-1344; 01 501 1347; 01 501 1441; 01 035 0498-0530; 01 501 1439-14440; 01 501 1345-1346; 01 501 1348-1352; 01 501 1405-1406; 01 501 1319-1331).

OC may have copies of other documents generated or received by the Saranac Laboratory which relate to asbestos studies. However, these documents were received by OC after litigation began and in the course of discovery, and were not maintained in OC's historical files relating to asbestos.

Additional information pertinent to the subject matter of this interrogatory would be located in OC's files related to asbestos, as described in Supplemental Response No. 2.

INTERROGATORY NO. 24:

Prior to December 31, 1989, has any employee of answering Defendant ever made a claim for any asbestos related disease under the Occupational Disease or Workmen's Compensation Statute of any state? If so, state:

- a. The date that Defendant first received notice of such claim;
- b. The total number of such claims per year received to date;
- c. The number of such claims for which disability benefits and/or medical expenses were paid by Defendant;
- d. Identify all persons to whom disability benefits and/or medical expenses were paid by Defendant and the exact medical diagnosis, disease and/or condition for which such benefits/expenses were paid.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 24:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

With regard to those asbestos-related worker's compensation claims filed against OC before 1974, OC states as follows:

OC has been named as a party in worker's compensation actions filed by persons allegedly employed at some point in time on construction jobs involving OC's Contracting and Supply Division. These persons were typically hired from union halls for specific jobs on an as-needed basis and were not long-term employees. As a result, these claimants filed actions against numerous past and present employers. These claimants alleged a variety of injuries from exposure--throughout their employment histories--to numerous asbestos and nonasbestos-containing

materials manufactured and/or distributed by a number of companies.

OC lacks adequate records to provide a complete response to this interrogatory for a number of reasons. Individual state workers' compensation laws determined the specific employers and/or insurance carriers which could be named as defendants in compensation actions, as well as the procedures for their notification. As a result, even though some workers' compensation claims list OC as an employer, OC may not have received notice of the claim, and even if OC received notice of the claim, it may not have been aware that the claim was related to asbestos exposure or that the claimant was employed by OC. Furthermore, workers' compensation claims historically have been processed by OC's insurance carriers and OC's corporate headquarters did not always receive notification of individual claims.

OC sets forth in Tabl~~ee~~ 1 the pertinent information from OC's records which is presently believed to be related to workers' compensation claims filed before 1974 by individuals employed by OC's Contracting and Supply Division:

Insert Table A

In addition to the claims in Table A, OC's records reflect that the following individuals, listed in Table B, also filed asbestos-related workers' compensation claims before 1974. It is believed these claims were probably handled by OC's insurance carriers. OC's records do not indicate when or if OC received notice of these claims.

Insert Table B

In the course of litigation, a certain plaintiffs' counsel produced to OC's Law Department portions of workers' compensation files purporting to be claims filed by various insulation workers and other tradesmen. It is believed that these files were originally obtained from codefendants or from public records, and copies were forwarded to OC's Law Department in approximately 1979.

Some of these files reflect claims apparently filed against OC which OC cannot currently verify from a review of its records. Table C sets forth information from such claims where OC was presumably a party.

Insert Table CC

The following employees of OC's Berlin, New Jersey Kaylo manufacturing plant also filed workers' compensation claims against OC before 1974, in which they alleged injury from exposure to asbestos in the plant environment:

<u>Name</u>	<u>Approx. Date of Claim Filed</u>	<u>Alleged Injury</u>
Albert Behnke	09/15/72	Chronic bronchitis; emphysema, cirrhosis of the liver
William Bodine	03/21/73	Asbestosis, emphysema
Harry Copeland	1/22/72	Pulmonary asbestosis
Floyd E Regn	06/14/71	Chronic pulmonary obstructive disease, pneumoconiosis
George Zepp	07/13/72	Pneumoconiosis, asbestosis

In 1965, OC learned that a Berlin worker had apparently contracted asbestosis; however, the injury was apparently not related to work at OC and, to OC's knowledge, no workers' compensation claim was filed against OC.

When OC purchased the Bloomington, Illinois plant from UNARCO in 1970, it acquired certain files pertaining to workers' compensation claims brought against UNARCO by its employees. OC, however, did not have knowledge of these claims until it purchased the plant in 1970. Some of these claims alleged injury from exposure to asbestos in the plant environment.

A few employees of other OC manufacturing plants filed asbestos-related workmen's compensation claims before 1974. It

is not known whether these employees were actually exposed to asbestos in connection with their employment for OC.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2 which is incorporated as if set out in full.

