IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA IN AND FOR THE COUNTY OF ALAMEDA

HENRY PLOOY and JOANNE PLOOY,

No. RG 07329961

Plaintiffs,

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ORDER RE MET LIFE'S MOTION FOR JUDGMENT AND [PROPOSED] STATEMENT OF DECISION

VS.

METROPOLITAN LIFE INSURANCE COMPANY, et al.,

Defendants.

Dept: 17

Action Filed: June 8, 2007 Trial Date: January 16, 2008

INTRODUCTION

Henry Plooy suffers from mesothelioma as a result of his occupational exposure to asbestos at the Johns-Manville Corporation plant in Stockton, California from 1959 through 1963. He claims damages from the Metropolitan Life Insurance Company based upon its alleged aiding and abetting of Johns-Manville's battery and fraud, and for violation of its own alleged duty of care under the Restatement 2d of Torts §324A. His wife, Joanne Plooy, also claims damages based upon her loss of consortium as a result of her husband's debilitating and ultimately fatal illness.

The principal legal and factual questions presented by this case are whether the Met Life is legally responsible for the injuries the Plooys are suffering

as a result of its extensive involvement with Johns-Manville and the health and welfare of its workers over a period of many years, despite the fact that Met Life had no direct contact of any kind with the Plooys. The Court concludes that it is under the claim for abetting and abetting, but not under section 324A.

PROCEDURAL HISTORY

The complaint in this action, filed June 8, 2007, alleges several causes of action against Met Life and others who were dismissed before or during trial. The case was assigned to this department for all purposes by Presiding Judge George C. Hernandez, Jr. on August 2, 2008.

On August 24, 2007 the Court granted plaintiffs' motion to advance pursuant to Code of Civil Procedure §136 because of the poor prognosis for Henry Plooy's remaining lifespan. Met Life's motions to stay this action and for summary judgment were denied on September 20, 2007 and October 4, 2007, respectively.² On November 5, 2007, the original November trial date was continued by a stipulation and order so that the parties would have more time to complete discovery and in the hope that plaintiff's health would improve enough for him to testify at trial.³ The order set a briefing schedule and a hearing on in limine motions and other pretrial matters for December 20, 2008 and jury selection for January 14, 2008. On January 22, 2008, five days after the jury had been sworn and just prior to opening statements all parties waived a jury and the matter proceeded as a court trial.

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¹ Johns-Manville ("J-M") filed for bankruptcy more than twenty years ago. It was not named as a party.

² An Amended Order Denying Met Life's Motion For Summary Judgment was filed on October 24, 2007. Met Life's petition for an extraordinary writ and request for a stay of proceedings was denied on November 8, 2007.

³ Except when the context requires otherwise, all remaining references to "plaintiff" or "Plooy" will be to Henry Plooy.

During plaintiff's case in chief his claims for punitive damages against Met Life were withdrawn. On February 6, 2008 plaintiff rested. Defendant J. T. Thorpe & Sons, Inc. moved for a nonsuit and that motion was granted. Met Life moved for entry of judgment pursuant to C.C.P. §631.8; the Court reserved its ruling on that motion until completion of defendants' case.

On February 13, 2008, after about 15 days for presentation of evidence, all parties rested. Met Life renewed its motion for judgment; the Court again reserved its ruling. During closing arguments on February 20, 2008 counsel for plaintiff announced a settlement with defendant Garlock Sealing Technologies, Inc. Plaintiff further announced that the only claims being pursued against Met Life are Henry Plooy's claims for aiding and abetting the fraud and battery of J-M and Joanne Plooy's claim for loss of consortium.

At the conclusion of closing arguments the matter was taken under submission. Having now reviewed the evidence submitted during the trial, plaintiff's proposed statement of decision, Met Life's Motion for Judgment and its proposed findings of fact and conclusions of law, the Court now issues this Proposed Statement of Decision.⁴

LEGAL FRAMEWORK

In light of Met Life's request that the Court rule on its motion for judgment before considering Met Life's evidence it may be helpful at the outset to clarify the elements plaintiff must prove in order to recover on his principal claims. With

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⁴ The Court acknowledges the parties' assistance in providing hard copies of the demonstrative materials they used in closing argument as well as electronic copies of their post-trial filings. After careful review of the underlying evidence, the Court has incorporated those parts of the electronic filings it deems appropriate.

respect to the claim of aiding and abetting J-M's battery and fraud plaintiff must prove the underlying torts as well as the elements of aiding and abetting.

Battery

A person can be liable for battery under California law for knowingly exposing another person to dangerous or toxic substances. CACI 1300; Restatement 2d of Torts, § 18. Plaintiff is not required to prove that J-M directed a battery to him personally, only that it intended to expose its employees to known hazards. *Lopez v. Surchia* (1952) 112 Cal. App. 2d 314, 318.

Fraud

With respect to fraud, plaintiff must prove J-M knowingly made material misrepresentations, or made statements that were misleading due to material omissions, with the intent that employees rely on those statements. CACI 1900. Plaintiff is not required to prove that the statements were directed at him personally. Civil Code 1711.

Aiding and Abetting

In addition to proving the underlying torts against J-M, plaintiff must also show that Met Life aided and abetted J-M in the commission or one or both underlying torts.

"Liability may ... be imposed on one who aids and abets the commission of an intentional tort if the person (a) knows the other's conduct constitutes a breach of duty and gives substantial assistance or encouragement to the other to so act' (Saunders v. Superior Court (1994) 27 Cal.App.4th 832, 846 [33 Cal. Rptr. 2d 438]; Rest.2d Torts, § 876.)" (Fiol v. Doellstedt (1996) 50 Cal.App.4th 1318, 1325-1326 [58 Cal. Rptr. 2d 308].)

Casey v. U.S. Bank Nat. Assn. (2005) 127 Cal. App. 4th 1138, 1144. With respect to the knowledge requirement:

California courts have long held that liability for aiding and abetting depends on proof the defendant had actual knowledge of the specific primary wrong the defendant substantially assisted. In *Lomita Land & Water Co. v. Robinson* (1908) 154 Cal. 36 [97 P. 10] (*Lomita*), the California Supreme Court explained this requirement in the course of affirming a judgment against two defendants for aiding and abetting a fraudulent land sale scheme engineered by two others. The court stated, "The words 'aid and abet' as thus used have a well understood meaning, and may fairly be construed to imply an intentional participation with knowledge of the object to be attained." (Id. at p. 47, italics added.)

In *Howard v. Superior Court* (1992) 2 Cal.App.4th 745 [3 Cal. Rptr. 2d 575], the court stated that " '[a]iding-abetting focuses on whether a defendant knowingly gave "substantial assistance" to someone who performed wrongful [***14] conduct' [Citation.] [¶] ... [A]iding and abetting ... necessarily requires a defendant to reach *a conscious decision to participate in tortious activity* for the purpose of assisting another in performing a wrongful act." (Id. at pp. 748-749, italics added.)

Id. at 1146.

With respect to the "substantial assistance" requirement "common sense tells us that even 'ordinary business transactions' a bank performs for a customer can satisfy the substantial assistance element of an aiding and abetting claim if the bank actually knew those transactions were assisting the customer in committing a specific tort." *Id.* at 1145.

Met Life's assertion that aiding and abetting liability is a doctrine of "limited application" and that plaintiff must show something more than the elements required in *Casey* based upon the Supreme Court's decision in *Sindell v. Abbott Labs* (1980) 26 Cal.3d 588, 606 is incorrect. *See, e.g.*, Closing Argument Graphics at p. 33. No aiding and abetting claim was pleaded or discussed in *Sindell*. Rather, the Court was addressing claims of conspiracy and common enterprise.

