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August 9, 2002

VIA FIRST CLASS MAIL

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Aaron S. Deluca, Esquire
Goldberg Persky Jennings & White PC
1030 Fifth Avenue, Third Floor
Pittsburgh, PA 15219-6295

Re: Rudy v. Crane Co., et. al., GD01-00124

Dear Aaron:

Enclosed please find Crane Co.'s Answers to Interrogatories and Request for Production of Documents Directed to Defendant Crane Value Group by Plaintiffs in the above-captioned case. Also enclosed is another copy of the Responses to Plaintiffs' Master Set of Interrogatories to Defendant Crane that were served on November 21, 2001. The Responses to Plaintiffs' Master Set of Interrogatories were for all pending and future Goldberg Persky cases, including the above-captioned case. Accordingly, since Crane Co. has now complied with Plaintiffs' discovery requests, the Court does not have to consider your Motions to Compel regarding the same against Crane Co.

Thank you and if you have any questions, please do not hesitate to contact me.

Very truly yours,



Michael J. Zukowski

MJZ:cs
Enclosures

cc: Honorable Joseph A. Jaffe (w/o enclosure) (via first class mail)
Nicholas P. Vari, Esquire (w/o enclosure)

PI-888126 v1 0213660-0930

IN THE COURT OF COMMON PLEAS OF ALLEGHENY COUNTY,
PENNSYLVANIA

LEVI H. RUDY and
CHARLOTTE RUDY, his wife,

Plaintiffs,

v.

CRANE VALVE GROUP, et al.,

Defendants.

) CIVIL DIVISION - ASBESTOS

) G.D. No. 01-00124

) CRANE CO.'S ANSWERS TO
) INTERROGATORIES AND REQUEST
) FOR PRODUCTION OF DOCUMENTS
) DIRECTED TO DEFENDANT CRANE
) VALVE GROUP BY PLAINTIFFS

) Filed on behalf of Defendant Crane Co.
) (with respect to named Defendant
) "Crane Valve Group")

) Counsel of record for this party:

) Nicholas P. Vari
) Pa. I.D. 59033
) Michael J. Zukowski
) Pa. I.D. 84136

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) Firm No. 148
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) Pittsburgh, PA 15222

IN THE COURT OF COMMON PLEAS OF ALLEGHENY COUNTY,
PENNSYLVANIA

LEVI H. RUDY and	)	CIVIL DIVISION - ASBESTOS
CHARLOTTE RUDY, his wife,	)	
	)	G.D. No. 01-00124
Plaintiffs,	)	
	)	
v.	)	
	)	
CRANE VALVE GROUP, et al.,	)	
	)	
Defendants.	)	
	)	

DEFENDANT CRANE CO.'S ANSWERS TO INTERROGATORIES AND REQUEST FOR
PRODUCTION OF DOCUMENTS
DIRECTED TO DEFENDANT CRANE VALVE GROUP

Defendant Crane Co. (with respect to named defendant "Crane Valve Group"), hereby propounds these Answers to Interrogatories and Request for Production of Documents directed to Defendant Crane Valve Group.

PRELIMINARY STATEMENT/ GENERAL OBJECTIONS

A. Plaintiff has named the "Crane Valve Group" as a defendant in this action. In accordance with the Pennsylvania Rules of Civil Procedure, Crane Co. will limit its responses to that aspect of its operations, which includes its divisions that have been involved primarily with the manufacture and sale of Crane Co. valves.

B. The following responses are based upon the information that is presently known and reasonably available to Crane Co. Crane Co. believes that these responses are accurate as of the date made. However, many of the matters inquired about in these Interrogatories and Request for Production of Documents directed to Defendant Crane Valve Group ("Discovery Requests") took place decades ago. Due to the passage of time,

information may be incomplete or no longer available. Nevertheless, Crane Co. has endeavored to investigate all relevant facts and circumstances. The following answers are based upon that investigation. Crane Co. cannot, however, exclude the possibility that its continued investigation may reveal more complete information. Crane Co.'s investigation of the matters inquired into by these Discovery Requests continues. The investigation is dependent upon locating knowledgeable individuals and relevant documents and information on an ongoing basis. No finite completion date can be placed upon these efforts. Crane Co. has made a reasonable effort to answer these Discovery Requests to the best of its present knowledge, information, and belief.

C. Crane Co. objects to these Discovery Requests to the extent they are unduly burdensome and overbroad, or seek information that is neither relevant to these actions and are not reasonably calculated to lead to the discovery of admissible evidence. Information requested in these Discovery Requests may be located in documents Crane Co. is willing to make available to plaintiffs' counsel under the parameters set forth herein. The burden of obtaining responsive information from those documents is the same for plaintiffs as it is for Crane Co.

D. Crane Co. objects to the use of the phrases "predecessors-in-interest," or "subsidiaries" as being vague, ambiguous, argumentative and/or seeking a legal conclusion. The answers to these Discovery Requests are limited to the business of Crane Co.'s Crane Valve Group business unit, which is the named defendant.

E. Crane Co. does not concede that any of its answers to these Discovery Requests are, or will be, admissible evidence at a trial of these actions. Crane Co. does not waive any objection, on any ground, whether or not asserted herein, to the use of any such answers at trial.

F. Crane Co. objects to these Discovery Requests to the extent they are unduly burdensome and overbroad, in that they are not in any way limited to the alleged exposure of Plaintiff.

G. Crane Co.'s responses to these Discovery Requests are based upon the documents and information that are known and reasonably available to it and its counsel. Crane Co. cannot exclude the possibility that other documents exist that may provide additional or more complete information. Crane Co. maintains documents in document repositories that may contain relevant information. Crane Co. has not reviewed all documents located in the repositories, because the expense involved with such an effort would be prohibitive and unduly burdensome. Consequently, Crane Co. cannot certify that the documents contained in the repositories do not contain information responsive to these Discovery Requests. The documents located at the repositories are not organized, and Crane Co. is not able to ascertain whether any of those documents contain information responsive to these Discovery Requests. The repositories contain numerous documents that contain information neither responsive to these Discovery Requests nor relevant to these actions. The repositories may also contain documents reflecting information that is protected by the attorney-client privilege, the work product doctrine, and/or other applicable privileges or protections. Should plaintiffs wish to review the documents located at any of the repositories, Crane Co. will make certain documents available to plaintiffs, if plaintiffs agree in writing that (i) Crane Co. has not waived any objections it may have with respect to the discoverability of those documents on any ground and (ii) Crane Co. may conduct a post-designation review to remove privileged and irrelevant documents from any collection of documents that may be copied for production to plaintiffs, even if plaintiffs had specifically designated the privileged or irrelevant document

for copying. All objections to the discovery of said documents and/or information are expressly reserved.

H. Crane Co. objects to the definitions contained in the Discovery Requests to the extent they render the Discovery Requests vague, overbroad, and unduly burdensome. In responding to the Discovery Requests, Crane Co. will use the commonly understood, everyday meanings of the terms used

INTERROGATORIES

1a. Did this defendant ever manufacture, produce, and/or fabricate any asbestos-containing products for use at the following job sites during the years listed?

- i) National Standard Wire of Mount Joy
1963 to 1964
- ii) Armstrong Lab; Lancaster, PA
1964 to 1967
- iii) RCA Building; Lancaster, PA
1964 to 1967
- iv) St. Anne's Home; Lancaster, PA
1964 to 1967
- v) Armstrong Floor Plant; Lancaster, PA
1964 to 1967
- vi) Armstrong Cork Plant; Lancaster, PA
1964 to 1967
- vii) Hilton Hotel n/k/a Brunswick Hotel; Lancaster, PA
1969
- viii) Three Mile Island 1969 to 1980
- ix) Gladfelter Paper Mill; Spring Grove, PA
1977
- x) Limerick Power Station
1979 to 1981

ANSWER: Subject to and without waiving the General Objections set forth above, Crane Co. did not manufacture, produce, and/or fabricate any asbestos-containing products as it understands that term and as that term is commonly used in asbestos litigation. Therefore, Crane Co. has no information responsive to this Interrogatory. See Crane Co.'s Responses to Plaintiff's Master Set of Interrogatories to Defendant Crane Co., which were served upon plaintiff's counsel on November 21, 2001.

1b. If the answer to Interrogatory #1a is yes, please list the following as to each asbestos-containing product:

- A. generic name and/or trade name;
- B. its chemical composition (the identity and percentage by weight);
- C. the form in which the product was shipped including the size of the container;
- D. a description of the physical appearance of such product, including color and texture;
- E. a description of any logos, writings, impressions or identifying markings that appeared on each product.

ANSWER: See Answer to Interrogatory 1a.

1c. Does this defendant possess any documents regarding the manufacturing, producing, and/or fabricating of any asbestos-containing products used at the job sites listed in Interrogatory #1a during the years listed? If yes, please provide copies of those documents.

ANSWER: See Answer to Interrogatory 1a.

2a. Did this defendant ever manufacture, produce, and/or fabricate any products that incorporated asbestos-containing components, parts, and/or materials for use at the job sites listed in Interrogatory #1a during the years listed?

ANSWER: Subject to and without waiving the General Objections set forth above, to the best of Crane Co.'s present knowledge, no. See Preliminary Statement, Section G.

2b. If the answer to Interrogatory #2a is yes, please list the following as to each product that incorporated asbestos-containing components, parts, and/or materials:

- A. generic name and/or trade name;
- B. its chemical composition (the identity and percentage by weight);
- C. the form in which the product was shipped including the size of the container;
- D. a description of the physical appearance of such product, including color and texture;
- E. a description of any logos, writings, impressions or identifying markings that appeared on each product.

ANSWER: See Answer to Interrogatory 2a.

- 2c. Does this defendant possess any documents regarding the manufacturing, producing, and/or fabricating of any products that incorporated asbestos-containing components, parts, and/or materials used at the job sites listed in Interrogatory #1a during the years listed? If yes, please provide copies of those documents.

ANSWER: See Answer to Interrogatory 2a.

- 3a. Did this defendant ever sell, merchandise, supply, deliver, distribute, install, and/or remove any asbestos-containing products at the job sites listed in Interrogatory #1a at any time during the years listed?

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to Interrogatory 3a to the extent it assumes that Crane Co. manufactured asbestos-containing products. Subject to and without waiving the foregoing objections, to the best of Crane Co.'s present knowledge, no. See Preliminary Statement § G.

- 3b. If the answer to Interrogatory #3a is yes, please list the following as to each asbestos-containing product:

- A. generic name and/or trade name;
- B. its chemical composition (the identity and percentage by weight);
- C. the form in which the product was shipped including the size of the container;
- D. a description of the physical appearance of such product, including color and texture;
- E. a description of any logos, writings, impressions or identifying markings that appeared on each product.

ANSWER: See Answer to Interrogatory 3a.

- 3c. Does this defendant possess any documents regarding the selling, merchandising, supplying, delivering, distributing, installing, and/or removing of any asbestos-containing products at the job sites listed in Interrogatory #1a during the years listed? If yes, please provide copies of those documents.

ANSWER: See Answer to Interrogatory 3a.

- 4a. Did this defendant ever sell, merchandise, supply, deliver, distribute, install, and/or remove any products that incorporated asbestos-containing components, parts, and/or materials at the job sites listed in Interrogatory #1a at any time during the years listed?

ANSWER: See Answer to Interrogatory 2a. See also Preliminary Statement § G.

- 4b. If the answer to Interrogatory #4a is yes, please list the following as to each product that incorporated asbestos-containing components, parts, and/or materials:

- A. generic name and/or trade name;
- B. its chemical composition (the identity and percentage by weight);

and/or materials at the job sites listed in Interrogatory #1 a at any time during the years listed?

ANSWER: See Answer to Interrogatory 2a. See also Preliminary Statement § G.

4b. If the answer to Interrogatory #4a is yes, please list the following as to each product that incorporated asbestos-containing components, parts, and/or materials:

- A. generic name and/or trade name;
- B. its chemical composition (the identity and percentage by weight);
- C. the form in which the product was shipped including the size of the container;
- D. a description of the physical appearance of such product, including color and texture;
- E. a description of any logos, writings, impressions or identifying markings that appeared on each product.

ANSWER: See Answer to Interrogatory 4a.

4c. Does this defendant possess any documents regarding the selling, merchandising, supplying, delivering, distributing, installing, and/or removing of any products that incorporated asbestos-containing components, parts, and/or materials at the job sites listed in Interrogatory #1a during the years listed? If yes, please provide copies of those documents.

ANSWER: See Answer to Interrogatory 4a.

5a. Does this defendant have knowledge, from any source, that its asbestos-containing products and/or the asbestos-containing products of any other defendant to this action were used at the job sites listed in Interrogatory #1 a?

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to Interrogatory 5a. because it is overly broad and unduly burdensome. Crane Co. further objects to Interrogatory No. 5a to the extent it assumes Crane Co. manufactured asbestos-containing products. Subject to and without waiving the foregoing objections, see Answer to Interrogatory 2a. See also Preliminary Statement § G.

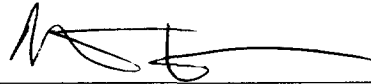
5b. If the answer to Interrogatory #5a is yes, please identify the sources) and provide copies of the source(s).

ANSWER: See Answer to Interrogatory 5a.

6a. Does this defendant have knowledge, from any source, that its products that incorporated asbestos-containing components, parts, and/or materials, and/or the products of any other defendant to this action that incorporated asbestos-containing components, parts, and/or materials, were used at the job sites listed in Interrogatory #1 a?

6b. If the answer to Interrogatory #6a is yes, please identify the sources) and provide copies of the source(s).

ANSWER: See Answer to Interrogatory 6a.



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Michael J. Zukowski
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VERIFICATION

I, Augustus I. duPont, Vice President, General Counsel and Secretary of defendant Crane Co., have reviewed the foregoing Crane Co.'s Answers to Interrogatories and Request for Production of Documents Directed to Defendant Crane Valve Group. The information provided has been obtained by Crane Co.'s counsel through a review of existing business records and interviews of former employees of the company. I am informed and believe, and on that basis assert, that said information is true and accurate to the best of my knowledge, information and belief.

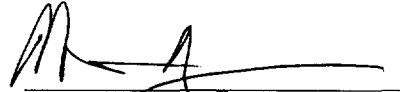
This statement is made subject to the penalty of 18 Pa. C.S.A. § 4904, relating to unsworn falsification to authorities.

DATED:

8/9/02
Augustus I. duPont

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of Crane Co.'s Answers to Interrogatories and Request for Production of Documents Directed to Defendant Crane Valve Group were served upon Plaintiff's counsel of record by United States mail, First Class, postage prepaid.



Michael J. Zukowski

Dated: August 9, 2002

IN THE COURT OF COMMON PLEAS OF ALLEGHENY COUNTY, PENNSYLVANIA

IN RE: ALL PENDING AND FUTURE
ASBESTOS CASES FILED BY
GOLDBERG, PERSKY,
JENNINGS & WHITE, P.C.

CIVIL DIVISION – ASBESTOS
Code 012

**RESPONSES TO PLAINTIFFS'
MASTER SET OF INTERROGATORIES
TO DEFENDANT CRANE CO.**

Submitted on behalf of "Crane Valve
Group" Crane Co.
(with respect to named Defendant
"Crane Valve Group")

Counsel of Record for this Party:

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PRELIMINARY STATEMENT/ OBJECTIONS/ RESERVATION OF RIGHTS

A. Crane Co. objects to these Interrogatories as being overbroad and unduly burdensome, inter alia, to the extent they seek information relating to cases that have not been filed. Rule 4001 of the Pennsylvania Rules of Civil Procedure limits discovery to pending claims, not claims that one may file in the future. Every action that the clients of Goldberg, Persky, Jennings & White, P.C. have filed against Crane Co. in Allegheny County, Pennsylvania, has named the "Crane Valve Group" as the defendant. In accordance with the Pennsylvania Rules of Civil Procedure, Crane Co. will limit its responses to that aspect of its operations, which includes its divisions that have been involved primarily with the manufacture and sale of Crane Co. valves.

B. The following responses are based upon the information that is presently known and reasonably available to Crane Co. Crane Co. believes that these responses are accurate as of the date made. However, many of the matters inquired about in these Interrogatories took place decades ago. Due to the passage of time, information may be incomplete or no longer available. Nevertheless, Crane Co. has endeavored to investigate all relevant facts and circumstances. The following answers are based upon that investigation. Crane Co. cannot, however, exclude the possibility that its continued investigation may reveal more complete information. Crane Co.'s investigation of the matters inquired into by these Interrogatories continues. The investigation is dependent upon locating knowledgeable individuals and relevant documents and information on an ongoing basis. No finite completion date can be placed upon these efforts. Crane Co.

has made a reasonable effort to answer these Interrogatories to the best of its present knowledge, information, and belief.

C. Crane Co. objects to these Interrogatories to the extent they seek information and/or documents that are protected by any privilege or protection, including but not limited to the attorney-client privilege, the joint-defense privilege and/or the work product doctrine. Crane Co. hereby asserts all applicable privileges and protections with respect to such information and/or documents.

D. Crane Co. objects to these Interrogatories to the extent they seek production of any information constituting a trade secret, confidential financial data, or other confidential research, development, or commercial information.

E. Crane Co. objects to these Interrogatories to the extent they are unduly burdensome and overbroad, or seek information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Information requested in these Interrogatories may be located in documents Crane Co. is willing to make available to plaintiffs' counsel under the parameters set forth herein. The burden of obtaining responsive information from those documents is the same for plaintiffs as it is for Crane Co.

F. Crane Co. objects to the use of the phrases "predecessor corporation," "predecessors," "successor corporation," or "successors" as being vague, ambiguous, argumentative and/or seeking a legal conclusion. The answers to these Interrogatories are limited to the business of Crane Co.'s Crane Valve Group business unit, which is the named defendant in all cases upon which these Interrogatories are based.

G. Crane Co. does not concede that any of its answers to these Interrogatories are, or will be, admissible evidence at a trial of these actions. Crane Co. does not waive any objection, on any ground, whether or not asserted herein, to the use of any such answers at trial.

H. Crane Co. objects to these Interrogatories to the extent they are unduly burdensome and overbroad, in that they are not in any way limited to the alleged exposure of Plaintiffs in these actions.

I. Crane Co.'s responses to these Interrogatories are based upon the documents and information that are known and reasonably available to it and its counsel. Crane Co. cannot exclude the possibility that other documents exist that may provide additional or more complete information. Crane Co. maintains documents in document repositories that may contain relevant information. Crane Co. has not reviewed all documents located in the repositories, because the expense involved with such an effort would be prohibitive and unduly burdensome. Consequently, Crane Co. cannot certify that the documents contained in the repositories do not contain information responsive to these Interrogatories. The documents located at the repositories are not organized, and Crane Co. is not able to ascertain whether any of those documents contain information responsive to these Interrogatories. The repositories contain numerous documents that contain information neither responsive to these Interrogatories nor relevant to these actions. The repositories may also contain documents reflecting information that is protected by the attorney-client privilege, the work product doctrine, and/or other applicable privileges or protections. Should plaintiffs wish to review the documents located at any of the repositories, Crane Co. will

make certain documents available to plaintiffs, if plaintiffs agree in writing that (i) Crane Co. has not waived any objections it may have with respect to the discoverability of those documents on any ground and (ii) Crane Co. may conduct a post-designation review to remove privileged and irrelevant documents from any collection of documents that may be copied for production to plaintiffs, even if plaintiffs had specifically designated the privileged or irrelevant document for copying. All objections to the discovery of said documents and/or information are expressly reserved.