INTERROGATORY NO. 225:

Identify each and every magazine or trade publication in which answering Defendant advertised its asbestos products from [sic] 1950 until the time you ceased mining, milling, selling, distributing, and/or applying asbestos containing products.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 25:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC did not advertise in the usual way via television or magazines, etc. During the time period in which OC manufactured asbestos-containing products, it provided product data and application information to commercial buyers. See attached Exhibits D, E, F, G and H.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 226:

As to the person(s) answering these interrogatories, state:

- a. name;
- b. title or position with defendant;

c. length of time employed by defendants.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 26:

Without waiving and incorporating by reference its original objections to this Interrogatory, OC supplements its response to the interrogatory as follows:

Responses to these interrogatories were prepared with the assistance of counsel and are based upon information obtained from presently existing corporate files and records and from interviews of various employees of OC. No single officer, employee or agent of OC has the personal knowledge to supply each and every answer required. The person signing these responses is informed that the files, documents and interviews referred to above do support these responses. If information is later obtained which modifies any of the responses herein, such information will be conveyed to the parties submitting these interrogatories. These responses are signed by Robert A. McOmber, Authorized Agent for Owens Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659. The telephone number of the corporation is (419) 248-8000.

Mr. McOmber began working for OC on March 25, 1979, as a part-time Economic Analyst. On June 18, 1979, Mr. McOmber became a full-time employee of OC and remained in the position of Economic Analyst until approximately August 1, 1981. He was E.E.O. Lawyer from approximately August 1, 1981, to October 1986, Attorney from October 1986 to June 1, 1989, and Counsel from June

1, 1989 to October 31, 1992. Mr. McOmber is currently an Authorized Agent for OC.

INTERROGATORY NO. 27:

Have you ever sold raw asbestos fiber? If so, state the dates you were involved in the sale of raw asbestos fiber.

RESPONSE TO INTERROGATORY NO. 27:

OC has never mined or milled raw asbestos and was not in the business of selling raw asbestos. However, in 1970, OC purchased from Unarco Industries the Chembest Division manufacturing plant located in Bloomington, Illinois. The plant manufactured urethane products and an asbestos-containing industrial insulation, Unarco board (Fyrco). In 1972, OC ceased the manufacture of its asbestos-containing Fyrco product. From October 1973 to October 1974, OC sold the surplus raw asbestos, approximately 462.5 tons, which had been originally purchased by Unarco Industries, to Weyerhaeuser Company of Marshfield, Wisconsin.

INTERROGATORY NO. 28:

State whether or not you have any information as to your relative market share regarding each of your asbestos containing products. If so, as to each year between 1940 or the time that you began mining, milling, selling, distributing and/or applying asbestos containing products until cessation of same, and with respect to each type of product, provide such information or opinion as to your market share and identify each document which provides any information to assist you in this determination. Give the same answers as to asbestos containing products in the Texas Gulf Coast area.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 28:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC objects to this interrogatory to the extent that it seeks information which is protected from discovery as attorney-client communications and/or attorney work product. Without waiving its objections, OC states that it has never been in the business of mining or milling raw asbestos or asbestos containing products.

OC further states that it does not have a compilation of the information requested herein. Information pertinent to the subject matter of this interrogatory would be located in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 29:

Have you designated distributors of your asbestos containing products in the State of Texas? If so, then state the name of all companies, their addresses, give the years that each was a designated distributor and the products each distributed.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 29:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC objects to this interrogatory to the extent that it implies an employer/employee, principal/agent, or any other formal relationship between OC and any independent distributors or salesmen who might have sold OC's products. Without waiving its objections, OC states that it distributed asbestos-containing Kaylo insulation products from April 1953 to April 1973, as indicated by a review of OC's collection of invoices for such products. Invoices relating to OC's distribution of asbestos-

containing Kaylo are maintained in OC's files related to asbestos as described in Supplemental Response No. 2.

OC also had limited involvement in the manufacture and/or distribution of other asbestos-containing products. See attached Exhibit A, a chart listing those asbestos-containing products previously manufactured and/or distributed by OC. OC's collection of invoices relating to the sales/shipments of these other asbestos-containing products is also maintained in OC's files related to asbestos as described in Response No. 2; however, this collection is incomplete. Furthermore, these documents are not segregated by purchaser/customer or by state, but are generally organized by invoice number.

OC's asbestos-containing Kaylo products were distributed to end-users in several different ways depending on the arrangements made at the time of purchase. Some shipments were made directly from the factory to specific locations (jobsites, warehouses, railheads, etc.) and invoiced to the purchaser. Other shipments were made from the factory to distributors or contractors who, in turn, sold the products to others. Similar arrangements were made with OC supply units in various locales throughout the United States. OC does not have a compilation of all entities which might have distributed OC's asbestos-containing products. However, OC refers plaintiffs to attached Exhibit KKK, a list of distributors of which OC is aware which distributed OC's asbestos-containing Kaylo products within Texas at some point during the period 1953-1973.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 30:

If you did not have designated distributors in the State of Texas, then state by what method sales of asbestos containing materials were made. Give the name and addresses of all Defendant's sales offices, relating to asbestos containing products, located in the State of Texas.

RESPONSE TO INTERROGATORY NO. 30:

OC refers plaintiffs to Supplemental Response to Interrogatory Nos. 3 and 29 and to the exhibits and documents proffered therein.

