OWENS CORNING: CORPORATE DOCUMENTS ACTUAL KNOWLEDGE OF THE HAZARDS OF ASBESTOS

(Submitted In Connection With Plaintiff's Punitive Damage Claim)

1935: OCF receives 1935 U.S. Public Health Service Study in which results show 67 out of 126 asbestos workers have first or second degree asbestosis (53%), and X-ray examinations indicate "cases of definite cardiac enlargement...associated with asbestosis."

(Natl. Liab. Doc. No. 4490.0: 1/4/35: "Effects of the Inhalation of Asbestos Dust on the Lungs of Asbestos Workers" by Lanza, McConnell and Fehnel) [OCF Bates No. 01 501 0499 - 01 501 0511](0506, 0507, 0509)

1935: OCF receives 1935 U.S. Public Health Service Study that further states only 25 of 126 "were entirely free from symptoms" of asbestosis.

(Natl. Liab. Doc. No. 4490.0: 1/4/35: "Effects of the Inhalation of Asbestos Dust on the Lungs of Asbestos Workers" by Lanza, McConnell and Fehnel) [OCF Bates No. 01 501 0499 - 01 501 0511](0506, 0507)

1935: OCF receives 1935 U.S. Public Health Service Study that states: Because "prolonged exposure to asbestos dust [causes] a pulmonary fibrosis," the "amount of dust...in the asbestos plants...[should] be substantially reduced."

(Natl. Liab. Doc. No. 4490.0: 1/4/35: "Effects of the Inhalation of Asbestos Dust on the Lungs of Asbestos Workers" by Lanza, McConnell and Fehnel) [OCF Bates No. 01 501 0499 - 01 501 0511](0509, 0510)

1936: OCF receives 1936 Saranac Lab Report in which Dr. Gardner states: "asbestos...[is] known to produce fibrosis of the lungs."

(Natl. Liab. Doc. No. 4321.0: 5/5/36: Gardner to Hazard) [OCF Bates No. 01 022 0637 - 01 022 0641](0637)

- 1941: OCF Legal Dept. to Dr. Gardner, Saranac Labs: "Good news" fiberglas will not produce an "asbestos-like reaction." (Natl. Liab. Doc. No. 4914.0: 1/20/41: OCF Legal Dept. to Gardner) [OCF Bates No. 01 500 0071]
- 1942: OCF gathers "weapons in reserve" to help fiberglas sales: 500-600 pages of "medical literature on asbestosis" to 1938: "scores of publications in which the lung and skin hazards of asbestos are discussed."

(Natl. Liab. Doc. No. 165.0: 1/7/42: OCF Ames to OCF Marshall, et al.) [OCF Bates No. 01 505 0016 - 01 505 0017](0016)

1943: Dr. Gardner, Saranac Labs advises OCF Ames that employee chest X-ray "shows a reaction strongly suggestive of asbestosis."

(Natl. Liab. Doc. No. 4312.0: 3/13/43: Gardner to OCF Ames) [OCF Bates No. 01 501 1611 - 01 501 1612](1611)

- 1943: OCF memo debates whether or not to mix asbestos and fiberglas. "We should keep on the alert otherwise we will run the risk of smearing fiberglas with the hazards of exposure to asbestos."

 (Natl. Liab. Doc. No. 167.0: 12/27/43: OCF Ames to OCF Gregory, et al.)
- 1943: OCF memo states: "Fabrication of asbestos...is a dusty process, and exposure to asbestos fly involves the dangers of asbestosis."

 (Natl. Liab. Doc. No. 167.0: 12/27/43: OCF Ames to OCF Gregory, et al.)

1943: OCF Ames recognizes that the "asbestos manufacturing industry is well acquainted with [the] hazards" of asbestos.

(Natl. Liab. Doc. No. 167.0: 12/27/43: OCF Ames to OCF Gregory, et al.)

1944: OCF informed that an asbestos pipecoverer (Baumgardner) was hospitalized "suffering from asbestosis."

(Natl. Liab. Doc. Nos. 160.0, 163.0, 168.0, 169.0, 170.0, 4343.0, 4344.0, and 4345.0)

1945: OCF Ames compares the hazards of free silicate to those of asbestos: "The asbestos fibers are a certain particle size and in certain concentrations can penetrate into the respiratory passages and cause havoc when they reach the alveoli of the lungs where they set up a chemical reaction with body fluids, similar to that found in Silicotics..." ... "The symptoms are similar: dyspnea (shortness of breath), hacking, unproductive cough, slight elevation of temperature, etc. Thank goodness we don't run into anything of that sort with fiberglass."