INTERROGATORIES DIRECTED TO DEFENDANT CRANE CO.

(1) State the name, address and official capacity of each person who has supplied information used in answering these interrogatories and indicate for which interrogatory each such person is responsible.

ANSWER: Crane Co.'s answers to these Interrogatories were prepared by Crane Co.'s counsel and are based upon counsel's review of numerous documents and historic interviews with past and present employees. Given the excessive nature of these Interrogatories, it would be unduly burdensome to provide this information for each Interrogatory.

(2) Identify each document that was examined, reviewed and/or used in answering each interrogatory, specify the interrogatory and identify the present custodian of each document.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is unduly burdensome, in that it relates to over 200 Interrogatory answers. Crane Co.'s counsel has reviewed many documents

relating to Crane Co. It would be unduly burdensome to require Crane Co. to specify for each Interrogatory exactly which documents may somehow impact on Crane Co.'s response. Subject to and without waiving the foregoing objections, Crane Co.'s responses are based on counsel's historic interviews with past and present employees and counsel's review of many documents. Crane Co. will make any documents specifically referenced in these responses available for review at a time and place convenient for both parties.

(3) State whether you are a corporation. If so, state: your corporate name; state of incorporation; date of incorporation; address of principal place of business; address(es) of any other place of business, including sales offices; whether, if you are a "foreign corporation" as defined under the law of the Commonwealth of Pennsylvania, you are now or have ever been registered or qualified to do business in the Commonwealth of Pennsylvania; and the corporate name, state of incorporation and date of incorporation of any subsidiary, predecessor or affiliate corporation.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad, unduly burdensome, and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, Crane Co. was originally incorporated in Illinois in or about 1855. In 1985, Crane Co. was reincorporated in Delaware. Its headquarters are located at 100 First Stamford Place, Stamford, Connecticut. It has maintained businesses in the Commonwealth of Pennsylvania.

(4) Identify all prior names by which you have existed.

ANSWER: Subject to and without waiving the foregoing General Objections, Crane Co. first began manufacturing valves in Chicago, Illinois, in or about 1855 under the name R.T. Crane and Brother. In 1872, the company changed its name to Crane Brothers Manufacturing Company. In 1890, this entity officially changed its name to Crane Co.

(5) If you have divisions which have ever mined, manufactured, produced, fabricated, imported, converted, compounded, processed, sold, merchandised, supplied, distributed and/or otherwise placed in the stream of commerce asbestos products, identify each such division and state the names, addresses and job title of each person who supervised each division, specifying the applicable time periods.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad, unduly burdensome, and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Crane Co. further objects to this Interrogatory on the grounds that the term "division" is vague and ambiguous, and to the extent it implies that Crane Co. manufactured any asbestos-containing products. Crane Co.'s response to this Interrogatory shall not be construed as an admission that Crane Co. was involved in any activity with respect to asbestos-containing products that are relevant in any way to these actions.

Subject to and without waiving the foregoing objections, Crane Co. was not a manufacturer of any asbestos-containing products, as that term is defined and as it is commonly used in asbestos litigation. With respect to valves, Crane Co. is and has been a manufacturer of certain types of industrial valves that were made of steel, bronze, and other metals; the valves themselves were not composed of asbestos.

Many of those valves bore the name "Crane," marked directly thereon. During certain time periods, certain of these valves had enclosed within their metal structure gaskets, packing, or discs that may have contained asbestos. Crane Co. did not manufacture these components but purchased them from other companies. Any components that may have been enclosed within the metal structure of Crane Co.'s valves did not emit friable or respirable asbestos fibers while enclosed therein. Any asbestos-containing components were completely encapsulated within the metal structure of the valves and/or valve fittings. Furthermore, any asbestos contained in the components themselves was chemically and physically bound within the component by a rubber-like compound. Crane Co. may also have sold a limited amount of replacement packing, discs and gaskets to its valve customers.

Over the one hundred-plus years during which Crane Co. has manufactured these valves, there have been numerous individuals involved in the supervision of Crane Co.'s valve manufacturing operations, one of whom is William N. McLean, who previously served as Crane Co.'s Director of Engineering.

(6) Have you controlled, purchased or in any way acquired any interest in any corporation or business entity which has mined, manufactured, produced, fabricated, imported, converted, compounded, processed, sold, merchandised, supplied, distributed and/or otherwise placed in the stream of commerce asbestos products?

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence, and to the extent it implies that Crane Co. manufactured any asbestos-containing

products. Crane Co. further objects to this Interrogatory because it is unduly burdensome insofar, inter alia, because it requires Crane Co. to provide information about the previous activities of companies it acquired, over which Crane Co. had no control.

Subject to and without waiving the foregoing objections, a review of available records indicates that Crane Co. has acquired a number of companies over the years that have been involved in the manufacture and sale of industrial valves. One of these was Chapman Valve Co., which Crane Co. acquired for approximately \$11.2 million in 1959, and which became a division of Crane Co. in 1964 when it was dissolved. Shortly thereafter, on July 17, 1967, Crane Co. announced the acquisition of Flomatics, Inc. After becoming a separate entity, the Crane Valve Group announced the acquisition of three companies in 1985: Mark Controls Corp. on May 2, Valve Systems and Controls of Houston, Texas on May 6, and Aloyco, Inc. on September 16. Crane Co. has further acquired over the years assets relating to valve manufacturing.

As a result of the above activities, Crane Co. has manufactured valves under various names such as Pacific Valves and Flowseal/Center Line (both related to the Mark Controls acquisition), the manufacturing plants for which are located in Long Beach California, Empire Foundry, which is located in Tulsa Oklahoma, Stockham, and Jenkins.

(7) If your Answer to the prior Interrogatory is in the affirmative, identify and attach copies of all documents related thereto and state:

(A) The name(s), including prior name(s), and the business address(es) of any and all such corporation(s) or business entity(ies);

(B) The date(s) on which you first controlled, purchased or acquired said interest;

- (C) The manner in which you acquired said interest, i.e., cash purchase, merger, consolidation, exchange or sale of assets, etceteras
- (D) The percentage of assets, ownership and/or control acquired by you;
- (E) Whether the corporation(s) or business entity(ies) acquired by you continued to exist following the acquisition and, if not, the date on which its existence ceased;
- (F) The nature of and/or amount of consideration paid by you for said interest;
- (G) The terms and conditions of any contracts or agreements by and between you and such corporation(s) or business entity(ies), including, but not limited to, the terms and conditions relating to the transfer of liabilities for obligations of such corporation(s) or business entity(ies);
- (H) Whether you continued the manufacture, sale and/or distribution of such corporation's or business entity's asbestos products and, if so, whether you used the same product name(s) in so doing, and
- (I) Whether there was an identity of name, officers, directors, personnel, property, suppliers, distribution outlets and/or clients between you and such corporation(s) or business entity(ies);

ANSWER: See objections and response to Interrogatory No. 6.

- (8) If you have directly or indirectly mined, manufactured, produced, fabricated, imported, converted, compounded, processed, sold, merchandised, supplied, distributed, installed and/or otherwise placed in the stream of commerce asbestos or asbestos-containing products, state as to each such product, indicating separately those products dealt with by you, your predecessor(s) in interest, your subsidiary(ies), and your affiliate(s), if any, the following:
 - (A) Brand name, trade-name, and/or trade-mark;
 - (B) The generic name or identity;
 - (C) Description, including size, shape, color and composition, i.e. solid, powder or other form;
 - (D) Chemical and physical composition, including, but not limited to, the percentage of each such asbestos fiber by weight and volume;
 - (E) Intended marketable use;
 - (F) Dates during which each asbestos product was mined, manufactured, produced, fabricated, imported, converted, compounded, processed, sold, merchandised, supplied, distributed, installed and/or otherwise placed in the stream of commerce;
 - (G) The identity of each person and/or business entity in the States of Pennsylvania, Maryland, Delaware, New Jersey, New York and West Virginia to whom or to which you sold or distributed each such product;
 - (H) The identity of each contractor, subcontractor, installer or other business entity in the States of Pennsylvania, Maryland, Delaware, New Jersey, New York

and West Virginia which ultimately installed, applied or used each such product;
and

(l) The custodian, identity and location of each document which refers to or contains information relevant to such sale, distribution or installation.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to the extent this Interrogatory implies that Crane Co. manufactured any asbestos-containing products, and on the grounds that the terms "indirectly mine, manufacture, etc." are vague and ambiguous. Subject to and without waiving the foregoing objections, by way of further answer, see response to Interrogatory No. 5.

(9) State whether you presently mine, manufacture, produce, fabricate, import, convert, compound, process, sell, merchandise, supply, distribute, install and/or otherwise place in the stream of commerce any asbestos product(s) listed in your Answer to the preceding interrogatory. If so, identify each product by brand name, trade name and/or trademark.

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge. See response to Interrogatory No. 13, infra.

(10) Identify each individual who participated in the design and preparation of manufacturing specifications for each asbestos product identified in your Answer to Interrogatory No. 8.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad, unduly burdensome and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Crane Co. further objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products.

The component parts in Crane Co.'s valves identified in Crane Co.'s response to Interrogatory No. 8 were manufactured by other companies.

(11) State whether any written memoranda, specifications, blueprints or other written materials of any kind or character now exist relating to the design and preparation of the asbestos products identified in your Answer to Interrogatory No. 8. If so, identify:

(A) Each such written material or document; and

(B) The custodian, identity and location of each such written material or document.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Other companies manufactured the component parts identified in Crane Co.'s response to Interrogatory No. 8.

(12) Identify, by location and product, each mine, mill, plant or other facility of yours in which the asbestos products identified in your Answer to Interrogatory No. 8 have been manufactured and/or assembled and the dates said facilities have been in operation.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Crane Co. further objects to this Interrogatory on the grounds that it is overbroad, unduly burdensome, and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence.

Subject to and without waiving the foregoing objections, to the best of its present knowledge and according to its annual reports, without limitation, Crane Co. assembled and/or manufactured valves at plants located in Chicago, Illinois; Chattanooga, Tennessee; Indian Orchard, Massachusetts; Jonesboro, Arkansas; Rogers, Arkansas;

Long Beach, California; and Washington, Iowa. Crane Co. did not manufacture or assemble any asbestos-containing components that may have been incorporated in the valves. Accordingly, those components would not have been manufactured at the locations listed above. See response to Interrogatory No. 5.

(13) If you have discontinued mining, manufacturing, producing, fabricating, importing, converting, compounding, processing, selling, merchandising, supplying, distributing and/or otherwise placing in the stream of commerce any asbestos products listed in your Answer to Interrogatory No. 8, identify the products discontinued, give the date of discontinuance and specify the reasons) for such discontinuance.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Crane Co. further objects to the extent this Interrogatory implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, asbestos components were removed from Crane Co.'s industrial valves that were manufactured in the United States in the mid-1980's, with the exception of one specific type of valve designed for petroleum industry applications, which incorporated an asbestos component until, to the best of Crane Co.'s present belief, late 1980's or the early 1990's. Asbestos-containing components were eliminated from Crane Co.'s products because of decreased consumer demand for products that incorporated asbestos and the availability of suitable components that did not contain asbestos.

(14) If you have done so, when did you first determine that any other material could be used in place of asbestos for high-temperature insulation or any other

use to or for which asbestos has been applied. If you have, in fact, substituted other material(s) for asbestos in your product(s), then state:

- (A) The identity of such substituted material(s);
- (B) When the product(s) with such substituted material(s) was first developed and marketed; and
- (C) The trade-names) and brand names(s) of the product(s) marketed with such substituted material(s).

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Crane Co. further objects to this Interrogatory to the extent it implies that there was a product that "could be substituted for" asbestos-containing components that may have been associated with any Crane Co. product. Subject to and without waiving the foregoing objections, in the late 1970s and early 1980s, as a result of changes in customer preferences, Crane Co. began to explore the prospect of replacing the asbestos-containing components in its industrial products. At that time, Crane Co. encountered difficulty locating suitable substitute components. Nevertheless, Crane Co., modified its engineering specifications in 1985 to phase out asbestos-containing components from all valves manufactured in the United States other than one specific valve designed for petroleum industry applications.

(15) With respect to each of the asbestos-containing products identified in your Answer to Interrogatory No. 8, state whether there has been any change, alteration or modification (hereinafter collectively called "change") from the time when it was first developed or you began to manufacture or sell it, to the present. If so, state:

- (A) The identity, by brand name and trade name, of each such product;
- (B) The nature of each such change;
- (C) The reasons for each such change;
- (D) The details of how the changed product differed from the original product, including, but not limited to, any changes in the asbestos content or chemical composition of each such product;
- (E) The names of each person recommending and/or approving such change;

(F) The date each change was accepted by you and made commercially available; and

(G) Whether there were any studies, evaluations or tests made in connection with such change, and if so, identify each such study by title, date, name of author and present location and custodian.

ANSWER: See objections and response to Interrogatory No. 14. By way of further answer, Crane Co. did not manufacture the asbestos-containing components that may have been encapsulated in its valves.

(16) Do you contend that any of the asbestos products listed in your Answer to Interrogatory No. 8 require change or modification before they may be used? If so, specify what change or modification is required for each such product.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that the terms "change" and "modification" are vague and ambiguous, and to the extent it implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, to the extent Crane Co.'s valves were supplied with gaskets, discs, or packing, they were ready for use. Those components ordinarily needed to be replaced over time, and it was the customer's choice as to the types of materials to use in those valves.

(17) Identify all patents issued, or any applications made therefor, for any asbestos product listed in your Answer to Interrogatory No. 8. Specify the number of each patent, the date(s) of application, issuance and renewal, if applicable, to whom each patent was issued and the product(s) for which each patent was issued.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Crane Co. did not manufacture the component parts of its valves

identified in its response to Interrogatory No. 8 that may have contained asbestos.

Subject to and without waiving the foregoing objections, to the best of its present knowledge, Crane Co. did not hold any patents with respect to those components.

(18) Identify all trade-marks registered for any products listed in your Answer to Interrogatory No. 8. Specify the number and date of registration, the term thereof, the date(s) of renewal, if applicable, by whom each trade-mark was registered and the product(s) for which each trade-mark was registered.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad in that it is not limited to products that contain asbestos. Subject to and without waiving the foregoing objections, Crane Co. has registered the name "Cranite" with respect to material that was manufactured by other entities and sold by Crane Co.

(19) State whether you have distributed, sold or installed any asbestos or asbestos-containing products which was/were mined, manufactured, produced, fabricated, imported, converted, compounded, processed, sold, merchandised, supplied and/or otherwise placed in the stream of commerce by persons and/or business entities other than you or your predecessor(s) in interest or subsidiary(ies), if any. If so, state:

(A) The identity of each such person and/or business entity whose asbestos products you sold, distributed or installed on a product-by-product basis;

(B) The terms of all assignments, agreements, licenses and other arrangements which relate to same, including whether the relationship was exclusive. Identify and attach copies of all such documents;

(C) As to each product, the brand name, trade-name and/or trademark adopted and used by the source from which you obtained said product for the distribution or sale;

(D) As to each product, the brand name, trade-name and/or trademark adopted and used by you for purposes of distribution or sale of said product;

(E) The generic name or identity of each product;

(F) The dates during which you distributed, sold or installed each such asbestos product;

(G) As to each such product, a description, including size, shape, color, composition, i.e. solid, powder or other form;

- (H) As to each such product, the type of asbestos and the percentage of asbestos, by weight and volume;
- (I) As to each such product, its intended marketable use;
- (J) The identity of each person and/or business entity in Pennsylvania, Maryland, Delaware, New Jersey, New York and West Virginia to whom or to which you sold, distributed or shipped each such product;
- (K) The identity of each contractor, subcontractor, installer or other business in Pennsylvania, Maryland, Delaware, New Jersey, New York and West Virginia which ultimately installed, applied or used each such product; and
- (L) The custodian, identity and location of each document which refers to or contains information relevant to such sale or distribution.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is unduly burdensome, overbroad and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Crane Co. further objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products.

Subject to and without waiving the foregoing objections, Crane Co. is not presently aware of all of the entities from which it obtained asbestos-containing components for its valves. Nevertheless, based upon available documents, it appears that, at various times, Crane Co.'s approved suppliers may have included B.F. Goodrich Co., Goodyear Tire & Rubber Co., and Sweet Rubber Co. of Akron, Ohio, with respect to "Cranite" material, Raybestos-Manhattan, Inc., Garlock, Inc., Johns-Manville, Inc., "Klingerit" and Nicolet, Inc., with respect to sheet gasket material, Crane Packing Co. (later John Crane-Houdaille, Inc.), Anchor Packing, Raybestos-Manhattan, Greene-Tweed, Garlock, Inc., Johns-Manville, Inc., Lindstrom & King, and R.M. Industrial Products with respect to valve packing, Flexitallic, Spirotallic, Lamons Gasket Co., and R-Way Gasket & Supply Co., with respect to spiral wound gaskets. The foregoing list is not intended to be an exhaustive list of Crane Co.'s suppliers.

- (20) Identify the distributors or approved applicators of the asbestos products identified in your Answers to Interrogatory Nos. 8 and 19 at any time during the period from 1930 to the present and identify and attach copies of all documents relating to said distributors and applicators. For each such entity, indicate:**
- (A) The terms of all assignments, agreements, licenses and other arrangements by and between you and said distributor or applicator;**
 - (B) Whether the distribution or application relationship was exclusive;**
 - (C) The year or years in which the distribution or application relationship was in effect;**
 - (D) The identity of the asbestos products listed in your Answers to Interrogatory Nos. 8 and 19 which the distributor or applicator was authorized to and did distribute or apply; and**
 - (E) The quantity of the asbestos products listed in your Answer to Interrogatory Nos. 8 and 19 distributed by the distributor or sold to the applicator on a year-by-year and product-by-product basis.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and unduly burdensome. Crane Co. further objects to the extent this Interrogatory implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, Crane Co.'s valves were distributed through Crane Co.'s supply branches and later its supply division, as well as other supply houses and contractors.

- (21) State whether you have ever sold, distributed or otherwise furnished any of the asbestos products listed in your Answer to Interrogatory No. 8 to any other person and/or business entity for resale or redistribution at any time from 1930 to the present. If so, state:**
- (A) The identity of each such person and/or business entity;**
 - (B) The brand name, trade-name and/or trademark adopted and used by you for each such product;**
 - (C) The brand name, trade-name and/or trademark adopted and used by each such person and/or business entity for each such product;**
 - (D) The generic name or identity of each such product;**
 - (E) The year(s) in which each such product was sold, distributed or otherwise furnished to each such person and/or business;**
 - (F) The intended marketable use for each such product;**

- (G) Whether each such product was intended to be used, resold, or distributed by such other person and/or business entity in the same or substantially the same condition as it was when shipped or delivered by you;**
- (H) The custodian, identity and location of all documents pertaining to agreements for the resale, distribution, or furnishing of your asbestos products to each other person and/or business entity; and**
- (I) Whether the resale, rebranding or redistribution agreement was exclusive.**

ANSWER: See objections and response to Interrogatory No. 20.

(22) State the following with respect to the packages and containers in which you sold, distributed or otherwise furnished each of the asbestos products described in your Answers to Interrogatory Nos. 8 and 19 on a year-by-year and product-by product basis:

- (A) A description of the package or container in which each product was sold, distributed or otherwise furnished, including composition, size, shape and color;**
- (B) A description of the markings or printed material that appeared on each package or container, indicating the size, color and location;**
- (C) A description of any logo or other design appearing on the package or container, indicating the size, color and location;**
- (D) A verbatim description of all caution or warning notices appearing on the package or container, setting forth the exact dates, location, size and color in which such notice appeared on each such product;**
- (E) A verbatim description of any instructions appearing on the package or container and include its location, size and color; and**
- (F) The identity of each person with knowledge of decisions made regarding the use and date of such caution, notice, warning or other statement or explanation.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, Crane Co. is not presently aware of any particular "packaging" and/or "containers" that may have been associated with its valves.

