

In Re: Consolidated Asbestos Cases

PLAINTIFF'S EXHIBIT

A-441

ARMSTRONG'S RESPONSES TO MASTER
PRELIMINARY INTERROGATORIES AND REQUEST
FOR PRODUCTION OF DOCUMENTS

GENERAL OBJECTION, STATEMENT AND LIMITATIONS

These responses are based on facts known to or believed by Armstrong World Industries, Inc., at the time of answer. Because much of the information is sought from many years ago and is therefore difficult or impossible to reconstruct or retrieve, we reserve the right to amend these responses as, and if, new or better information becomes available or if any error is discovered. These responses are from AWI's records and knowledge and not those of its former wholly-owned subsidiary, Armstrong Contracting & Supply Corporation (hereinafter ACandS), which operated independent of AWI. Although AWI manufactured Nonpareil asbestos-containing insulation materials from approximately 1910 until the early 1930's, AWI is not aware of any current personal injury claims with respect to those products; thus, no answers are given concerning those products. AWI's contract department expanded into the high temperature insulation contracting field at the beginning of World War II, and AWI last sold an asbestos-containing insulation product in mid-1969. The responses set forth herein are limited in time and place to asbestos-containing thermal insulation products to which Plaintiffs may allege exposure and which were manufactured or sold by AWI during this time period. Because virtually all cases against AWI refer to insulation products, no answer is made concerning floor products, gaskets, materials, roofing products, adhesives, board or such other non-insulation products. To the extent this Interrogatory or request calls for information beyond this limitation stated above, an objection is made thereto as being irrelevant, immaterial, burdensome, oppressive and/or not calculated to lead to the discovery of admissible evidence. To the extent the information contained herein differs in any respect from any prior

Preliminary Interrogatories:

1. Objection. It is impossible for AWI to answer this interrogatory. AWI has been involved in the asbestos litigation for many years. During the course of said litigation, its legal representatives have reviewed voluminous records of itself and others, have conferred with many current and former employees of AWI and others, and have conferred with legal representatives of others. It has thus become impossible to distinguish sources of information in an accurate and meaningful way.

2. (a) Armstrong World Industries, Inc.

(b) Pennsylvania

(c) Liberty and Charlotte Streets, Lancaster, Pennsylvania

(headquarters were located in Pittsburgh, Pennsylvania from 1891 to 1929).

(d) 8/9/38

(e) Objection. The information sought is irrelevant to matters between Plaintiff and AWI.

3. In 1860, a partnership named John D. Glass & Company was formed. In 1864, the partnership's name became Armstrong Brother & Company. In 1891, the business was incorporated as Armstrong Brother & Company, Inc. There are no predecessor corporations to AWI.

Until late 1957, this company had an insulation contract department which operated under the insulation division. Insulation products, including some which contained asbestos and were manufactured by other companies, were installed by the insulation contract department. In late 1957, ACandS was formed as a wholly-owned subsidiary of this company for the purpose of assuming the contract insulation business effective January 1, 1958. This former subsidiary, which operated independently of this company, was sold in 1969 to the North Lime Corporation, 120 North Lime Street, Lancaster, Pennsylvania. ACandS was involved in the installation of insulation products. Documents which may expand upon these responses are available for inspection.

4. AWI was not in the business of mining asbestos. AWI was not in the business of processing raw asbestos. AWI was not in the business of selling

raw asbestos. Documents which may expand upon these responses are available for inspection.

5. (a-d) See Attachment A. Under our record retention schedule, sales records (invoices, bills of lading, etc.) for asbestos-containing insulation products no longer exist. All contract documents went with ACandS upon its formation in late 1957.

LT Cork Covering which contained only a small percent of asbestos in the outside paper wrapper and was used as low temperature insulation, was sold from 1956-1959.

Armaspray, was sold only to ACandS 1966-1969.

We have no knowledge of any sales being made to the specified locations.

Documents which may expand upon these responses are available for inspection.

(f) Objection. This interrogatory is vague and ambiguous.

6. Yes. See response to Interrogatory No. 5.

7. Objection. This interrogatory is vague and ambiguous. Without waiving these objections, see Attachment A.

8. (a) Name of manufacturing company.

(b) Trade name.

(c) Time period.

(d) Volume of transfer.

(e) Purchaser.

- (a) Unarco.
- (b) Armabestos.
- (c) 1954-1956.
- (d) Unknown.
- (e) AWI purchased this product for use in its contract installation services.

- (a) Ehret Magnesia Manufacturing Company.
- (b) AWI 85% Magnesia Pipe Covering (included Calcium Silicate inner layer for higher temperature applications.)
- (c) 1957.
- (d) Unknown.
- (e) AWI purchased this product for use in its contract installation services. This name was later assigned to ACandS.

- (a) Eagle-Picher.
- (b) Armatemp 166 Cement. At the time AWI relabeled Armatemp 166 (1954-1957), AWI was unaware that it contained asbestos. Through the course of litigation, Eagle-Picher has provided information that suggests Armatemp 166 contained asbestos.
- (c) 1954-1957.
- (d) Unknown.
- (e) AWI purchased this product for use in its contract installation services. This name was later assigned to ACandS.

After 1957, AWI was required to be the signatory on certain relabeling agreements between the manufacturer of the products and ACandS. These

products were purchased by, delivered to and used by ACandS in contracts of installation. AWI did not purchase, sell, or install these products.

9. Objection. This interrogatory is vague and ambiguous. Without waiving these objections, under our record retention schedule, sales records (invoices, bills of landing, etc.) for asbestos-containing insulation products no longer exist. All contract documents went with ACandS upon its formation in late 1957.

LT Cork Covering which contained only a small percent of asbestos in the outside paper wrapper and was used as low temperature insulation, was sold from 1956 - 1959.

Armaspray, was sold only to ACandS 1966-1969.

Documents which may expand upon these responses are available for inspection.

10. Documents which may expand upon these responses are available for inspection.

11. None to our knowledge.

12. (a-c,e) The Beaver Falls Plant, Beaver Falls, Pennsylvania, commenced operation in 1903. Manufacturing operations ceased in 1969 at this facility, which was then used for a warehouse up to 1973, at which time the building was sold. The asbestos-containing insulation products manufactured by AWI at the Beaver Falls Plant were LT Cork Covering from 1956 to 1959 and Armaspray from 1966 to 1968.

(d) When LT Cork Covering was manufactured, E. Zinn (now deceased), was the plant manager. When Armaspray was manufactured, R. P. Steffe (now deceased) was the plant manager.

(f) Under our record retention schedule, sales records for asbestos-containing insulation products no longer exist. All contract documents went with ACandS upon its formation in late 1957.

Under our record retention schedule, sales records (invoices, bills of lading, etc.) for asbestos-containing insulation products no longer exist. All contract documents went with ACandS upon its formation in late 1957.

LT Cork Covering which contained only a small percent of asbestos in the outside paper wrapper and was used as low temperature insulation, was sold from 1956-1959.

Armaspray, was sold only to ACandS 1966-1969.

We have no knowledge of any sales being made to the specified locations.

Documents which may expand upon these responses are available for inspection.

(g) See response to Interrogatory 4.

13. See Attachment A. In addition please refer to response to interrogatory no. 8 above regarding relabeled products.

14. (a-e) See Attachments A-E.

(f) See Attachment C.

(g) See Attachment A.

(h) See Attachment D.

(i) The only manufacturing facility relevant to this litigation was the Beaver Falls Plant, Beaver Falls, Pennsylvania. The asbestos-containing insulation products manufactured by AWI at the Beaver Falls Plant were LT Cork Covering from 1956 to 1959 and Armaspray from 1966 to 1968.

(j-k) See Attachment B.

(l) See Attachment E.

(m) Under our record retention schedule, sales records for asbestos-containing insulation products no longer exist. All contract documents went with ACandS upon its formation in late 1957. We have no knowledge of any sales being made to specified geographic regions. Documents which may expand upon these responses are available for inspection.

(n-q) Documents which may be relevant to these interrogatories are available for inspection.

(r) LT-30 Cork Covering Trademark:

Registered: November 8, 1955.

Assigned to North Lime Corp.: August 1, 1969.