(Natl. Liab. Doc. No. 4973.0: 8/29/45: OCF Ames to OCF McKay, et al.) [OCF Bates No. 01 022 0731] (0731)

- 1945: OCF Ames realizes that "asbestos fibers in the only silicate that has been determined by lung pathologists to involve the lung hazard."

 (Natl. Liab. Doc. No. 4973.0: 8/29/45: OCF Ames to OCF McKay)
 [OCF Bates No. 01 022 0730 01 022 073](0731)
- 1945: OCF Ames compares the hazards of free silicate to those of asbestos: "It is an entirely different story with asbestos. The asbestos fiber [are] the only silicate that has been determined by lung pathologists to involve a lung hazard.

 (Natl. Liab. Doc. No. 4973.0: 8/29/45: OCF Ames to OCF McKay, et al.) [OCF Bates No. 01 022 0731] (0731)
- 1945: OCF Ames understands that "asbestos fibers...can penetrate into the respiratory passages and cause havoc when they reached alveoli of the lungs."

(Natl. Liab. Doc. No. 4973.0: 8/29/45: OCF Ames to OCF McKay, et al.) [OCF Bates No. 01 022 0730 - 01 022 0731](0731)

1946: OCF receives a report by the Safety Advisor to State of Ohio on asbestos dust counts in which he "estimate[s] that the concentration of dust...would be within a range of from 5 to 10M."

(Natl. Liab. Doc. No. 4345.0: 1/21/46: Hanna to Columbus Medical Department) [OCF Bates No. 01 501 0175]

1947: OCF Chemistry Lab takes "dust counts...in the Insulation Cement Dept. to determine extent of asbestos dust hazard." Dust concentration from OCF plant range from 12 to 25 million particles on the first floor and 30 to 50 million particles per cubic foot on the second floor.

(Natl. Liab. Doc. No. 5736.0: 4/7/47: OCF Morrison to the Record, et al.) [OCF Bates No. 02 203 1273 - 02 203 1274](1273)

1947: In response to dust counts in the Insulating Dept. above the TLV of 5 million particles, OCF Chemistry Dept. recommends "substitution of another material for asbestos...installation of a more efficient local exhaust systems...and furnishing suitable respirators for the operators [that] should be worn continuously."

(Natl. Liab. Doc. No. 5736: 4/7/47: OCF Morrison to the Record, et al.) [OCF Bates No. 02 203 1273 - 02 203 1274]

1947: OCF Smucker recognizes the "potential hazard" from dust in their insulating cement operation.

(Natl. Liab. Doc. No. 4924.0: 4/29/47: OCF Smucker to OCF Zimmerman, et al. [OCF Bates No. 01 022 0603 - 01 022 0608](0606)

1951: OCF receives 1951 Saranac Lab Survey that states: "...two main health hazards must be considered... asbestos...and crystalline free silica."

(Natl. Liab. Doc. No. 5116.0: 1/31/51: Urban to Vorwald) [OCF Bates No. 42 016 0802 - 42 016 0804] (0803)

1951: OCF receives 1951 Saranac Lab Survey that states: "...the main hazard to health of workers...arises from exposure to long-fibered asbestos."

(Natl. Liab. Doc. No. 5117.0: 2/6/51: Urban to Vorwald) [OCF Bates No. 42 016 0808 - 42 016 0813](0812)

1952: OCF receives 1952 Saranac Lab Report that states: "The results...show that Kaylo dust is capable of producing...asbestosis" and "that every precaution should be taken to protect workers against inhaling the dust."

(Natl. Liab. Doc. No. 233.1: 2/7/52: Vorwald to Hazard) [OCF Bates No. 01 501 1347]

1952: Owens-Illinois Kaylo advertisement states: "...the material is non-irritating to the skin and non-toxic."

(Natl. Liab. Doc. No. 60090.0: 2/52)(Natl. Liab. Doc. No. 60097.0: 7/52)

1953: OCF becomes distributor of Kaylo.