(23) If any changes were made to the packages and containers in which you sold, distributed or otherwise furnished each of the asbestos products described

in your Answer to Interrogatory No. 8 and 19, indicate as to each such package or container:

- (A) The nature of each such change, e.g., changes in composition, size, shape and color, and/or changes regarding the placement, modification or removal or any color, logo, design, name, work, number, instruction, warning or other marking on the container;
- (B) The date which you decided to make the change;
- (C) The date the container was in fact changed;
- (D) The reason for the change;
- (E) The identity of each present or former employee, office, representative or agent of yours at any time from 1930 to the present with knowledge or information regarding your decision to change any aspect of the package or container; and
- (F) The custodian, location and identity of each document in your custody, control or possession which contains information relevant to your decision to change any aspect of the package or container.

ANSWER: See objections and response to Interrogatory No. 22.

(24) Do you have custody, possession, or control of any packages that presently or formerly packaged asbestos-containing products? If so,

- (A) Identify each such package;
- (B) Identify the custodian of each such package;
- (C) Identify the date of which each such package was sold and/or distributed by you and the date when each such package was retrieved from your facilities and/or from the stream of commerce;
- (D) State whether or not such package was retrieved from the stream of commerce or was retrieved from your warehouses or storage facilities; and
- (E) If it was retrieved from the stream of commerce, identify the person or company from whom it was retrieved;
- (F) If it was retrieved from in-house sources, i.e., warehouses, storage facilities, or sales representatives, identify where and from whom it was received.

ANSWER: See objections and response to Interrogatory No. 22.

(25) For each brochure, pamphlet, specification, instruction, manual, bulletin, advertisement or other written material describing or relating to each of the asbestos products identified in your Answers to Interrogatory Nos. 8 and 19:

- (A) Describe its contents and the date thereof;
- (B) State when and to whom it was distributed;
- (C) State the manner in which it was placed in the product container or whether it was separate from the product container;

- (D) State whether any written, printed or graphic matter was present to warn of any potential harmful ingredient it might contain. If so state:
- (1) Whether a signal word, e.g., "danger", "warning" or "caution" was present.
 - (2) Whether the signal word was printed in boldface, capital letters or different colored inks;
 - (3) The wording of the statements describing any hazard; and
 - (4) The wording, size, color and location of all directions and/or instructions pertaining to any method of use to avoid any hazard.
- (E) Identify each individual who participated in the writing of the brochure or other written materials and describe in detail the extent of his participation;
- (F) Identify and produce each document which reflects, refers or relates to the information contained in the brochures, or other written materials and/or the decision to include such information; and
- (G) As to any information received orally in answer to this interrogatory, identify each person who supplied such information and state the full substance of the information supplied.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Crane Co. further objects to this Interrogatory as being ambiguous, overbroad and unduly burdensome. Subject to and without waiving the foregoing objections, Crane Co. distributed externally written material regarding its valves, but, with one exception described below, it is not presently aware of any of such materials that focused specifically on the fact that certain component parts of those valves may have contained asbestos.

To the best of Crane Co.'s present knowledge, the only "warning" associated with any Crane Co. product regarding asbestos was a notification which first appeared in the mid-1980s, attached to certain industrial valves that informed the user that asbestos-containing materials were contained within the valve. That warning read as follows:

"CAUTION – Contains Asbestos Packing or Gasket". See response to Interrogatory No.

5.

(26) Identify each present or former employee, officer, agent or representative of yours who directed, handled, solicited, supervised, promoted or otherwise participated in the sale, supply, distribution, delivery, installation or removal in Pennsylvania at any time from 1930 to the present of any asbestos products identified in your Answers to Interrogatory Nos. 8 and 19.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Crane Co. further objects on the grounds that this Interrogatory is unduly burdensome. Subject to and without waiving the foregoing objections, Crane Co. is not aware of any of its employees who were specifically responsible for selling asbestos-containing products in Pennsylvania.

(27) For each person identified in your Answer to Interrogatory No. 26 who participated in the advertising in Pennsylvania of any asbestos products identified in your Answers to Interrogatory Nos. 8 and 19 at any time from 1930 to the present, state:

- (A) His or her duties, responsibilities and inclusive years of employment;**
- (B) The identity of each product advertised, marketed or promoted; and**
- (C) The method by which each product was advertised, marketed or promoted, and if by print, the name of the publication, the inclusive dates during which the advertisement or promotion appeared therein and the publisher.**

ANSWER: See objections and response to Interrogatory No. 26.

(28) Describe your corporate structure and policy concerning the subject of employee safety in the design, development, manufacture, testing and use of asbestos products identified in your Answers to Interrogatory Nos. 8 and 19 from 1930 to the present. In your Answer to this Interrogatory, identify each present or former corporate department, division, subdivision or other group responsible for the above-described activities and dates related thereto and, with respect to each, identify the name, title, duties, responsibilities, dates of employment and current or last known business and residential address of the highest supervisory employee with knowledge of any of those activities during any time from 1930 to the present.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Crane Co. further objects to this Interrogatory on the grounds that it seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence, because to the best of Crane Co.'s present knowledge, none of the plaintiffs in these actions worked at or have alleged that they were exposed to asbestos-containing products at a Crane Co. facility.

(29) Describe your corporate structure concerning the subject of research and development of asbestos products identified in your Answers to Interrogatory No. 8 and 19 from 1930 to the present. In your Answer to this Interrogatory, identify each present or former corporate department, division, subdivision or other group responsible for any of these activities and dates related thereto and, with respect to each, identify the name, title, duties, responsibilities, dates of employment and current or last known business and residential address of the highest supervisory employee during any time from 1930 to the present.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Crane Co. further objects to the extent this Interrogatory implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, Crane Co. is not presently aware of any of its employees who were involved in the development of the asbestos-containing components of its valves. Crane Co.'s engineering department was responsible, at least in part, for selecting the components used in its valves.

(30) Describe your corporate structure concerning medical directors, industrial hygienists, physicians, biological scientists or consultants in these fields from 1930 to the present. In your Answer to this Interrogatory, identify the name, title, duties, responsibilities, period of employment, to whom the individual reported, the current or last known business and residential address of each medical director, industrial hygienist, physician, biological scientist or consultant of yours, the location, identifying titles or codes, and custodians of all reports or memoranda written by each, the professional specialization of each, the reason for hiring each such person and the name and address of the person in your company responsible for hiring each such person.

ANSWER: See objections to Interrogatory No. 28.

(31) Identify any medical examination program offered or sponsored by you and your insurance carrier, from 1930 to the present, for employees handling or otherwise exposed to asbestos and/or asbestos products. With respect to each such program, indicating applicable time periods, state:

- (A) The manner of communicating with employees about such program;**
- (B) Whether examination was optional or mandatory and, if the latter, how frequently such examination was required;**
- (C) What percentage of employees permitted to undergo such examination actually participated;**
- (D) What percentage of employees who underwent such medical examination were found to have pneumoconiosis, asbestosis, mesothelioma, lung cancer or other cancers; and**
- (E) With respect to the employees referred to in your Answer to Part (D) of this Interrogatory, what percentage of these employees were paid disability, and/or worker's compensation benefits and for what percentage of employees were medical expenses paid for purposes of treatment of such condition.**

ANSWER: See objections to Interrogatory No. 28.

(32) State whether you or anyone on your behalf ever conducted, engaged in or participated in any tests, studies and/or research concerning the human health consequences of a person coming in contact with and/or inhaling asbestos fibers or asbestos dust during the manufacture and/or use of asbestos products. If so, identify:

- (A) What tests, studies and/or research were done;**
- (B) Where said tests, studies and/or research were done;**
- (C) The individuals or groups engaged in or participating in the tests, studies and/or research;**

- (D) The substance of any recommendations and/or suggestions given as a result of the tests, studies or research. State when, by whom and to whom said recommendations were made, including the addresses of these individuals;
- (E) All written documents including, but not limited to, reports, memoranda, specifications and correspondence which refer, relate or pertain to said tests, studies and/or research; and
- (F) The present custodian of the written documents identified in your Answer to Part (E) of this Interrogatory.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad in that it is not limited to Crane Co.'s products, and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, Crane Co. did not manufacture asbestos-containing valve components and did not conduct tests or studies of these types.

(33) State whether any of the medical directors, industrial hygienists, physicians, biological scientists or consultants in these fields identified in your Answer to Interrogatory No. 30 ever made any recommendations and/or suggestions to you pertaining to the risks or hazards to persons involved in the manufacture or use of asbestos products. If so, identify:

- (A) The date when said recommendations and/or suggestions were made;
- (B) The individual to whom said recommendations and/or suggestions were made;
- (C) The individual who made said recommendations and/or suggestions;
- (D) The substance of the recommendations and/or suggestions;
- (E) What actions, if any, were taken by you as a result of said recommendations and/or suggestions; and
- (F) If no action was taken by you as a result of said recommendations and/or suggestions, state the reason(s) why and the person(s) responsible for making that decision.

ANSWER: See objections and response to Interrogatory No. 30. Subject to and without waiving the foregoing objections, to the best of Crane Co.'s present knowledge, no.

(34) State whether you have ever conducted or directed any investigations or studies to determine the amount of airborne dust containing asbestos fibers in your facilities where asbestos products were mined, milled, manufactured, produced, fabricated, converted, processed, stored, used, handled, installed or removed. If so, identify:

- (A) The date of each such dust count or sampling;**
- (B) The individual or group conducting each such dust count or sampling;**
- (C) The result or conclusion of each such dust count or sampling;**
- (D) All documents which refer, relate or pertain to each such dust count or sampling;**
- (E) The technique used for each such dust count or sampling;**
- (F) The purpose for administering each such dust count or sampling;**
- (G) What action, if any, has been taken in response to the findings of each dust count or sampling;**
- (H) The living person who has the most knowledge of the matters herein; and**
- (I) The identity of all documents identified in your Answer to this Interrogatory and custodian thereof.**

ANSWER: See objections to Interrogatory No. 28.

(35) State whether any written memoranda, specifications, blueprints or other written materials of any kind or character exist relating to any testing of the asbestos products identified in your Answers to Interrogatory Nos. 8 and 19. If so, identify:

- (A) Each such written material or document by date and description; and**
- (B) The custodian, identity and location of each such written material or document.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products because it is overbroad, and because it is ambiguous in its use of the term "testing of asbestos products." Subject to and without waiving the foregoing objections, and subject to Crane Co.'s understanding of the term "testing of asbestos products," see objections and response to Interrogatory No. 32.

(36) State whether, after you released to the public any of the asbestos products identified in your Answers to Interrogatory Nos. 8 and 19, you ever conducted or directed any tests thereon to determine potential health hazards involved in the use of the material contained therein. If so, indicate the date of each test, the individual or group conducting each such test, the result or conclusion of each such test, and the present custodian of all documents identified in this answer.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies (i) that there was a potential health hazard involved in the use of its products and (ii) that Crane Co. manufactured any asbestos-containing products. Crane Co. further objects to the use of the phrase "released to the public" as it is used in this Interrogatory. Crane Co.'s valves were sold to industrial customers, who were sophisticated users of those valves. Subject to and without waiving the foregoing objections, Crane Co. did not test its products after it sold them, and it did not conduct any studies relating to health hazards allegedly associated with asbestos. By way of further answer, see response to Interrogatory No. 32.

(37) State whether, prior to 1982, you ever had any labor inspectors or persons from or financed by your company go to job sites or other areas where your asbestos products were being used and/or installed to make a dust level count. If so, indicate when and where such a practice or procedure occurred, the purpose of the practice or procedure, the results of such dust counts and what action, if any, was taken by you in response to the findings made as a result of said practice or procedure. If not, explain why such dust counts were not done.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products, and because it is unduly burdensome and overbroad in that it is not limited to the jobsites at which plaintiffs worked. Crane Co. further objects on the grounds that this Interrogatory seeks information that is neither relevant to these actions

nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, to the best of Crane Co.'s present knowledge, no.

(38) State whether you ever conducted or directed any studies designed to learn how to prevent, minimize or eliminate the inhalation and ingestion of asbestos dust and fibers by those who use your asbestos products or are exposed to asbestos dust or fibers therefrom. If so, indicate the date of each study, the individual or group conducting each such study, the result or conclusion of each such study, all documents which refer, relate or pertain to each such study and the present custodian of all documents identified in this Answer.

ANSWER: In Addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies (i) that Crane Co. manufactured any asbestos-containing products, and (ii) that anyone was exposed to asbestos dust or fibers from Crane Co.'s valves. Subject to and without waiving the foregoing objections, Crane Co. was aware at all times that any asbestos that may have been contained in the components of Crane Co.'s valves was chemically and physically bound within the component itself by a rubber-like compound. Moreover, those components were completely encapsulated within the metal structures of the valves and/or valve fittings and did not emit friable or respirable asbestos fibers while enclosed therein. Crane Co. was further aware that the process of replacing those components did not emit any appreciable amount of asbestos dust or fibers, and any asbestos exposure that may have occurred was at a de minimis level and well within all applicable regulations.

For these reasons, Crane Co. did not ever believe, nor does it believe today, that any Crane Co. valve was harmful when used as intended. Crane Co. did not conduct any tests, studies or research regarding further minimizing the amount, if any, of

asbestos its valves may have emitted below the, at most, de minimis levels of asbestos that those components may have released.

(39) Identify all trade organizations, associations or other entities to which you belong or belonged. Said organizations, etcetera, include, but are not limited to, the following:

- (A) Asbestos Textile Institute (ALI)**
- (B) Industrial Hygiene Foundation and/or Industrial Health Foundation (IF)**
- (C) Mineral Wool Institute**
- (D) Industrial Mineral Insulation Manufacturers Institute**
- (E) Magnesia Silica Insulation Manufacturers Association**
- (F) National Insulation Manufacturers Association (NINA)**
- (G) Thermal Insulation Manufacturers Association (TIMA)**
- (H) Asbestos Information Association of North America (AIA)**
- (I) Quebec Asbestos Mining Association (QAMA) and Quebec Asbestos Producers Association**
- (J) National Safety Council**
- (K) Asbestos Cement Products Association**
- (L) Refractories Institute**
- (M) Sprayed Mineral Fiber Manufacturers Association**
- (N) Gypsum Association**
- (O) International Association of Wall and Ceiling Contractors**
- (P) Southwestern Insulation Contractors Association (SWICA)**
- (Q) Air Hygiene Foundation**
- (R) National Insulation Contractors Association (NICA)**
- (S) Northwest Magnesia Association**
- (T) Institute of Occupational Environmental Health**
- (U) Friction Materials Standards Institute**
- (V) Friction Materials Safety Institute**
- (W) International Association of Wall and Ceiling**
- (X) Contracting Plasterers' and Lathers' International Association**
- (Y) Asbestosis Research Counsel of England**
- (Z) Asbestos International Association**
- (AA) Thermal Insulation Contractors Association of England**
- (BB) American Conference of Governmental Industrial Hygienists (ACGIH)**
- (CC) American Association of Testing Materials (ASTM)**
- (DD) International Association of Wall and Ceiling Insulators (AWCI)**
- (EE) American National Standards Institute (ANSI)**
- (FF) American Petroleum Institute (API)**
- (GG) Gasket Fabricators Association (GFA)**
- (HH) Mechanical Packing Association (MPA)**
- (II) Mineral Fiber Products Bureau (MFPB)**
- (JJ) Gypsum Drywall Contractors International (GDCI)**
- (KK) American Industrial Hygiene Association**

(LL) National Mineral Wool Association
 (MM) Acoustical Materials Association (AMA)
 (NN) Acoustical Materials and Insulation Association (AMIA)
 (OO) American Board Products Association (ABPA)
 (PP) North American Industrial Hygiene Association (NAIHA)
 (QQ) National Lime Association (NLI)
 (RR) Contracting Plaster and Lathers International (CPLI)
 (SS) American Standards Association (ASI)
 (TT) American Society and Safety Engineers (ASSE)
 (UU) American Industrial Hygienists (AIHA)
 (VV) Employing Plasterers Association (EPA)
 (WW) Methal Lath Association (HA)
 (XX) Pulp and Paper Institute (PPI)
 (YY) Hardboard Association (HA)
 (ZZ) Resilient Floor Covering Institute
 (AAA) Or any other such trade association to which you had or have either corporate or individual association or to which you belong or belonged.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and unduly burdensome. Subject to and without waiving the foregoing objections, to the extent relevant and to the best of its present knowledge, with respect to the businesses relevant to Crane Co. valves, Crane Co. was a member of the National Safety Council (approximately 1975-1996) and the Valve Manufacturers Association (approximately 1938 to present). William N. McLean served on various committees of the American Petroleum Institute.

(40) For each trade organization, association or other entity identified in your Answer to Interrogatory No. 39, state:
 (A) Dates of membership;
 (B) Type of membership, i.e., regular or associate;
 (C) The dates and type of any meetings you attended and the identity of the individuals who attended such meetings on your behalf;
 (D) The identity, title, duties and responsibilities of any individual who held an elected, appointed or self-designated position within said organization, etceteras
 (E) The names of any publications or written materials distributed by or on behalf of said organization, etceteras
 (F) The identity of all documents received by you from said organizations) and the dates of receipt of each;

- (G) The amount of money your contributed in each year;**
- (H) Whether you served on the board or any committees, and if so, identify the persons) who was on said board or committee, the position of the persons) on said board or committee and the dates thereof; and**
- (I) The identity of all written studies, investigations, materials, notes summaries, minutes or transcripts relating to publications, reports, transactions and proceedings of said organization(s), etcetera and the custodian thereof.**

ANSWER: See objections and response to Interrogatory No. 39.

(41) For each trade organization, association or other entity identified in your Answer to Interrogatory No. 39, identify all studies, tests, research, recommendations, suggestions, seminars, symposia and/or speeches conducted or made which concerned, discussed, addressed or dealt with the actual, alleged or possible health hazards associated with exposure to asbestos.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it vague and ambiguous. Subject to and without waiving the foregoing objections, Crane Co. is presently unaware of any such studies or related materials.

(42) With respect to each study, test, research project recommendation, suggestion, seminar, symposium or speech identified in your Answer to Interrogatory No. 41, identify:

- (A) The individuals or groups involved therein;**
- (B) The date(s) thereof;**
- (C) The complete results thereof;**
- (D) The recommendations, if any, which were made as a result thereof; and**
- (E) The custodian, identity and location of each document which represents, refers to or contains information relating thereto.**

ANSWER: See objections and response to Interrogatory No. 41.

(43) Describe each action taken by you as a result of each study, test, research project, recommendation, suggestion, seminar, symposium and/or speech identified in your Answer to Interrogatory No. 41. In your Answer to this

Interrogatory, state the date of each action and the identity of the individuals) who initiated said action.

ANSWER: See objections and response to Interrogatory No. 41.

(44) State whether you directed, sponsored, financed, participated in or received any findings or results of any studies and/or tests performed by the Saranac Laboratory of the Trudeau Foundation concerning the human health consequences of exposure to asbestos.

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, no.