INTERROGATORY NO. 31:

Did you ever have a division or subsidiary company engaged in the contracting business of applying insulation products? If so, give the name of such division or subsidiary company, the full address of the home office of such division or subsidiary company, and the dates such division or subsidiary company was engaged in the contracting business.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 31:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC had contracting units which operated as the Supply and Contracting Division (and later the Contracting Division) of OC from January 1950 until February 1987 when this division was sold. OC's supply and contracting units were engaged in the business of distributing the products of OC and others as well as in the contract application of these products. Contract applica-

tion could include the installation and/or removal of asbestos-containing Kaylo products and similar insulation products. Most of the division's records, including job files, were transferred with this sale. See Supplemental Response No. 2.

Additional information pertinent to the subject matter of this interrogatory would be located in OC's files related to asbestos, as described in Supplemental Response No. 2.

INTERROGATORY NO. 32:

Based upon the contents of your products, the method of manufacturing and the method of application, could or can your products be generally applied or removed without liberating asbestos fibers? Your answer may be limited to those asbestos-containing products that you have identified in any Harris County asbestos case.

- a. If there is a different answer concerning different products manufactured, sold, distributed, or used by your company then specify the different products by 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 the year involved.
- c. If there is a difference in your answer depending on the trade or type worker, then specify which type workers you are referring to.

RESPONSE TO INTERROGATORY NO. 32:

OC states that its asbestos-containing Kaylo pipe and block products might have emitted some dust, a small percentage of which was asbestos, when the product was cut or sawed; OC's asbestos-containing cements might have emitted some dust, a small percentage of which was asbestos, when the product was mixed. Neither would do so during installation unless subject to the

previously stated activities. Roof coatings and adhesives rebranded for OC by various manufacturers contained encapsulated asbestos which prevented the generation of airborne fibers upon application.

INTERROGATORY NO. 33:

Was it anticipated that your asbestos containing products may have to be removed, stripped, disturbed, or replaced at any time after installation?

RESPONSE TO INTERROGATORY NO. 33:

OC's asbestos-containing Kaylo insulation was designed so that it could be removed for maintenance purposes and then reinstalled. Other than for such maintenance work, asbestos-containing Kaylo insulation was designed to last for extremely long periods of time, likely for the life of the item being insulated.

INTERROGATORY NO. 34:

Did the defendant, during the time it mined, manufactured, milled, sold or applied asbestos-containing products, give users or other persons exposed to asbestos containing products or their employers who would be applying, using, removing your asbestos containing products instructions concerning safety precautions to the use in applying, using or removing such products? If so, describe such instructions, to whom they were given, the dates they were given, and the manner of giving such instructions.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 34:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC's asbestos-containing insulation products were intended to be cut, sawed, mixed, routed, bound or wrapped as necessary

for fitting during application. OC further~~er~~ states that it intended that its asbestos-containing insulation products be used by insulation applicators, their assistant~~ss~~s, or other sophistic~~at~~ed users in accordance with the instructi~~on~~s and cautionary statements provided in connection with those products as set forth in Supplemental Response No. 3, attached Exhibits D, E, F, G, H, V, W, X, Y, Z, AA, BB and CC; and in accordance with standard trade practices and applicable guidelines, regulations, and laws. OC notes that employers, who were in the best position to observe and control the workplace, were required by laws in numerous states, to protect workmen, keep the workplace safe, warn workers of potential hazards involved in excessive exposure to asbestos and other dusts, and control dust.

Additional information pertinent to the subject matter of this interrogatory would be contained in OCC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 35:

If you have pled that the Plaintiffs misused Defendant's asbestos containing products, then state in what manner the defendant contends that Plaintiffs misused its products? If "Yes", then state in what manner and under what circumstances each product was misused. Also state what Plaintiffs could have done to avoid such misuse.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 35:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC states that certain plaintiffs may have misused its products by their failure to heed and/or follow the information on safe handling and health practices as described in Supplemental Response to Interrogatory No. 3.

INTERROGATORY NO. 36:

List all the job sites, contractors and/or facilities in the Gulf Coast area of Texas, including, but not limited to, oil refineries, chemical plants, power plants, shipyards, commercial buildings, and manufacturing plants, where or to whom defendant's asbestos products were supplied, distributed, sold and/or used. Also, list which products were involved, the date or time period of such sale, distribution, use or installation and if known [sic], the physical location within the facility listed. Alternatively, you may produce [sic] the documents requested in Request for Production No. 1.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 36:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

Upon receipt of detailed plaintiffs' employment history listing specific jobsite, city and state locations and corresponding years of employment, OC will review its records and attempt to respond.

INTERROGATORY NO. 37:

For the attached list of San Antonio job sites, state whether or not Defendant's asbestos products were supplied, distributed, sold and/or used. Also, list which products were involved, the date or time period of such sale, distribution, use of installation and, if known, the physical location within the facility listed.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 37:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC states that it is unable to supplement this interrogatory, as the list referenced to herein was not attached.