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Negligent Undertaking

Met Life also argues that negligent undertaking claims under the Restatement of Torts 2d §324A are "disfavored and narrowly defined." Closing Argument Graphics at p. 39. It cites *Dekens v. Underwriters Labs Inc.* (2003) 107 Cal. App.4th 1177, 1179-80 as authority for that proposition. Met Life's proposed Findings of Fact and Conclusion of Law at 49:3. But neither *Dekens* nor any other cited case supports the suggestion that this tort is "disfavored." Although the Court of Appeal upheld a summary judgment in *Dekens* based upon a factual record rather different from the one in this case, there is no suggestion that the doctrine should be "narrowly defined" or narrowly applied. To the contrary, as the Supreme Court recognized in *Artiglio v. Corning Incorporated* (1998) 18 Cal. 4th 604, 613:

Over 30 years ago, we described this negligent undertaking theory of liability--sometimes referred to as the "Good Samaritan" rule--as "[f]irmly rooted in the common law [of negligence]" (Schwartz v. Helms Bakery Limited (1967) 67 Cal. 2d 232, 238 [60 Cal. Rptr. 510, 430 P.2d 68]) and cited section 324A as one of the authorities establishing its controlling principles (67 Cal. 2d at p. 238, citing numerous authorities). Indeed, "[i]t is ancient learning that one who assumes to act, even though gratuitously, may thereby become subject to a duty of acting carefully, if he acts at all." (Glanzer v. Shepard (1922) 233 N.Y. 236 [135 N.E. 275, 276, 23 A.L.R. 1425].) As "Dean Prosser says [and Dow Chemical concedes], '[I]f the defendant enters upon an affirmative course of conduct affecting the interests of another, he is regarded as assuming a duty to act, and will thereafter be liable for negligent acts or omissions[.]' " (Valdez v. Taylor Automobile Co. (1954) 129 Cal. App. 2d 810, 817 [278 P.2d 91].)

The Court then articulates the elements of such a claim as follows:

As the traditional theory is articulated in the Restatement, a negligent undertaking claim of liability to third parties requires evidence that: (1) the actor (in this case, Dow Chemical) undertook, gratuitously or for consideration, to render services to another (Dow Corning); (2) the services rendered were of a kind the actor should have recognized as

necessary for the protection of third persons (plaintiffs); (3) the actor failed to exercise reasonable care in the performance of its undertaking; (4) the failure to exercise reasonable care resulted in physical harm to the third persons; and (5) either (a) the actor's carelessness increased the risk of such harm, or (b) the undertaking was to perform a duty owed by the other to the third persons, or (c) the harm was suffered because of the reliance of the other or the third persons upon the undertaking. (See generally, FNS Mortgage Service Corp. v. Pacific General Group, Inc. (1994) 24 Cal. App. 4th 1564, 1572 [29 Cal. Rptr. 2d 916]; Williams v. Saga Enterprises, Inc. (1990) 225 Cal. App. 3d 142, 151 [274 Cal. Rptr. 901]; see also Roberson v. United States (9th Cir. 1962) 382 F.2d 714, 721.) Recovery on section 324A's negligent undertaking theory thus requires proof of each of the well-known elements of any negligence cause of action, viz., duty, breach of duty, proximate cause and damages. (See generally, Schwartz v. Helms Bakery Limited, supra, 67 Cal. 2d at p. 238 [applying, inter alia, § 324A to ascertain duty element in negligence action]; 6 Witkin, Summary of Cal. Law, supra, Torts, § 732, pp. 60-62 [elements of negligence action]; Rest.2d Torts, § 281 [same].)

Id., at 613-14. See also Paz v. State of California (2000) 22 Cal. 4th 550, 560.

Causation

Although Met Life disputes the significance of the conduct plaintiff relies upon and disputes that some of it even occurred, the primary thrust of Met Life's motion for judgment is that the evidence plaintiff submitted does not support a finding that anything Met Life did or did not do in the 1930s, 1940s, and early 1950s was a factual or legal cause of plaintiff's injuries. In this decision, as in its decision on Met Life's motion for summary judgment, the Court applies the "substantial factor" test of causation. See *Rutherford v. Owens-Illinois* (1997) 16 Cal. 4th 953, 969 ("The term "substantial factor" has not been judicially defined with specificity, and indeed it has been observed that it is "neither possible nor desirable to reduce it to any lower terms."") In explaining what is and what is not required to show a substantial factor *Rutherford* said:

This court has suggested that a force which plays only an "infinitesimal" or "theoretical" part in bringing about injury, damage, or loss is not a

substantial factor. (People *v. Caldwell* (1984) 36 Cal. 3d 210, 220 [203 Cal. Rptr. 433, 681 P.2d 274].) Undue emphasis should not be placed on the term "substantial."

16 Cal. 4th at 969. Rutherford went on to hold:

In the context of a cause of action for asbestos-related latent injuries, the plaintiff must first establish some threshold *exposure* to the defendant's defective asbestos-containing products, *and* must further establish in reasonable medical probability that a particular exposure or series of exposures was a "legal cause" of his injury, i.e., a *substantial factor* in bringing about the injury. In an asbestos-related cancer case, the plaintiff need *not* prove that fibers from the defendant's product were the ones, or among the ones, that actually began the process of malignant cellular growth. Instead, the plaintiff may meet the burden of proving that exposure to defendant's product was a substantial factor causing the illness by showing that in reasonable medical probability it was a substantial factor contributing to the plaintiff's or decedent's *risk* of developing cancer.

Id. at at 982-83 (emphasis in original; footnote omitted).

When the *Rutherford* this test is applied to J-M's conduct in this case, plainly plaintiff has established the causation element of his claims for battery and fraud. There is no question in this case that the exposure to J-M's asbestos increased the risk of plaintiff's injury. However, that does not end the inquiry.

Rutherford did not address causation in the context of an aiding and abetting case or a section 324A case brought against an entity that was not in the chain of distribution of an asbestos product. Rather, its focus was on a more traditional products liability case in which plaintiff had unsuccessfully sought to shift the burden of proof on causation to defendants. Hence, Rutherford does not stand for the proposition that plaintiff may prevail against Met Life without showing that its conduct was a substantial factor in causing plaintiff to be exposed to J-M's asbestos.

Met Life relies on *Saezler v. Advanced Group* 400 (2001) 25 Cal. 4th 763, a premises liability case in which the Supreme Court affirmed a summary judgment for the landlord. Plaintiff was assaulted on the premises and there was evidence that defendant's security at the building was inadequate. Plaintiff had offered an expert opinion that if there had been better security plaintiff would not have been assaulted. However, that opinion did not take account of the fact that there had been numerous assaults and criminal conduct within the complex by individuals who were authorized to be on the premises. As the Court said:

Plaintiff admits she cannot prove the identity or background of her assailants. They might have been unauthorized trespassers, but they also could have been tenants of defendants' apartment complex, who were authorized and empowered to enter the locked security gates and remain on the premises. The primary reason for having functioning security gates and guards stationed at every entrance would be to exclude unauthorized persons and trespassers from entering. But plaintiff has not shown that her assailants were indeed unauthorized to enter. Given the substantial number of incidents and disturbances involving defendants' own tenants. and defendants' manager's statement that a juvenile gang was "headquartered" in one of the buildings, the assault on plaintiff could well have been made by tenants having authority to enter and remain on the premises. That being so, and despite the speculative opinion of plaintiff's expert, she cannot show that defendants' failure to provide increased daytime security at each entrance gate or functioning locked gates was a substantial factor in causing her injuries. (See Nola M., supra, 16 Cal. App. 4th at p. 427; Mitchell v. Gonzales, supra, 54 Cal. 3d at pp. 1049, 1052-1054; Rest.2d Torts, § 431, subd. (a).) Put another way, she is unable to prove it was "more probable than not" that additional security precautions would have prevented the attack. (Leslie G., supra, 43 Cal. App. 4th at p. 488; see Prosser & Keeton, Torts, supra, § 41, p. 269 [plaintiff must show it more likely than not defendant's conduct was cause in fact of the result; "mere possibility of such causation is not enough"]; Rest.2d Torts, § 433B, com. a, p. 442.)