(s) LT Cork Covering Patent:

Patent Number: 2,776,231

Date of patent: January 1, 1957

Date of Application: June 28, 1954

(t) LT Cork Covering was first manufactured with a kraft paper cover. In 1956, asbestos paper was substituted for the kraft paper for the purpose of creating a more fire resistant surface.

Armaspray originally contained a 6D5 chrysotile asbestos. In July, 1967, A. W. Amosite was substituted, and in January, 1968, S/33/65 asbestos was substituted. The initial asbestos change was due to the increased fiber length, greater wet strength and improved thermal conductivity of the

Amosite. The next change was a result of the discontinuation of supply of A. W. Amosite, the substitution being based upon the supplier's recommendation.

15. Objection. This interrogatory/request contains an implicit assumption of matters not otherwise established, which renders the interrogatory/request as argumentative, incapable of fair and correct answer, and without foundation. Without waiving same, not to our knowledge.

16. (a) AWI insulation mechanics employed by us were foreseeable users of asbestos-containing insulation products which AWI installed. Insulation mechanics employed by ACandS were foreseeable users of LT Cork Covering (1958 and 1959) and Armaspray (1966-1969).

(b-c) Research continues with regard to the persons employed by AWI who were involved in the design of LT Cork Covering. W. G. Owens, Senior Research Scientist, and W. H. Yeager, Senior Lab Technician, participated in the design of Armaspray. Both Mr. Owens and Mr. Yeager have retired. Documents which may expand upon these responses are available for inspection.

(d) Objection. This interrogatory is overly broad, vague and ambiguous. In addition, this interrogatory/request contains an implicit assumption of matters not otherwise established, which renders the interrogatory/request as argumentative, incapable of fair and correct answer, and without foundation.

17. Under our record retention schedule, sales records (invoices, bills of lading, etc.) for asbestos-containing insulation products no longer exist. All contract documents went with ACandS upon its formation in late 1957.

LT Cork Covering which contained only a small percent of asbestos in the outside paper wrapper and was used as low temperature insulation, was sold from 1956-1959.

Armaspray, was sold only to ACandS 1966-1969.

We have no knowledge of any sales being made to the specified locations.

Documents which may expand upon these responses are available for inspection.

18. This company has had sales offices nationwide over the years, including Jacksonville, Florida.

19. The asbestos fiber in Armaspray was purchased from Lake Asbestos of Quebec, Ltd. and from North American Asbestos Corporation. The asbestos paper in LT Cork Covering was purchased from Dobeckmun Company. Documents which may expand upon these responses are available for inspection.

20. Objection. The information sought by this interrogatory is currently at issue pending litigation. See Armstrong v. Aetna Casualty & Surety Company, et al, No. 31567, Los Angeles Superior Court.

21. AWI's understanding of the effects of asbestos on the health of workers may be generally summarized as follows:

AWI first became aware of a potential risk of asbestosis to plant workers in the late 1930's at about the time that the Commonwealth of Pennsylvania listed asbestosis as a compensable disease in its Occupational Disease Act and regulations (1937). The payment of life insurance, weekly sickness and non-occupational benefits, total and permanent disability benefits, and retirement pensions were undertaken by Metropolitan Life Insurance Company in 1931 for AWI and it undertook a number of plant surveys over time in order to determine ratings for premiums and to identify and eliminate any potentially harmful conditions. Air samples were taken in 1939, and one sample was viewed as requiring a reduction of atmospheric dust for safety purposes. A survey in 1948 included a description of asbestosis and stated that "the threshold limit for asbestos dust adopted by the American Conference of Governmental Hygienists at their 1948 meeting is 5 million particles of asbestos per cubic foot of air."

AWI now understands that such statement by Metropolitan was consistent with a report of the U.S. Public Health Service, authored by Dr. W. C. Dreessen in 1938, entitled "A Study of Asbestosis in the Asbestos Textile Industry," wherein Dr. Dreessen stated that the threshold concentration of dust should be the highest dust concentration that would not produce pneumoconiosis in an originally healthy workman during his entire working life, and that "5 million particles per cubic foot may be regarded tentatively as a threshold value for asbestos dust exposure until better data are available." Dr. Dreessen further stated that "it would seem that if the dust concentration in asbestos factories could be kept below 5 million particles . . ., new cases of asbestosis probably would not appear."

AWI employed union insulators in its insulation contracting business until the end of 1957. Upon information and belief, AWI's worker's compensation insurance carrier visited jobs in progress to inspect job conditions and observe if reasonable safety precautions were being taken: AWI is not aware that any such visits resulted in any observation or finding that insulators were exposed to asbestos dust above the threshold limit values or that hazardous conditions relating to asbestos existed on its job sites. AWI was also informed that the Massachusetts Department of Health Division of Industrial Hygiene concluded that there did not seem to be an apparent dust hazard in the occupation of pipe covering or in the mixing of cement for pipe and boiler covering. Furthermore, AWI was told by Keasbey & Mattison, the manufacturer of heat insulation materials it was installing, that its employees had been manufacturing the products for years without any ill effects.

AWI now understands that the Massachusetts Department of Health Division of Industrial Hygiene Report was consistent with a 1946 study of pipecoverers entitled "A Health Survey of Pipe Covering Operations and Constructing Naval Vessels," authored by Dr. Fleischer, Professor Drinker and others, where they concluded that "it would appear that asbestos pipe covering of naval vessels is a relatively safe occupation." AWI now understands that the Fleischer/Drinker conclusions were not criticized in the American medical literature until about the time of Dr. Selikoff's pioneer publications in the mid-1960s. AWI first became aware of these pioneering studies of Dr. Selikoff in the late 1960s concerning the possible risk of asbestosis, lung cancer and mesothelioma to insulators. AWI is unaware that asbestos is

causally associated with any other form of cancer. Documents which may expand upon these responses are available for inspection.

22. See Attachment G.

23. AWI's understanding of the effects of asbestos on the health of workers may be generally summarized as follows:

AWI first became aware of a potential risk of asbestosis to plant workers in the late 1930's at about the time that the Commonwealth of Pennsylvania listed asbestosis as a compensable disease in its Occupational Disease Act and regulations (1937). The payment of life insurance, weekly sickness and non-occupational benefits, total and permanent disability benefits, and retirement pensions were undertaken by Metropolitan Life Insurance Company in 1931 for AWI and it undertook a number of plant surveys over time in order to determine ratings for premiums and to identify and eliminate any potentially harmful conditions. Air samples were taken in 1939, and one sample was viewed as requiring a reduction of atmospheric dust for safety purposes. A survey in 1948 included a description of asbestosis and stated that "the threshold limit for asbestos dust adopted by the American Conference of Governmental Hygienists at their 1948 meeting is 5 million particles of asbestos per cubic foot of air."

AWI now understands that such statement by Metropolitan was consistent with a report of the U.S. Public Health Service, authored by Dr. W. C. Dreessen in 1938, entitled "A Study of Asbestosis in the Asbestos Textile Industry," wherein Dr. Dreessen stated that the threshold concentration of dust should

be the highest dust concentration that would not produce pneumoconiosis in an originally healthy workman during his entire working life, and that "5 million particles per cubic foot may be regarded tentatively as a threshold value for asbestos dust exposure until better data are available." Dr. Dreessen further stated that "it would seem that if the dust concentration in asbestos factories could be kept below 5 million particles . . ., new cases of asbestosis probably would not appear."

AWI employed union insulators in its insulation contracting business until the end of 1957. Upon information and belief, AWI's worker's compensation insurance carrier visited jobs in progress to inspect job conditions and observe if reasonable safety precautions were being taken: AWI is not aware that any such visits resulted in any observation or finding that insulators were exposed to asbestos dust above the threshold limit values or that hazardous conditions relating to asbestos existed on its job sites. AWI was also informed that the Massachusetts Department of Health Division of Industrial Hygiene concluded that there did not seem to be an apparent dust hazard in the occupation of pipe covering or in the mixing of cement for pipe and boiler covering. Furthermore, AWI was told by Keasbey & Mattison, the manufacturer of heat insulation materials it was installing, that its employees had been manufacturing the products for years without any ill effects.

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concluded that "it would appear that asbestos pipe covering of naval vessels is a relatively safe occupation." AWI now understands that the Fleischer/Drinker conclusions were not criticized in the American medical literature until about the time of Dr. Selikoff's pioneer publications in the mid-1960s. AWI first became aware of these pioneering studies of Dr. Selikoff in the late 1960s concerning the possible risk of asbestosis, lung cancer and mesothelioma to insulators. AWI is unaware that asbestos is causally associated with any other form of cancer. Documents which may expand upon these responses are available for inspection.