INTERROGATORY NO. 38:

Up until the time that you ceased to sell and/or manufacture asbestos containing products, had the defendant ever conducted or caused to be conducted any studies designed to minimize or eliminate the inhalation of asbestos dust or fibers by those exposed to the use of the defendant's asbestos containing 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 completed;
- c. Any publication or dissemination of the results of the studies;
- d. The nature of any action to eliminate or minimize inhalation of asbestos dust or fibers;
- e. Attach copies.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 38:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC objects to this interrogatory as overly broad and burdensome. OCC also objects to the phrase "studies designed to minimize or eliminate the inhalation of asbestos dust" as being ambiguous. Without waiving its objections, OC states that the cautionary statement on its Kaylo carton recommended the use of

respirators approved by the U.S. Bureau of Mines for pneumoconiosis producing dusts in appropriate circumstances. The exact type of respirator approved by the U.S. Bureau of Mines changed from year to year.

See also Supplemental Response No. 33 for information regarding cautionary language which OC included with its asbestos containing products; Supplemental Response No. 13, for information regarding those studies related to asbestos containing Kaylo, of which OC was aware before 1974;; and Supplemental Response No. 11, for information regarding dust protective equipment.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 39:

Has the defendant ever directly advised any person or party to whom you sell your asbestos containing products of threshold limit values for exposure to asbestos dust recommended by the American Conference of Governmental Industrial Hygienists, or mandated by any governmental entity? If so, state the date that you so advised such person or party, the manner in which you advised such person or party, and the name of each.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 39:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC notes that it no longer manufactures and/or distributes asbestos containing products. OC further state that it does not have a compilation of every instance in which one or more of OC's

employees may have discussed applicable TLVs for asbestos dust with any person or party to whom [OC sold] asbestos containing products. Many OC employees who might have information pertinent to this interrogatory are retired or deceased. However, OC states that information relating to TLVs was generally available and published in scientific, medical and trade publications from the 1940s through the present. OC further refers plaintiffs to Supplemental Response No. 3, particularly the discussion regarding OC's distribution of NIMA and NIOSE pamphlets, attached as Exhibits BB and DD. OC also notes that Material Safety Data Sheets it prepared for various naval shipyards regarding its asbestos-containing Kaylo products contained information regarding the applicable TLV for asbestos dust. See attached Exhibit AA.

Additional information pertinent to the subject matter of this interrogatory, to the extent that it exists, would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 40:

State the year that this defendant was first advised of threshold limit values and maximum allowable concentrations of both asbestos dust and total dust by the American Conference of Governmental Industrial Hygienists, and state the name of the employee of the company receiving such information, the information received, the method of receipt of such information and attach copies of the instrument communicating such advice.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 40:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC is aware of the threshold limit values (TLVs) for exposure to asbestos dust as recommended by the American Conference of Governmental Industrial Hygienists (ACGIH). However, OC cannot state precisely when or from what source it first became aware of such TLVs. OC is aware that, from 1946 to 1969, the ACGIH adopted a TLV of five million particles per cubic foot of air (MPPCF).

In 1963, Robert Peele, an Industrial Hygienist for Union Carbide, informed OC that the maximum allowable asbestos dust in the air was five MPPCF. OC was also informed that dust samplings conducted by Mr. Peele during the fabrication of asbestos-containing Kaylo revealed that the dust emitted was below the applicable TLV.

In 1968, the ACGIH recommended the reduction of the asbestos TLV to two MPPCF or 12 fibers per cubic centimeter greater than five microns in length. This recommendation went into effect in 1969.

In 1971, OSHA adopted an emergency standard for exposure to asbestos dust of five fibers per cubic centimeter greater than five micrometers in length based on an eight hour time weighted average.

In 1972, OSHA adopted the above as a permanent standard.

The information from the ACGIH is as readily available to plaintiffs as it is to OC.

OC refers plaintiffs to attached Exhibit LLL, a compilation of documents relating to OC's developing knowledge of TLV's.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 411:

Was such threshold limit values of maximum allowable concentrations inquired about in the preceding interrogatory total dust or just asbestos dust?

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 41:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC states that it understood that threshold limit values, as applied to the manufacturing and application of asbestos-containing products, referred to asbestos dust.

INTERROGATORY NO. 412:

Up until the time that Defendant ceased to sell and/or manufacture asbestos containing products, state in detail what test, if any, your company or its predecessor(s) ever made with regard to the quantity, quality, or threshold limit values of asbestos dust or particles to which users or bystanders were exposed while using your asbestos containing products.

- a. If there were any such tests or studies, give the name or names of the person(s) conducting the tests, the date of the tests and attach true copies of any reports, findings or memoranda concerning such tests or studies.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 422:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC refers plaintiffs to Supplemental Response No. 13.

OC states that it does not have a "predecessor" as it understands that term. OC further states that the techniques used by OC or by others performing industrial hygiene surveys for OC with respect to the manufacturing of asbestos-containing Kaylo changed over time to conform to general practices, recommendations by governmental agencies and other applicable institutions regarding industrial hygiene methods.

Since approximately 1970, the recommended method for evaluating asbestos-containing dust has consisted of counting asbestos fibers which have been lodged on a standard membrane filter. The result is reported as the number of fibers per cubic centimeter of air, expressed as f/cc.