25 Cal. 4th at 776. In that context the Court made the statement Met Life relies upon:

As Professors Prosser and Keeton observe, "A mere possibility of such causation is not enough; and when the matter remains one of pure speculation or conjecture, or the probabilities are at best evenly balanced, it becomes the duty of the court to direct a verdict for the defendant." (Prosser & Keeton, Torts (5th ed. 1984) § 41, p. 269, fns. omitted, italics added.)

Id. at 475-476. The Court's lengthy discussion of other premises liability cases makes clear that "a general finding of the foreseeability of some kind of future injury or assault on the premises" does not, by itself, satisfy the requirement of causation. "Actual causation is an entirely separate and independent element of the tort of negligence. . . . [¶¶] In other words, plaintiff must show some substantial link or nexus between omission and injury." Id. at 778.

This Court does not read *Saezler* as being applicable only to premises liability cases. Nor does it read *Saezler* as overruling the Court's prior explanation of what a plaintiff must show in order to establish causation:

" 'Proof of the relation of cause and effect can never be more than "the projection of our habit of expecting certain consequents to follow certain antecedents merely because we have observed those sequences on previous occasions." When a child is drowned in a swimming pool, no one can say with certainty that a lifeguard would have saved him; but the experience of the community is that with guards present people are commonly saved, and this affords a sufficient basis for the conclusion that it is more likely than not that the absence of the guard played a significant part in the drowning. Such questions are peculiarly for the jury. Whether proper construction of a building would have withstood an earthquake, whether reasonable police precautions would have prevented a boy from shooting the plaintiff in the eye with an airgun, whether a broken flange would have made an electric car leave the rails in the absence of excessive speed, whether a collision would have occurred if the defendant had not partially obstructed the highway, and many similar questions, cannot be decided as a matter of law.' " (Campbell v. General Motors Corp., supra, 32 Cal. 3d at p. 120, quoting Prosser, Proximate Cause in California (1950) 38 Cal. L.Rev. 369, 382-383, italics added in Campbell.)

Saezler, supra, 25 Cal. 4th at 788-89 (Werdiger, dissenting).

MET LIFE'S MOTION FOR JUDGMENT

Aiding and Abetting

The record in this case is quite different from that before the Court in Saezler. For purposes of ruling on Met Life's motion it suffices to point out that plaintiff here does not rely upon expert opinions which are unsupported by, much less inconsistent with, other credible evidence. For reasons which are more fully discussed later, the Court finds that plaintiff produced substantial evidence that Met Life aided and abetted the battery and fraud J-M began perpetrating on its asbestos workers in the 1930s and continued perpetrating into the 1960s.

Applying the substantial factor test of causation to the evidence plaintiff presented in its case, the Court DENIES Met Life's motion for judgment with respect to the aiding and abetting claims.

Negligent Undertaking

The principal bases for Met Life's motion with respect to the negligent undertaking claim are that it owed no duty to plaintiff, and that the evidence does not support a finding of causation. With respect to the first point, Met Life relies on the Supreme Court's decision in *Artiglio*, *supra*. In *Artiglio* the Court concluded as a matter of law that Dow Chemical's studies of the properties of silicone done in the 1940s and 1950s did not create a duty to plaintiff who was allegedly injured by a Dow Corning silicone breast implant approved by the FDA in 1991 and implanted in her body at some later time. The Court noted that Dow Chemical had "conducted no tests with respect to the safety of the actual breast

implants Dow Corning marketed." *Id.* at 617. It also cited and relied upon a series of earlier cases for the proposition that a Good Samaritan who has performed an act or series of acts in the past is not required to continue performing such acts indefinitely. *Id.* at 615.

The record in *Artiglio* differs from the record in this case in at least two important respects. Initially, the "pure" research conducted by Dow Chemical in the 1940s and 1950s was not related to any particular existing product, but rather to products Dow Corning hoped to develop in the future. In contrast, the asbestos J-M mined and processed was already in use when Met Life began to study the relationship between asbestos and asbestosis in the late 1920s and throughout the next two decades through examinations of workers, air samples, plant inspections and animal experiments. There was thus a clearly ascertainable group, the employees of J-M exposed to asbestos dust and who soon were acknowledged to be suffering from it.

Moreover, nothing in the *Artiglio* decision suggests that Dow Chemical held itself out as a premier source of knowledge and advice for governmental agencies, employers, employees and their families on industrial hygiene and occupational medicine issues, including the hazards of various kinds of dust inhalation. As discussed below, Met Life assumed that role because of its own self interest as well as the public interest in improving working conditions and workers' health.

The Court has no difficulty determining on the record discussed below that Met Life's activities constituted the voluntary undertaking of a duty to J-M

employees exposed to dust which extended throughout the 1930s and 1940s and the early 1950s. However, the cases *Artiglio* cites make clear that there is a temporal limit to the existence of that duty.

No evidence was presented on precisely when and why Met Life withdrew from its role in the area of industrial welfare and stopped providing assistance to J-M with respect to its workers. The latest evidence in the record concerning any plant study by Met Life for J-M is in 1950. Met Life closed its laboratories at about that time. As is discussed more fully below, the latest evidence in the record of Dr. Sheppard, while employed by Met Life, seeking to assist J-M in California with its problems at the Lompoc plant and its relations with Dr. Abrams occurred in 1952 or 1953. Although Dr. Lanza continued his activities from his position at New York University, there is no evidence that he functioned as Met Life's employee or agent beyond that same time period.

So the question remains whether, given the Court's determination that Met Life had a duty to J-M workers throughout the 1930s, 1940s and into the early 1950s, did that duty continue to exist as plaintiff. Plaintiff did not start work at J-M until 1959. So far as the record discloses, he had no contact of any kind with Met Life as his insurer, or as an entity which studied the air at the Stockton plant which did not open until 1957, or as a reviewer of any x-rays of plaintiff. The Court concludes that on the record discussed below it did not. Consequently Met Life's motion for judgment on plaintiff's claim under section 324A is GRANTED.

STATEMENT OF THE EVIDENCE

Henry Plooy And His Exposure To Asbestos

Plaintiff was raised on a dairy farm in Southern California. Except for his time at J-M's Stockton plant he was always a farmer. He held a number of jobs at J-M between 1959 and 1963, including unloading bags of raw asbestos from box cars and sweeping it up. The plant where plaintiff worked consisted of one very large room. Raw materials were delivered at one end of the plant. They were mixed and "cooked" to the right consistency, then formed into concrete pipes which were then dried, cooled and trimmed. Many of the operations at the plant, including unloading and sweeping, were inherently dusty. Dust formed from asbestos and other ingredients used in the process was visible in the air. Some jobs, such as unloading bags of asbestos, which were often torn, spilling their contents, and sweeping up the raw asbestos exposed the workers closest to those activities to more airborne asbestos than other operations.