24. Objection. This interrogatory/request contains an implicit assumption of matters not otherwise established, which renders the interrogatory/request as argumentative, incapable of fair and correct answer, and without foundation. Without waiving same, to our knowledge, no such studies were conducted.

25. Objection. This interrogatory/request contains an implicit assumption of matters not otherwise established, which renders the interrogatory/request as argumentative, incapable of fair and correct answer, and without foundation. Without waiving same, to our knowledge, no such studies were conducted.

26. Objection. This interrogatory/request contains an implicit assumption of matters not otherwise established, which renders the interrogatory/request as argumentative, incapable of fair and correct answer, and without foundation.

27. Objection. This interrogatory/request contains an implicit assumption of matters not otherwise established, which renders the interrogatory/request as argumentative, incapable of fair and correct answer, and without foundation. Further, objection. The term "health study" is vague, ambiguous and unintelligible. Without waiving same, Armstrong did not direct to be performed, sponsor, finance or receive the results of any such tests or studies. The payment of life insurance, weekly sickness and non-occupational benefits, total and permanent disability benefits, and retirement pensions were undertaken by Metropolitan Life Insurance Company in 1931 for Armstrong and it undertook a number of plant surveys over time in order to determine ratings for premiums and to identify and eliminate any potentially harmful conditions. Similar surveys by other entities took place in later years. Documents which may expand upon these responses are available for inspection.

28-32. AWI's understanding of the effects of asbestos on the health of workers may be generally summarized as follows:

AWI first became aware of a potential risk of asbestosis to plant workers in the late 1930's at about the time that the Commonwealth of Pennsylvania listed asbestosis as a compensable disease in its Occupational Disease Act and regulations (1937). The payment of life insurance, weekly sickness and non-occupational benefits, total and permanent disability benefits, and retirement pensions were undertaken by Metropolitan Life Insurance Company in 1931 for AWI and it undertook a number of plant surveys over time in order to determine ratings for premiums and to identify and eliminate any potentially harmful conditions. Air samples were taken in 1939, and one sample was viewed as requiring a reduction of atmospheric dust for safety purposes. A

survey in 1948 included a description of asbestosis and stated that "the threshold limit for asbestos dust adopted by the American Conference of Governmental Hygienists at their 1948 meeting is 5 million particles of asbestos per cubic foot of air."

AWI now understands that such statement by Metropolitan was consistent with a report of the U.S. Public Health Service, authored by Dr. W. C. Dreessen in 1938, entitled "A Study of Asbestosis in the Asbestos Textile Industry," wherein Dr. Dreessen stated that the threshold concentration of dust should be the highest dust concentration that would not produce pneumoconiosis in an originally healthy workman during his entire working life, and that "5 million particles per cubic foot may be regarded tentatively as a threshold value for asbestos dust exposure until better data are available." Dr. Dreessen further stated that "it would seem that if the dust concentration in asbestos factories could be kept below 5 million particles . . ., new cases of asbestosis probably would not appear."

AWI employed union insulators in its insulation contracting business until the end of 1957. Upon information and belief, AWI's worker's compensation insurance carrier visited jobs in progress to inspect job conditions and observe if reasonable safety precautions were being taken: AWI is not aware that any such visits resulted in any observation or finding that insulators were exposed to asbestos dust above the threshold limit values or that hazardous conditions relating to asbestos existed on its job sites. AWI was also informed that the Massachusetts Department of Health Division of Industrial Hygiene concluded that there did not seem to be an apparent dust hazard in the occupation of pipe covering or in the mixing of cement for pipe

and boiler covering. Furthermore, AWI was told by Keasbey & Mattison, the manufacturer of heat insulation materials it was installing, that its employees had been manufacturing the products for years without any ill effects.

AWI now understands that the Massachusetts Department of Health Division of Industrial Hygiene Report was consistent with a 1946 study of pipecoverers entitled "A Health Survey of Pipe Covering Operations and Constructing Naval Vessels," authored by Dr. Fleischer, Professor Drinker and others, where they concluded that "it would appear that asbestos pipe covering of naval vessels is a relatively safe occupation." AWI now understands that the Fleischer/Drinker conclusions were not criticized in the American medical literature until about the time of Dr. Selikoff's pioneer publications in the mid-1960s. AWI first became aware of these pioneering studies of Dr. Selikoff in the late 1960s concerning the possible risk of asbestosis, lung cancer and mesothelioma to insulators. AWI is unaware that asbestos is causally associated with any other form of cancer. Documents which may expand upon these responses are available for inspection.

33-35. Objection. This Interrogatory contains an implicit assumption of matters not otherwise established, which renders the Interrogatory as argumentative, incapable of fair and correct answer, and without foundation. Without waiving same and subject thereto, AWI states that since the beginning of World War II, AWI manufactured only two asbestos-containing thermal insulation products. LT Cork Covering which contained only a small percent of asbestos in the outside paper wrapper and was used as low temperature insulation, was sold from 1956 - 1959. Judge Robert M. Parker granted

Judgment N.O.V. in Gracedel v. Fibreboard Corporation, et al (E.D. Texas June 13, 1982) (Order attached) denying plaintiff's claims that LT Cork Covering was defective in design and marketing and holding that AWI "shall not be liable to the plaintiff for any exposure to plaintiff, if any, from LT Cork Covering."

For Armaspray manufactured and sold only from August 1966 until mid-1969, Armstrong Contracting & Supply Corporation published safety precautions to be followed in all applications. This precaution was not placed on the container but is believed to have been presented in the Armstrong Contracting & Supply Corporation construction manual. It is our understanding that the specially trained insulation mechanics applying Armaspray were instructed according to the provisions of the construction manual. Armaspray was furnished by this Defendant exclusively to Armstrong Contracting & Supply Corporation. For applications of Armaspray with A-200 spray equipment, the safety precaution read:

"Always wear a U.S. approved respirator when spraying. If tamping in the vicinity of the actual spray operator, the tamper should also wear a respirator."

For application of Armaspray with the Armaspray junior spray machine, the safety precaution read:

"Always wear an MSA approved respirator when spraying. If tamping in the vicinity of the actual spray operator, the tamper should also wear a respirator."

Armaspray was sold by this Defendant exclusively to Armstrong Contracting & Supply Corporation (now ACandS, Inc.) from 1966 to 1969. Armaspray was packaged in bags containing the Armstrong Contracting & Supply Corporation label. Documents which may expand upon these responses are available for inspection.

36. Objection. This Interrogatory contains an implicit assumption of matters not otherwise established, which renders the Interrogatory as argumentative, incapable of fair and correct answer, and without foundation. Without waiving same and subject thereto, AWI states that since the beginning of World War II, AWI manufactured only two asbestos-containing thermal insulation products. LT Cork Covering which contained only a small percent of asbestos in the outside paper wrapper and was used as low temperature insulation, was sold from 1956 - 1959. Judge Robert M. Parker granted Judgment N.O.V. in Gracedel v. Fibreboard Corporation, et al (E.D. Texas June 13, 1982) (Order attached) denying plaintiff's claims that LT Cork Covering was defective in design and marketing and holding that AWI "shall not be liable to the plaintiff for any exposure to plaintiff, if any, from LT Cork Covering."

For Armaspray manufactured and sold only from August 1966 until mid-1969, Armstrong Contracting & Supply Corporation published safety precautions to be followed in all applications. This precaution was not placed on the container but is believed to have been presented in the Armstrong Contracting & Supply Corporation construction manual. It is our understanding that the specially trained insulation mechanics applying Armaspray were instructed according to the provisions of the construction manual. Armaspray was

furnished by this Defendant exclusively to Armstrong Contracting & Supply Corporation. For applications of Armaspray with A-200 spray equipment, the safety precaution read:

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For application of Armaspray with the Armaspray junior spray machine, the safety precaution read:

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Armaspray was sold by this Defendant exclusively to Armstrong Contracting & Supply Corporation (now ACandS, Inc.) from 1966 to 1969. Armaspray was packaged in bags containing the Armstrong Contracting & Supply Corporation label. Documents which may expand upon these responses are available for inspection.