Before 1970, asbestos-containing dusts were evaluated by using an impinger or midget impinger, whereby air was drawn through liquid medium. The dust was counted in a light field, a method outlined by the United States Public Health Service for dust counting.

Industrial hygiene surveys were performed to evaluate potential exposure to such dusts as asbestos and silica. Asbestos can be identified by using polarized light, and silica can be isolated by using phase contrast optical microscopy.

If industrial hygiene surveys indicated a potential exposure to these dusts above the time weighted average threshold limit value in effect at the time, then certain recommendations may have been made to company management for corrective action.

OC also refers plaintiffs to Response No. 3, specifically paragraphs 6-10.

Additional information pertinent to the subject matter of this interrogatory may be found in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 43:

Does the Defendant possess or have in its control any written documents and/or written materials prior to 1980 which indicate that other manufacturers of asbestos containing products had any knowledge, information, or understanding that asbestos would, could, or might be harmful? If so, list each document and/or written material, and attach a copy.

RESPONSE TO INTERROGATORY NO. 43:

OC states that it does not have a compilation of the information requested herein. However, in a June 2, 1964 letter, an Eagle-Picher employee transmitted to an employee of OC's Pacific Coast Division the portion of a National Insulation Manufacturers Association Board of Directors meeting minutes dealing with a competitor's intention to use a cautionary label. This same letter also stated that Eagle-Picher was planning to attach a cautionary statement on its asbestos-containing cements. Eagle-Picher inquired of OC at that time as to whether or not OC should have Eagle-Picher place such a warning on the cements which it

rebranded for OC. On June 5, 1964, OC agreed to have such labels applied to the rebranded cement. See attached Exhibit MMM.

Additional information pertinent to the subject matter of this interrogatory, to the extent that it exists, would be located in OC's document library proffered in Supplemental Response to Interrogatory No. 2.

INTERROGATORY NO. 44:

Did your company or its predecessor(s) ever place any warning directly on any of its asbestos containing products? (i.e. on insulation pipe covering itself). If so, state the wording of such warning, the size, how it was marked and the dates of placement.

RESPONSE TO INTERROGATORY NO. 44:

OC states that it does not have a "predecessor" as it understands the definition of that term.

OC further states that it did not place any warnings directly on its asbestos-containing products. However, OC refers plaintiffs to Response to Interrogatory No. 3 and to the exhibits and documents proffered therein for information relating to warnings placed on the packaging of OC's asbestos-containing products.

INTERROGATORY NO. 45:

Did the Defendant ever provide a warning within its sales literature pertaining to asbestos containing products? If so, list the wording, the dates and what literature it was placed in.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 45:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC states that, to the best of its knowledge, warnings regarding OC's asbestos-containing products were not reprinted in its product data and application information, attached as Exhibits D, E, F, G, H, BB, CC and DD. However, OC did place warning labels on containers of its asbestos-containing products. OC refers plaintiffs to Supplemental Response No. 3 and the exhibits attached thereto.

Additional information pertinent to the subject matter of this interrogatory, to the extent that it exists, would be located in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 46:

Were any Material Safety Data sheets ever prepared by the Defendant for your asbestos products? If so, attach copies.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 46:

Without waiving and incorporating by reference its original objections to this interrogatory, OCC supplements its response to the interrogatory as follows:

By 1970, OC provided Material Safety Data Sheets for its asbestos-containing Kaylo products upon request. These MSDS indicated the then recommended TLV for asbestos fibers and recommended leak or spill procedures and specific respirator and ventilation precautions for asbestos dust. See attached Exhibit AAA.

Additional MSDS would be located in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 47:

Does Defendant have insurance policies that might cover the claims made by Plaintiffs in this case?

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 47:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

Which insurance carrier or carriers may be responsible for payment of defense costs in this case and/or for any judgment that may be entered in this case is a function of the amounts in question and the time of any payments made, and also may depend upon the date of manifestation of the claimed asbestos-related condition. Therefore, OC cannot with certainty answer this interrogatory as phrased. However, OC also states that it has unexhausted products liability coverage with the following insurance carriers: Aetna Casualty & Surety; Allianz Underwriters; American Centennial; Associated International; Birmingham Fire; Central Natl. of Omaha; Columbia Casualty; Continental; Employers Ins. Wausau; Employers Mutual Cas.; Gibraltar; Granite State; Haftpflichtverband; Harbor Insurance Co.; INA Underwriters; Landmark; London Guarantee & Accd.; National Union Fire; Northbrook; Old Republic; Pacific Employers; Protective Natl. Ins.; Republic; Royal Indemnity; Royale Belge; Seguros La Comercial; Twin City Fire. For additional information, OC refers plaintiffs to the attached Exhibit NNN, a chart pertaining to OC's insurance policies.

INTERROGATORY NO. 48:

If the answer to the above interrogatory is affirmative, please state:

- a. the amounts of insurance coverage that is currently available as of the date you answer these interrogatories, and
- b. how much is in dispute.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 48:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC refers plaintiffs to Supplemental Response No. 47 and Exhibit NNN.