(Affidavit of Robert A. McOmber in Healy vs. OCF, et al.: R. Vol. XIV, C3380)

- 1955: OCF receives memo declaring: "Please minimize the health angle...100 to 1 chances are it is 'asbestosis.'"

 (Natl. Liab. Doc. No. 4218.0: 5/18/55) [OCF Bates No. 01 501 0267]
- 1955: OCF receives memo discussing that "Kaylo dust could cause asbestosis, an incurable lung condition."

(Natl. Liab. Doc. No. 4203.0: 10/5/55: Hazard to Olander) [OCF Bates No. 000058 - 000059]

1955: Dr. Schepers, Saranac Labs publishes medical articles in the *A.M.A. Archives of Industrial Health*. OCF Rogers sends memo to OCF management stating these "articles are 'loaded with statements that could be damaging in a suit' against Owens-Corning." Studies and defense actions should begin.

(Natl. Liab. Doc. No. 4216.0: 12/6/55: OCF Rogers to OCF Boeschenstein, et al.)

1956: Dr. Schepers, Saranac Labs gives OCF Burch Asbestos Studies showing unfavorable results during long term exposure. He states: "Asbestos is fairly well incriminated as a carcinogen and the asbestos causes lung damage."

(Natl. Liab. Doc. No. 4314.0: 2/6/56: Schepers to OCF Burch) [OCF Bates No. 01 501 1573 - 01 501 1577] p.1577)

1956: In an OCF memo discussing the unfavorable results of the Saranac Lab Experiments, the OCF Legal Dept. states that the results are "certainly nothing we could show customers or a union."

(Natl. Liab. Doc. No. 4341.0: 2/8/56: OCF Black to OCF Bishop, et al.) [OCF Bates No. 01 501 1312]

1956: OCF Kaylo Brochure touts product as "non-irritating, non-toxic" and "contribute[s] to worker well-being."

(Natl. Liab. Doc. No. 4349.0: 6/1/56) [OCF Bates No. 42 012 0722 - 42 012 0729](0726, 0728)

1957: OCF Johnson states: "...everyone in our company is conscious of the...problems of Asbestosis and allied diseases."

(Natl. Liab. Doc. No. 182.0: 5/23/57: OCF Johnson to OCF Burch)

1961: OCF Shannon memo states: "There is some confusion among various people in our company, as to our objective in the reinforcement of Kaylo with glass fibers...We do not plan to substitute glass pound for pound for asbestos (asbestos 4-10 cents per lb. - glass 40 cents and up).

(Natl. Liab. Doc. No. 5159.0: 9/26/61: OCF Shannon to OCF Boyd, et al.) [OCF Bates No. 01 041 1199 - 01 041 1200](1200)

1962: OCF Technical Center states "major disadvantage of using of asbestos fibers in Kaylo...[is the] potential health hazard (asbestosis)."

(Natl. Liab. Doc. No. 4334.0: 10/31/62: OCF Shannon) [OCF Bates No. 01 041 0710 - 01 041 0774](0722)

1963: OCF Product Development Labs memo discusses the health hazards of Kaylo versus GPL 400 [Asbestos-Free Insulation]. The memo states: "I have reviewed the general problem of the dust hazard of insulations and their effect upon humans...Asbestos (as found in Kaylo) when breathed into the lungs causes asbestosis which often leads to lung cancer...All insulations are dusty and insulators seldom complain except when the dust is particularly irritating to them.

Based upon presently available data, GPL-400 [Asbestos-Free Insulation] is not as detrimental to the health as is Kaylo."

(Natl. Liab. Doc. No. 556.0: 9/17/63: OCF Lotz to OCF Pearson, et al.) [OCF Bates No. 01 043 0032]

1964: Dr. Selikoff publishes JAMA articles on asbestos exposure and cancer.

(Natl. Liab. Doc. No. 1539.0: 4/6/64)

1964: OCF Edwards states: "Dr. Kenneth Smith, Medical Director of J-M, told me some weeks ago that he had recommended to J-M management that certain J-M asbestos-containing products be labeled to indicate the alleged hazards of asbestos. The J-M management and legal department have now decided to label their pre-formed products...It is obvious that these warning labels will have some impact in the field and possibly upon Public Health and other government officials...The question before us is whether or not Fiberglas Kaylo should protect itself against more stringent and punitive health laws and the possibility of third party actions by following the J-M lead."