37. Objection. This interrogatory is overly broad. Without waiving same,

(a) LT Cork Covering brochures and Armstrong Industrial Insulation brochures were prepared by us.

(b) We have no records concerning the dates that the LT Cork Covering brochure was forwarded to customers but believe it would have been around

1956-1959. We believe the Armstrong Industrial Insulation brochures were made available at various times during the period AWI had a contract unit.

Documents which may expand upon these responses are available for inspection.

38. Because of the lapse of years, we are unable to state each and every magazine or trade publication in which our asbestos insulation products were advertised. We believe they may have been advertised in the usual trade publications.

39. The brochures described in response to interrogatory no. 37 contained instructions for proper installation and use.

40. Prior to 1958, when this company operated an insulation contracting unit, AWI believes it received a total of nine claims for alleged pulmonary illness, possibly related to alleged asbestos exposure. Not all of these claims resulted in a payment by AWI. Generally, AWI was only one of a number of employers named. During this same period, AWI received an average of 500 to 600 claims per year by its contact employees for workers' compensation, of which only the claims noted above may have allegedly related to asbestos. Upon receipt of the first claim in 1952, AWI also received a report from the Commonwealth of Massachusetts, Department of Labor and Industries, Division of Occupational Hygiene, that stated there did not seem to be an apparent dust hazard in the occupation of pipecovering or in the mixing of cement for pipe and boiler covering.

The Travelers Insurance Company insured AWI's contract operation, including the administration of workers' compensation claims, and visited selected jobs in progress to inspect job conditions and observe if reasonable safety precautions were being taken and at no time reported to AWI that insulators were exposed to asbestos dust above the threshold limit values or that hazardous conditions relating to asbestos existed on its job sites. AWI's insurance department, in providing insurance administrative services for ACandS, also received workers' compensation claims by employees of that company (until 1969) and others, including Armstrong Cork Company, alleging pulmonary illness possibly related to asbestos exposure.

In reference to a second claim filed, AWI was assured by Keasbey & Mattison, the manufacturer of the heat insulation materials in question, that its employees had been manufacturing such products for years without any ill effects.

In early 1957, Travelers advised AWI that Travelers' engineering department was planning to survey a current insulating job. Travelers stated that it was felt that it would be able to develop recommendations which would prevent or minimize this exposure, and that as soon as it had anything to report, it would submit its findings. AWI left the contracting business at the end of 1957 when that business was assumed by ACandS. AWI has no current record of Traveler's findings. In April 1968, Canadian Johns-Manville Company, Ltd., sent a mailing to numerous companies, including AWI, which contained the minutes of the first six meetings of the Scientific Committee of the Institute of Occupational and Environmental Health of the Quebec Asbestos Mining Association. AWI was never a member of QAMA or present at such

meetings. This literature was immediately sent on to ACandS with the comment from AWI's insurance manager that, prior to receiving this information, he had no idea of the extent of the research work being done in this field. Soon thereafter, ACandS assumed responsibility for monitoring its own workers' compensation claims.

The products at issue in the workers' compensation claims were typically pipe covering and cements. AWI did not manufacture these products, and no product of any kind manufactured by AWI was ever found to be the cause of any condition of any claimant in any of these workers' compensation claims. See Attachment K.

First Ten P.I. Suits Filed Against AWI Alleging Asbestos-Related Injury from Exposure to Asbestos Insulation Products Manufactured or Sold by AWI

Caption, Docket No., Court, State, Date Filed

- (a) John A. Karjala v. Armstrong Cork Company, et al. No. 5-71-18;
United States District Court, Fifth Division, Minnesota; May 3,
1971.
- (b) Floyd Gustafson v. Armstrong Cork Company, et al. No. 5-71-40;
United States District Court, Fifth Division, Minnesota; May 20,
1971.
- (c) Evelyn Roderman, etc. v. Armstrong Cork Company, et al. No.
C72-390; United States District Court, Northern District of Ohio;

April 26, 1972.

- (d) Thomas S. Hartwell v. Armstrong Cork Company, et al. No. 7513; United States District Court, Eastern District of Texas; April 12, 1972.
- (e) Rose Ann Ricci, etc. v. Armstrong Cork Company, et al. No. C72-507; United States District Court, Northern District of Ohio; May 18, 1972.
- (f) Clarence A. Borel v. Armstrong Cork Company, et al. No. 6449; United States District Court, Eastern District of Texas; Filed October 20, 1969; Armstrong not named as a defendant until February 18, 1970.
- (g) Buena Mae McDaniel v. Armstrong, et al. No. 6967; United States District Court, Eastern District of Texas; June 24, 1971.
- (h) Carol Antholz, etc. v. Armstrong Cork Company, et al. No. 5-70 CIV 105; United States District Court, Fifth Division, Minnesota; January 7, 1971.
- (i) Samuel Potter v. Armstrong Cork Company, et al. No. 6329; United States District Court, Eastern District of Texas; February 24, 1970.
- (j) Betty Sedlock, etc. v. Armstrong Cork Company, et al. No. C72-395;

United States District Court, Northern District of Ohio; April 25, 1972.

41. AWI belonged to the National Mineral Wool Association from 1947 to 1950 and again from 1953 until 1962. AWI has not been a member of any other national trade association or organization whose concern was the manufacture of asbestos-containing insulation products during the relevant time period that AWI manufactured and/or sold asbestos-containing insulation products. As a contractor, AWI's contract department belonged to numerous local contractor associations; AWI ceased such membership by the end of 1957 when it left the contracting business. Later, after AWI no longer manufactured or sold asbestos-containing insulation products, AWI had an associate membership in two National Trade Associations in order to market its low temperature insulation products such as Armaflex. Documents which may expand upon these responses are available for inspection.

42. AWI has a library in Lancaster, Pennsylvania which contains engineering and manufacturing information, but, there was no library established specifically for industrial hygiene, medicine or safety. Documents which may expand upon these responses are available for inspection.

COMMONWEALTH OF PENNSYLVANIA:

: SS

COUNTY OF LANCASTER

:

I, the undersigned, J. H. Miller, Jr., being first duly sworn according to law, depose and say that I am an Assistant Secretary of Armstrong World Industries, Inc. The information contained in the responses hereto was gathered pursuant to my overall guidance by employees of this Company. I have no personal knowledge of same but am informed and therefore believe the answers to be true and correct. The responses have been prepared by counsel. I am executing this affidavit solely for the purpose of affixing the Company's signature hereto.

DATED: March 6, 1992

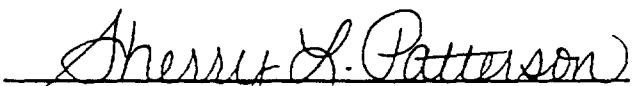
ARMSTRONG WORLD INDUSTRIES, INC.

A Pennsylvania Corporation

BY:


Assistant Secretary

On this 6th day of March, 1992, before me personally appeared J. H. Miller, Jr., to me known to be the person described herein, and who executed the foregoing instrument and who acknowledged that he voluntarily executed the same.


Notary Public

NOTARIAL SEAL
SHERRY L. PATTERSON, Notary Public
Lancaster, Lebanon County, PA
My Commission Expires May 3, 1993

ARMSTRONG'S CONTRACT DEPARTMENT

Armstrong historically was a cold storage manufacturer and contractor, supplying cork insulation products which were installed by its employees in dairies, ice houses, etc. Except for a limited high pressure product line manufactured 1910-1930, Armstrong's main involvement with asbestos-containing insulation products began at the beginning of World War II when its Contract Department was first able to install products manufactured by others. Although Armstrong remained primarily a cold storage contractor, the high temperature business grew until the end of 1957, when the contracting business was taken over by ACandS. Documents which may expand upon these responses are available for inspection.

PRODUCTS MANUFACTURED BY OTHER COMPANIES AND
INSTALLED BY ARMSTRONG CONTRACT EMPLOYEES

Keasbey & Mattison (1939-1957)

The following products were sold by Keasbey & Mattison Company for installation by Armstrong's contract department at various times and locations; not every product was available at all times and at every location.