INTERROGATORY NO. 49:

If you have not previously supplied the requested information into [sic] eh [sic] Master Asbestos File, then for each and every expert witness, medical or otherwise, whom you may call to testify during the trial of this cause, please state the following:

- a. Full name,
- b. Address,
- c. Phone number,
- d. Each subject matter on which the expert witness is expected to testify;
- e. The mental impressions and opinions held by the expert which relate to this case in any way, and
- f. The facts known to the expert (regardless of when the factual information was acquired) which relate to or form the basis of the mental impression and opinions held by the expert.
- g. Who will be paying each such expert and how much.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 49:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC refers plaintiffs to Exhibit AAAA reports of the following witnesses who may be called to testify as experts at the time of trial: Howard Ayer, Louis Burghner, James Crapo, William Dyson, Jeffrey Golden, Thomas Howard, Gerald Kerby, Charles Powell, August Rossano, Dorsett Smith, Gail Stockman, and Peter Frank/Steven Pierce/Paul Weber/Albert Lilienfeld. OC further refers plaintiffs to its Witness List attached hereto as Exhibit BBBB and Deposition Designations attached hereto as Exhibit CCCC for additional information responsive to this interrogatory.

INTERROGATORY NO. 50:

If you have previously supplied the requested information in the Master Asbestos File, then for each expert who will not be called as a witness, but whose work product forms the basis in whole or in part of the opinions of an expert who will be called as a witness, state:

- a. the name, address and telephone number of the non-testifying expert;
- b. the subject matter of the work product on which the testifying expert will rely;
- c. the mental impression of the non-testifying expert; and
- d. the facts known to the non-testifying expert.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 50:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC refers plaintiffs to its Witness List attached hereto as Exhibit BBBB.

INTERROGATORY NO. 51:

Identify the name, address and telephone number every person whom you intend to call as a witness at trial, who has not previously been listed as a witness in Defendant's Master Witness List on file in the Master Asbestos File.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 51:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC refers plaintiffs to its Witness List attached hereto as Exhibit BBBB and its Deposition Designations attached hereto as Exhibit CCCC.

INTERROGATORY NO. 52:

What is Defendant's present net worth?

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 52:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC refers plaintiffs to Exhibit 000, a copy of its most recent annual report, for information pertinent to the subject matter of this interrogatory.

INTERROGATORY NO. 53:

Has this defendant, or its present directors or officers acting on its behalf, made monetary contributions in excess of \$5,000.00 within the past ten years to the following scientists or researchers who have written on the subject of asbestos-related diseases or to their employing universities on behalf of or at the request of the scientist or researcher:

Raymond Murphy - Harvard Medical School and Harvard School of Public Health.

Margaret Becklace - McGill University, Montreal, Canada.

Stuart Brooks - University of Florida at Tampa.

Edward A. Gaensler - Boston University of Medicine, Harvard Medical School, Tufts Medical School.

Bernard Gee - Yale University School of Medicine.

Allan Goldman - South Florida College of Medicine, Division of Pulmonary, Critical Care and Occupational Medicine.

Jerome Kleinerman - Case Western Reserve University School of Medicine.

Hilton Lewinsohn - University of Connecticut, Yale University.

Hans Weill - Tulane University

Morton Corn - John [sic] Hopkins

Brooke Mossman - University of Vermont.

John Craighead - University of Vermont.

J. Christopher Wagner

J. Corbett McDonald - McGill University

Peter Elmes

Paul E. Wheeler - Johns Hopkins

Lee Reichman - University of Medical and Dentistry of New Jersey, Newark, New Jersey.

J.M.G. Davis - Institute of Occupational Medicine, Edinburgh, U.K. (England).

J.N.P. Davies - Albany Medical College, New York.

RESPONSE TO INTERROGATORY NO. 53:

OC objects to this ~~inter~~rogatory on the grounds that it is overly broad and burdensome, vague and ambiguous, and to the extent it seeks information protected from discovery by attorney-

client communications and/or attorney work product. OC further states that it currently has no compilation of the information requested herein; however, investigation continues.

INTERROGATORY NO. 54:

In what year did this defendant first become aware of the 1938 Public Health Bulletin No. 241 entitled "A Study of Asbestosis in the Textile Industry?"

RESPONSE TO INTERROGATORY NO. 54:

Based upon current information, OC is unable to determine exactly when it acquired Public Health Bulletin No. 241, entitled "A Study of Asbestos in the Asbestos Textile Industry," by Dreessen, Dallavale, Edwards, Miller and Sayers. However, in the early 1940s, some OC employees became aware of reports of asbestosis and asbestos corns associated with the inhalation of heavy concentrations of asbestos fibers in the asbestos textile manufacturing industry from published medical studies such as the Dreessen publication described above.

A copy of the article published as Public Health Bulletin No. 241 has been found in OC's historical files. However, it is impossible to know exactly which employees would have read this article.

Additional information pertinent to the subject matter of this interrogatory would be contained in OC's files related to asbestos as described in Supplemental Response No. 2.