However, plaintiff was never in a job at the plant when he was not exposed to some level of airborne asbestos. Indeed, plaintiff and other workers regularly used an air hose at the plant to blow off as much of the dust as they could from their clothes before going home from work at the end of the day. No one told them not to. No one explained to them the dangers of inhaling asbestos dust, including the dangers of contracting asbestosis, lung cancer, and mesothelioma. No one instructed them to wear protective masks or provided such masks to plaintiff. No signs were posted indicating that inhalation of asbestos dust could be extremely harmful to workers' health or fatal. No one explained to plaintiff that the more asbestos he breathed in the more likely it was

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⁵ The link between asbestos and mesothelioma was not established until near the time plaintiff left J-M.

that he would contract a serious or fatal illness. No supervisor, manager or industrial hygienist ever cautioned plaintiff about these dangers. If anyone had given plaintiff any such warning he would have quit for a safe, regular job, which is what he thought he had while he was employed by J-M. (Henry Plooy, Video Transcript "(Tr.)" 1/23/08, 20:13 – 16, 23:2 – 6)

The initial symptoms of plaintiff's mesothelioma began to manifest themselves late in 2006 and early in 2007. He was diagnosed with this fatal disease in March 2007. (Horn, Tr. 1/23/08 first sess., 25:12 – 15, 27:1 – 4; Henry Plooy, Video Tr. 1/23/08, 66:13 – 21.)

In consultation with his doctors and his family plaintiff has undergone a series of extremely difficult procedures and surgeries in an effort to prolong the time plaintiff has with his family. Since his prognosis was so guarded, a video deposition of plaintiff was taken in July 2007 which provides much of the evidence summarized in this section. Despite obvious difficulties plaintiff also testified briefly at the trial. As of that time plaintiff had not regained any semblance of the robust health and vitality he enjoyed a year ago. His prognosis is that he may live for another year, but not more, and that he will die a terribly painful death.

Johns-Manville Corporation

Prior to its bankruptcy, J-M was one of the largest, if not the largest, company in the business of mining asbestos as well as manufacturing and distributing asbestos containing products in the United States. At the time

plaintiff began working for it, J-M had 14 facilities in the United States and Canada and employed more than 12,000 "asbestos workers." (PE 1603).

The evidence is clear that by no later than 1935 J-M was well aware of the danger that its workers could contract asbestosis by inhaling asbestos dust at work. (PEs 208, 221, 225, 3841, 273). As early as 1943 Leroy Gardner, then the head of the Saranac Laboratory, advised Vandiver Brown, Vice President and General Counsel of J-M and brother of its President ("Brown"), that confidential animal studies Gardner had done for J-M and other companies presented "suggestive but not conclusive" evidence of an association between asbestos dust and cancer. (PE 488). Because of his initial animal experiment results and because of ten reported cases of asbestosis and cancer in humans at that time, Gardner wanted permission to repeat his experiments.

In 1946 Gardner wrote to J. P. Woodward of J-M advising him that there were then 23 reported cases involving asbestosis and pulmonary cancer. He asked for access to x-rays J-M had been collecting of its workers (based on recommendations to J-M by Met Life, discussed below), to further study the question. (PE 603). There is no evidence that Gardner was given permission to repeat his animal experiments or to review the J-M x-rays before his own death in 1946.

⁶ J-M's definition of "asbestos workers" does not include workers exposed to asbestos and other toxic substances, and thus dramatically understates the total number of J-M employees put at risk by exposure to asbestos.

In any event, there is no question that by the mid-1950s J-M was aware that the predominant medical view based upon further human evidence was that inhaling asbestos could cause lung cancer. (PEs 972,1155).

J-M's response to the evolving state of knowledge, first with respect to asbestosis and later with respect to lung cancer, was to avoid disclosing, or to minimize the dangers of asbestos in communications to the public and regulators, and to keep its workers largely in the dark. While taking some steps recommended by Met Life to minimize excess dust, to require initial screening and periodic x-rays of applicants and workers, to transfer some workers who showed signs of asbestosis or progressive fibrosis – none of which individually or together eliminated the dangers—J-M's de facto policy through the time plaintiff was employed at the Stockton plant was not to provide warnings about asbestos to its workforce and not to tell workers J-M knew had signs of lung disease that they had it. (See, e.g., PEs. 947, 952, 972, 982, 1063,1039). As one J-M employee described the situation much later "in 1947, the workmen's compensation and health research, such as it was, was handled by our Legal Department on a hush-hush basis." (PE1144). As another employee wrote in 1979: "it was company practice into the early 70's not to tell a person about his illness." (PE 1155).

J-M Industrial Hygiene Program

J-M documentation reveals statements by J-M reflecting an apparent intent to control dust concentrations in excess of applicable standards, and some sensitivity to state inspections and potential enforcement of standards. ME 3946,

a memo from Binder to Williams in April 1938, reported on an Illinois state inspection and expectation that industries clean up plants and keep them clean: "they mean business." ME 3624, a November 1932 memo from Williams stated that plant managers are responsible to request equipment to control dust. This concern was prompted by the lawsuits brought against J-M at Manville. (ME 3938). As these suits had been brought, J-M stated that it considered controlling the dust and conducting physical examinations of employees.

A "Personal" letter by Lewis Fritts, M.D., to Mr. Begert, manager of the Manville factory, in 1940, submitted a report of x-ray examinations of all the plant employees. Cases with abnormality would be reviewed in six months. No mention of warning or advising workers appears in the letter. (ME 3656).

A J-M "Manual of Standard Practices" made its appearance no later than 1948. (ME 3971, 8-6-48 Revised). It was a "reference and a guide." Part of the manual as of 1952 set forth policy generally to make a doctor's opinion a matter of record in the medical files, to flag personnel records, and to place an individual in a suitable work environment, where a determination is made that his health is affected by his work or environment. (ME 3972). The stated policy did not refer to asbestos-related conditions.

In 1951, J-M made available a survey service by its own personnel. Direct expenses and surveys would be paid and absorbed by the plant requesting the survey. (ME 3987, "Executive Bulletin" by Hart).

In 1954 J-M stated that it was evaluating asbestos exposures in terms of a maximum allowable concentration of 1 million fibers/cubic feet instead of 5 million particles/cubic feet, indicated in the ACGIH TLV standards, discussed more fully below. (ME 4036). There is no suggestion that this method of evaluating dust concentrations had any connection with a risk of cancer. Rather, the stated reason for the different standard as of 1957 was Saranac research indicating that

the fibers 10-15 micron and larger were the fibrosis-producing agents. (ME 3975). Five million particles per cubic foot are roughly equivalent to 30 fibers per cubic centimeters. (Ringo Tr., 2-11-08, pp. 9-10). One cubic foot equals 28,316.85 cubic centimeters. Dusty fibers per cubic centimeter converts to 849,505 fibers per cubic foot. This means that a standard of 1 million fibers per cubic foot is close to, but slightly over, the 5 MPPCF standard.

Dust samples taken by J-M personnel starting in 1951 were to be forwarded to Travelers Insurance Company for analysis (ME 3988). The record contains numerous reports by Travelers on dust samples.

The Manual of Standard Practices, 10-6-61, reflects that J-M established Industrial Hygiene Laboratories at Manville, Waukegan, Lompoc and Canada. Each laboratory provided service to specific J-M facilities. All costs for survey services would be paid by the plant requesting the survey, and corrective action was said to be the plant manager's responsibility. (ME 3980). J-M also created standard forms for reporting survey results. The survey reports were to be kept confidential. (ME 3981 [5119], Manual for Standard Practices, 10-20-61). ⁷

The record contains several "confidential" surveys of J-M's Stockton plant at various locations in the plant, from 1959 into 1968. They show survey results for MPPCF, and for 1962 and later, MFPCF. As discussed below, J-M was aware that the level of 5 MPPCF was not a "safe" level for its workers, despite the fact that it was adopted as a permissible exposure level in California. Even at the levels specified, J-M met the standards sometimes at some locations and exceeded them at others. (ME 4001-4025).

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⁷ At the Court's request, the parties submitted copies of all documents admitted into evidence in chronological order with each page Bates numbered for ease of reference. The number in brackets represents the corresponding page number in Plaintiffs' Trial Exhibit Binders.