- 85% Magnesia Pipe Covering & Block and Cement were used to insulate pipes and surfaces with temperatures up to 600°F.
- Hy-Temp Pipe Covering & Block and Cement were used to insulate heat lines and surfaces with temperatures ranging from 600°F to 1900°F.
- Kamatt Pipe Covering was used to insulate pipes with temperatures up to 750°F.
- Kaytherm Block was used to insulate surfaces with temperatures up to 1500°F.
- Mani-Ply Insulations were used to insulate pipes with temperatures up to 500°F.
- Bestfelt Pipe & Block & Sheet was used to insulate temperatures up to 700°F. The pipe covering was used on lines subject to vibrations.
- Air Cell Insulations were used on lines or surfaces with temperatures up to 300°F.
- Simplex Pipe Insulations were used to insulate lines with temperatures up to 300°F where a water-repellant surface was needed.
- Duplex Wool Felt Pipe Insulation was used to insulate hot or cold water lines 40°F to 210°F.
- K&M Asbestos Insulating Cements: No. 151-smooth, hard surface; No. 152-general utility cement; Velvet Hard Finish - hard gloss finish over blocks or cements; Mineral Wool - used in place of block insulation; Amblerex No. 2 - up to 1000°F.
- K. P. Asbestos Floats were used to give a dense, tough, hard quality to the final asphalt plastic finish on walls of low temperature rooms (EX 25 asbestos in earlier years).

Unarco (1954-1956):

Armabestos Pipe Covering & Block was used to insulate pipes with temperatures up to 750°F or 1200°F, or surfaces up to 1200°F.

Ehret Magnesia (1957):

85% Magnesia Pipe Covering and Block (and Calcium Silicate Pipecovering for use as an inner layer with 85% magnesia) was used to insulate pipes and surfaces with temperatures ranging from 600°F (85% Magnesia alone) to 1200°F (both layers).

Baldwin Hill (1951-1956):

Baldwin-Hill #1 Insulating Cement, and later Mineral Wool (Powerhouse) Cement, was used for plastic insulation on irregular surfaces up to 1800°F.

Owens-Illinois (1957):

Kaylo Pipe Covering & Block was used to insulate pipes and surfaces with temperatures up to 1200°F; Kaylo-20, up to 1800°F.

Eagle-Picher (1954-1957):

Armatemp 166 Cement was used as an all-purpose insulating material on surfaces up to 1800°F. At the time AWI relabeled Armatemp 166 (1954-1957), AWI was unaware that it contained asbestos. Through the course of litigation, Eagle-Picher has provided information that suggests Armatemp 166 contained asbestos.

PRODUCTS MANUFACTURED BY ARMSTRONG

LT Cork Covering (1956-1959) was a pipe insulation, -120°F to 200°F.

Armaspray (1966-1968) was used by AC&S to insulate large irregular surfaces, up to 1600°F.

ARMSTRONG'S CONTRACT DEPARTMENT

Armstrong historically was a low temperature insulation manufacturer and contractor, supplying cork insulation products which were installed by its employees in dairies, ice houses, etc. Except for a limited product line manufactured from approximately 1910-1933, Armstrong's main involvement with high-temperature asbestos-containing insulation products began at the beginning of World War II, when its Contract Department first obtained the right to install products manufactured by Keasbey & Mattison. Armstrong remained primarily a cold storage contractor until the end of 1957, when the contracting business was taken over by ACandS. Documents which may expand upon these responses are available for inspection.

PRODUCTS MANUFACTURED BY OTHER COMPANIES AND
INSTALLED BY ARMSTRONG CONTRACT EMPLOYEES

Keasbey & Mattison (1939-1957):

The following products were sold by Keasbey & Mattison Company for installation by Armstrong's contract department at various times and locations; not every product was available at all times and at every location.

85% Magnesia Pipe Covering & Block was molded. The pipe covering was furnished in 3' half sections (split horizontally) and furnished with a factory-applied canvas jacket, forming a hinge and lap. The block was furnished in 3' x 6" x 1-1/2" segments. 85% Magnesia Cement was sold in powder form.

Hy-Temp Pipe Covering & Block was molded. The pipe covering was furnished in 3' lengths or tubular half sections in thicknesses from 1" to 3" for pipe sizes 1/2" to 10" in diameter. The block was furnished in 3' lengths and 3", 6", 9" and 12" widths with thicknesses from 1" to 4". Hy-Temp Cement was sold in powder form.

Kamatt, a molded pipe covering, was furnished in 3' lengths and thicknesses of 2", 2-1/2" or 3" for all pipe sizes over 12" in diameter.

Kaytherm Block was precision molded and gray colored. It was furnished in 3' lengths by 6" widths with thicknesses of 1-1/2" or 2".

Mani-Ply Insulation, a pipe covering, was furnished in 3' lengths in thicknesses of 1", 1-1/2" or 2".

Bestfelt Pipe Covering was furnished in 3' lengths of 1" standard thicknesses for pipe sizes 1-1/2" to 24" in diameter.

The Bestfelt Block and Sheets were furnished in 3' lengths and 6", 9", 18" or 36" widths with thicknesses from 1/2" to 4".

Air Cell Insulations were available in pipe covering, sheet, or block form. The pipe covering was furnished in 3' lengths and thicknesses of 1/2" to 1", for pipe sizes 1/2" to 6" in diameter. The sheets and block were furnished in 6", 9", 12", 18", 36" or 72" lengths and 3" widths, with thicknesses from 1/2" to 4".

Simplex Pipe Insulation was available only with 3 or 4 plies of felt per inch and 3' lengths for pipe sizes 1/2" to 8" in diameter.

Duplex Wool Felt Pipe Insulation had a white covering. It was furnished in 3' lengths and thicknesses from 1/2" to 2".
K&M Asbestos Insulating Cements: Nos. 151, 152, Velvet Hard Finish, Mineral Wool and Amblerex No. 2 were sold in powder form.
K. P. Asbestos Floats were sold in powder form (Ex #25 in earlier years).

Unarco (1954-1956):

Armabestos, a molded pipe covering and block, was a grayish, hard substance. The pipe covering was furnished in 3' lengths in thicknesses from 1" to 5" for pipe sizes 1/2" to 24" in diameter. The block was furnished in 3' lengths and 6", 12", 18" or 36" widths with thicknesses from 1" to 3".

Ehret Magnesite (1957):

85% Magnesite Pipe Covering (Calcium Silicate inner layer available), a molded material, was available for pipes 2" or greater in diameter.

Baldwin Hill (1951-1956):

Baldwin-Hill #1 Insulating Cement, and later Mineral Wool (Powerhouse) Cement, was sold in powder form.

Owens-Illinois (1957):

Kaylo, a molded pipe covering and block, was rigid, preformed, and white in appearance.

Kaylo-20 was colored pink with iron oxide for identification purposes. The pipe covering was furnished in 3' lengths and thicknesses from 1" to 3" for pipe sizes 1/2" to 39" in diameter. The block was furnished in 18" or 36" lengths and 3", 6", 12" or 18" widths with thicknesses from 1" to 3".

Eagle-Picher (1954-1957):

Armtemp 166 Cement was sold in powder form. At the time AWI relabeled Armtemp 166 (1954-1957), AWI was unaware that it contained asbestos. Through the course of litigation, Eagle-Picher has provided information that suggests Armtemp 166 contained asbestos.

PRODUCTS MANUFACTURED BY ARMSTRONG

LT Cork Covering (1956-1959) consisted of precision cut segments of cork board adhered to a backing of aluminum foil with a 16/1000" outer covering of nonfriable asbestos paper.

Armaspray (1966-1968), a spray-on insulation, was gray in color and granular.

ARMSTRONG'S CONTRACT DEPARTMENT

Armstrong historically was a low temperature insulation manufacturer and contractor, supplying cork insulation products which were installed by its employees in dairies, ice houses, etc. Except for a limited product line manufactured from approximately 1910-1933, Armstrong's main involvement with high-temperature asbestos-containing insulation products began at the beginning of World War II, when its Contract Department first obtained the right to install products manufactured by Keasbey & Mattison. Armstrong remained primarily a cold storage contractor until the end of 1957, when the contracting business was taken over by ACandS. Documents which may expand upon these responses are available for inspection.

PRODUCTS MANUFACTURED BY OTHER COMPANIES AND
INSTALLED BY ARMSTRONG CONTRACT EMPLOYEES

Keasbey & Mattison (1939-1957):

The following products were sold by Keasbey & Mattison Company for installation by Armstrong's contract department at various times and locations; not every product was available at all times and at every location.