- (45) If your Answer to Interrogatory No. 44 is in the affirmative, identify;**
- (A) All documents in your possession or control which summarize or explain the investigations or results of said studies or tests;**
 - (B) The identity, substance and dates of all communications, oral or written, between you and Saranac Laboratory personnel, including but not limited to Gerrit W. Schepers, M.D., Arthur Vorwald, M.D. and/or Leroyu Gardner, M.D.;**
 - (C) All documents relating to Saranac Laboratory studies or tests which were received or submitted by you, either directly or indirectly through predecessor(s) in interest, subsidiary(ies) or affiliate(s), if any, through other companies, or through any trade associations, organizations or entities;**
 - (D) All recommendations or findings of such studies in relation to:**
 - (1) Adequacy or inadequacy of the threshold limited values;**
 - (2) The signatories to the agreement;**
 - (3) The purpose for entering into the agreement;**
 - (4) What, if any, editing rights you retained regarding any reports or studies to be issued by the Saranac Laboratory; and**
 - (5) What, if any, materials you actually reviewed and/or edited as a result of the studies performed by Saranac Laboratory; and**
 - (E) The custodian and location of all documents and/or communications identified in your Answer to this Interrogatory.**

ANSWER: See objections and response to Interrogatory No. 44.

(46) State the amount of money spent or contributed by you annually from 1930 to the present for research of the relationship between exposure to asbestos

dusts, fibers and/or products and any pulmonary pathology and identify each person or organization to whom the expenditure or contribution was made and the dates thereof.

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, for, inter alia, the reasons set forth in Crane Co.'s responses to Interrogatory Nos. 36 and 38, Crane Co. has not spent or contributed any money for any such research other than that conducted in connection with this litigation.

(47) State whether you have ever maintained a library (or libraries) which contains books, articles, periodicals, journals and/or reference materials that relate to the subjects of asbestos, industrial hygiene, medicine, safety, health, occupational disease and/or engineering. If so, state:

- (A) The date each such library was established;**
- (B) The location of each such library;**
- (C) The identity of each librarian or other person in charge of the operation and materials of each such library;**
- (D) For whose use each such library was established;**
- (E) The title, publisher and dates of subscription to or acquisition of each such periodical or journal for each such library; and**
- (F) The title, author, publisher, date and dates of acquisition of each such article and book for each such library.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, for, inter alia, the reasons set forth in Crane Co.'s responses to Interrogatory Nos. 36 and 38, Crane Co. did not maintain any library dedicated to asbestos.

(48) State whether any of the codefendants in this litigation or the following companies have ever furnished you with any information as to the state of the

medical knowledge at any time regarding the relationship between exposure to asbestos dusts, fibers and/or products and the contracting of diseases, including asbestosis, pneumoconiosis, mesothelioma, lung cancer and other cancers:

- (A) Johns-Manville/Canadian Johns-Manville
- (B) Raybestos-Manhattan/Raymark
- (C) H.K. Porter/Southern Asbestos/Southern Textile
- (D) Celotex/Philip Carey
- (E) Carey Canada
- (F) National Gypsum/National Asbestos Mines
- (G) Pittsburgh Corning
- (H) Owens-Corning Fiberglas
- (I) Owens-Illinois
- (J) Keene/Ehret/Baldwin-Hill/Baldwin Ehrit-Hill/Mundet
- (K) Fibreboard/Pabco
- (L) GAF/Ruberoid/Eternit/Vermont Asbestos Mines
- (M) Armstrong World Industries/Armstrong Cork
- (N) Flintkote/Flintkote Mines
- (O) Asbestospray/Smith 6L Kanzler/Spraycraft
- (P) Georgia-Pacific
- (Q) U.S. Gypsum
- (R) W.R. Grace/Zonolite/Multibestos
- (S) Turner & Newall/Turner Bros. Asbestos/Turner Asbestos Corp./J.S. Roberts/Ferodo
- (T) U.S. Minerals
- (U) Asbestos Corporation Ltd.
- (V) Asbestos Unlimited
- (W) Union Carbide
- (X) Cape Asbestos/Cape Industries/North American Asbestos Corp.
- (Y) Bell Asbestos Mines
- (Z) Lake Asbestos of Quebec
- (AA) Nicolet Industries/Keasbey & Mattison
- (BB) Cassiar Asbestos Corp.
- (CC) ACandS/Armstrong Contracting & Supply
- (DD) General Motors Corp.
- (EE) Westinghouse
- (FF) Uniroyal/U.S. Rubber
- (GG) Pfizer/Gibsonburg Lime Products Co.
- (HH) McCormick Asbestos Co./MCIC
- (II) Porter Hayden/Reid Hayden
- (JJ) Hopeman Bros.
- (KK) Krafft-Murphy
- (LL) Hampshire Industries/John H. Hampshire
- (MM) Dresser Industries/John H. Hampshire
- (NN) Foster Wheeler
- (OO) Ford Motor Co.
- (PP) Unarco/Union Asbestos and Rubber Co.

- (QQ) Quigley Co.**
- (RR) Amatex**
- (SS) Eagle Picher Industries**
- (TT) Metropolitan Life Insurance**
- (UU) Forty Eight Insulation**

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, none of these companies have ever furnished Crane Co. with information of this type.

- (49) If your Answer to Interrogatory No. 48 is in the affirmative, identify:**
- (A) How the information was furnished;**
 - (B) Who furnished said information;**
 - (C) When said information was given to you; and**
 - (D) The identity and substance of said information.**

ANSWER: See objections and response to Interrogatory No. 48.

(50) State whether, at any time since 1930, you have interchanged, exchanged or communicated, the results of research, tests, studies or experiments regarding the relationship between exposure to asbestos dusts, fibers and/or products and the contracting of diseases, including asbestosis, pneumoconiosis, mesothelioma, lung cancer and other cancers, with any other person, corporation or other business entity, including, but not limited to, co-defendants in this action and/or the companies listed in Interrogatory No. 48 above.

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, it has never participated in information exchanges of this type other than the exchange of medical reports in connection with this litigation.

- (51) If your Answer to Interrogatory No. 50 is in the affirmative, state:**
- (A) When said interchange, exchanges or communications occurred;**
 - (B) The identity of those persons, corporations or business entities who participated in said interchanges, exchanges or communications;**

- (C) The content of said interchanges, exchanges or communications; and**
- (D) The identity of the custodian of any documents which relate to said interchanges, exchanges or communications.**

ANSWER: See objections and response to Interrogatory No. 50.

(52) Identify all persons who have testified on your behalf before the Occupational Safety and Health Administration, the National Institute of Occupational Safety and Health, any United States congressional or state legislative committee, subcommittee, administrative hearing or investigative proceeding on the subjects of the human health consequences of exposure to asbestos dusts, fibers and/or products and the setting, modification, feasibility and acceptance of allegedly safe or proper levels of exposure to said asbestos and asbestos products.

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, no one has provided any such testimony on Crane Co.'s behalf.

(53) Identify all documents presented to or utilized in the preparation of testimony before the organizations, agencies or committees referred to in Interrogatory No. 52, specifying which documents were presented or utilized for each such body and the present custodian and location of each document.

ANSWER: See objections and response to Interrogatory No. 52.

(54) For all testimony or presentations identified in your Answer to Interrogatory No. 52, identify:

- (A) The dates and descriptions of the hearings and proceedings;**
- (B) The relationship between the person who testified or responded and you; and**
- (C) All studies, test results, scientific and/or medical documents relied upon by each person as the basis for any recommendation made or testimony given;**

ANSWER: See objections and response to Interrogatory No. 52.

(55) State your knowledge relating to the meaning of “maximum allowable concentration” and/or “threshold limit value” as it pertains to asbestos exposure and disease.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it calls for the opinion of an expert industrial hygienist.

(56) With reference to “maximum allowable concentration” and “threshold limit value” (which, for purposes of this interrogatory, means how much asbestos dust and/or fibers one can safely inhale, absorb or ingest without risk of disease or illness), state:

- (A) When and by what means you first obtained information related to a threshold limit value and maximum allowable concentration;**
- (B) The substance of any information imparted to you regarding the same; and**
- (C) Whether and by what means you advised or warned anyone of details relating thereto.**

ANSWER: Subject to and without waiving the foregoing General Objections, while Crane Co. is aware of the applicable regulations governing asbestos exposure levels, Crane Co. has no present knowledge of the precise circumstances regarding how or when it first became aware of such limits.

(57) State whether you ever knew that any governmental, private agency, and/or other entity issued guidelines suggesting a “maximum allowable concentration” and/or “threshold limit value” (as defined in Interrogatory No. 56) for exposure to asbestos dust and/or fibers. If so, state:

- (A) The identity of the agency or other entity which issued said guidelines;**
- (B) The verbatim content of said guidelines;**
- (C) The date said guidelines were issued;**
- (D) The date you were first aware of the purposes of said guidelines and;**
- (E) The custodian, location and identity of all documents related thereto.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory as being ambiguous and duplicative.

(58) State whether you were ever made aware that the proper method for determining safe levels of asbestos dust was to test concentrations of asbestos fibers in the air rather than the total number of asbestos particles in the air. If so, state:

- (A) The source of such knowledge;**
- (B) The persons who obtained such knowledge and when;**
- (C) All documents relating thereto; and**
- (D) The custodian and location of all documents identified in your Answer to Part (C) of this Interrogatory.**

ANSWER: See objections to Interrogatory No. 55.

(59) State in detail what tests or studies, if any, you ever conducted or directed with regard to the quantity, quality, or threshold limit values (as defined in Interrogatory No. 56) of asbestos dust, fibers or particles to which insulators, shipyard workers or others who used the asbestos products identified in your Answers to Interrogatory Nos. 8 and 19 and/or others working in the same vicinity were exposed.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies (i) that any individual was exposed to asbestos dust or fibers from Crane Co.'s products, and (ii) that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, to the best of its present knowledge and for, inter alia, the reasons set forth in its responses to Interrogatory Nos. 36 and 38, Crane Co. conducted no studies of this type. By way of further answer, see response to Interrogatory No. 38.

(60) State in detail what research, tests or studies, if any, you ever conducted or directed to determine whether the exposure of insulators, shipyard workers or others to asbestos dust exceeded the American Conference of Governmental Industrial Hygienists' (A.C.G.I.H.) recommended threshold limit values.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory as being duplicative.

(61) State in detail what steps, if any, you ever took to determine whether the American Conference of Governmental Industrial Hygienists' (A.C.G.I.H.) recommended threshold limit values for exposure to asbestos dust were accurate or reliable.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory as being vague and ambiguous, since it does not indicate the respect in which the purported threshold limit values were "accurate and reliable." To the extent plaintiffs care to offer an opinion as to the threshold limit values relevant to this request, Crane Co. reserves the right to present its own expert's opinion on this topic.

(62) State your knowledge relating to the meaning of "dose response relationship" as it pertains to exposure to asbestos dusts, fibers and/or products and the contracting or disease, including asbestosis, pneumoconiosis, mesothelioma, lung cancer and other cancer.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it calls for the opinion of an expert.

(63) State whether you have ever placed any warranties, guarantees or other such representatives on any asbestos products identified in your Answers to Interrogatory Nos. 8 and 19 and/or on or in the containers or packages in which said products were sold, distributed or otherwise placed in the stream of commerce. If so, state:

(A) The inclusive dates on which each such warranty, guarantee or other representation appeared on or with the product and/or on or in the container or package;

(B) A verbatim description of each such warranty, guarantee or other representation;

(C) A description of the location of the product and/or container where such warranty, guarantee or other representation was placed;

(D) Each of your present or former highest supervisory employees with knowledge of the decision to place any such warranties, guarantees or other representations on or with the product and/or on or in the container or package; and

(E) The custodian of all documents in your custody, possession or control which relate to or describe any such warranties, guaranties or other representations or the decision to place any of these on or with the product and/or on or in the container or package.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections and presuming that plaintiffs meant "representations" and not "representatives," to the best of its present knowledge, Crane Co. never placed any such warranties, guarantees or representations on any of its valves.

(64) State whether the content and/or placement of any warranty, guarantee or other representation described in your Answer to Interrogatory No. 63 was ever changed. If so, for each such change, identify:

(A) The nature of the change, including a verbatim description, if applicable;

(B) The date when the change was made and the inclusive dates during which such change appeared on or with the product and/or on or in the container or package;

(C) The persons with personal knowledge of the reasons for making the change; and

(D) The custodian of documents in your custody, possession or control which relate to the decision and process of making the change.

ANSWER: See objections and response to Interrogatory No. 63.

(65) State when and by what means you became aware of the alleged hazards of exposure to asbestos dusts, fibers and/or products to the health of persons coming into contact with, handling or using asbestos products.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory because it is not limited to Crane Co.'s products, and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Crane Co. further objects to this Interrogatory to the extent it presumes that Crane Co.'s products emitted hazardous levels of asbestos fibers or dust. Crane Co. does not consider itself competent to offer opinions as to causal relationships, if any, between various substances and alleged disease processes. Crane Co. must defer to the reasoned judgment and opinions of expert witnesses on all questions of human disease, its cause, and its diagnosis. Subject to and without waiving the foregoing objections, Crane Co. first became aware of the alleged association between asbestos exposure and illness in human beings sometime in the 1970s. Crane Co. does not believe, however, that exposure to any of its products was harmful. See objections and response to Interrogatory No. 38.

(66) State when and by what means you became aware that exposure to asbestos dusts, fibers and/or products was acknowledged to be or alleged to be potentially hazardous to the health of persons coming in contact with, handling or using asbestos products.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is duplicative.

(67) State whether you ever learned that there is or may be a causal connection between exposure to asbestos dust and:

- (A) Asbestosis;**
- (B) Pneumoconiosis;**
- (C) Lung Cancer;**
- (D) Mesothelioma; and**
- (E) Other cancers.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is duplicative.

(68) If you Answer to Interrogatory No. 69 is in the affirmative, identify the following as to each such disease listed therein:

(A) When and by what means you first became aware of such causal connection;

(B) If your awareness of such causal connection was obtained at any conference, lecture, convention, symposium, or other such meeting, identify the event, its date, the person(s) who attended on your behalf and/or any documents obtained from such event; and

(C) If your awareness of such causal connection was obtained from a medical or scientific study, or from any other published works, identify the same and the date of your receipt thereof.

ANSWER: See objections and response to Interrogatory No. 69.

(69) State whether you ever specifically informed the purchasers and/or users of the asbestos products identified in your Answer to Interrogatory Nos. 8 and 19 that exposure to asbestos dust could cause asbestosis, pneumoconiosis, lung cancer, mesothelioma and/or other cancers. If so, state:

(A) The date(s) of such notice to purchasers or users;

(B) The means used for transmittal of such notices;

(C) The custodian, identity and location of each document which refers to or contains information relevant to such notice; and

(D) The identity of each person who made decisions regarding the furnishings of such notice to purchasers and/or users.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory as being duplicative. Subject to and without waiving the foregoing objections, see Crane Co.'s objections and responses to Interrogatory Nos. 36 and 38, as they relate to the fact that (1) Crane Co.'s customers, including plaintiffs' employers, were sophisticated users of Crane Co.'s valves, and (2) the fact that the asbestos-

containing components of Crane Co.'s valves did not emit harmful levels of asbestos fibers or dust. See Crane Co.'s objections and response to Interrogatory No. 25 as it pertains to warnings.

(70) State whether you ever specifically informed the distributors or other entities identified in your Answer to Interrogatory No. 20 and/or those identified in your Answer to Interrogatory No. 21 who resold or redistributed the asbestos products identified in your Answers to Interrogatory Nos. 8 and 19 that exposure to asbestos dust could cause asbestosis, pneumoconiosis, lung cancer, mesothelioma and/or other cancers. If so, state:

- (A) The date(s) of such notice;**
- (B) The means used for transmittal of such notices;**
- (C) The custodian, identity and location of each document which refers to or contains information relevant to such notice; and**
- (D) The identity of each person who made decisions regarding the furnishing of such notice to distributors and/or those engaged in the resale or redistribution of the asbestos products.**

ANSWER: See objections and response to Interrogatory No. 69.

(71) State whether you ever provided any caution, notice, warning or other statement or explanation of the potential health hazards of exposure to asbestos on or with the asbestos products identified in your Answers to Interrogatories Nos. 8 and 19.

ANSWER: See objections and response to Interrogatory No. 69.

(72) If your Answer to Interrogatory No. 71 is in the affirmative, state as to each product identification in your Answers to Interrogatory Nos. 8 and 19:

- (A) The date(s) on which such caution, notice, warning or other statement or explanation first appeared;**
- (B) The identity of each person with knowledge of decisions made regarding the use of such caution, notice, warning or other statement or explanation;**
- (C) The verbatim content of each caution, notice, warning or other statement or explanation when it was first used;**
- (D) Whether the caution, notice, warning or other statement or explanation was ever altered, amended or changed. If so, include how, when and why it was altered, amended or changed; and**

(E) The size, color and location of the caution, notice, warning or other statement or explanation on each such product and/or its container or package.

ANSWER: See objections and response to Interrogatory No. 71.

(73) State when you first became aware that asbestos products were being labeled with a caution, warning, notice or other statement or explanation concerning the potential health hazards resulting from the use of asbestos products and/or exposure to asbestos dust or fibers and identify the product(s) and manufacturers) with which such label was connected.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, this information is presently unavailable to Crane Co.

(74) Identify the officer, agent, servant, employee or other representative of yours who first obtained an awareness that asbestos products were being labeled as described in Interrogatory No. 73.

ANSWER: See objections and response to Interrogatory No. 73.

(75) Identify the custodian, identity and location of all documents related to the knowledge obtained by you regarding the labeling of asbestos products as described in Interrogatory No. 75.

ANSWER: See objections and response to Interrogatory No. 73.

(76) State when and by what means you first became aware that Johns-Manville Corporation or any of its affiliated companies place on its asbestos products a caution, warning, notice, other statement or representation concerning the potential health hazards resulting from the use of asbestos products and/or exposure to asbestos dust or fibers.

ANSWER: See objections and response to Interrogatory No. 73.

(77) Identify the officer, agent, servant, employee or other representative of yours who first became aware that the asbestos products of Johns Manville Corporation or its affiliated companies were being labeled as described in Interrogatory No. 76.

ANSWER: See objections and response to Interrogatory No. 73.

(78) Identify the custodian, identity and location of all documents related to the knowledge obtained by you regarding the labeling of asbestos products by Johns-Manville Corporation or its affiliated companies as described in Interrogatory No. 76.

ANSWER: See objections and response to Interrogatory No. 73.

(79) If upon learning that Johns-Manville Corporation or its affiliated companies labeled its asbestos products as described in Interrogatory No. 76, you did not apply such labels to the products identified in your Answer to Interrogatory No. 8 and 19, state:

- (A) The reason(s) for such a decision;**
- (B) The identity of any agent, servant, employee, officer or representative of your involved in discussions and decisions regarding the same; and**
- (C) The custodian, identity and location of all documents pertaining to such a decision.**

ANSWER: See objections and response to Interrogatory No. 73. See also objections and response to Interrogatory Nos. 36 and 38.

(80) State whether you specifically informed your employees, agents and/or servants that use of asbestos products and/or exposure to asbestos dust or fibers was either actually or alleged to be hazardous to their health.

ANSWER: See objections to Interrogatory No. 28.

(81) If your Answer to Interrogatory No. 82 is in the affirmative, state:

(A) When and in what manner you first provided such information to these persons;

(B) The identity of any agent, servant, employee, officer or representative of yours involved in discussions and decisions regarding providing information to these persons;

(C) The verbatim content of any written documents and/or communications containing such information; and

(D) The custodian, identity and location of all documents which relate or pertain to providing such information to these persons.