J-M's President, C.J. Burnett, in 1960 stated that some J-M plants had obtained excellent dust control but many had not (ME 3978 [5012]). The talk stressed the increases in claims and compensation expenses. ([5011-5012]). It noted that dust control did "not require, per se, additional ventilation capacity." ([5015]).

By 1965, J-M's Manual set forth its basic concept that any material, no matter how toxic, can be handled safely. Standardization of procedures, equipment and reporting was deemed essential to prevent injuries "and related financial liability," and the program was designed to provide records of working conditions to evaluate appropriation expenditures, compliance with government agencies, customer inquiries, "evidence in litigation, etc." (ME 3984 [5252]).

At a J-M Industrial Relations Managers' Meeting, November 18 to December 2, 1955, Dr. Kenneth Smith, J-M's Medical Director, made a presentation which included reference to a requirement by the American Medical Association code of ethics, and in many areas by civil law, that doctors employed by corporations discuss the results of physical examinations with each employee as if he were a private patient. "Any defects listed that might cause disease or injury should be discussed with the employee so he can take proper precautions to protect his health. Management should be advised of the advice in general terms because of potential compensation costs." (ME 3974 [4688-4689, 4724-4725]). This stated J-M requirement was not followed, as prior and subsequent evidence demonstrates.

As noted above, the J-M industrial hygiene program did not count as asbestosis any pneumoconiosis in an employee who had previous dust exposure or who handled mixed fibers, such as asbestos and silica, cement, diatomite, and magnesia, which was the case in most J-M plant operations. J-M used the term "asbestos worker" to include only employees who handled asbestos fiber and no

other potentially toxic material. The workers who handled mixed dust, according to J-M, "obviously" could not have asbestosis. (PE 1603 [2289]).

The incidence of disease was so great that at one of the internal J-M conferences at which suspected lung problems in workers were discussed (PE 982) in 1958, after reviewing several cases, J-M's Sheckler announced "We can put Transite Pipe out of business from this list alone." (PE 1600 [2260]).

ME 3974 mentions that a list should be made of raw materials that may be potential health hazards. Substitutions, deletions and changes of various toxic materials listed should be noted so that the Industrial Relations Manager can take appropriate steps in warning medical personnel and "the safety engineers, industrial hygienist, and plant production personnel of potential hazards." (ME 3974 [4689]). Toxicity of many new materials is checked at the Research Center and "every effort will be made to warn of potential health hazards." ([4689, 4725]). The document by focusing on changes in raw materials, and new raw materials, did not address warning anyone, let alone the plant employees, of the hazards of J-M's long time raw material, asbestos.

None of the J-M industrial hygiene documentation submitted by Met Life contains any reference to warning J-M workers about the hazards of asbestos. Nor does it reveal any re-examination by J-M of its practice and policy not to provide such warnings. None of the documentation shows any indication that J-M considered the risks of cancer from asbestos dust. None of it deviates from, and most of it is consistent with, Met Life's advice on choosing which workers with lung disease to move to less dusty areas. The Travelers Insurance Company documents submitted by Met Life simply provide analyses of dust counts, and do not give advice on industrial hygiene generally, or whether to warn workers, or how to deal with workers whose examinations show evidence of lung disease.

Despite what J-M set down in its Manual of Standard Practices or its industrial hygiene written policies, or said in its speeches, the J-M practice and policy was not to warn its workers and not to advise all workers with lung changes of their condition. There is no credible evidence of meaningful warnings to employees. The overwhelming evidence is that there were no warnings. On the latter point, J-M documents demonstrate the actual practice and policy. *E.g.* PE 739 [1916-1933] (1949); PE 982 [2081-2116] (1957); PE 1036 [2296-2302] (1963); PE 1037 [2328-2329] (1963).

For example, a confidential 1949 J-M memorandum, transmitting a study by J-M's Dr. Smith of 708 J-M Canadian workers, also reflects J-M's practice and policy of not telling an older worker of his lung condition or moving him out of the dust, so "the company can benefit by his many years of experience." (PE 739 [1919, 1925]). The men studied were grouped into 5 classifications, described as follows:

Negative: Essentially normal and healthy lungs.

Mil +: This classification indicates a slight increase in the x-

ray shadows at the roots of the lungs; all these films

are considered normal.

P1: Very early signs of a non-specific fibrosis extending

beyond the lung roots.

P2: Advanced fibrosis of a non-specific nature.

A1: Early asbestosis.

([1918, 1924]). Of the 708 men studied, only 4 workers were classified as having "negative x-ray readings," i.e., only four men out of 708 had "[e]ssentially normal and healthy lungs." (Id.) J-M had expected such a finding: "[a]s would be expected, very few of the men exposed to dust had negative x-ray findings." (Id.) When. Smith published this study in the open medical literature six years later, however, he listed 3 classifications: "(a) essentially normal lungs; (b) marked linear exaggeration (P-2) but not typical pattern of asbestosis, and (c) definite

asbestosis." (PE 947 [2053]). Smith publicly stated that of the 708 men studied, "649, or 91%, had normal x-rays." ([2053]). It is reasonable to infer that to reach this high number of "essentially normal lungs," Smith treated as "essentially normal" workers classified otherwise in 1949, i.e., those men with "Mil +" and "P1" classifications. J-M reported as "normal" those individuals with increases in x-ray shadows and those with early signs of non-specific fibrosis.

Dr. Smith's establishment of J-M's actual policy of non-disclosure is well documented during the 1950s in PE 982. This document records a meeting of Dr. Smith, with other J-M employed doctors, R.M. Jackson, Manager of the Industrial Health Program, and C.L Sheckler. When directing his doctors how to "manage" the x-rays taken of J-M employees who showed early signs of lung disease Smith told them to put such materials in a special "conference" file:

You will see the reason for this as we develop this thing. So that you will know at a later date why you have pulled this case aside, I think it might be advisable to take a little memo pad and write, in your own handwriting, (but not dictated and then typed), a little note as to why you have pulled this Xray aside and want to use it at the conference . . such as,'Note: e plus linear exaggeration' – 'Note: Fine nodulation' – Note: Shadow left lower lobe' . . and just clip that to the Xray. At the time of the conference, that will be removed and destroyed, so that we will have nothing in our records as to a diagnosis up to this point. That is the purpose.

. . . .

No dust restriction or medical restriction is given to the man or to the company. That's our responsibility, to care for the man and to protect management.

. . . .

At that point, everything is still ethical. We have not identified a man with a disease without the man's knowing it. We have not indicated anything in our medical records which can say 'this is early silicosis' and which later can incriminate us if our diagnosis is wrong. But we have set in motion the wheels to elimination of the hazard to an employee or employees.

(PE. 982 [2093-95]). Smith makes clear that his conference group would find out what the dust surveys showed about the employee's working area. If it was

within permissible limits, nothing more was to be done. If not, then his group would sit down with the plant manager and say:

'Listen this man is going to be told that he should not work in this area, he has a medical restriction and this is what it is going to mean to you in dollars and cents and trouble, and trial and tribulation'. That's a special thing we will have to decide in this group ourselves, if, after a reasonable time, nothing has been done by the plant production people.

Id. at 2096. Nowhere in the document does Dr. Smith recommend that the worker actually be told anything about his condition.

Non-disclosure continued into the 1960s. The January 28, 1963 "red slip, pink slip" memorandum (PE 1036 [2296-2309]) reflects that 71 workers were classified as "red slips," meaning they had been medically identified as having one of 3 stages of pneumoconiosis of occupational origin. ([2296, 2299]). Even though the doctor advised management that these employees should be kept out of toxic dust, 25 of the 71 "red slips" were not told of their conditions and were "not necessarily in dust free jobs." (Id.). The memo further recognized that from a "moral standpoint" the affected workers should be told of their conditions; that doctors should tell them promptly from an "ethical standpoint;" but from a "practical standpoint, if we tell 25 persons they are pneumoconiotic within the next 2 to 6 weeks, there maybe [sic] an undesirable panic or near panic." ([2297, 2300]).