85% Magnesite Pipe Covering & Block and Cement contained approximately 10% asbestos. We have no knowledge as to the type.

Hy-Temp Pipe Covering & Block and Cement contained approximately 13% asbestos. We have no knowledge as to the type.

Kamatt Pipe Covering contained amosite asbestos. We have no knowledge as to the percentage.

We have no knowledge as to the type or percentage of asbestos contained in Kaytherm Block.

We have no knowledge as to the type or percentage of asbestos contained in Mani-Ply Insulation.

We have no knowledge as to the type or percentage of asbestos contained in Bestfelt Pipe & Block & Sheet.

Air Cell Insulations and Simplex Pipe Insulations consisted of layers of flat and corrugated asbestos felt which was approximately 75% asbestos bonded together with a sodium silicate, in a special laminating process. We have no knowledge as to the type of asbestos.

Duplex Wool Felt Pipe Insulation was composed of creped felt, waterproof felt binder, and a canvas jacket in addition to asbestos paper. We have no knowledge as to the type or percentage of asbestos.

We have no knowledge as to the type or percentage of asbestos in the K&M Asbestos Insulating Cements (Nos. 151 and 152, Velvet Hard Finish, Mineral Wool and Amblorox No. 2)

K. P. Asbestos Floats were asbestos; however, we have no knowledge as to the type of asbestos (Ex 25 asbestos in earlier years).

Unarco (1954-1956):

Armabestos Pipe Covering & Block contained approximately 50% amosite asbestos.

Ehret Magnesia (1957):

We have no knowledge as to the percentage or type of asbestos contained in 85% Magnesia Pipe Covering (Calcium Silicate inner layer available).

Baldwin Hill (1951-1956):

We have no knowledge as to the type or percentage of asbestos in Baldwin-Hill #1 Insulating Cement, and later Mineral Wool (Powerhouse) Cement.

Owens-Illinois (1957):

Kaylo Pipe Covering & Block contained chrysotile asbestos.

Eagle-Picher (1954-1957):

Armtemp 166 Cement contained mineral wool with a specially formulated binder. At the time AWI relabeled Armtemp 166 (1954-1957), AWI was unaware that it contained asbestos. Through the course of litigation, Eagle-Picher has provided information that suggests Armtemp 166 contained asbestos.

PRODUCTS MANUFACTURED BY ARMSTRONG

LT Cork Covering (1956-1959) consisted of cork board adhered to a backing of aluminum foil with a thin (16/1000") coating of asbestos paper. The asbestos paper, purchased from Dobeckmun Company was presumably chrysotile; the percentage of asbestos contained therein is not known.

Armaspray (1966-1968), a mineral wool product, contained about 8% asbestos, amosite or chrysotile.

ARMSTRONG'S CONTRACT DEPARTMENT

Armstrong historically was a low temperature insulation manufacturer and contractor, supplying cork insulation products which were installed by its employees in dairies, ice houses, etc. Except for a limited product line manufactured from approximately 1910-1933, Armstrong's main involvement with high-temperature asbestos-containing insulation products began at the beginning of World War II, when its Contract Department first obtained the right to install products manufactured by Keasbey & Mattison. Armstrong remained primarily a cold storage contractor until the end of 1957, when the contracting business was taken over by ACandS. Documents which may expand upon these responses are available for inspection.

PRODUCTS MANUFACTURED BY OTHER COMPANIES AND
INSTALLED BY ARMSTRONG CONTRACT EMPLOYEES

The following products were sold by Keasbey & Mattison Company for installation by Armstrong's contract department at various times and locations; not every product was available at all times and at every location.

Keasbey & Mattison (1939-1957):

85% Magnesite Pipe Covering & Block and Cement were used to insulate pipes and surfaces with temperatures up to 600°F.

Hy-Temp Pipe Covering & Block and Cement were used to insulate heat lines and surfaces with temperatures ranging from 600°F to 1900°F.

Kamatt Pipe Covering was used to insulate pipes with temperatures up to 750°F.

Kaytherm Block was used to insulate surfaces with temperatures up to 1500°F.

Mani-Ply Insulations were used to insulate pipes with temperatures up to 500°F.

Bestfelt Pipe & Block & Sheet was used to insulate temperatures up to 700°F. The pipe covering was used on lines subject to vibrations.

Air Cell Insulations were used on lines or surfaces with temperatures up to 300°F.

Simplex Pipe Insulations were used to insulate lines with temperatures up to 300°F where a water-repellant surface was needed.

Duplex Wool Felt Pipe Insulation was used to insulate hot or cold water lines 40°F to 210°F.

K&M Asbestos Insulating Cements (Nos. 151 and 152, Velvet Hard Finish, Mineral Wool and Amblerex No. 2) were general utility cements which could also be used as insulating cements on surfaces with temperatures up to 1000°F.

K. P. Asbestos Floats were used to give a dense, tough, hard quality to the final asphalt plastic finish on walls of low temperature rooms (Ex 25 in earlier years).

Unarco (1954-1956):

Armabestos Pipe Covering & Block was used to insulate pipes with temperatures up to 750°F or 1200°F, or surfaces up to 1200°F.

Ehret Magnesia (1957):

85% Magnesia Pipe Covering (Calcium Silicate inner layer available) was used to insulate pipes and surfaces with temperatures ranging to 600°F (both layers to 1200°F).

Baldwin Hill (1951-1956):

Baldwin-Hill #1 Insulating Cement, and later Mineral Wool (Powerhouse) Cement, was used for plastic insulation on irregular surfaces up to 1800°F.

Owens-Illinois (1957):

Kaylo Pipe Covering & Block was used to insulate pipes and surfaces with temperatures up to 1200°F.

Kaylo-20 could be used on temperatures up to 1800°F.

Eagle-Picher (1954-1957):

Armtemp 166 Cement was used as an all-purpose insulating material on surfaces up to 1800°F. At the time AWI relabeled Armtemp 166 (1954-1957), AWI was unaware that it contained asbestos. Through the course of litigation, Eagle-Picher has provided information that suggests Armtemp 166 contained asbestos.

PRODUCTS MANUFACTURED BY ARMSTRONG

LT Cork Covering (1956-1959) was used to insulate pipes and fittings with temperatures ranging from -120°F to 200°F.

Armaspray (1966-1968) was used to insulate large, irregular surfaces such as tanks and vessels with temperatures up to 1600°F.

ARMSTRONG'S CONTRACT DEPARTMENT

Armstrong historically was a low temperature insulation manufacturer and contractor, supplying cork insulation products which were installed by its employees in dairies, ice houses, etc. Except for a limited product line manufactured from approximately 1910-1933, Armstrong's main involvement with high-temperature asbestos-containing insulation products began at the beginning of World War II, when its Contract Department first obtained the right to install products manufactured by Keasbey & Mattison. Armstrong remained primarily a cold storage contractor until the end of 1957, when the contracting business was taken over by ACandS. Documents which may expand upon these responses are available for inspection.

I. PRODUCTS MANUFACTURED BY OTHER COMPANIES AND
INSTALLED BY ARMSTRONG CONTRACT EMPLOYEES

Packaging

Armstrong Cork Company was primarily an insulation contractor whose employees installed insulation products at specific job sites. Most of these asbestos-containing insulation products were manufactured by other companies. These products were packaged by the manufacturer according to its own specifications. Pipe coverings, block and sheet were packaged in cartons; cements and floats in bags.

Labeling

Most of these asbestos-containing insulation products were manufactured by the Keasbey-Mattison Company and labeled with the Keasbey and Mattison name. They were not labeled with the Armstrong Cork Company name. Kaylo was labeled by Owens-Corning Fiberglas with its name.

A limited number of asbestos-containing insulation products were relabeled by the manufacturers to include the Armstrong Cork Company trade name: Armabestos in 1954 - 1956 (manufactured by Unarco) 85% Magnesia Pipe Covering (included Calcium Silicate inner layer) in 1957 (manufactured by Ehret Magnesia Manufacturing Company) and Armatemp 166 Cement in 1954-1957 (manufactured by Eagle-Picher).

II. PRODUCTS MANUFACTURED BY ARMSTRONG

Packaging and Labeling

LT Cork Covering (1956-1959) was packaged in cardboard cartons with the trademark "Armstrong" with the letter "A" centered in a colored disc.