INTERROGATORY NO. 55:

In what year did this defendant first become aware of the 1946 article entitled "A Health Survey of Pipe Covering Opera-

tions in Constructing Naval Vessels" by Fleischer, Drinker, et al.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 55:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

The article, "A Health Survey of the Pipe Covering Operations In Constructing Naval Vessels" by W. Fleischer, F. Viles, R. Gade and P. Drinker, was published in the Journal of Industrial Hygiene and Toxicology in January 1946. Because most of the individuals employed by OC at the time of the report's publication are either retired or deceased, it is impossible for OC to determine exactly when it received a copy of or precisely who at OC reviewed this report. However, OC states that, to the best of its knowledge, it received a copy of the April 1946 issue of the Industrial Hygiene Digest, in which the Fleischer/Drinker report was described, in or around April 1946 in the course of OC's membership in the Industrial Hygiene Foundation. See attached Exhibit HH, a copy of the April 1946 issue of the Industrial Hygiene Digest, and attached Exhibit II, a copy of an affidavit of Marianne Kaschak of the Industrial Hygiene Foundation.

Additional information pertinent to the subject matter of this interrogatory would be located in OC's files related to asbestos, as described in Supplemental Response No. 2.

INTERROGATORY NO. 56:

How many claims or lawsuits (other than workers' compensation claims) were filed against this Defendant in the 1930's

alleging, in whole or in part injury, damage or disease from exposure to or inhalation of various dusts? This interrogatory includes cases of asbestosis, pneumoconiosis and silicosis due to the fact individuals were or may have been exposed to mixed types of dusts.

RESPONSE TO INTERROGATORY NO. 56:

OC states that it did not have its inception until 1938.

OC further states that it does not have a compilation of the information requested herein, but, to the best of its knowledge and belief no such claims or lawsuits were filed against OC in the 1930's. Such information, to the extent it exists, would be located in OC's document library proffered in Response No. 2. See also Response No. 24 and the tables proffered therein.

INTERROGATORY NO. 57:

Has this Defendant in other litigation ever alleged or admitted that the health hazards of asbestos containing insulation products were known prior to 1945?

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 57:

Without waiving and incorporating by reference its original objections to this interrogatory, OC supplements its response to the interrogatory as follows:

OC objects to this interrogatory on the grounds that it is overly broad and burdensome, vague and ambiguous. Without waiving its objections, OC states that it does not have a compilation of the information requested herein. However, OC refers plaintiff to Response No. 9.

Respectfully submitted,

BEAN & MANNING, L.L.P.

William J. Covert

William J. Covert, Jr.
Texas State Bar No. 64967550
5847 San Felipe, Suite 1500
Houston, Texas 77057
(713) 783-7070
(713) 974-8173 FFax Number

ATTORNEYS FOR DEFENDANT,
OWENS-CORNING FIBERGLAS CORP.

CERTIFICATE OF SERVICE

I hereby certify that Defendant Owens-Corning Fiberglas Corporation's Supplemental Responses to Interrogatories has been served upon plaintiff's counsel of record, John E. Williams, Jr., Williams, Bailey & Wesner, L.L.P., 8441 Gulf Freeway, Suite 600, Houston, Texas 77017-5001 via hand delivery this 27th day of JUNE, 1994.

William J. Covert
William J. Covert, Jr.

THE EXHIBITS TO THIS INTERROGATORY ARE EXCEEDINGLY VOLUMINOUS. THEY CAN BE FOUND IN THE ANSWERS TO INTERROGATORIES FILE, ALONG WITH A COPY OF THE INTERROGATORY.

A LIST OF THE EXHIBITS FOLLOWS THE COVER LETTER ON THE INTERROGATORY.

BEAN & MANNING, L.L.P.

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GREGORY A. SCHLAK
JOHN A. LABOON

*ALSO LICENSED IN COLORADO

June 27, 1994

VIA HAND DELIVERY

Hon. Kathryn Tyra
District Clerk
Harris County Courthouse
301 Fannin Street
Houston, TX 77210

AUG 1 1994

Re: Cause No. 90-23333 (Master Asbestos File); IN RE:
Asbestos Litigation; In the District Courts of Harris
County, Texas

Dear Ms. Tyra:

Enclosed for filing in the above referenced case, please find Defendant Owens-Corning Fiberglas Corporation's Supplemental Responses to Plaintiffs' Requests for Production and Supplemental Responses to Plaintiffs' Interrogatories. Please acknowledge receipt of same by returning a file-stamped copy of this letter to me in the enclosed self-addressed, stamped envelope.

A copy of the Supplemental Responses to Requests have been forwarded to plaintiffs' counsel. Also, a copy of this transmittal letter has been forwarded to the various counsel of record as indicated below.

Kindest personal regards.

Very truly yours,

BEAN & MANNING, L.L.P.

William J. Cozort
William J. Cozort, Jr.

WJC:amp
Enclosures

cc: VIA HAND DELIVERY

Mr. John Eddie Williams, Jr.