J-M employed a similar practice for its "pink slip" cases, those medically identified as possibly showing signs of pneumoconiosis. Even though the doctor advised management that these employees should be kept out of toxic dust, they were not told of their conditions. (PE 1036 [2297, 2300]). If management could not tell the "pink slips" of their medical conditions, then they could not remove those workers from their dusty environments. (Id.). The J-M solution was to

destroy the "pink slips" and any records referring to them, limiting all information to the medical department. ([2298, 2301-2302]).

A January 31, 1963 memorandum (PE 1037) also addressed the "red slip pink slip" cases. The J-M doctor at the Waukegan plant wrote to Dr. Smith at J-M's General Headquarters. He noted a backlog of moving "red slip" cases to dust-free jobs, and of obtaining corporate approval to notify "red slip" employees of their condition. (PE 1037 [2328-2329], memo Davison to Smith, 1-31-63).

A confidential February 14, 1963 memorandum from Dr. Smith to Dr. Davison at Waukegan reflects that Smith evaluated workers not only to determine the extent of possible disease, but "more importantly, to try to estimate the potential Workers' Compensation liability that existed in the plant and to forecast future expenses." He took into account the man's present and past working environment in interpreting an x-ray change to indicate which people would probably become disabled. He put no notations in the employee's medical file and issued no red slips, because, he noted, he "was acting only as a consultant," in "an advisory capacity and not a supervisory one." (PE 1039 [2310]). J-M, thus, was conducting x-ray exams to estimate its compensation liability arising from employees who would become disabled, while intentionally not flagging the employee's medical records.

What was actually happening at J-M plants during the period of plaintiff's employment is also evidenced by the testimony of Dr. Kent Wise. Dr. Wise took over from his father the task of examining J-M employees at its Pittsburg plant in 1962. He was not briefed about occupational disease (Wise Tr. 26) and did not take on any responsibility for it. (*Id.*, p. 28). He received no medical literature on occupational lung disease. (*Id.*, p. 42). Dr. Kenneth Smith, J-M's Medical Director at the time, told him occupational lung disease was not his responsibility; but that of Smith or another company chest specialist. (*Id.*, p. 52). Dr. Wise

never saw the Manual of Standard Practices the entire time he worked with J-M to 1973. (*Id.*, pp. 7, 54). Medical records of employees were sent to the Industrial Relations Department. (*Id.*, p. 58). X-rays were taken in the office of Dr. Wise's father and sent to the plant. (*Id.*, pp. 32-33).

Dr. Wise reported his physical examination findings to the employer. He communicated information from his physical examinations of employees to the Industrial Relations Department, which would convey it to the corporate medical department. (*Id.*, pp. 61-62). The corporate medical people were to correlate the physical examination form with the x-rays. (*Id.*, p. 57). Dr. Wise did not attempt to put together his findings, with x-rays and exposure to dust (dust counts were confidential and not for his eyes, anyway) and advise the employee, for that was the Medical Director's job. (*Id.*, pp. 37-38, 59-61). He later found out, in 1969, that was not the way things were going. (*Id.*, pp 38-39).

J-M's failure to have a plant physician with knowledge about and responsibility for lung disease did not mean there was no such disease at the Pittsburg plant. Eleven of 23 men, chosen for long service in apparently dusty jobs, showed positive x-ray evidence of occupational pulmonary disease when Dr. Smith reviewed the films in 1957. (ME 4044).

Dr. Wise operated as an independent contractor, paid on a fee-for-service basis. (*Id.*, p. 36). J-M carefully kept information regarding lung disease of its workers to itself advising diseased employees only when it suited its desires to do so.

Dr. Smith's plan to use threats of advising workers of their health condition to get local plant managers to improve conditions either was never implemented or had very little effect. Plant worker testimony uniformly reflects dusty conditions at J-M plants. (Plooy Dep. pp. 23, 36-41; Iturraran Tr., 1-30-08, p.16:17-23 (Stockton Plant); Cavallaro Dep. pp. 13, 17-20, 22-23, 25-28, 35

(Pittsburg Plant); Ramirez Dep. pp. 64-66, 68-71 (Redwood City Plant); Parker Dep., pp. 64:13-23; Charles Ay Tr., 1-29-08, p. 16:25-17:22 (Long Beach plant); Anderson Dep., pp 6-7, 9, 12 (Waukegan plant)).

Testimony of Dr. Horn established that workers at several J-M plants at Stockton, Pittsburg, Redwood City, Long Beach, Waukegan, New Orleans and New Jersey had significant exposures to asbestos at all these sites and were put at risk for all asbestos-related diseases. (Horn Tr., 1-23-08, pp. 10:15-11:19, 12:17-25).

Dr. Moore, an industrial hygienist and occupational medicine specialist called as an expert witness by Met Life offered no opinions and pointed to no documents related to worker warnings. He acknowledged dust counts in J-M plants were consistently excessive through the 1950s. (Moore Tr., 2-08-08, afternoon session, pp. 57:8-21).

Other than the deposition testimony of one former J-M doctor at one plant who said he took it upon himself to provide information to workers, there was no evidence, much less convincing evidence that J-M had a policy or practice of disclosing adverse medical information or that its industrial hygiene program was effective in protecting workers' health.

Met Life's Connection To This Case

It is not disputed that Met Life has never been in the business of mining asbestos or selling asbestos-containing products or protective gear. As discussed above, plaintiff had no contact with Met Life or its employees regarding asbestos. He never read or heard anything from Met Life or its employees regarding asbestos (Henry Plooy, Video Tr. 1/23/08, 93:22 – 95:20); and had no

fiduciary, confidential, contractual or other direct connection with Met Life or its employees regarding asbestos. (*Id.*, 93:7 – 21.)

Nor is there any evidence that plaintiff was insured under any Met Life policy, either directly or as part of a group insurance plan issued to J-M. Met Life did provide group life and health insurance to J-M from time to time from 1937 until 1969. (PE 1608, Supp. Responses, No. 81 [2498-2499]), but not for plaintiff. 8 Nonetheless, plaintiff contends that Met Life aided and abetted J-M's wrongdoing. The evidence plaintiff relies upon in this regard is as follows:

In the early part of the 20th century, Met Life was the largest financial institution in the world and may have been the largest corporation in the world. (Skipper Tr., 1-13-08, pp. 25:18-23) In 1930, it insured more than one-fifth of the working population in the United States and Canada. (ME 3799, "Industrial Hygiene" [3175]). Having observed that the health of its policyholders lagged behind that of the general population, in 1909 Met Life formed its Welfare Division. (ME 3751). Met Life took the "step of joining the public health forces of America by founding its Welfare Division." (ME 3814 [0610-0611]). In 1913, Met

⁸ In 1947 Met Life, together with another insurance company, provided a credit facility which provided J-M access to up to \$25,000,000. In 1947 J-M borrowed \$4,000,000 from Met Life (and was entitled to draw an additional \$20,000,000, through December 31, 1950. (PE 1573; 683, [1642, 1664]). The borrowing from Met Life was outstanding in part, until July 1967, when the balance of \$1,000,000 was paid. (PE 1046 [2311], 1084 [2322], 1126 [2326-2327]). In present day dollars, the \$4,000,000 that J-M borrowed in 1947 would be worth over \$36,000,000, and the \$20,000,000 additional available for borrowing would be worth over \$180,000,000.

However, the testimony of Dr. Harold Skipper provides uncontroverted evidence that this was an arms' length transaction typical of the type of investments large insurance companies made in that time frame. There is no evidence connecting this credit facility in any way with Met Life's involvement in J-M's effort to minimize the dangers of asbestos.