Armaspray (1966-1968) was packaged in 50 lb. kraft paper bags printed with the name Armstrong Contracting & Supply Corporation, Lancaster, Pennsylvania.

Armstrong has employed physicians and nurses at its plants for many years to provide emergency first aid and other on-site medication and care to employees who would be later referred to their own family physician for further treatment as necessary.

The applicable emergency first aid personnel were at the Beaver Falls Plant:

Dr. L. P. Atwell -- until 1966 (deceased)

Dr. J. C. Sutton, Jr. -- 1966 to present

Documents which may expand upon these responses are available for inspection.

ARMSTRONG'S CONTRACT DEPARTMENT

Armstrong historically was a cold storage manufacturer and contractor, supplying cork insulation products which were installed by its employees in dairies, ice houses, etc. Except for a limited high pressure product line manufactured 1910-1930, Armstrong's main involvement with asbestos-containing insulation product began at the beginning of World War II, when its Contract Department was first able to install products manufactured by others. Although Armstrong remained primarily a cold storage contractor, the high temperature business grew until the end of 1957, when the contracting business was taken over by ACANDS. Documents which may expand upon these responses are available for inspection.

CONTRACT DEPARTMENT WORKER'S COMPENSATION CLAIMS

Armstrong received a number of worker's compensation claims filed by its former union employees, which claimed health problems from asbestos. The first claim was in 1952, and eight more were received by Armstrong while it continued as an employer of union insulators (until the end of 1957). Of the two claims which reached disposition during this period, Armstrong was dismissed from one and paid benefits in the other.

From then until 1969, when Armstrong last sold an asbestos-containing insulation product, Armstrong received 48 more claims from its former contract department employees, and handled other such claims for ACANDS. The majority of Armstrong claims disposed of during this period resulted in dismissals or a similar result for Armstrong.

Following is a case-by-case summary of the contract department worker's compensation claims:

<u>Claimant</u>	<u>First Receipt of Claim</u>	<u>Claimant Attorney</u>	<u>Location</u>	<u>Disposition Date</u>	<u>Disposition as to Armstrong</u>
Rothwell, Richard J. Faulkner Rd. Wilmington, MA	9/52	L. Locke (address unknown)	Ind. Accid. Bd. Boston, MA	10/16/53	Dismissal
Hyatt, Floyd (address unknown)	9/53	Lucille Snowden 808 Seybold Bldg. Miami, FL	Fla. Ind. Comm. Div. - Tallahassee No. S-85602	5/4/54	Award - \$5,000
Munger, Lewis M. (address unknown)	1954	Unknown	Mich. WCAB Bay City	9/8/61	Settlement - \$9,616 (Est.)

<u>Claimant</u>	<u>First Receipt of Claim</u>	<u>Claimant Attorney</u>	<u>Location</u>	<u>Disposition Date</u>	<u>Disposition as to Armstrong</u>
Cuthbertson, Jack H. 2284 Holbrook Drive Concord, CA	11/54	Smith & Parrish 1616 Fin. Ctr. Bldg. San Francisco, CA	Cal. Ind. Accid. Comm., San Francisco No. 96 C 622198	5/8/58	Settlement - \$468.60
Campbell, Edward Woodtick Road Waterbury, CT	7/55	Norman Zolot 2607 Whitney Avenue Hamden, CT	W.C. Comm. Hartford, CT		No award indicated
Swartout, John E. 3000 Merrywood Drive Sacramento, CA	7/56	Smith, Parrish, et al 501 Fin. Ctr. Bldg. Oakland, CA	Cal. Ind. Accid. Comm. San Francisco No. 56 SF 169 171	7/27/60	Dismissal
Hartwig, Henry 1917 North 34th Street Milwaukee, WI	2/57	Hugh Hafer 511 Warner Theater Bldg. Milwaukee, WI	Wis. Ind. Comm. Madison No. E 2227 287	1/10/58	Dismissal
Coll, Vincent P. 719 Cleveland Drive Cheektowaga, NY	7/57	Unknown	N.Y. W.C. Appeals Buffalo No. 85702510	10/30/59	Settlement - \$2,191 (Est.)
Haake, Harry 33 Sunny Ridge Drive East Hartford, CT	10/57	Unknown	W.C. Comm. of Ct. No. B8683974	10/16/59	Settlement - \$124.45
McCarrell, E. O. 12255 Hart Street North Hollywood, CA	2/57	Unknown	Cal. Dept. of Ind. Relats. Los Angeles No. 56 LA 176 684	11/2/60	Settlement - \$13,319
Shepherd, James R. (address unknown)	4/58	Unknown	Ind. Accid. Bd. Boston, MA	6/8/61	Settlement - \$5,891.29
Spencer, Thomas B. R. D. #2 Williamstown, NJ	6/58	Samuel Pelsky 735 P.S.F. Bldg Philadelphia, PA	Pa. Bur. of W.C. No. 150802	6/7/62	Dismissal

<u>Claimant</u>	<u>First Receipt of Claim</u>	<u>Claimant Attorney</u>	<u>Location</u>	<u>Disposition Date</u>	<u>Disposition as to Armstrong</u>
Strickland, Fred E. 39 Ellsworth Street San Francisco, CA	8/58	Smith, Parrish, et al 501 Fin. Ctr. Bldg. Oakland, CA	Cal. Ind. Accid. Comm. San Francisco No. 57 SF 182-526	7/27/59	Settlement - \$37.50
Thorsted, Roy (address unknown)	6/59	Unknown	Cal. Ind. Accid. Comm. Oakland No. 59 OAK 1367	12/30/59	Dismissal
Reed, Clarence H. 1230 Essex St. San Antonio, TX	6/59	Rudy Rice 4175 South Main San Antonio, TX	Ind. Accid. Bd. Austin, TX	6/7/60	Settlement - \$500
Cuthbertson, Robert F. (address unknown)	7/59	Unknown	Cal. Ind. Accid. Comm. Oakland No. 59 OAK 1053	12/13/61	Dismissal
Viall, Lloyd V. 5485 South 4270 West Kearns, UT	8/59	Unknown	Nev. Ind. Comm. No. OD 59 14826		No award indicated
Zini, Robert 3184 Turk Street San Francisco, CA	8/59	Smith, Parrish, et al 405 14th Street Oakland, CA	Cal. Ind. Accid. Comm. No. 58 SF 186 653	7/1/60	Dismissal
Streithorst, L. J. 2637 Lincoln Avenue Richmond, CA	5/60	Smith, Parrish, et al 501 Fin. Ctr. Bldg. Oakland, CA	Cal. Ind. Accid. Comm. No. 60 SF 192 145	5/19/64	Dismissal
Curtis, Harvey E. 28312 Michigan Avenue Inkster, MI	8/60	Markle & Markle 1030 Buhl Building Detroit, MI	Mich. W.C. Dept. Detroit No. B 9384208	11/7/62	Dismissal
Dean, William 61-07 Woodside Avenue Woodside, NY	9/60	Unknown	N.Y. W.C. Bd. N.Y.C. No. 06008650	2/26/62	Dismissal