(Natl. Liab. Doc. No. 528.0: 8/12/64: OCF Edwards to OCF Staelin, et al.) [OCF Bates No. 01 029 0398]

- 1965: OCF Edwards states: Due to "health hazards of our Kaylo products" and Dr. Selikoff's recent articles, "we should continue to give serious consideration to the labeling of our Kaylo products."

 (Natl. Liab. Doc. No. 531.0: 1/22/65: OCF Edwards to OCF Pfeifer, et al.) [OCF Bates No. 01 008 1333]
- 1965: OCF Edwards' "confidential" letter states: "Our present concern is to find some way of preventing Dr. Selikoff from creating problems and affecting sales."

(Natl. Liab. Doc. No. 4318.0: 11/29/65: OCF Edwards to OCF Briley) [OCF Bates No. 02 215 0557]

1966: OCF memo states: "Asbestos is recognized as a health hazard causing asbestosis...Suitable respirators should be worn by workman...We [need to] consider the labeling of our Kaylo products."

(Natl. Liab. Doc. No. 559.0: 8/8/66: OCF Edwards to OCF Briley) [OCF Bates No. 01 039 1475 - 01 039 1476](1475, 1476)

1966: OCF memo states that Dr. Selikoff claims only one asbestos "fiber in the body can cause cancer."

(Natl. Liab. Doc. No. 559.0: 8/8/66: OCF Edwards to OCF Briley) [OCF Bates No. 01 039 1475 - 01 039 1476](0175)

1966: OCF Johnson states: "OCF cannot disassociate itself from asbestos, as we buy nearly one million dollars worth as reinforcement for Kavlo."

(Natl. Liab. Doc. No. 536.0: 10/27/66: OCF Johnson to OCF Staelin, et al.) [OCF Bates No. 01 036 0813 - 01 036 0814](0813)

1966: OCF distributes 11/7/66 minutes from the Industrial & Commercial, Research & Development Division's Review conducted at the OCF Technical Center in Granville, Ohio that states: OCF "Johnson explained the current situation regarding the health hazards aspects of asbestos reinforcement in Kaylo." He recommends OCF rapidly move to find a feasible replacement.

(Natl. Liab. Doc. No. 538.0: 11/4/66: OCF Davis to OCF Boeschenstein, et al.) [OCF Bates No. 01 036 0813 - 01 036 0814]

1966: OCF memo states: "Because of certain potential health hazards involved in the use of asbestos fibers,...a <u>non-asbestos</u> re-inforced Kaylo needs to be developed."

(Natl. Liab. Doc. No. 5125.0: 12/1/66: OCF Shannon to OCF Pearson, et al.) [OCF Bates No. 01 027 0911 - 01 027 0912](0912)

1967: OCF memo states that asbestos' only "draw back involves a health hazard."

(Natl. Liab. Doc. No. 4443.0: 4/26/67: OCF Shannon to OCF McEvoy & OCF Pfeifer) [OCF Bates No. 01 016 2476.01 - 01 016 2478](2476.01)

1967: OCF Vyverberg & OCF Edwards attend August 10, 1967, NIMA meeting where Dr. Cooper discusses "an increase of bronchiogenic carcinoma of about three times over expected in the insulation workers" and "two or three cases of mesothelioma."

(Natl. Liab. Doc. No. 4317.0: 8/10/67: NIMA minutes) [OCF Bates No. 42 013 0927 - 42 013 0930](0928)

1967: OCF management aware that "studies on lung cancer will condemn asbestos."

(Natl. Liab. Doc. No. 571.0: 8/24/67: OCF Briley to OCF Boeschenstein)

1967: OCF Shannon memo states: "... the replacement of asbestos program has been delayed."

(Natl. Liab. Doc. No. OCF 142: 8/28/67: OCF Shannon to OCF Johnson, et al.) [OCF Bates No. 01 023 0208 - 01 023 0209](0209)

1967: OCF Pfeifer memo discusses "the importance of finding a fibrous substitute for asbestos within the coming months. More and more legislative attention is being given to the publicized detrimental health effects of asbestos to humans. This is not only in the United States, but in Great Britain as well."