ANSWER: See objections to Interrogatory No. 28.

(82) Describe in detail any precautionary procedures which you urged or required your employees, agents and/or servants to follow so as to reduce and/or avoid the potential hazards or dangers associated with use of asbestos products and/or exposure to asbestos dust or fibers and state when and how each such procedure was introduced to these individuals.

ANSWER: See objections to Interrogatory No. 28.

(83) State whether you ever required your employees, agents and/or servants who worked with and around asbestos and/or asbestos products to wear respirators, gas masks, protective clothing and/or other protective devices. If so, state:

(A) Which employees, agents and/or servants, by type of employment and department, were required to use each such protective device;

(B) The date(s) on which the directive relative to each such protective device was issued for each type of employee and each department;

(C) Which type of protective device was required to be used or worn by each type of employee and each department;

(D) The identity of any agent, servant, employee, officer or representative of yours involved in discussion and decisions regarding the same; and

(E) The custodian, identity and location of all documents pertaining to protective devices.

ANSWER: See objections to Interrogatory No. 28.

(84) State whether at the commencement of an individual's employment with you, from 1930 to the present, you informed that person as to possible health ramifications of working with and around asbestos fibers, dust and/or products.

If so, set forth:

- (A) The nature of the warning;**
- (B) The manner in which said information is communicated and, if the communication is in writing, attached a copy hereto;**
- (C) When such practice was initiated; and**
- (D) By whom such information is communicated.**

ANSWER: See objections to Interrogatory No. 28.

(85) State whether, based upon the material contents, the manufacturing methods and the method of intended use of the asbestos products identified in your Answers to Interrogatory Nos. 8 and 19, those asbestos products can generally be applied and/or removed by users or others without liberating asbestos fibers.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Crane Co. further objects to this Interrogatory to the extent it is framed in the present tense. Subject to and without waiving the foregoing objections, Donna M. Ringo CIH, the expert industrial hygienist whom Crane Co. has retained to assist it in this litigation, has opined that "the fiber release associated with the use, handling, and removal of asbestos-containing gaskets and packing products do not present a hazard to users in the workplace or bystanders. The de minimus, if any, fiber

release associated with the use, handling, installation, and removal of these products is significantly below current OSHA regulatory exposure levels."

(86) State whether it was foreseeable to you that your asbestos-containing products would have to be removed, at any time after installation.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, gaskets, packing and discs contained in Crane Co. valves may have needed to be replaced from time to time.

(87) State whether you ever provided users and others who would be applying or removing your asbestos products instructions concerning safety precautions to use during use of or exposure to such products.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. See response to Interrogatory No. 5.

(88) State when you first became aware or received notice that any person was claiming injury as a result of use of an/or exposure to asbestos products identified in your Answers to Interrogatory Nos. 8 and 19.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad in that it is not limited to claims arising from an asbestos-related injury, and to the extent it implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, available records indicate that the first lawsuit against Crane Co.

for an alleged asbestos-related injury resulting from the use of or exposure to Crane Co. valves was filed sometime in 1983 or 1984.

(89) With regard to the first awareness or notice of claim of injury described in your Answer to Interrogatory No. 88 and regarding all claims filed up to the present for any injury allegedly resulting from the use of and/or exposure to asbestos products, state:

- (A) The identity of each Claimant;**
- (B) The date of notice of each claim;**
- (C) A description of each claim;**
- (D) The type of injury allegedly sustained by each claimant;**
- (E) The job location and job function of each claimant;**
- (F) The date of employment of each claimant;**
- (G) The identity of each attorney representing the individuals making such claims;**
- (H) The style, case number and court applicable to each claim;**
- (I) The resolution of each claim; and**
- (J) The custodian, identity and location of all documents which relate or pertain to each claim.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is unduly burdensome and overbroad.

(90) State whether, at any time prior to the present, any person filed a claim against any worker's compensation insurance carrier which provided coverage for you alleging that he or she contracted a disease as a result of use of and/or exposure to asbestos products identified in your Answers to Interrogatory Nos. 8 and 19.

ANSWER: See objections to Interrogatory No. 28.

(91) If your Answer to Interrogatory No. 90 is in the affirmative, provide the following information:

- (A) A list of each such claim by claimant's name, occupation, date of employment, job location, date claim filed and jurisdiction; and**
- (B) A brief summary of the disposition of each such claim.**

ANSWER: See objections and response to Interrogatory No. 90.

(92) State whether you ever received any reports or communications from your worker's compensation insurance carrier or products liability insurance carrier with regard to potential health hazards incident to use of asbestos products and/or exposure to asbestos fibers or dust.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, to the best of Crane Co.'s present knowledge, Crane Co. did not receive any reports or communications of this type.

(93) If your Answer to Interrogatory No. 92 is in the affirmative, state:
(A) The substance of the contents of such reports or communications;
(B) The identity of the insurance carrier from which you received each report or communication;
(C) The date of each such report or communication; and
(D) The custodian, identity and location of all documents which relate or pertain to such reports or communications.

ANSWER: See objections and response to Interrogatory No. 92.

(94) State whether you ever maintained or operated a unit or units of your corporation, including, but not limited to, divisions, subsidiaries or any other entity, which was/were under contract to apply or install the asbestos products described in your Answers to Interrogatory Nos. 8 and 19.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, for a period of time believed to be less than two years during the early 1960s, Crane Co. had

a division that was involved with the erection of piping systems in limited geographic areas. Crane Co. is presently unaware of any information linking that division to the products identified in these Interrogatory answers.

(95) If your Answer to Interrogatory No. 94 is in the affirmative, identify any and all claims filed by workers in such contract units or divisions alleging disease arising out of the use of asbestos products and/or exposure to asbestos fibers or dust and, as to each such claim, state:

- (A) The date on which you first received notice;**
- (B) The identity of the claimant;**
- (C) The nature and description of the claim;**
- (D) The job location and job function of each claimant;**
- (E) The date of employment of each claimant;**
- (F) The style, case number and jurisdiction;**
- (G) The resolution of the claim; and**
- (H) The custodian, identity and location of all documents which relate or pertain to each claim.**

ANSWER: See objections and response to Interrogatory No. 94.

(96) Describe the methods by which you have maintained records concerning the manufacture, sale, advertising, distribution, delivery and installation of each of the asbestos products identified in your Answer to Interrogatory No. 8 and 19.

ANSWER: Subject to and without waiving the foregoing General Objections, see Preliminary Statement, Sections B and I.

(97) With regard to the record-keeping method described in your Answer to Interrogatory No. 96, identify:

- (A) Each present and former corporate department, division or subdivision responsible for maintaining the records;**
- (B) How the records are kept, e.g., in boxes, filed, on microfilm, microfiche or computer tape or disk;**
- (C) The inclusive dates of manufacture, sale, advertising, distribution, delivery and installation that the record keeping system covers;**
- (D) The location(s) where such records are maintained; and**

(E) The identity of each person employed by you at any time from 1930 to the present, in the highest supervisory capacity, who is or was directly responsible for the collection and maintenance of such records.

ANSWER: See objections and response to Interrogatory No. 96.

(98) If the record keeping system described in your Answer to Interrogatory No. 96 includes use of microfilm, microfiche, computer tape or disk or any other system in which data is taken from other records, state whether you have retained the documents or other material from which the information entered into these modes of storage was obtained. If not, indicate:

(A) The date when and location where the original records were destroyed or discarded; and

(B) The identity of each employee, representative, official or agent of yours who ordered, authorized or supervised said destruction.

ANSWER: See objections and response to Interrogatory No. 96.

(99) State whether, at any time from 1930 to the present, you made any representations that the presence of asbestos in the products identified in your Answer to Interrogatory Nos. 8 and 19 made these products superior, in any way, to any asbestos-free product or material intended for the same or similar use.

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge as it understands plaintiff's use of the term "representations," no.

(100) If your Answer to Interrogatory No. 99 is in the affirmative, indicate with respect to each such representation:

(A) The date(s) on which the representation was made;

(B) Its exact content; and

(C) The manner in which it was communicated.

ANSWER: See objections and response to Interrogatory No. 99.

(101) State whether, at any time from 1930 to the present, you made any representations that the use of asbestos or the use of the asbestos products identified in your Answer to Interrogatory Nos. 8 and 19 was safe, harmless or not dangerous.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, to the best of Crane Co.'s present knowledge, as it understands plaintiffs' use of the term "representations," no.

(102) If your Answer to Interrogatory No. 101 is in the affirmative, indicate as to each such representation:

- (A) The date(s) on which the representation was made;**
- (B) Its exact content; and**
- (C) The manner in which it was communicated.**

ANSWER: See objections and response to Interrogatory No. 101.

(103) State whether any of the asbestos products identified in your Answers to Interrogatory Nos. 8 and 19 were ever stored or warehoused by you in Pennsylvania at any time from 1930 to the present.

ANSWER: Subject to and without waiving the foregoing General Objections and subject to the information contained in Crane Co.'s responses to Interrogatory Nos. 8 and 19, Crane Co. at one time marketed its valves at the following locations: 218-22 East 8th St., Erie, Pennsylvania; 245 Master St., Philadelphia, Pennsylvania; 1600 South 59th St., Philadelphia, Pennsylvania; 40 24th St., Pittsburgh, Pennsylvania and 407 North Front Street, Reading, Pennsylvania.

(104) If your Answer to Interrogatory No. 103 is in the affirmative, identify:

- (A) The address of each warehouse or storage facility;
- (B) The asbestos products stored or warehoused at each warehouse or storage facility identified in your Answer to part (A) of this Interrogatory.
- (C) The year(s) of such storage or warehousing; and
- (D) The custodian, identity and location of each document in your custody, possession or control which describes or relates to such storage or warehousing.

ANSWER: See objections and response to Interrogatory No. 103.

(105) Identify the means by which the asbestos products identified in your Answers to Interrogatory Nos. 8 and 19 were transported to Pennsylvania at any time from 1930 to the present and state:

- (A) If the asbestos products were transported by rail, identify the name(s) of the railroad company(ies) providing that service and the year(s) during which such service was used;
- (B) If the asbestos products were transported by truck, identify the names) of the carrier providing that service and the years) during which such Service was used;
- (C) If the asbestos products were transported by vessel, identify the name(s) of the shipline providing that service and the year(s) during which such service was used;
- (D) The identity of each employee of yours responsible for coordinating the transport or delivery of such products to Pennsylvania;
- (E) The identity of each employee, officer, agent or representative of yours with personal knowledge of the transport or delivery of such products to Pennsylvania; and
- (F) The custodian, identity and location of each document which describes or relates to the transport or delivery of such products to Pennsylvania;

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is unduly burdensome, overbroad, and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Crane Co. further objects to the extent this Interrogatory implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections and subject to the information contained in Crane Co.'s responses to Interrogatory Nos. 8 and 19, Crane Co. has no

specific present knowledge regarding how its valves were transported to the locations identified in its response to Interrogatory No. 103.

(106) Identify each person whom you expect to call as an expert witness at trial, state the subject matter on which each expert is expected to testify, state the substance of the findings and opinions to which each expert is expected to testify and a summary of the grounds for each opinion and produce any written report made by each expert concerning those findings and opinions.

ANSWER: Subject to and without waiving the foregoing General Objections, at this time, Crane Co. expects to call Donna M. Ringo, the expert industrial hygienist whom Crane Co. has retained to assist it in this litigation, as an expert witness at trial. Ms. Ringo will testify that the fiber release associated with the use, handling, and removal of asbestos-containing gaskets and packing products do not present a hazard to users in the workplace or bystanders. The de minimus, if any, fiber release associated with the use, handling, installation, and removal of these products is significantly below current OSHA regulation exposure levels. A copy of Ms. Ringo's report is attached as Exhibit "A."

(107) With regard to expert witnesses identified in your Answer to Interrogatory No. 106, identify by case name, date, court and case number any deposition or testimony given to each such expert and state the custodian and location of transcripts thereof.

ANSWER: Subject to and without waiving the foregoing General Objections, Ms. Ringo was deposed on July 2, 2001 in the case of Wakeland v. A-C Product Liability Trust, et. al., in the Circuit Court for the County of St. Clair Illinois 98-L-519-A.

(108) Identify each person who has testified on your behalf at trial or by deposition in a case alleging asbestos-related injury, state the custodian and

location of transcripts thereof, and set forth the case name, number, court and date with respect to each proceeding in which the witness testified.

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, William N. McLean, a former Crane Co. employee, has been deposed in two cases. Mr. McLean was deposed on February 9, 1995 in In re: Burleigh and Cass Counties. Mr. McLean was also deposed on December 15, 1995 in Mike Norman v. A-C Product Liability Trust, et al., in the Circuit Court for the County of Wayne Michigan 94-421061 NP.

(109) State whether you contend that asbestos products have been or can be manufactured or treated so as to eliminate all potential health hazards to workers who use asbestos products and/or are exposed to asbestos fibers or dust. If so, explain in detail the factual basis for this contention.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad in that it is not limited to Crane Co.'s products. Crane Co. does not consider itself competent to offer opinions as to causal relationships, if any, between various substances and alleged disease processes. Crane Co. must defer to the reasoned judgment and opinions of expert witnesses on all questions of human disease, its cause, and its diagnosis. Crane Co. did not manufacture or design asbestos-containing products, as it understands those terms.

Subject to and without waiving the foregoing objections, as indicated in Crane Co.'s responses to Interrogatory Nos. 36 and 38, any asbestos dust or fibers that may have been emitted from the asbestos-containing components encapsulated within Crane Co.'s valves was at a de minimis level and significantly below OSHA regulatory

levels. Moreover, at such low levels, there has never been an OSHA requirement that warnings or precaution labels regarding asbestos be placed on these components or their packaging. Accordingly, without regard for other products, Crane Co. contends that the asbestos-containing components contained within its valves did not pose health hazards to workers who came into contact with them.

(110) State whether you contend that any person or business entity not presently a part to this action is responsible in whole or in part for any of the plaintiff's damages. If so, identify each such person or business entity and state the facts which form the basis for each such contention.

ANSWER: Subject to and without waiving the foregoing General Objections, Crane Co. does not know who, if anyone, is responsible for plaintiffs' alleged damages.

Plaintiffs' employers were sophisticated users of industrial products and were, or should have been, aware of any potential health hazards on their premises. Thus, to the extent plaintiffs' employers could have prevented harm to plaintiffs, they would be responsible for plaintiffs' damages. Moreover, plaintiffs themselves may be responsible for their damages to the extent, *inter alia*, they misused an otherwise safe product, created their own injuries through tobacco use, or were aware of any potential health hazard associated with any product and failed to take steps to protect themselves.

(111) State whether you contend that asbestos products are not inherently dangerous. If so, state all facts and documents which form the basis for such a contention.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad in that it is not limited to Crane Co.'s products, and seeks information that is neither relevant to these actions nor

reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, without regard for other products, Crane Co. contends that the asbestos-containing components contained within its valves were not inherently dangerous.

(112) State whether you contend that you did not have any reason or duty to warn Plaintiff, Plaintiffs' employers or users of the asbestos products identified in your Answer to Interrogatory Nos. 8 and 19 of the hazards and risks of use of and exposure thereto. If so, state all facts and identify all documents which form the basis for such a contention.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies (i) that Crane Co. manufactured any asbestos-containing products and (ii) that the intended use of Crane Co. valves posed a risk of exposure to asbestos. Subject to and without waiving the foregoing objections, for, inter alia, the reasons stated in its responses to Interrogatory Nos. 36 and 38, Crane Co. valves were not dangerous products, and Crane Co. had no duty to warn regarding them. Moreover, it is not necessary to place asbestos-related warnings on products such as the components that were encapsulated in Crane Co.'s valves. By way of further answer, see Exhibit "A."

(113) State whether you contend that you performed adequate tests of the safety of the asbestos products identified in your Answer to Interrogatory Nos. 8 and 19. Is so, state all facts and identify all documents which form the basis for such a contention.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that the term "adequate tests" is vague and ambiguous, and to the extent it implies that Crane Co. manufactured any asbestos-

containing products. Crane Co. further objects to this Interrogatory because it is overbroad and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, Crane Co. believes and, therefore, contends that it possessed adequate information to enable it to conclude that its valves were not dangerous products. By way of further answer, see response to Interrogatory Nos. 32 and 38.

(114) State whether you contend that you did not conspire with others to allow asbestos products to be used without adequate warnings, or without any warnings, regarding the hazards or risks of use of and/or exposure thereto. If so, state all facts and identify all documents which form the basis for such a contention.

ANSWER: Subject to and without waiving the foregoing General Objections, yes. Crane Co. did not "conspire" with anyone in connection with asbestos-containing products.

(115) State whether you contend that there are circumstances under which asbestos products can safely be handled and used. If so, state all facts and identify all documents which form the basis for such a contention.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory because it is overbroad, because it is not limited to Crane Co. valves, and because it is unduly burdensome, insofar as it requests a potentially infinite amount of information as to why Crane Co. valves were not dangerous products. Subject to and without waiving the foregoing objections, without regard to other products, Crane Co. contends that its valves could be safely handled and used. See Exhibit "A."

(116) State whether you contend that there is now or has ever been a distinction between one or more of the following with respect to use of and exposure to asbestos products and the health hazards or risks relating thereto: miners, millers, textile workers, asbestos plant workers, insulators, shipyard workers, steel plant workers, building tradesmen (i.e. electricians, pipefitters, laborers, etc.), industrial workers, auto mechanics, and brake service mechanics. If so, state all facts and identify all documents which form the basis for such a contention.

ANSWER: Subject to and without waiving the foregoing General Objections, Crane Co. is not an expert in these tasks performed by various tradesmen. Crane Co. must defer to the reasoned judgment and opinions of expert witnesses on such issues.

(117) State whether you contend that there are differences between asbestos fiber types (chrysotile, amosite, crocidolite, actinolite, anthophyllite or tremolite) with regard to diseases they may be capable of causing. If so, state all facts and identify all documents which form the basis for such a contention.

ANSWER: See objections to Interrogatory No. 55.

(118) Identify all locations, including but not limited to those at which Plaintiff worked, to which you sold, supplied, distributed and/or installed asbestos products within the States of Pennsylvania, West Virginia, Maryland, Delaware, New York and New Jersey from the date of the inception of your company to the present and include as to each such location:

- (A) The identity of the person(s) participating in each such investigation; and**
- (B) Whether you have obtained statements from any witness(es) and, if so, identify:**
 - (1) The identity of each such witness; and**
 - (2) The identity of the person in possession of each such statement.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory because it is unduly burdensome and overbroad, and to the extent it seeks information relating to job sites not relevant to the present lawsuits. Crane Co. has existed since 1855 and cannot possibly identify every single location in those states

to which it has shipped its valves in the last 146 years, let alone the persons involved therewith.

(119) State whether you contend that you gave adequate warnings to users of and to those exposed to your asbestos products, including the plaintiff, of the hazards and risks of use of and exposure thereto. If so, state all facts and identify all documents which form the basis of such a contention.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that the term "adequate warnings" is vague and ambiguous, and to the extent it implies (i) that Crane Co. manufactured any asbestos-containing products, and (ii) that Crane Co.'s products posed a risk of exposure to asbestos of which Crane Co. had a duty to warn. Subject to and without waiving the foregoing objections, for, inter alia, the reasons set forth in Crane Co.'s responses to Interrogatory Nos. 36 and 38, yes. See response to Interrogatory No. 32.

(120) State whether you contend that there were changes made to your asbestos products after they left your control. If so, state all facts and identify all documents which form the basis of such a contention.