Life's Vice President Frankel stated that Met Life took on its welfare work in the belief that its relation to its industrial policyholders was something more than a contract. He said the agents who visited the policyholder weekly were more than canvassers. They had a mission as educators. (ME 3756(A), [2664]).

In 1924, Met Life founded its Industrial Health Section and, two years later, its industrial hygiene laboratory to study occupational hazards in industrial plants. (ME 3814 [3612])

Met Life's 1924 publication, "Industrial Hygiene" (ME 3800]) recognized that the industrial physician "may make a periodic examination of all employees so that physical weaknesses and slight illnesses may be discovered and treatment provided." Accordingly, Met Life wrote, "This type of preventive medicine should be strongly encouraged." ([0032]). "The industrial physician's mission is to prevent disease." ([0035]). The 1924 edition of "Industrial Hygiene" contained advice on numerous subjects, including general cleanliness, toilets, drinking water, lighting, working clothes, and prevention of injury from dusts and gases, including silica "which produces serious lung disease in a comparatively short time." ([0051]).

In a separate 1924 publication, Met Life undertook to advise about industrial dust and hazards and how to control them. (ME 3817A, Lee Frankel, "Health of the Worker," [2974-2977]). That publication provided advice on how to educate factory workers about safety issues:

Another method of educating the worker is the display of attractive posters on the factory bulletin board. Much care and attention has been given to be the make-up of such posters and the results achieved have been excellent, particularly in safety education . . . And finally, at all points of contact, the physician and nurse can exert a very real influence on the workers who consult them. In the course of the ordinary routine of the medical department, no opportunity should be lost of advancing the practices of health education by stressing the desirability of avoiding the hazards of the industry and of sane, hygienic living

day-by-day.

([3024-3025]).

The evidence establishes that Met Life used the Industrial Hygiene Section not only to advance medical knowledge, but as a marketing tool to help sell group insurance policies. Annual reports show how it regularly provided information and literature on industrial health and hygiene to both policyholders and nonpolicyholders, tracking those in the latter group it deemed to be (sales) "prospects." (ME 3006 [3700]; ME 3008 [3775]); (ME 3016 [4112] 1945); (ME 3019 [4214]). In connection with its group life insurance sales, Met Life's flyer, circa 1938, "Metropolitan's Popularity Means Larger Employee Membership in Your Group Insurance Plan," pointed out that "Your Employees and Their Families Know the Metropolitan Intimately Because . . . (2) About 29,000,000 Policyholders, approximately every 5th man, woman & child in U.S. & Canada is insured by Metropolitan . . . (5) 1,060,775,399 Booklets on Health Education & Safety (Around 188,771 per day in 1938) . . . (6) 301,144 Moving Picture Showings on Health and Safety to more than ½ population of U.S. & Canada (Around 1,024 showings per week in 1938) . . . (7) Effective Medical Research and Industrial Health Surveys pertaining to Pneumonia, Silicosis, Asbestosis, etc. . . . (9) Over 175,000,000 Calls in the home each year out of 1128 Branch Offices." (PE 384)

[0803]).

In 1933 the Industrial Hygiene Section became part of Met Life's Welfare Division. (ME 3814 [0645]). By approximately 1933, Met Life's "Industrial Hygiene and Safety" publication (ME 3803), referring to its industrial research laboratory, advised that trained personnel would collect air samples and analyze for dust content or poisonous substances which workers might breathe. It pointed out that Met Life recognized the "confidential relationship which should exist between the Company and those it serves." ([0426]). The publication cited recent Met Life studies that "concerned such matters as the effects upon the lungs of various inorganic dusts encountered in foundries, asbestos fabricating plants. . ." (Id.)

Although Met Life closed its Industrial Hygiene Laboratory in 1951, (PE 1157), as late as 1953, the "Health and Welfare Division of the Company maintained occupational health and safety services for both employers and employees." (ME 3747 [2023]). Met Life provided "a program of occupational health that included medical, nursing, and first-aid services; health education; and the control of the environment," it offered up its consulting services stating that "the Occupational Health Service is prepared to furnish practical assistance to Group-insured firms that submit problems for its consideration. Staff members will appraise existing health programs... They also provide, on request, medical information about specific occupational diseases." ([2024-2025]). Met Life's staff was available to interpret roentgenograms of employees exposed to dusts which may affect the lungs. ([2025]). Met Life recommended that "better results are obtained through personal visits of plant representatives to the office of the Occupational Health Services, where their problems can be discussed frankly with members of the Staff." (Id.) Met Life also annually offered its group

policyholders an employee education program. ([2031]). This was a continuing program which provided, on a month-by-month schedule, colorful posters for bulletin board display, timely pamphlets for distribution to employees, and illustrated articles for employee publications." (Id.)

Met Life not only provided health information to potential corporate customers it provided plain language pamphlets directly to millions of workers. Through its agents, starting in 1909, the Met Life Welfare Division distributed pamphlets on a wide variety of health issues, including diseases, diet, first aid, and accident prevention (PE 1317, "13,000 Agents to Help in Public Health Work," 1915 (agents visit 10 million policyholders' homes every week); ME 3854 [1062-1076], "The President Outlines a Quarter Century of Public Service by the Metropolitan," 1939; PE 484 [1166-1205], Excerpts from "A Family of Thirty Million," pp. 421-459, 1943 [1167, 1174-1175]; ME 3746-A [1347], "Metropolitan Life's Welfare Service Rounds out 35 Years," 1944; ME 3753 [1527], "Work of North American Life Insurance Companies in Improving Public Health," 1947; ME 3751 [1692-1693], "A Life Insurance Company in the Field of Public Health," 1948). An example is the pamphlet "A War on Consumption." (ME 3718(B) (1921) [0020]).

Met Life's publication, "Twenty-Five Years of Life Conservation," reported on the activities of its Welfare Division from 1909 - 1934. Met Life's health pamphlets went in the hands of its agents through the doors of millions of industrial homes, and were distributed by public and private health agencies in hundreds of health campaigns. Met Life prepared literature to meet the unique needs of special groups such as industrial managers and employees. The literature ranged from reduction of scientific knowledge to its simplest terms in popular health pamphlets to technical presentations based on studies or research sponsored by the company. (ME 3814 [0607-0656], p. 26 [0633]). Met

Life also utilized movies, film strips, magazine advertisements, exhibits, posters, speakers and radio to send out its health and safety messages. (ME 3753 [1527]).

Although Met Life was at the forefront of recognizing the danger of asbestosis in the late 1920s and early 1930s, the pamphlets it published to educate employers and employees about industrial dust and disease issues are silent on the subject of asbestos as a hazardous dust. In 1924, Met Life published "Industrial Hygiene," which contained a general statement that, "Dust is the great enemy of the workman." (ME 3800 [0051]). However, the publication noted that the kinds of dusts varied greatly in their hygienic significance and that the "most harmful" of the dusts were emery dust and silica. (Id.) The pamphlet was revised in 1930 (ME 3799) and again in 1933. (ME 3803). Even though evidence about asbestos disease had accumulated in the literature—"asbestosis" was named as such in 1927—this edition simply referred to "recent studies" of such things as inorganic dusts encountered in asbestos plants by the Met Life laboratory and provided no health information or warnings. ([0426]). The 1933 Industrial Hygiene and Safety booklet refers to the existence of another pamphlet on "Silicosis and Other Dust Diseases of the Lungs." That pamphlet was not introduced into evidence, although it was referred to in the 1930 edition of "Industrial Hygiene and Safety. ([3192]).

By 1944, more than 1.275 billion of Met Life's health pamphlets had been distributed in the United States and Canada. (PE 3746-A [1347]). More than 129 million persons had viewed Met Life health and safety films. (ME 3746(A), 7-8-44 [1347]). According to Met Life, its agents never relaxed their efforts to place its booklets on health problems where the material was most needed. In addition, Met Life included in its services to group insurance firms "a year-round distribution program of health and safety material for employees of these firms."