(Natl. Liab. Doc. No. OCF 147: 9/8/67: OCF Pfeifer to OCF McEvoy, et al.) [OCF Bates No. 01 022 1363 - 01 022 1365](1363)

1967: OCF prevents Ohio State University student from publishing paper because information "such as a discussion on cancer and asbestos fiber" was "considered extremely proprietary."

(Natl. Liab. Doc. No. 5095.0: 9/21/67: OCF Shannon to OCF Overman, et al.) IOCF Bates No. 01 027 09511

1967: OCF memo states: "...the government will probably blow the whistle ... to the use of asbestos in the not so distant future and, before we embark upon a substantial expansion program...we had better be damn sure that we have an answer to the asbestos threat."

(Natl. Liab. Doc. No. 5113.0: 10/9/67: OCF Ladd to OCF Barthold, et al.) [OCF Bates No. 01 029 1126]

1967: OCF memo discussing the reasons for accelerating the replacement of asbestos in 1968 states: "...in the event the health hazard aspect of asbestos fibers becomes a major national and/or political hot potato, OCF will have an alternate fiber to switch to so as to stay in business."

(Natl. Liab. Doc. No. 545.0: 10/16/67: OCF Shannon to OCF Swank) [OCF Bates No. 01 022 1466 - 01 022 1467](1466)

1968: OCF sued in <u>Tomplait</u>. Dr. Konzen writes to OCF Logan "that the condition (asbestosis) was well known and well documented in the literature during the entire time that Mr. Tomplait used the insulation."

(Natl. Liab. Doc. No. 4310.0: 2/9/68: OCF Konzen to OCF Logan and OCF Briley) [OCF Bates No. 02 209 0222 - 02 209 0223](0223)

1968: Dr. Selikoff publishes JAMA article on smoking, asbestos and cancer.

(Natl. Liab. Doc. No. 1553.0: 4/8/68)

1968: OCF Shannon states: "Asbestos...is reported to cause cancer.

Because of adverse publicity, possible court actions and for [our]

protection of our position in the...market, it is necessary for OCF to
eventually remove asbestos fibers from Kaylo."

(Natl. Liab. Doc. No. 548.0: 4/30/68: OCF Shannon to OCF Hibbard & OCF McEvoy)

1969: OCF Saverstrom memo discusses "...major problems in my product line." The first being "health hazards from asbestos."

(Natl. Liab. Doc. No. OCF 196: 9/3/69: OCF Saverstrom to OCF Glosser) [OCF Bates No. 01 001 1958 - 01 001 1959](1958)

1970: OCF Kern "feel(s) it is important that we take a look at other fibers as a replacement for asbestos."

(Natl. Liab. Doc. No. 5551.0: 1/15/70: OCF Kern to OCF Glosser, et al.) [OCF Bates No. 01 022 1569]

1970: OCF is making "no progress" in replacing asbestos in Kaylo. (Natl. Liab. Doc. No. 5552.0: 1/19/70: OCF Peck to OCF Hibbard, et al.)

(Natl. Liab. Doc. No. 5552.0: 1/19/70: OCF Peck to OCF Hibbard, et al.) [OCF Bates No. 01 022 1570]

1970: OCF discovers "any insulation containing asbestos has been banned in the major power and process applications in England."

(Natl. Liab. Doc. No. 5035.0: 9/8/70: OCF Parker to OCF Pearson, et al.) [OCF Bates No. 01 022 1593]

1970: OCF Konzen suggests "precautionary label be affixed to each carton containing the Kaylo product...The Corporate Legal Staff to review and comment [on] this proposal."

(Natl. Liab. Doc. No. 4958.0: 9/15/70: OCF Konzen to OCF Peck, et al.) [OCF Bates No. 02 007 0439]

1970: OCF Kern discussing Kaylo labeling with OCF Konzen: "Are you saying that <u>we have</u> to do this now? I naturally would like to delay this requirement as long as possible."

(Natl. Liab. Doc. No. 3929.0: 9/21/70: OCF Kern to OCF Konzen, et al.)

1970: OCF Konzen replies to OCF Kern about labeling, "From a health standpoint I feel that we should label the product at this time."

(Natl. Liab. Doc. No. 3930.0: 9/25/70: OCF Konzen to OCF Kern & OCF Logan)

1970: OCF Chief Industrial Hygienist Devitt suggests "a respirator program...as a temporary measure until positive engineering and process controls can be installed."