ANSWER: See objections and response to Interrogatory No. 16.

(121) With regard to each type of asbestos or asbestos product identified in your Answers to Interrogatory Nos. 8 and 19, state:

- (A) Where it was purchased, or if it was not purchased, where it was obtained;**
- (B) From whom it was purchased or obtained and when;**
- (C) The manner in which it was received, stored and used in the production of the product; and**
- (D) The amount of it received by you on a year to year basis.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is duplicative. Subject to and without waiving

the foregoing objections, by way of further answer, see objections and responses to Interrogatory Nos. 19 and 20.

(122) Before marketing, selling, distributing and/or installing the asbestos-containing products identified in your Answers to Interrogatory Nos. 8 and 19 did you or anyone on your behalf conduct any pre-marketing tests of such asbestos-containing products concerning their potential for causing injury to persons exposed thereto? If your answer is in the affirmative, please state:

- (A) The particular products upon which such tests were performed;**
- (B) When said tests were performed;**
- (C) By whom said tests were performed;**
- (D) Where said tests were performed;**
- (E) What tests were performed;**
- (F) The reason for performing said tests;**
- (G) The results of said tests;**
- (H) To whom said results were reported or communicated; and**
- (I) Where the results of said tests were memorialized.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and duplicative, and to the extent it implies that (i) Crane Co. was the manufacturer of any asbestos-containing products and (ii) that anyone was exposed to a risk of injury from asbestos in connection with any Crane Co. valves. Subject to and without waiving the foregoing objections, by way of further answer, see response to Interrogatory No. 32.

(123) Before marketing, selling, distributing and/or installing the asbestos-containing products identified in your Answers to Interrogatory No. 8 and 19, did you or anyone on your behalf conduct a search of the medical and scientific literature concerning asbestos or asbestos-containing products and potential health hazards associated therewith. If your answer is in the affirmative, please state:

- (A) The particular searches performed;**
- (B) When said searches were performed;**
- (C) The dates of such searches;**
- (D) Where said searches were performed;**
- (E) By whom said searches were performed;**
- (F) The results of said searches;**

- (G) To whom the results were reported or communicated; and
- (H) Where the results of said searches were memorialized.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and duplicative. Subject to and without waiving the foregoing objections, by way of further answer, see response to Interrogatory No. 38.

(124) State when and under what circumstances you first learned that those engaged in the mining and milling of asbestos and/or the manufacturing of asbestos-containing products contracted asbestos related lung disease including but not limited to pleural asbestosis, parenchymal asbestosis, pulmonary asbestosis, lung cancer, colon cancer, other cancers, and mesothelioma.

ANSWER: Subject to and without waiving the foregoing General Objections, Crane Co. does not consider itself competent to offer opinions as to causal relationships, if any, between various substances and alleged disease processes. Crane Co. must defer to the reasoned judgment and opinions of expert witnesses on all questions of human disease, its cause, and its diagnosis. Subject to the foregoing, Crane Co. first became aware of the alleged association between asbestos exposure and illness in human beings sometime in the 1970s. For, inter alia, the reasons set forth in its responses to Interrogatory Nos. 36 and 38, however, Crane Co. does not believe that exposure to its valve products was harmful.

(125) Have you or has anyone on your behalf conducted or had conducted any investigation of the statistical and/or epidemiological relationship between your employees exposed to asbestos or any persons using the asbestos-containing products identified in your Answers to Interrogatory Nos. 8 and 19 and the contraction by humans or animals of pleural asbestosis, parenchyma) asbestosis, pulmonary asbestosis, lung cancer, colon cancer, other cancers and mesothelioma. If so:

- (A) Identify each person participating in such investigation and describe in detail the extent of this participation;
- (B) State when the investigation was conducted;
- (C) Identify the person or persons who authorized the investigation;
- (D) Identify each document which refers or related to any information set forth in answer to this Interrogatory;
- (E) As to any information received orally in answer to this Interrogatory, identify each person who supplied such information and state the full substance of the information supplied;
- (F) Identify the person or persons to whom the results of the investigation were reported or communicated; and
- (G) Where the results of said investigation were memorialized.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products, and because there is no evidence that any plaintiff was a Crane Co. employee or ever present at a Crane Co. facility. Subject to and without waiving the foregoing objections, for, inter alia, the reasons stated in Crane Co.'s responses to Interrogatory Nos. 36 and 38, no.

(126) Describe in detail all written and oral reports, including those reports originating from users of any of the asbestos-containing products identified in your Answers to Interrogatory Nos. 8 and 19 made by anyone, including doctors, and employees and agents of the Defendants, concerning any relationship between the use of these products and the development of pleural asbestosis, parenchyma asbestosis, pulmonary asbestosis, lung cancer, colon cancer, other cancer or mesothelioma in humans or animals.

- (A) Identify all persons making said reports and to whom said reports were made;
- (B) State whether any report or series or reports initiated changes and/or reevaluation of the production, sale or use, or recommendations for use, of any of those products;
- (C) Identify each document which refers or relates to any information set forth in answer to this Interrogatory;
- (D) As to any information received orally in answer to this Interrogatory, identify each person who supplied such information and state the full substance of the information supplied; and
- (E) Identify the date of each of the reports.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products, and on the grounds that it overbroad and unduly burdensome. Subject to and without waiving the foregoing objections, Crane Co. has no present knowledge of reports of this type, other than those prepared in the context of this litigation.

(127) With respect to each of the asbestos-containing products identified in your Answers to Interrogatory Nos. 8 and 19, state separately whether you gave any consideration to the possibility of inhalation of asbestos fibers by users of the product. If so:

- (A) Describe, in detail, the factors considered;**
- (B) Give the date, location and names of participants at each meeting where the matter was discussed or considered; and**
- (C) Identify each document recording such consideration by date, title, file designation, author and present location.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is vague as to the time period to which it pertains, overbroad and unduly burdensome. Crane Co. further objects to the extent this Interrogatory implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, for, inter alia, the reasons set forth in Crane Co.'s responses to Interrogatory Nos. 36 and 38, it was determined that Crane Co.'s valves did not pose an asbestos-related danger to human health.

(128) At the time of development of or at the time of the decision to manufacture, sell, distribute and/or install each of the asbestos-containing products identified in your Answers to Interrogatory Nos. 8 and 19, did you attempt to determine whether the product complied with any then applicable safety standards, safety

orders, regulations, laws, rules and design requirements of any city, county, state, or the Federal Government of the United States?

(A) If the answer is in the negative, please state the reasons for not conducting such an analysis and identify the name of the persons deciding not to conduct the analysis; and

(B) If the answer is in the affirmative, identify those safety standards, safety orders, regulations, laws, rules, or other ordinances which you claim you considered.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad in that it is not limited to the safety of Crane Co.'s products as they relate to asbestos. Subject to and without waiving the foregoing objections, Crane Co.'s valves were safe and complied with all applicable governmental safety regulations.

(129) Did you ever recommend to purchasers or users of the asbestos-containing products identified in your Answers to Interrogatory Nos. 8 and 19, or to any other Defendant with respect to asbestos products sold or made available to them, directly or indirectly, that respirators, protective masks and/or protective clothing be worn while working with, installing or removing the product? If so, state separately for each product:

(A) The date or dates when each such recommendation was made;

(B) The date or dates when each such recommendation was made to all users;

(C) Who made the recommendation;

(D) Who received the recommendation;

(E) If oral, the manner and substance of the recommendation; and

(F) If written, identify the document by title, date, file designation and author of each such recommendation and the location and present custodian of each such recommendation.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. See response to Interrogatory No. 5, supra.

(130) Have you ever communicated with an agency or department of the United States, or state or local government, concerning the specifications and/or

standard for any asbestos-containing products? If so, state separately for each product or set of specifications:

- (A) Identify each such product;
- (B) The number, if any, assigned to the military or federal specification or standard;
- (C) The intended purpose or use for the product so specified;
- (D) The date, time and place of each communication and:
 - (1) The name of each of your agents or employees who participated in each communication;
 - (2) The name, titles, and agencies or each individual with whom such communication was had;
 - (3) The subject of the communication;
 - (4) Whether any notes, minutes or memoranda in any form were recorded of such communication or of any meetings between you and the agency;
 - (5) Whether any documents were submitted to the agency; and
 - (6) If (4) or (5) is answered in the affirmative state the name, and location of the custodian or such records.

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, no.

(131) Have you ever been a member of or participated in a trade association which communicated with any agency or a department of the United States, concerning specifications and/or standards for any asbestos product? If so, state separately for each product or set of specifications:

- (A) The identity of each such product;
- (B) The number, if any, assigned to the military or federal specification or standard;
- (C) The name of the association;
- (D) The years during which you were a member of or participated in the association;
- (E) The intended purpose or use for the product or specification;
- (F) The date, time and place of each communication:
 - (1) The name of each of your agents or employees who participated in each communication;
 - (2) The name, titles, and agencies of each individual with whom such communication was had;
 - (3) The subject of the communication;
 - (4) Whether any notes, minutes or memoranda in any form were recorded of such communication or of any meetings between you and the agency; and
 - (5) Whether any documents were submitted to the agency, including the name, and location of the custodian of such records.

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, no.

(132) Have you undertaken any tests or studies to determine what type of ventilator or ventilation system would eliminate or decrease the number of airborne asbestos fibers in confined space? If so, state:

- (A) Who made the test or study;**
- (B) When was the test or study made;**
- (C) What was the result of the study or test;**
- (D) To whom the results were reported or communicated; and If the result was written, identify the document by title, date, file designation and author each such test or study, and the location and present custodian thereof.**

ANSWER: Subject to and without waiving the foregoing General Objections, Crane Co. was not responsible for the working conditions at its customers' facilities.

Therefore, it would not have conducted studies relating to ventilation at those facilities.

(133) Have you or has anyone on your behalf attended and/or participated in any conference, seminar, lecture or symposium not previously identified herein dealing with the potential health hazards of asbestos inhalation or use of asbestos-containing products and, if so, state:

- (A) The date and place of such conference, seminar, lecture or symposium;**
- (B) The person or persons conducting such conference, seminar, lecture or symposium;**
- (C) The person or persons who attended on your behalf;**
- (D) The subject matter of such conference, seminar, lecture or symposium;**
- (E) The speakers and/or moderators at such conference, seminar, lecture or symposium; and**
- (F) Whether any reports or memoranda were made concerning the subject matter of such conference, seminar, lecture or symposium, identifying each such report or memorandum.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory because it is vague, unduly burdensome and overbroad. Subject to and without waiving the foregoing objections, Crane Co. presently knows of no

attendance at such seminars, beyond those attended by its counsel in the context of this litigation.

(134) State when, if at all, you received knowledge of the following publications or matters discussed therein, who received such knowledge and identify all documents relating to such knowledge:

- (A) Selikoff, et al., "Asbestosis and Neoplasia," 42 Am. J. Med. 1967;**
- (B) Selikoff, Churg and Hammond, "The Occurrence of Asbestosis Among Industrial Insulation Workers,; 132 Ann. New York Acad. SC. 139 (1965)**
- (C) 1957 Industrial Hygiene Foundation of America - "An Epidemiological Study of Lung Cancer in Asbestos Miners" by Braun;**
- (D) 1964 "Asbestos Exposure and Neoplasia" by Selikoff, Churg and Hammond;**
- (E) Annals New York Academy of Sciences, "The occurrence of Asbestosis Among Insulation Workers in the United States" by Selikoff, Churg and Hammond;**
- (F) 1965 - "Relation Between Exposure to Asbestos and Mesothelioma", by Churg and Hammond;**
- (G) 1968 - "Asbestos Exposure, Smoking, and Neoplasia" by Selikoff, Hammond and Churg;**
- (H) "Documentation of the Threshold Limit Values for Substances in Workroom Air", A.C.G.LH. (3rd 1971);**
- (I) "Threshold Limit Values for 1961", A.C.G.LH. (1961);**
- (J) 1906 report by Dr. H. Matague Murray,**
- (K) 1930 - "The Occurrence of Pulmonary Fibrosis and Other Pulmonary Afflictions in Asbestos Workers" by E.RA. Merewether, M.D.;**
- (L) 1930 - "Report on Effects of Asbestos Dust on the Lungs and Dust Suppression in the Asbestos Industry" by Merewether and Price;**
- (M) Lanza, A.J., W.J. McConnell, and J.W. Fehnel. "Effects of the Inhalation of Asbestos Dust on the Lungs of Asbestos Workers," Publ. Health Rep. 50: 1-12 (1935);**
- (N) Fulton, W.B. et al., Asbestos. Harrisburg Pennsylvania: Department of Labor and Industry, Commonwealth of Pennsylvania, 1935;**
- (O) Doll, R, "Mortality from Lung Cancer in Asbestos Workers", British Journal of Industrial Medicine, v. 12, 1955;**
- (P) Wagner, J.C., et al., "Diffuse Pleural Mesothelioma and Asbestos Exposure in the North Western Cape Province," British Journal of Industrial Medicine, v. 17, 1960;**
- (Q) Hueper, W.C. "Carcinogens in the Human Environment," Arch. Path. 71:237-267 (1961);**
- (R) Enterline, P.E. and M.F. McKiever. "Differential Mortality from Lung Cancer by Occupation," J. Occup. Med. 5:283-290 (1963);**

- (S) Newhouse, M. and H. Thompson. "Mesothelioma of Pleura and Peritoneum following Exposure to Asbestos in the London Area," Brit. J. Indust. Med. 22:261-269 (1965);
- (T) Hueper, W.C. "Occupational and Nonoccupational Exposures to Asbestos," Ann. N.Y. Acad. Sci. 132:184-195 (1965); and
- (U) Brodeur, P., "The Magic Mineral", The New Yorker Magazine, 10/12/68.

ANSWER: Subject to and without waiving the foregoing General Objections, Crane Co. presently possesses no information responsive to this Interrogatory.

(135) When was the first time that you became aware of the contents and existence of Public Health Bulletin No. 241 entitled "A Study of Asbestosis in the Asbestos Textile Industry" by Dressen, Dallavale, Edwards, Miller, and Sayers?

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, it never received a copy of the article identified in this Interrogatory.

(136) With respect to the article referred to in the preceding Interrogatory, please state:

- (A) How you became aware of the existence of such article;
- (B) How you first became aware of the content of such article;
- (C) Which individuals, representatives, employees or agents of yours were the first to become aware of the content and existence of such article;
- (D) The job title or position held by such individuals) of your who was the first to become aware of the contents and existence of such article.

ANSWER: See objections and response to Interrogatory No. 135.

(137) State whether your knowledge of the contents of the article referred to in the preceding two interrogatories was relied upon by you at any time in deciding whether a caution or warning statement should be place upon the asbestos-containing products identified in your Answers to Interrogatory Nos. 8 and 19 concerning the potential health hazards of exposure to asbestos. If so, please state:

- (A) How such article influenced the decision concerning the placement of a caution or warning statement on such asbestos-containing products concerning the potential health hazards posed by exposure to asbestos; and
- (B) Identify and attach hereto copies of all writings, including memos, letters, etc., concerning your reliance on such article in deciding whether to place a caution or warning statement on such asbestos-containing products.

ANSWER: See objections and response to Interrogatory No. 135.

(138) When was the first time that you became aware of the contents and existence of the article entitled "A Health Survey of Pipe Covering Operations in Constructing Naval Vessels" by Fleischer, Viles, Gade and Drinker.

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, it never received a copy of the article identified in this Interrogatory.

(139) With respect to the article referred to in the preceding interrogatory, please state:

- (A) How you became aware of the existence of such article;
- (B) How you first became aware of the content of such article;
- (C) Which individuals, representatives, employees or agents of yours were the first to become aware of the content and existence of such article; and
- (D) The job title or position held by such individuals) of yours who first became aware of the contents and existence of such article.

ANSWER: See objections and response to Interrogatory No. 138.

(140) State whether your knowledge of the contents of the article referred to in the preceding two interrogatories was relied upon by you at any time in deciding whether a caution or warning statement should be place upon the asbestos-containing products identified in your Answer to Interrogatory No. 8 and 19 concerning the potential health hazards of exposure to asbestos. If so, please state:

- (A) How such article influenced the decision concerning the placement of a caution or warning statement on such asbestos-containing products concerning the potential health hazards posed by exposure to asbestos; and

(B) Identify and attach hereto copies of all writings, including memos, letters, etc., concerning your reliance on such article in deciding whether to place a caution or warning statement on such asbestos-containing products.

ANSWER: See objections and response to Interrogatory No. 138.

(141) Identify all patents issued, or any applications made therefor by you, for any non-asbestos product which was developed to replace an asbestos-containing product. Specify the number of each patent, the date(s) of application, issuance and renewal if applicable, to whom each patent was issued and the product(s) for which each patent was issued.

ANSWER: Subject to and without waiving the foregoing General Objections, Crane Co. did not manufacture the component parts of its valves identified in its response to Interrogatory Nos. 8 and 19 that may have contained asbestos, and thus did not manufacture any replacements for said components. Accordingly, Crane Co. did not obtain any patents regarding those components.

(142) Pursuant to your record destruction or retention policy have you destroyed any documents, records or writings pertaining to:

- (A) Health hazards of asbestos;**
- (B) Workmen's Compensation claims arising out of asbestosis, lung cancer, mesothelioma, corpulmonale, pneumoconiosis, or pulmonary fibrosis;**
- (C) Placing caution statements or warning labels on your products;**
- (D) Hazardous conditions in your mines, plants or factories;**
- (E) Funding of studies about health hazards of asbestos; and**
- (F) Lawsuits arising out of injuries alleged to have been caused by asbestos.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is unduly burdensome and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, Crane Co. is not presently aware of the destruction of any such documents.

(143) State your understanding of what legal duties or obligations you have or had concerning testing, inspection, design, manufacturing and use of the asbestos-containing products identified in your Answers to Interrogatory Nos. 8 and 19 before and after marketing them for sale.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it seeks a legal conclusion, and is not a proper subject of fact discovery.

(144) State whether you have ever discussed or considered the effect giving caution statements or warnings would have on sales of products containing asbestos. If so, please state:

- (A) The form of consideration or discussion;**
- (B) The date of the discussion or consideration;**
- (C) If the consideration or discussion occurred at a meeting, the names and present business and home addresses of those attending;**
- (D) The location and identifying codes of any records of such considerations or discussions;**
- (E) Whether you discussed or considered the effect such warnings) would have on sales of the product;**
- (F) Whether you considered or discussed the costs that would be insured in preparing and using such label; and**
- (G) Whether consideration was given to the effect any particular language used in a warning might have on sales.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad in that it is not limited to Crane Co.'s products, is vague as to the time period to which it pertains, and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Crane Co. further objects that the term "effect" is vague and ambiguous. Subject to and without waiving the foregoing objections, Crane Co. is not presently aware of any discussions or considerations of this type.

(145) Did you ever consider the resultant effect on sales of the asbestos products identified in your Answers to Interrogatory Nos. 8 and 19 of the public knowing of health hazards linked to asbestos? If so, please state:

- (A) The form of the consideration;**
- (B) The date of the consideration;**
- (C) The names of each person who considered the matter;**
- (D) If the consideration occurred at a meeting, the names and present business and home addresses of those attending; and**
- (E) The location and identifying code of all records of such consideration;**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence, and that it is overbroad in that it is not limited to alleged health hazards associated with Crane Co.'s products. Crane Co. further objects on the grounds that this Interrogatory is vague as to the time period to which it pertains, that the term "effect" is vague and ambiguous, and to the extent it implies (i) that Crane Co.'s products posed a threat of asbestos exposure when used as intended and that (ii) Crane Co. manufactured any asbestos containing products. Subject to and without waiving the foregoing objections, Crane Co. became aware that customers' preferences with respect to asbestos changed in the 1970's.