<u>Claimant</u>	<u>First Receipt of Claim</u>	<u>Claimant Attorney</u>	<u>Location</u>	<u>Disposition Date</u>	<u>Disposition as to Armstrong</u>
Harding, Clifford P. 1407 Howe Avenue Sacramento, CA	1/61	Smith, Parrish, et al 501 Fin. Ctr. Bldg. Oakland, CA	Cal. Ind. Accid. Comm. 2/27/62 Oakland No. 60 SF 193 854		Settlement - \$50.57
Riley, James W. 1596 West June Avenue Anaheim, CA	12/59	Hays, McLaughlin & Evans 6331 Hollywood Blvd. Los Angeles, CA	Cal. Ind. Accid. Comm. 11/3/61 Los Angeles No. 57 LA 182 835		Settlement - \$1,324.91
Gronenthal, John 1116 Fifth Avenue Spokane, WA	8/61	Leo Frederickson 203 Rookery Bldg. Spokane, WA	Wash. Bd. of Ind. Ins. No. C 753 051		No award indicated
Staples, John D. (address unknown)	6/62	Unknown	Cal. Ind. Accid. Comm. 4/25/63 No. 62 LB 19396		Settlement - \$821.80
Brodale, Frederick 2344 Fulton Street Berkeley, CA	8/62	Minor J. Schmid 1322 Webster Street Oakland, CA	Cal. Ind. Accid. Comm. 4/6/64 Oakland No. 62 OAK 8566		Settlement - \$111
Gillivich, Steve 239 Georgia Avenue San Bruno, CA	8/62	Smith, Parrish, et al 315 Fin. Ctr. Bldg. Oakland, CA	Cal. Ind. Accid. Comm. 8/8/63 Oakland No. 61 OAK 7152		Dismissal
Wyss, John (address unknown)	8/62	Robert Laws 405 - 14th Street Oakland, CA	Cal. Ind. Accid. Comm. 4/26/66 No. 62 OAK 7422		Settlement - \$362
Kingston, George A. 2617 West 70th Street Minneapolis, MN	11/62	Robins, Davis & Lyons 1130 Minn. Bldg. St. Paul, MN	Minn. Ind. Comm. St. Paul No. 112920	3/29/63	Settlement - \$1,500
Miller, Arthur H. 3217 Castalia Avenue Los Angeles, CA	11/62	Brundage, Hackler, et al 1621 West 9th Street Los Angeles, CA	Cal. Ind. Accid. Comm. 3/25/66 Los Angeles No. 62 LA 235 371		Dismissal

<u>Claimant</u>	<u>First Receipt of Claim</u>	<u>Claimant Attorney</u>	<u>Location</u>	<u>Disposition Date</u>	<u>Disposition as to Armstrong</u>
Faulkner, John 12328 Carmenita Whittler, CA	5/63	Louis Berson 305-1/2 Avalon Blvd. Wilmington, CA	Cal. Ind. Accid. Comm. 1/14/64 Long Beach No. 63 LB 22467		Dismissal
Goans, Robert O. 4232 - 25th Street San Francisco, CA	8/63	Smith, Parrish, et al 315 Fin. Ctr. Bldg. Oakland, CA	Cal. Ind. Accid. Comm. 8/12/64 Oakland No. 63 OAK 11052		Settlement - \$175
Greischar, Paul J. 151 LaVista Avenue Concord, CA	5/62	Smith, Parrish, et al 315 Fin. Ctr. Bldg. Oakland, CA	Cal. Ind. Accid. Comm. 4/5/66 Oakland No. 62 OAK 8188		Settlement - \$85
Everitt, Allen 449 - 22nd Street Richmond, CA	1/64	Unknown	Cal. WCAB Oakland No. 63 OAK 11139	11/1/66	Dismissal
Novak, Edward C. 1855 Riverton Avenue North Hollywood, CA	9/64	William Hays 6331 Hollywood Blvd. Los Angeles, CA	Cal. Ind. Accid. Comm. 8/18/66 Los Angeles No. 63 LA 250 854		Settlement - \$300
Furia, Del 3004 Carvel Drive Santa Rosa, CA	2/65	McKenzie and Arata 421 Orchard Street Santa Rosa, CA	Cal. Ind. Accid. Comm. 12/21/65 Santa Rosa No. 65 SRO 34243		Settlement - \$132.16
Coates, John C. (address unknown)	5/65	Wilfred Boudreaux (address unknown)	New Orleans, LA		No award indicated
Reilly, James J. 256 Stratford Drive San Francisco, CA	6/65	Gordon Gaines 315 Fin. Ctr. Bldg. Oakland, CA	Cal. Ind. Accid. Comm. Oakland No. 65 OAK 17136		No award indicated
Hunt, Melvin L. 1126 Bainbridge Avenue West Covina, CA	1/66	Ed Silver Silver & McWilliams	Cal. WCAB Long Beach No. 65 LB 29228	11/7/66	Settlement - \$3,298

<u>Claimant</u>	<u>First Receipt of Claim</u>	<u>Claimant Attorney</u>	<u>Location</u>	<u>Disposition Date</u>	<u>Disposition as to Armstrong</u>
Crader, Willard 10603 Valencia Street Bloomington, CA	6/66	Gerald Tiernan 436 West 4th Street Pomona, CA	Cal. Ind. Accid. Comm. 8/18/67 Pomona No. 64 POM 1939		Settlement - \$433 (est.)
Puetz, Henry C. Rt. 2, Box 101-D Oakley, CA	7/66	Smith, Parrish, et al 405 - 14th Street Oakland, CA	Cal. Ind. Accid. Comm. 3/9/70 Oakland No. 66 OAK 20668		Settlement - \$114 (est.)
Lumbattis, Vernon E. (address unknown)	11/66	Steve Roseman 1621 West 9th Street Los Angeles, CA	Cal. WCAB No. 66 LA 291 957	8/23/68	Settlement - \$609
Clark, Dean 13331 Lakewood Boulevard Downey, CA	2/67	Steve Roseman 1621 West 9th Street Los Angeles, CA	Cal. WCAB Los Angeles No. 66 LA 292 043	8/29/69	Settlement - \$137 (est.)
Herkel, Frederick J., Jr. 5331 Riverview Rd. Minneapolis, MN	3/67	E. Lee Armstrong 270 North Snelling St. Paul, MN	Ind. Comm. of Minn. Div. of W.C. St. Paul No. 374963		No award indicated
Tyler, John 6333 Dashwood Lakewood, CA	3/67	Howard Gebler 315 West 9th Street Los Angeles, CA	Cal. WCAB Long Beach No. 68 LB 36087	5/24/67	Dismissal
Hallmark, Stanley R. 36 Anchor Drive Pittsburg, CA	5/68	Stephen Chandler 220 Juana Avenue San Leandro, CA	Cal. WCAB Oakland No. 68 OAK 26794	3/17/69	Settlement - \$262
Haag, Alvin 14035 - 33rd Avenue, S. Seattle, WA	6/68	Unknown	Wash. Dept. of Labor and Ind. Seattle, No. F 541406		No award indicated
Pond, Lowell M. 10989 Amery Avenue South Gate, CA	7/68	Eugene Marias 727 West 7th Street Los Angeles, CA	Cal. WCAB Los Angeles No. 67 LA 318 198		No award indicated

<u>Claimant</u>	<u>First Receipt of Claim</u>	<u>Claimant Attorney</u>	<u>Location</u>	<u>Disposition Date</u>	<u>Disposition as to Armstrong</u>
Boyer, Wayne 1122 Palm Street Las Vegas, NV	7/68	Eugene Marias 727 West 7th Street Los Angeles, CA	Cal. WCAB Los Angeles No. 68 LA 322 421		No award indicated
Brimmer, Lawrence 6800 North Dort Hwy. Flint, MI	8/68	Rene J. Ortleib 706 Mott Foundation Bldg. Flint, MI	Mich. W.C. Dept. Lansing	1/5/70	Dismissal
Pfleghaar, Edward L. 141 Monterey Street Brisbane, CA	10/68	Ott & Williams 126 Hyde San Francisco, CA	Cal. WCAB San Francisco No. 68 SF 223 867		No award indicated
Nicholson, Clyde 1808 East Commonwealth Fullerton, CA	10/68	Howard A. Gabler 727 West 7th Street Los Angeles, CA	Cal. WCAB Santa Ana No. 68 ANA 23276		No award indicated
McCormick, William C. 3169 Live Oak Huntington Park, CA	11/68	Rose, Klein & Marias 727 West 7th Street Los Angeles, CA	Cal. WCAB Los Angeles No. 67 LA 317 548	6/20/69	\$1,003 (est.)
Gay, Irvin E. 4910 - 11th Avenue Sacramento, CA	12/68	Unknown	Cal. WCAB Sacramento No. 68 SACO 29383		No award indicated
Stanley, John 10786 Stanley La. Garden Grove, CA	2/69	Jerrold M. Wolf 727 West 7th Street Los Angeles, CA	Cal. WCAB Santa Ana No. 68 ANA 23456	6/6/69	Settlement - \$221.87
Stennett, Lee (address unknown)	4/69	Jerome Goldberg 727 West 7th Street Los Angeles, CA	Cal. Ind. Accid. Comm. No. 67 VA 15051		No award indicated
Owens, Glen R. (address unknown)	7/69	Howard Lehman 727 West 7th Street Los Angeles, CA	Cal. WCAB No. 69 LA 332 593	5/28/70	Settlement - \$525