Natl. Liab. Doc. No. 4465.0: 10/13/70: OCF Devitt to OCF Preston, et al.)
[OCF Bates No. 01 070 0217 - 01 070 0219](0217)

1971: Doctor of OCF employee tells OCF that employee has "asbestosis, moderate severe" and should be "relocated out of any environmental hazards."

(Natl. Liab. Doc. No. 5157.0: 6/30/71: Paisley to OCF McNally) [OCF Bates No. 02 209 0726 - 02 209 0731](0727)

1971: OCF Konzen states: "It is noted that [OCF Scheurle] deleted the paragraph concerning the relationship between asbestosis over - exposure and cancer" from the original draft before handing it out to Union membership and physicians of employees.

(Natl. Liab. Doc. No. 4322.0: 8/17/71: OCF Konzen to OCF Scheurle, et al.) [OCF Bates No. 42 011 016_]

1971: OCF receives Berlin Health Program on Asbestos that states: "Asbestos...can cause adverse health effects in workers who manufacture and handle asbestos containing products...lt is well established that asbestos is capable of causing changes in the lungs." Study suggests protective measures, such as "wear(ing) proper respirators," should be taken.

(Natl. Liab. Doc. No. 4326.0: 9/22/71)

(Natl. Liab. Doc. No. 4326.0: 9/22/71) [OCF Bates No. 42 011 016_ - 42 011 0166](0163, 0164)

1971: OCF plans "no changes...in consumption rates for Grade S-33 78 asbestos. It will remain at the projected 200 ton level."

(Natl. Liab. Doc. No. 5019.0: 11/18/71: OCF Shannon to OCF Wilson, et al.) [OCF Bates No. 01 009 0383]

1972: OCF Al Pierce states: "All asbestos free material is to be stored together in the same bays. Do not mix in bays with asbestos material. Under no circumstances is this [asbestos] material to be shipped or substituted when shipping [an] order unless the order calls for asbestos free and this is clearly marked on the order."

(Natl. Liab. Doc. No. 4960.0: 7/24/72: OCF Al Pierce to OCF Warehouse Crews W.F. Justus) [OCF Bates No. 42 007 1543.]

1972: OCF Gilkey memo presents the Minutes of the Kaylo 10 - Asbestos Free Team Meeting on July 25, 1972. OCF Scheuerle instructed to balance "inventories of asbestos containing products...for easy phase out after December 1, 1972."

(Natl. Liab. Doc. No. OCF 276: 7/31/72: OCF Gilkey to OCF Distribution List) [OCF Bates No. 01 001 0734-01 001 0736](0734) MIA

1972: OCF Gilkey memo presents the Minutes of the Kaylo 10 - Asbestos Free Team Meeting on July 25, 1972. OCF Glosser to "extent maximum pressure to move current slow moving inventories of [asbestos] Kaylo products out of the Berlin Plant."

(Natl. Liab. Doc. No. OCF 276: 7/31/72: OCF Gilkey to OCF Distribution List) [OCF Bates No. 01 001 0734-01 001 0736](0734) MIA

1972: Invoice from North American Asbestos Corporation to OCF for a shipment of 69.9 metric tons of Grade M amosite fiber shipped 8/7/72 on the "Hellonic Hero" to port of Philadelphia then via national freight to Berlin, New Jersey Plant.

(Natl. Liab. Doc. No. 5027.0: 8/25/72: North American Asbestos Corporation invoice to OCF Accounting Department) [OCF Bates No. 42 015 1515] (1515)

1972: OCF memo discusses Japan discovering asbestos ban in U.S. & U.K. "due to being detrimental (their words) to the human body." Japan request regulations and OCF's plans for a substitute.

(Natl. Liab. Doc. No. 4332.0: 9/5/72: OCF Warden to OCF Shannon & OCF Mercer) [OCF Bates No. 01 086 1565]

1972: OCF Shannon states: "You are probing into a very sensitive area when you request information for transmittal to Japan on asbestos, its threat to health, government regulations, and OCF plans for attacking the problem...I'm not sure how much information OCF wants to release on the subject of asbestos." The Legal and Medical departments should handle it.