(146) Have you ever imposed or considered any restrictions or limitations on the use of the asbestos-containing products you sold, supplied, distributed and/or installed? If so, state separately for each products;

- (A) The verbatim content of each limitations indicating which product it applied to;**
- (B) The date it was first imposed;**
- (C) The reason for imposing the restriction or limitations;**
- (D) If the reason for the restriction is stated in any document, identify each document by date, author, title and state where it is presently located;**
- (E) The person responsible for imposing the restriction or limitation;**

- (F) If the limitation or restriction was communicated to purchasers of the product, state how this was communicated and if in writing, identify the communication and attach a copy to your answer, and
- (G) If not imposed, state why not.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Crane Co. further objects on the grounds that this Interrogatory is vague, ambiguous, and not capable of a meaningful response.

(147) Did you, at any time since 1930, ever consider providing any warnings, using any caution label or imposing any restriction on the use of the asbestos-containing products identified in your Answers to Interrogatory Nos. 8 and 19? If so, state separately for each time the matter was considered:

- (A) The form of the consideration;
- (B) The date of the consideration;
- (C) If the consideration occurred at a meeting, the names and present business and home addresses of those attending;
- (D) The substance of the consideration;
- (E) The location and identifying codes of any records of such consideration;
- (F) What language would be used in each label and whether you considered the effect such language would have in:
 - (1) Providing an adequate warning; and
 - (2) Depressing sales of the products;
- (G) What were the various sizes of labels that were considered and the substance of the discussion; and
- (H) Where each label or warning was to be placed on the product and the substance of any pertinent discussions.

ANSWER: See objections and response to Interrogatory No. 25.

(148) Did you receive any warning, instructions, or information as to the potential dangers of asbestos inhalation when you purchased, or accepted any asbestos or asbestos products? If so, for each:

- (A) Describe in detail each such warning, instruction or information received;
- (B) State whether such warning, instruction or information was oral or written;

(C) If oral, identify the substance of the warning, instruction or information received and the date and the name and company of the person from whom received; and

(D) If written, attach a copy of each warning, instruction and information, identify it by date given, title and reference number and state the manner and location whereby it was transmitted to you.

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, it did not receive any warnings, instructions, or information of this type.

(149) Have you ever included a health warning with respect to any product manufactured by you which does not contain asbestos, indicating that such non-asbestos containing product may in some way be harmful to human beings? If so, for each such product, please state:

(A) The name of the product;

(B) The chemical composition or ingredients of the product;

(C) The use for which such product is intended;

(D) The manner in which it is thought the product may cause harm to human beings;

(E) The contents of the warning;

(F) The size of the warning;

(G) The color of the warning;

(H) The date the warning was first given to the public; and

(I) The names of the people responsible for or participating in the decision to provide the warning and:

(1) Their present address;

(2) Their present position or status with your company; and

(3) The position held at the time the decision was made.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it seeks information that is neither relevant to these actions, nor reasonably calculated to lead to the discovery of admissible evidence.

(150) Have you ever sent any advisory letter or memoranda to any of your customers (specifically including without limitation, to any co-defendant in this

case) which attempts to advise them of any health hazard that may be associated with the use of asbestos-containing products? If so,

- (A) Identify the author of each such advisory letter or memorandum;
- (B) State the content of such advisory letter or memorandum;
- (C) Identify the persons) to whom each such letter or memorandum was sent;
- (D) State the date on which each such letter was sent; and
- (E) Identify the custodian of all such advisory letters or memoranda.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad. Subject to and without waiving the foregoing objections, for, inter alia, the reasons set forth in its responses to Interrogatory Nos. 36 and 38, no. By way of further answer, see response to Interrogatory No. 25.

(151) Did you or do you claim that any respirators or other breathing devices prevent inhalation of 100% of the asbestos dust and fibers which may be given off or released from the asbestos-containing products identified in your Answers to Interrogatory Nos. 8 and 19? If so, state:

- (A) Identify the respirator by manufacturer of product name and number;
- (B) When the respirator was sold;
- (C) Give the detailed description of such respirator or other breathing device;
- (D) The basis of your claim that it will prevent the inhalation of such dust and fibers; and
- (E) Identify any relevant tests performed by date, title, author and number.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds it implies that (i) Crane Co. manufactured any asbestos-containing products and that (ii) Crane Co.'s products gave off or released asbestos dust or fibers in any more than de minimis amounts, when used as intended. Subject to and without waiving the foregoing objections, this Interrogatory requires expertise in the areas of industrial hygiene and/or breathing devices, which Crane Co. does not possess.

(152) Have you undertaken or financed any studies to determine what type of respirator and/or protective mask would either eliminate or afford maximum protection against the inhalation of asbestos fibers? If so, state:

- (A) Who made the study;**
- (B) When was the study made;**
- (C) What was the result of the study; and**
- (D) If the result was written, identify the document by title, date, file designation and author of each such study, and the location and present custodian thereof.**

ANSWER: Subject to and without waiving the foregoing General Objections, for, inter alia, the reasons set forth in Crane Co.'s responses to Interrogatory Nos. 36 and 38, no.

(153) State whether you have entered into any agreement, either oral or written, with any other Defendant in this action or other personal injury asbestos cases regarding:

- (A) Settlement or non-settlement and/or**
- (B) Allocation of damages, should the Plaintiff prevail on liability. If the answer is yes to either of the above, state the substance of each such agreement and such parties who have entered into this agreement and:**
 - (1) Identify those persons who participated in the preparation of each such agreement and describe in detail the nature and extent of his participation; and**
 - (2) Identify each document which contains, refers or relates to each such agreement.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence.

(154) State whether any expert whom you expect to call as a witness at trial has performed any examination, test, modeling or other analysis of any product at issue in this action or of any product similar in nature to a product at issue in this trial, if you intend to call that witness to testify at trial and the witness will rely on the examination, testing, modeling, or other analysis of such similar products. If so:

- (A) Identify the product involved by trade name and brand name;**

- (B) Identify the defendant whom you claim manufactured or sold the product; and
- (C) With respect to such examination, test, modeling or other analysis;
- (1) Identify the expert who performed it;
- (2) State the date it was performed;
- (3) State its purpose;
- (4) State its nature;
- (5) State the results;
- (6) State the expert's conclusions based on it;
- (7) State whether any notes of the examination, test, modeling or other analysis were made; and
- (8) State whether the expert has issued a report which mentions or is based in whole or in part upon any such examination, test, modeling or other analysis. If so, please attach a copy of the report to your answers to these Interrogatories.

ANSWER: Subject to and without waiving the foregoing General Objections, Donna M. Ringo has performed numerous tests on asbestos gaskets and packing. See Exhibit "A" and Deposition Transcript of Donna M. Ringo identified in response to Interrogatory No. 107.

- (155) State whether any expert whom you expect to call as a witness at trial has ever inspected, visited or otherwise viewed any workplace where asbestos-containing products were used or removed. If so:
- (A) Identify the expert;
- (B) Identify each site inspected, visited or otherwise viewed;
- (C) State the date of each such inspection, visit or viewing;
- (D) State whether any notes were made by the expert with respect to such inspection, visit or viewing;
- (E) State the opinions of the expert in whole or in part upon the inspection, visit or view; and
- (F) State whether the expert issued any report concerning the inspection, visit or view. If so, please attach a copy to your Answers to these Interrogatories.

ANSWER: See objections and response to Interrogatory No. 154.

- (156) State whether you have ever attended any meetings related to the setting of industry of governmental standards or regulations related to asbestos. If so, identify:
- (A) When the meeting occurred;

- (B) The participants;
- (C) The standard or regulation which was involved;
- (D) All other participants at the meeting; and
- (E) All documents which evidence, reference or relate to any such meeting.

ANSWER: Subject to and without waiving the foregoing General Objections, Crane Co. is presently unaware of having attended any meetings of this type.

(157) State whether you have ever participated in anyway in the development of governmental specifications for asbestos products. If so, state in detail:

- (A) The extent and substance of your participation;
- (B) The inclusive dates of your participation;
- (C) All persons who participated;
- (D) The governmental entity involved; and
- (E) The identity of all documents which evidence, reference or relate to your participation.

ANSWER: Subject to and without waiving the foregoing General Objections, Crane Co. is presently unaware of having ever participated in the development of specifications of this type.

(158) List all companies which have provided you Worker's Compensation insurance and accident and disability insurance since 1930 and the inclusive dates of coverage for each such company.

ANSWER: See objections to Interrogatory No. 28.

(159) Did you in any way assist or participate in, or receive information from or about:

- (A) Any Metropolitan Life Insurance Company investigations, studies or dust surveys of asbestos conducted from 1929 to 1960; and
- (B) Any Industrial Hygiene Foundation investigations, studies or dust surveys of asbestos from 1930 to 1982.

If so, for each:

- (1) State what role of action you took; and
- (2) Identify all documents relevant to such activities by name, date, title, file number and present location.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad, unduly burdensome, and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, to the best of Crane Co.'s present knowledge, no.

(160) State whether or not you were a member of any board, committee, organization or group involved in the review or formulation of Worker's Compensation laws concerning asbestos or asbestos-related disease in any of the United States. If so, for each:

- (A) State what role or action you took and when; and**
- (B) Identify all documents relevant to such activities by name, date, title, file number and present location.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, to the best of Crane Co.'s present knowledge, no.

(161) State whether or not you attended a symposium of dust problems held on January 15, 1935 in Pittsburgh, Pennsylvania. If so, please state:

- (A) What, if any, matters were discussed at this symposium;**
- (B) The substance of any discussions concerning asbestos or asbestos-related products; and**
- (C) The substance of any discussion concerning the problems of ventilation, dust collecting and elimination, respiratory devices, and the establishment of**

standards for dust counting and particle size determination and for the taking of x-rays and diagnostic use and for interpretation of the markings on x-ray films.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, to the best of Crane Co.'s present knowledge, no.

(162) If your Answer to the preceding Interrogatory is affirmative, state whether or not you or any of your agents, representatives and/or employees were elected to any of the committees formed at the end of the January 15, 1935 symposium.

If so, state:

- (A) What committees to which you/they were elected or named**
- (B) The purpose for the formulation of the committee;**
- (C) The objectives of the committee; and**
- (D) If any reports, notes, minutes and/or summaries were issued by said committee.**

If so, state:

- (1) The identify of the notes, minutes and/or summaries and where they are located.**

ANSWER: See objections and response to Interrogatory No. 161.

(163) State whether you or any representatives, agents and/or employees were present at a meeting on November 11, 1948 held at the headquarters of the Johns-Manville Corporation. If so, state:

- (A) The name of the individual who attended;**
- (B) The matters discussed at the meeting;**
- (C) Whether any minutes, notes, reports and/or summaries of the meeting were made;**
- (D) To whom said minutes, notes, reports and/or summaries of the meeting were delivered; and**
- (E) By whom said minutes, notes, reports and/or summaries are maintained.**

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, no.

(164) For every policy of liability insurance insuring you against losses as a result of claims for bodily injury or death as a result of use of your asbestos products from 1935 to the present list:

- (A) The name of each insurer;**
- (B) Each policy number;**
- (C) The term of each policy;**
- (D) The amount of the coverage;**
- (E) Whether each policy provides for primary or excess coverage and if excess, the limit;**
- (F) The deductible, if any, for each policy;**
- (G) The basis of coverage for each, e.g. claims made, occurrence;**
- (H) The amount paid by the insurer to date or alternatively the amount of coverage still remaining; and**
- (I) The identity of the person having possession of each policy.**

ANSWER: Subject to and without waiving the foregoing General Objections, the following chart identifies the confirmed primary insurance coverage available to Crane Co. Additional primary coverage may be available for prior years, but is subject to dispute by certain carriers:

Carriers	Policy Number	Term	Limits
Globe Indemnity	GLC 011930	1/1/60-1/1/61	1 M OCC/2M AGG
Globe Indemnity	GLC 011931	1/1/61-1/1/62	1M OCC/2M AGG
CCC	CL 4293679R	7/1/61-7/1/64	1M OCC/2M AGG PER YEAR
Liberty Mutual	LG162100401702 8	2/1/68-2/1/69	1M OCC/2M AGG
Liberty Mutual	LG162100401702 9	2/1/69-2/1/70	1M OCC/2M AGG
Liberty Mutual	LG162100401702 0	2/1/70- 2/28/71	1M OCC/2M AGG
Hartford	10 CA 46800	2/28/71- 7/1/72	1M OCC/1M AGG
Hartford	10 CA 46801	7/1/72-7/1/73	1M OCC/1M AGG
Hartford	10 CA 46801	7/1/73-7/1/74	1M OCC/1M AGG
Aetna	01AL260803SCA	7/1/76-7/1/77	1M OCC/1M AGG
Aetna	01AL260851SCA	7/1/77-7/1/78	1M OCC/2M AGG
Aetna	01GL8SCA	7/1/78-7/1/79	1M OCC/2M AGG

Carriers	Policy Number	Term	Limits
Aetna	01AL265932SCA	7/1/78-7/1/79	1M OCC/2M AGG
Aetna	01GL1475SCA	7/1/79-7/1/80	1M OCC/2M AGG
Aetna	01AL265996SCA	7/1/79-7/1/80	1M OCC/2M AGG
Continental	SRL3636025	7/1/80-7/1/81	1M OCC/2M AGG
Continental	SRL3636199	7/1/81-7/1/82	1M OCC/2M AGG
INA	CFG209262	7/1/82-7/1/83	1M OCC/2M AGG
INA	CFG209868	7/1/83-7/1/84	1M OCC/2M AGG
INA	CFG3141403	7/1/84-7/1/85	1M OCC/2M AGG
INA	CFG G07749673	7/1/85-7/1/86	1M OCC/3M AGG

(165) For each of the last five (5) years state the actuarial surplus or deficit as reported to the United States Government in compliance with the Employer Retirement Income Security Act (ERISA), of each and every pension plan maintained by you for your employees.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence.

(166) For each of the last five (5) years, identify any off-balance sheet transaction, lease, asset, liability, or other factor that would have a material effect on your financial condition as per trade on your balance sheets.

ANSWER: See objections to Interrogatory No. 165.

(167) Please state for each of the last five (5) years the following financial ratios:

- (A) Current ratio;
- (B) Quick ratio;
- (C) Income after taxes to sale;
- (D) Income before interest and taxes to sales;
- (E) Income after taxes to equity;
- (F) Sales to assets;
- (G) Sales to equity;
- (H) Sales to inventory;
- (I) Equity to assets;
- (J) Equity to debt;
- (K) Cost of goods sold to sales; and
- (L) General and administrative expense to sales.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Crane Co. further objects on the grounds that this Interrogatory is unduly burdensome. Crane Co. is a publicly traded company, and therefore, the information is available to plaintiffs already.

(168) State the two digit, three digit and four digit standard industrial classification code used by you in reporting economic data to the United States Government. Also provide product codes (seven digit) pertinent to your company.

ANSWER: See objections to Interrogatory No. 165.

(169) If you are part of a holding company structure, identify all payments of dividends, corporate allocations and charges for corporate expenses made by you to the parent corporation.

ANSWER: See objections to Interrogatory No. 165.

(170) If you contend that you are unable to pay an award of punitive damages because of your financial condition or otherwise, state the facts upon which you base such contention and identify all documents in support thereof.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Plaintiffs have come forward with no evidence whatsoever to support a claim for punitive damages against Crane Co.

(171) State whether you received any documents pertaining, relating or referring to the non-disclosure of potential health hazards associated with exposure to asbestos or asbestos-containing products. If so, for each such document state:

- (A) The date the document was received;**
- (B) By whom the document was authorized;**
- (C) To whom the document was addressed;**
- (D) The subject matter of the document; and**
- (E) Where a copy of said document is maintained.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and unintelligible.

(172) Did you send any documents to any person or entity which relate, refer or pertain to the non-disclosure of potential health hazards associated with exposure to asbestos or asbestos-containing products? If so, for each document state:

- (A) The date the document was prepared;**
- (B) By whom the document was prepared;**
- (C) The date the document was sent;**
- (D) To whom the document was addressed;**
- (E) The subject matter of the document; and**
- (F) Where a copy of said document is maintained.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and unintelligible.

(173) State whether you or anyone on your behalf ever made any changes, or approved any changes suggested by others, in any reports, studies or writings concerning potential health hazards associated with exposure to asbestos or asbestos-containing products. If your answer is in the affirmative, please state:

- (A) The date such suggestions were made;**
- (B) By whom such suggestions were made;**
- (C) The suggestion made;**
- (D) The reasons for such suggestions;**
- (E) If such suggestions were memorialized in writing; and**
- (F) If such suggestions were memorialized in writing, the identity and location of a copy of said document reflecting such suggestions.**

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, no.

(174) State whether you ever received or are in possession of any documents, reports, writings, or studies which were done by you or someone on your behalf concerning the potential health hazards associated with exposure to asbestos or asbestos-containing products, which were not published or otherwise made available to members of the public. If your answer is in the affirmative, please state:

- (A) The title of the writing, report, document**
- (B) The date;**
- (C) By whom prepared;**
- (D) To whom it was sent; and**
- (E) Where a copy of the document, writing, report or study is maintained.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory to the extent it seeks to invade Crane Co.'s attorney work product.

(175) State whether you received any document, study, reports or other writings concerning the potential health hazards associated with exposure to asbestos or asbestos-containing products which document(s) were not made available through publication to members of the public. If your answer is in the affirmative, please state:

- (A) The date of said document;**
- (B) The date received by you;**
- (C) By whom it was sent;**
- (D) To whom it was sent;**
- (E) The title of the document, if any;**
- (F) The subject matter of the documents; and**
- (G) Where a copy of said document is maintained.**

ANSWER: See objections to Interrogatory No. 174.

(176) State whether after you became aware of the potential health hazards associated with exposure to asbestos or asbestos-containing products you continued to sell, distribute or install the asbestos-containing products identified in your Answers to Interrogatory Nos. 8 and 19 without any cautions or warnings and, if so, state:

- (A) The date you became aware of the potential hazards;**

- (B) The period of time for each such product that you continued to sell, distribute or install said product without a caution or warning;**
- (C) The reason(s) for continuing each sales, distributions or installations after you became so aware; and**
- (D) The person(s) responsible for such decision(s).**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Crane Co. further objects to the extent this Interrogatory implies (i) that the intended use of Crane Co.'s products posed a health hazard and (ii) that Crane Co manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, Crane Co. has never been made "aware" of any asbestos-related health hazards relating to the use of its valves.

(177) If you contend that you are not responsible for the alleged acts, omissions and/or liabilities for any predecessor in interest, state the facts upon which you base such contention and identify all documents in support thereof.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is vague, ambiguous, and not capable of a meaningful response.

(178) State whether after learning the potential health hazards associated with exposure to asbestos or asbestos-containing products you informed those selling, distributing and/or installing your product of those potential hazards. If so, state:

- (A) Those informed;**
- (B) The date(s) as to each;**
- (C) Who informed them;**
- (D) What information was given; and**
- (E) If given in writing**
 - (1) The author;**

- (2) To whom sent;
- (3) The date; and
- (4) Where a copy of the writing is maintained.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory as being duplicative.

(179) Identify all documents that you will use in support of your defense that you are not liable for punitive damages.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory as being unduly burdensome. By way of further answer, see objections to Interrogatory No. 170.