1. *Chrysomelidae* (Coleoptera) 10

IN RE: ASBESTOS LITIGATION) IN THE DISTRICT COURTS OF
MASTER ASBESTOS FILE) HARRIS COUNTY, TEXAS

EXHIBIT LIST

- | | | |
|---|---|--|
| A | = | Product Chart |
| B | = | Index of Pre-1973 Privileged Documents |
| C | = | Index of Post-1972 Privileged Documents |
| D | = | Kaylo Product Data & Application Information |
| E | = | Fiberglas Metal Mesh Blankets Product Data & Application Information |
| F | = | Fiberglas Sewn Blankets Product Data & Application Information |
| G | = | Fiberglas Insulating Cement, Finishing Cement and O-C Mastic Finish Product Data & Application Information |
| H | = | Roofing Products Data and Application Information |
| I | = | Fyrcor (Unarcoboard) containers |
| J | = | Pictures of SC-30 and SC-40 Cement bags |
| K | = | Mock-up pictures of asbestos-containing Kaylo cartons |
| L | = | Pictures of Fiberglas Insulating and Finishing Cements |
| M | = | OCF/Fibreboard Rebranding Agreement |
| N | = | OCF/Johns-Manville Rebranding Agreement |
| O | = | OCF/Eagle-Picher Rebranding Agreement |
| P | = | OCF/OI Kaylo, Distribution Agreement |
| Q | = | OCF/OI Berlin Plant Purchase Agreement |
| R | = | Kaylo Patent List |
| S | = | Resin Patents |
| T | = | Continuous and Chopped Strand Mat Patents |
| U | = | Roofing Products Patents |

V = Warning on bags of cement rebranded for OCF by Eagle-Picker

W = Kaylo Warning Label

X = Revised Kaylo Warning Label

Y = Unarcoboard Warning Label

Z = Fyrcor (Unarcoboard) Revised Warning Label

AA = Material Safety Data Sheets for Kaylo

BB = NIMA Brochure - "Recommended Health Safety Practices"

CC = NIMA Brochure - "Safety Reminders"

DD = NIOSH Booklet - "Caution Asbestos Dust"

EE = Dreessen study (01 501 0514-0648)

FF = Lanza study (01 500 0072-0084)

GG = Correspondence re: OCF's receipt of Lanza study (01 500 0062-0064)

HH = April 1946 Industrial Hygiene Digest

II = IHF affidavit

JJ = 3/9/42 letter, Dow Chemical to OCF re: Capt. Brown's study (01 501 0965-0968)

KK = 6/12/56 letter, Hazard to Brought (01 118 0108)

LL = 1952 draft OI pamphlet and correspondence re: health aspects of Kaylo (01 501 1348-1352)

MM = Saranac Lake Documents

NN = Peele study (Report 62-IH-1-G-1)

OO = Peele study (Report 63-IH-3-G-1)

PP = Memo 6/30/63 - Lotz to Boynton

QQ = Robert Peele Diary 4/30/63

RR = Robert Peele Diary 5/1/63

SS = Robert Peele Diary 5/16/63

TT = Selikoff article, "Asbestos Exposure and Neoplasia" (01 007 0287-0291)

UU = Memo 4/22/64 - Edwards to Taylor

VV = Correspondence re: potential Massachusetts Worker's Comp Claim (01 039 1471-1472)

WW = Minutes of 11/7/66 I&C R&D review

XX = Berlin Plant Educational Program

YY = Berlin Safety Rules

ZZ = Berlin Plant Epidemiological Study

AAA = Aetna "Special Hazard Survey"

BBB = Bradley Study at Berlin

CCC = Clayton Survey

DDD = Collection of documents re: industrial hygiene inspections conducted at Berlin plant by New Jersey Department of Labor and Industry

EEE = Devitt Studies

FFF = Bath Ironworks Study 8/19/86

GGG = Bath Ironworks Study 9/12/66

HHH = NIMA Minutes

III = NIMA Minutes

JJJ = NIMA Minutes

KKK = List of Distributors within Texas

LLL = TLV Compilation

MMM = Letter dated June 2, 1964 from Eagle-Picher

NNN = OCF Insurance Information

OOO = OC's 1993 Annual Report

Requests for Production

EXHIBIT PPP = Original invoice for asbestos-containing
Kaylo

EXHIBIT QQQ = File Title index of Pre-1973 Documents Locat-
ed in OCF's Document Library

EXHIBIT RRR = 6/2/65 letter from Farrell to Bigalow

EXHIBIT SSS = Copeland - Workers' Compensation File

EXHIBIT TTT = Bodine - Workers' Compensation File

EXHIBIT UUU = Regn - Workers' Compensation File

EXHIBIT VVV = Sepp - Workers' Compensation File

EXHIBIT WWW = Bronson - Workers' Compensation File

EXHIBIT XXX = Workers' Compensation Compilation

EXHIBIT YYY = OC's 1993 Third Quarter 10-Q

EXHIBIT ZZZ = OC's 1993 10-K

EXHIBIT 000.1-4 = OC's 1989-1992 Annual Reports

EXHIBIT AAAA = OC's Expert Reports

EXHIBIT BBBB = OC's Witness List

EXHIBIT CCCC = OC's Deposition Designations