(Natl. Liab. Doc. No. 4330.0: 9/13/72: OCF Shannon to OCF Warden) [OCF Bates No. 01 086 1564]

1972: OCF Konzen states asbestos "...is known to cause a fibrosis of the lungs called Asbestosis...Irreversible and progressive lung scarring will therefore occur... before it is apparent to the man or on medical examination. Likewise, occupational exposure to asbestos is known to be causely related to carcinoma of the lung and malignant mesothelioma." He suggests "substituting a less hazardous material" and taking proper protective measures.

(Natl. Liab. Doc. No. 4313.0: 9/20/72: OCF Konzen to OCF Mayer) [OCF Bates No. 02 418 0057 - 02 418 0059](0057) 1972: Invoice from North American Asbestos Corporation to OCF regarding shipment of 25 metric tons of Grade M amosite fiber shipped on 9/1/72 on the "African Moon" to port of Philadelphia then via national freight to the Berlin, New Jersey Plant.

(Natl. Liab. Doc. No. 5028.0: 9/15/72: Invoice from North American Asbestos Corporation to OCF Accounting Department [OCF Bates No. 42 015 1517]

1972: Invoice from National Asbestos Corporation to OCF for shipment of 50 metric tons of Grade M amosite fiber shipped 10/24/72 on the "African Sun" to port of Philadelphia then via national freight to the Berlin, New Jersey Plant.

(Natl. Liab. Doc. No. 5029.0: 10/31/72: Invoice from National American Asbestos Corporation to OCF Accounting Department)
[OCF Bates No. 42 015 1519]

1972: OCF memo states: "Asbestos free block containing asbestos dust will be marked AFX...for approximately 2 days until all asbestos contained block is trimmed."

(Natl. Liab. Doc. No. 5025.0: 11/14/72: OCF Dropkin to Record) [OCF Bates No. 42 007 1503]

(Natl. Liab. Doc. No. 4948.0: 11/14/74: McNelly to OCF Preston)

1974: Letter to OCF proclaims "Oh joy!!! Oh joy!!! The last of the damn asbestos has been removed from the storage area."

[OCF Bates No. 01 127 0027]

APPENDIX ONE Cast of Characters

	<u> </u>	Natl. Liab. Doc. No.
Ames	Public Relations Manager, OCF	170.0
Barthold	Toledo, OCF	5113.0
Bishop	Medical Department, OCF	4341.0
Black	Legal Department, OCF	4341.0
Boeschenstein	Vice-President of Marketing, OCF	538.0
Boyd	Toledo, OCF	5159.0
Briley	Vice-President, OCF	4217.0
Burch	Director of Personnel & Industrial Relations, OCF	4314.0
Campbell	Industrial Health Committee, OCF	4924.0
Devitt	Chief Industrial Hygienist, OCF	4465.0
Edwards	Director of Health and Hygiene, OCF	557.0
Gardner, Dr.	Saranac Labs	4312.0
Gilkey	OCF	OCF276
Glosser	Toledo, OCF	OCF196
Hazard	Industrial Relation Division, OI	233.1
Hibbard	Granville, OCF	5552.0
Johnson	Comptroller of I & C Marketing Division, OCF	538.0
Kern	Toledo, OCF	5552.0
Konzen	Medical Director, OCF	4333.0
Ladd	Vice-President of I & C Marketing Division, OCF	538.0
Logan	Legal Department, OCF	4958.0
Lotz	Product Development Labs, OCF	556.0
Marshall	'	
McEvoy	Director Research, OCF	538.0
McKay	New York, OCF	4973.0
McNally	,	
Mercer	Granville, OCF	4332.0
Morrison	Chemical Labs, OCF	5736.0
Overman	Toledo, OCF	569.0
Pailsley	Physician of Edward Saunders	5157.0
Pansius	Supervisor Architectural and Roofing Development, OCF	538.0
Parker		
Pearson	Manager General Products Development Labs, OCF	538.0
Peck	Toledo, OCF	5552.0
Pfeifer	Granville, OCF	538.0
Preston	Bloomington Plant Manager, OCF	4948.0
Saverstrom	Toledo, OCF	OCF196
Scheurle	Berlin, OCF	581.0
Seigeman	Quality Standards and Control, OCF	538.0
Shannon	Technical Center, OCF	5159.0
Simison	Industrial Health Committee, OCF	4924.0
Smucker	Industrial Health Committee, OCF	4924.0
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