(180) For each of the asbestos-containing products identified in your Answers to Interrogatory Nos. 8 and 19, indicate the purpose of asbestos fibers in the product formulation and state whether such asbestos fibers were necessary for the proper performance of the product as intended by you.

ANSWER: Subject to and without waiving the foregoing General Objections, Crane Co. did not manufacture or design the components of its valves identified in response to Interrogatory Nos. 8 and 19.

(181) If you had a sales or other office or manufacturing or storage facility located in Pennsylvania, Maryland, Delaware, West Virginia, New York, and/or New Jersey state the following:

- (A) The address and type (whether sales office, executive offices, manufacturing, packaging, warehouse, shipping or other) of each office or facility;
- (B) Dates each office or facility was open and in operation;
- (C) The area or territory of responsibility for each such office or area or territory covered by the operations of each facility;
- (D) The identity of any asbestos-containing products that were manufactured, packaged or stored in such facility and the dates applicable thereto; and

(E) The identity of any asbestos-containing products that were sold, distributed or supplied from each such office or facility and the dates applicable thereto.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is unduly burdensome and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, at various times, Crane Co.'s valves were sold at supply branches at the following locations: 502 Broad St., Charlestown, West Virginia; North Broadway, Albany New York; 21 Washington St., Binghamton, New York; 201 Church St., Buffalo, New York; 209 Main St., Hempstead, New York; 47-30 29th St., Long Island City, New York; 200 South Ave., Rochester, New York; 760 West Genessee St., Syracuse, New York; 326 Broad St., Utica, New York; 2994 Mt. Ephraim Ave., Camden, New Jersey; 90 South St., Newark, New Jersey; 50 Escher St., Trenton, New Jersey; 626 W. Pratt St., Baltimore, Maryland; 1221 N. Salisbury Blvd., Salisbury, Maryland; 218-22 East 8th St., Erie, Pennsylvania; 245 Master St., Philadelphia, Pennsylvania; 1600 South 59th St., Philadelphia, Pennsylvania; 40 24th St., Pittsburgh, Pennsylvania and 407 North Front Street, Reading, Pennsylvania.

(182) If any product brochure, advertisement, bulletin or other document published by you identified jobsites in Pennsylvania, Maryland, Delaware, West Virginia, New York and/or New Jersey where any of the asbestos-containing products were supplied, delivered, installed or applied and identify and attach copies of each brochure, advertisement, bulletin or document containing reference to each such jobsite.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is unduly burdensome and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Crane Co. further objects on the grounds that this Interrogatory is not limited to the jobsites where any plaintiff worked.

(183) If you ever received notification or awareness of the failure of any of your asbestos-containing products to perform as intended by you, state:

- (A) The name of the product;**
- (B) The problem or failure discovered or of which you became aware;**
- (C) The date you initially became aware of such problem or failure;**
- (D) The time period during which you received notification of continued existence of such problem or failure;**
- (E) Any actions taken by you as a result of such awareness;**
- (F) Any labeling placed by you on packages of such products providing notification of such problem or failure;**
- (G) The identity of any document prepared by you relating to the problem or failure; and**
- (H) Any decision by you to withdraw the defective product or to limit its production and/or availability.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that the term "failure" is vague and ambiguous, and to the extent it implies that Crane Co manufactured any asbestos-containing products.

(184) If you or any attorney or law firm representing you has in connection with any asbestos personal injury claim or asbestos property damage claim ever been fined or otherwise sanctioned by a court anywhere within the United States for improperly or inadequately responding to discovery requests for production of documents, state:

- (A) The identity of each judge and court which imposed any such fine or sanctions;**
- (B) The date of any such fine or sanctions;**
- (C) The amount of any fine;**
- (D) The details of any sanctions;**
- (E) The identity, title and business address of each person or persons fined or sanctioned;**

- (F) The date of any hearing or deposition conducted prior to the court's decision of any such fine or sanction;**
- (G) The identity of anyone testifying in any such hearing or deposition and the date thereof;**
- (H) If any such fine or sanctions were appealed;**
- (I) The decision on appeal; and**
- (J) The case name and docket number of the proceeding in which any fine or sanctions were ordered.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence.

(185) For each of the asbestos products identified in your Answers to Interrogatory Nos. 8 and 19, state whether you engaged in any advertising program to promote the sale of that product and, if so, state:

- (A) The name or description of each advertising media that you have used to promote the product during the period 1930 to 1982;**
- (B) The name of each national magazine or periodical in which you have advertised the product during the period 1930 to 1982;**
- (C) The date of each issue of such magazine or periodical in which such advertisement appeared;**
- (D) The name and address of each newspaper, in which it advertised the product during the period 1930 to 1982;**
- (E) The date of each publication of each newspaper in with the advertisement appeared;**
- (F) Identify and produce each document which refers, reflects or pertains to each such advertisement which was published in each such magazine, periodical and/or newspaper; and**
- (G) State whether the advertising of the product was handled by an agency and, if so, state the name and address of each advertising agency that handled any portion of the advertising of the product during the period 1930 to 1982.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that the term "advertising program" is vague and ambiguous. Crane Co. further objects to this Interrogatory because it is unduly burdensome, overbroad and seeks information that is neither relevant to these actions

nor reasonably calculated to lead to the discovery of admissible evidence. Lastly, Crane Co. objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, to the best of Crane Co.'s present knowledge, it marketed and promoted its valves.

(186) State whether you have ever been the subject of any investigation or accusation by any Governmental Agency concerning asbestos and the provisions of the Occupational Safety and Health Act of 1970 (P.L 91-596, 29 U.S.C. Section 651 et seq.). If so state:

- (A) The date of such investigation, accusation, or other administrative or judicial procedure or action;**
- (B) The administrative agency or Court in which any proceedings arising from such investigation or accusation were heard or instituted;**
- (C) The determination and results of any such accusation or action;**
- (D) The identity of each document which refers or relates to information set forth in answer to this interrogatory; and**
- (E) As to any information received orally in answer to this interrogatory, identify each person who supplied such information and state the full substance of the information supplied.**

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, no.

(187) Please state:

- (A) Your knowledge as to any respirator or other breathing device which was on the market during the time period you produced, sold, distributed and/or installed asbestos-containing products which would prevent the inhalation of asbestos dust and fibers;**
- (B) A detailed description of such respirator or other breathing device, together with all information as to how such device prevents the inhalation of asbestos dust and fibers;**
- (C) What tests, if any, were conducted by whom and where, with regard to the effectiveness of any such device;**
- (D) Identify each documents in you possession which refers or relates to the subject matter of this Interrogatory; and**

(E) As to any information received orally in answer to this interrogatory identify each person who supplied such information and state the full substance of the information supplied.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is unduly burdensome in that it requires extensive information over an unspecified period of time on equipment not manufactured, sold, or distributed by Crane Co. Crane Co. further objects to this Interrogatory on the grounds that it seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, for, inter alia, the reasons set forth in Crane Co.'s responses to Interrogatory Nos. 36 and 38, Crane Co. did not retain information of this type.

(188) With respect to the period from 1930 to 1982, state the names, addresses and company title or position of each person who at any time during that period was in charge of the following activities with regard to each of the products identified in Answers to Interrogatory Nos. 8 and 19:

- (A) Production;**
- (B) Marketing;**
- (C) Labeling;**
- (D) Advertising;**
- (E) Product evaluation;**
- (F) Research and development; and**
- (G) Distribution.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is unduly burdensome in that it requires extensive information on numerous individuals who worked at Crane Co. over the span of 52 years. Subject to and without waiving the foregoing objections, Crane Co. is

presently aware that William N. McLean served as its Director of Engineering for some period of time relevant to these responses.

(189) Have you received any reports of documents prepared by Metropolitan Life Insurance Company from 1929 to about 1960, concerning statistical and/or other studies of asbestos workers for Johns-Manville? If so:

- (A) Identify and product all such documents received;**
- (B) Identify who received them and when; and**
- (C) Identify the current location of the documents.**

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, no.

(190) As to any asbestos threshold limit values ever published by the American conference of Governmental Industrial Hygienists, state when, if ever, you brought such information to the attention of purchasers, users, sellers and/or suppliers of your asbestos products. If you did not do so, state the reasons why not.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Crane Co further objects to this Interrogatory to the extent it implies that Crane Co. manufactured any asbestos-containing products. Subject to and without waiving the foregoing objections, for, inter alia, the reasons set forth in its responses to Interrogatory Nos. 36 and 38, never.

(191) Please identify all of your present or former employees, categorized by manufacturing plant, business division, date of claim, claimant occupation, employment date, and claim disposition who are now receiving or who have ever received benefits under any Occupational Disease or Workmen's Compensation Statute for each year from 1930 until the present time for each of the following:

- (A) Asbestosis;**

- (B) Lung Cancer;
- (C) Mesothelioma;
- (D) Any other pulmonary disorder;
- (E) Gastrointestinal System Cancer; and
- (F) Asbestos-related lung disease.

ANSWER: See objections to Interrogatory No. 28.

(192) Please state if any of the physicians, industrial hygienists, or other persons identified by you in these answers to interrogatories ever made at any time any recommendations and/or suggestions to you pertaining to the risks or hazards to persons involved in the manufacturing or use of any asbestos-containing product. If so, please state:

- (A) When was each such recommendation and/or suggestion made;
- (B) To whom was each such recommendation and/or suggestion made;
- (C) By whom was each such recommendation and/or suggestion made;
- (D) The substance of each recommendation and/or suggestion; and
- (E) The identity of all writings addressed, directed or submitted to you pertaining to the subject matter of this interrogatory.

ANSWER: See objections and response to Interrogatory No. 30.

(193) Please state each private meeting or discussion held at any time before December 31, 1982 between any of your directors, officers, or employees and any officer or employee of any other manufacturer or seller of asbestos or asbestos-containing products in which the safety of any asbestos-containing product was a subject of discussion. As to each such meeting or discussion, please state:

- (A) Its date;
- (B) Its location;
- (C) The participants in the meeting or discussion identified by name, title and business affiliation;
- (D) A description of all statements made by each participant concerning the safety of any asbestos-containing product; and
- (E) The identity of all writings pertaining in any manner to the matters covered in this interrogatory.

ANSWER: Crane Co. objects to this Interrogatory, on the grounds that it is overbroad, and because it seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence.

(194) Please state whether you exported any asbestos-containing product to a country without attaching warnings or caution labels regarding the potential hazards of asbestos exposure on the packaging of each such product after you had sold, supplied or distributed the same or similar types of products in the United States with such warnings or caution labels. If so, please state:

- (A) The generic and brand names of each such product exported;**
- (B) The asbestos content, by type, weight and volume, of each such product exported;**
- (C) The dates when you began and ceased exporting each such product;**
- (D) The countries to which you exported each such product;**
- (E) The dates, content and description, by size and color, of any warning or caution labels regarding and potential health hazards of asbestos exposure which were placed on the packaging of each such product exported;**
- (F) The identity of each of your directors, officers and/or employees who participated in making the decision to export such products; and**
- (G) The identity of all documents pertaining to the export of each such product and the custodian thereof.**

ANSWER: In addition to the General Objections set forth above, Crane Co objects to this Interrogatory on the grounds that it is unduly burdensome and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. No plaintiff in these actions is alleged to have worked outside the United States.

(195) Please state whether you exported asbestos-containing products to a country after those same or similar types of products had been banned in the United States. If so, please state:

- (A) The generic and brand names of each such product exported;**
- (B) The asbestos content, by type, weight and volume, of each such product exported;**
- (C) The dates when you began and ceased exporting each such product;**
- (D) The countries to which you exported each such product;**
- (E) The dates, content and description, by size and color of any warning or caution labels regarding the potential health hazards of the asbestos exposure which were placed on the packaging of each such product exported; and**
- (F) The identity of all documents pertaining to the export of each such product and the custodian thereof.**

ANSWER: See objections and response to Interrogatory No. 194.

(196) State whether you ever received a publication known as the "Asbestos Magazine". If so, please state:

- (A) The dates you received such publication;**
- (B) The terms, circumstances or requirements of receipt of such publication, e.g., free, by subscription, distributed at meetings, etc.; and**
- (C) The identity and custodian of any copies of such magazine that you received;**

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, no.

(197) Please state whether you recalled any asbestos product or otherwise attempted to remove it from the stream of commerce after you became aware of the potential health hazards of asbestos exposure.

- (A) If so, please state when, why and how you performed such a recall for each such product;**
- (B) If not, please state the reason for not doing so and the identity of all corporate officials responsible for not doing so; and**
- (C) Identify all documents pertaining to the subject matter of this interrogatory.**

ANSWER: Subject to and without waiving the foregoing General Objections, for, inter alia, the reasons set forth in its responses to Interrogatory Nos. 36 and 38, Crane Co. does not believe that its valves created health hazards relating to asbestos.

(198) Please provide the approximate market share of each of your asbestos products, individually or by category, identified in Answers to Interrogatory Nos. 8 and 19 which you sold, supplied, distributed and/or installed in Pennsylvania, Maryland, West Virginia, Delaware, New Jersey, New York and/or the United States for each year from 1930 to 1982. Identify all documents pertaining to the subject matter of this Interrogatory.

ANSWER: Subject to and without waiving the foregoing General Objections and subject to Crane Co.'s understanding of the term "asbestos products," Crane Co. did not keep records reflecting information of this type.

(199) Please state whether you used, installed, applied and/or removed asbestos-containing materials from any of your own facilities after learning of the potential health hazards of asbestos exposure. If so, please state:

- (A) The purpose for each such action;**
- (B) The location where each such action occurred;**
- (C) The dates for each such action;**
- (D) The persons responsible for deciding to undertake such action;**
- (E) How each such action was accomplished by the workers who were removing the asbestos-containing materials;**
- (F) What respiratory protection was recommended and/or required for the workers who were using or removing the asbestos-containing materials, and if so, the dates thereof; and**
- (G) The identity of any employees who alleged asbestos-lung disease or filed a Workers' Compensation claim alleging asbestos-lung disease as a result of such work, and if so, all dates thereof.**

ANSWER: See objections to Interrogatory No. 28.

(200) Please state whether you or any of your directors, officers, shareholders, or officials ever owned any financial interest or stock in any company other than yours which was involved in the mining, manufacturing, production, sale, supply or distribution of asbestos or any asbestos-containing product, including but not limited to, Metropolitan Life Insurance Co., co-Defendants in this case and bankrupt asbestos companies, e.g., Johns-Manville Corporation and its subsidiaries and affiliated companies. If so, please state:

- (A) The identity of the entity or persons who owned such interest;**
- (B) The job title and position of each person who owned such interest;**
- (C) The value of such interest owned by each such entity or persons; and**
- (D) The dates of such ownership by each such entity or persons.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence.

(201) State whether you ever produced, funded or in any way participated in the creation of any film, video, movie or tape (hereinafter "film") whose subjects included asbestos, asbestos-containing products, asbestos and health, methods of asbestos product application, or removal, recommended practices for asbestos product use or warnings concerning asbestos inhalation. If so, state:

- (A) The identity, contents and description of each film;**
- (B) The author or producer of each film;**
- (C) The date of each film;**
- (D) The identity of all products discussed therein;**
- (E) To whom each film was shown and when; and**
- (F) The present location and custodian of each film.**

ANSWER: Subject to and without waiving the foregoing General Objections, to the best of Crane Co.'s present knowledge, no.

(202) Have you or any of your representatives ever visited any location in Pennsylvania, Maryland, Delaware, West Virginia, New Jersey and/or New York for the purpose, among others, of promoting, selling or discussing asbestos-containing products or for the purpose of discussing, inspecting or reviewing the use of asbestos-containing products or the health and safety aspects concerning the use of such products? If so, state:

- (A) The name, address, and title of each individual, agent or employee who visited each location or entity;**
- (B) The date of each visit;**
- (C) The purpose of each visit;**
- (D) Who at each location he or she saw and spoke to on each occasion;**
- (E) Whether such party or parties discussed the possible long term effects on health and safety of exposure to asbestos with management personnel, and, if so state:**

- (1) The content of such discussions; and**
- (2) The dates of such discussions.**
- (F) Whether such party or parties attempted to impart information respecting possible health and safety ramifications of long term asbestos exposure to employees and if so, state:**
 - (1) The results of such efforts;**
 - (2) The content of the information sought to be imparted; and**
 - (3) The date of such efforts.**
- (G) With respect to your answer to this interrogatory and each subpart thereof, identify and produce all documents relating to, concerning or referencing the information contained in your answer or to the subject matter of the interrogatory and each subpart thereof.**

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and seeks information that is neither relevant to these actions nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, to the best of Crane Co.'s present knowledge, neither Crane Co. nor anyone acting on its behalf ever made a visit to any of these locations that related specifically to asbestos-containing products.

(203) Name any person not heretofore mentioned having personal knowledge of the facts material to this case.

ANSWER: In addition to the General Objections set forth above, Crane Co. objects to this Interrogatory on the grounds that it is overbroad and not capable of a meaningful answer.



Nicholas P. Vari

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Attorneys for Defendant Crane Co.



DMR
& ASSOCIATES

~~CONFIDENTIAL - ATTORNEY WORK PRODUCT~~

Report of Donna M. Ringo

Privileged and Confidential - Attorney Work Product

TO WHOM IT MAY CONCERN:

I have been requested to provide my opinion concerning the question of whether or not the use of asbestos containing gaskets and packing in the workplace provides a risk of harm to users from an industrial hygienist's standpoint.

I am a Certified Industrial Hygienist and have provided consulting services to a variety of clients with regard to the potential release of asbestos fibers from various materials. I have designed surveys to evaluate the actual fiber release during the removal of gaskets and packings. I have conducted and supervised more than 400 air samplings during these surveys and reviewed the data. I am personally familiar with the use, handling and removal practices of these materials as found in industrial settings.

In addition, I have read reports of air sampling data generated by other industrial hygienists concerning fiber release from asbestos containing gaskets and packings and after careful review have found them to be consistent with the actual field data for fiber release. The studies were conducted using proper scientific method and analysis.

In my opinion, the fiber release associated with the use, handling, and removal of asbestos containing gasket and packing products do not present a hazard to users in the workplace or bystanders. The de minimus, if any, fiber release associated with the use, handling, installation and removal of these products is significantly below current OSHA regulatory exposure levels. At these low levels, there is not, nor has there ever been an OSHA requirement that warnings and precaution labels be placed on the products or their packaging. In fact, the exposure levels from asbestos containing gaskets and packings are essentially similar to and are within the same order of magnitude as the ambient air asbestos concentration levels. From an industrial hygiene perspective, these levels have not been associated with any increased risk of disease to workers or bystanders.

Respectfully submitted:

Donna M. Ringo, CIH

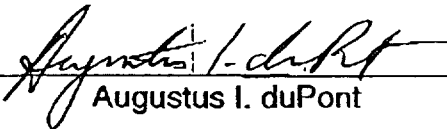


REVISED 2/20/98

VERIFICATION

I am the Vice President, General Counsel, and Corporate Secretary of Defendant Crane Co. and I am authorized to execute this verification on Crane Co.'s behalf. The answers given are true to the best of my knowledge, information and belief.

I understand that this verification is subject to the penalties of 18 Pa. C.S.A. § 4904, relating to unsworn falsifications to authorities.


Augustus I. duPont

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Responses to Interrogatories Directed to Defendant Crane Co. was sent to counsel for Plaintiffs by First Class United States Mail on November 21, 2001, and notice thereof was provided to all other parties via United States Mail on this same day.



Nicholas P. Vari