(ME 3753 [1524-1529], "The Weekly Underwriter," Armstrong, 5-10-47, [1527]).

In 1947, Met Life reported that it had well-equipped physical and chemical service laboratories, and its expert technicians, working with the company's industrial physicians, "are prepared to give complete service to group policyholders upon request in all phases of industrial hygiene." (ME 3753 [1527]). In the same year, Met Life published a description of services available through its Health and Welfare Division, including brochures for industrial management, including several respiratory related publications, silicosis, chromium, and welding. (ME 3170 [4184]). No asbestos brochure is mentioned. In 1953, Met Life published "Metropolitan Services in Occupational Health and Safety" a description of services offered through the Health and Welfare Division. (ME 3747). Occupational Health Booklets available were listed, including silicosis, chromium and welding, but not asbestos. (Id. [2025-2026])

According to Met Life's expert witness, Dr. Moore, Met Life made no specific comments or statements related to worker education in the asbestos arena. (Moore Tr., 2-08-08, afternoon session, p. 54:20-55:4). While some of its scholarly publications made reference to the seriousness of exposure to asbestos, other did not. For example, in the early 1920s Met Life prepared a document for use of its medical examiners to determine risks of various occupations. That document became a government publication in 1933 entitled "Occupation Hazards and Diagnostic Signs" (ME 3093), published by U.S. Department of Labor, Bureau of Labor Statistics. That publication did not list cancer as a risk of either asbestos, or uranium. At that time the evidence in the record does not support a finding that a link with cancer and asbestos or cancer and uranium was suspected.

[However, Met Life revised the publication and the Bureau of Labor Statistics published it in 1942. (ME 3755). Again, the 1942 edition did not

suggest that asbestos causes cancer. It did report a high frequency of lung cancer in Czechoslovakian miners and stated that it was "believed to be due to the radioactivity of the ore. (*Id.*, [1146]). A few case reports had appeared in the literature indicating a high frequency of cancer in miners from this mine. (D. Egilman, Tr. 1-29-08, afternoon session, p. 17:13-18:7).

Met Life did not revise the publication to state that asbestos dust might cause lung cancer, even though by 1941 there were 20 to 50 case reports in the medical and scientific literature about asbestos causing cancer in miners, including reports of pathological findings of cancer location, specific type, scarring and pleural thickening, and the presence of asbestos bodies in the lung tissue of those with lung cancer. Unlike asbestos, which results in the formation of asbestos bodies in tissue, uranium does not leave evidence of itself in the lungs. (D. Egilman, Id., pp. 23:24-24:3).

The evidence supports an inference that Met Life made a decision not to publish a pamphlet or brochure on the dangers of asbestosis and later on the dangers of asbestos and lung cancer as part of its efforts to cooperate with J-M and the asbestos industry in not publicizing the risks of inhaling asbestos dust. To understand why this inference is entirely reasonable it is necessary to look at the context in which the dangers of asbestos began to be appreciated in the late 1920s and early 1930s.

Dust Disease Claims

By 1935, Met Life recognized that there had been "an extraordinary number of damage suits brought by employees against employers on the basis of exposure to silica dust so that at the present time it is estimated that these

damage suits are well in excess of \$100,000,000." (PE 292 [0716])⁹ Met Life noted a "very marked tendency of employees who are exposed to dust other than silica dust" to sue their employers alleging pulmonary injury, such that "whole industries are in turmoil, handicapped on the one hand by lack of definite knowledge of the action of these dusts on the lungs and on the other, by the inadequacy of the law to protect them." (PE 292 [0729]). In this time frame, Met Life's IH Section was "being continually consulted on the technical aspects of wording of proposed laws, regulations, and codes dealing with the dust problem." (PE 292 [0717-0730]).

One of the key Met Life employees who was uniquely qualified to help manage the asbestos problem for J-M and others throughout the 1930s and 1940s was Dr. Anthony J. Lanza. Lanza was one of the preeminent authorities in the United States in occupational medicine from 1914 to 1963. (Dr. Egilman, Tr. 1-28-08, afternoon session, p. 30:3-10) From 1907 to 1920 Lanza was in charge of the Office of Industrial Hygiene, U.S. Public Health Service. He had been Chief Surgeon of the U.S. Bureau of Mines. He served as special adviser on industrial hygiene to the government of Australia, as special staff member of the International Health Board of the Rockefeller Foundation, and as executive director of the National Health Council. He guided Met Life's research and educational services. According to Met Life: "His fame as an authority on certain industrial diseases such as silicosis is both national and world wide." He was a prominent member of industrial hygiene committees of the American Medical Association, the U.S. Chamber of Commerce, and the American Public Health

⁹ \$100,000,000 in 1935 would amount to over \$1.42 billion in 2006 dollars. (Stipulation regarding testimony of Robert Johnson).

Association, and served on the board of trustees of the Industrial Hygiene Foundation. (PE 595 [1376-1377]; PE 387, [0806]); PE 555 [1366],1945; PE 599 [1387]).

Lanza joined Met Life as an Assistant Medical Director in 1927. (ME 3001.) During World War II, Lanza took a leave from Met Life for most of 1942 through 1944 to head the Division of Occupational Health in the Preventive Medicine Service of the Surgeon General's Office, War Department. (ME 3016, p. 10.) In 1945, when he returned to Met Life, Lanza held the position of an Associate Medical Director. (*Id.*) In that capacity, Lanza oversaw or participated in Met Life's provision of industrial hygiene services to certain of its industrial insureds, including Johns-Manville. Lanza also wrote articles and gave presentations and speeches on the health hazards and health effects of various industrial dusts and other materials, including asbestos. (*See, e.g.,* PE 684, p. 7.) Lanza retired from MetLife on December 31, 1948. (*Id.*, p. 8) to take the position of Chair of the newly created Institute of Industrial Medicine at New York University. Nonetheless, Met Life hoped that "in 1949 and thereafter [Lanza would provide] a little more advisory attention to some of our problems here than would normally be the case" (PE 641 [1517]).

Because of his own background and the platform Met Life provided him Lanza was a perfect person for J-M to turn to with its concerns about asbestos.

In 1935, Lanza, had no question in his mind that many of the largest industries in the country were "looking to Metropolitan as the one place where they could get accurate and impersonal guidance in dealing with the problem that at present is a serious menace to them from an economic standpoint." (PE 292 [0718, 0731]).

Met Life had been involved in the Picher Clinic, established in 1927 at Picher, Oklahoma, to investigate the nature and means of preventing pulmonary dust disease among miners. Met Life operated the clinic jointly with the Tri-State

Zinc mine operators and the U.S. Bureau of Mines, until 1932 when the clinic was turned over to the mine operators. (ME 3814 [0646]).

Met Life accepted industry's position that industrial medical studies, which could be damaging to industry in dealing with workers' claims, should not be published. In Lanza's words, writing to Saranac Laboratories on its difficulties with the mine operators:

None of us could have foreseen this plague of damage suits all over the country which have scared employers out of their wits and for good reason. Your position in this regard is identical with mine with reference to the asbestosis study. Here we have a large mine of material, representing a lot of time, energy, and money, which were put into a nationwide study of asbestos and which we cannot print.

(PE 155 [0435-0436]).

Lanza's suggested solution for that non-asbestos research was to follow the U.S. Public Health Service practice of concealing the identity of the plants involved, which appeared to have been accepted by the mine operators. (PE 160 [0471-0476]). In regard to the silicosis problem, Lanza noted that:

[W]e must recognize that the present disturbed condition of affairs, with the extraordinary multiplicity of damage suits for silicosis is not only very disturbing but necessitates that all of us who are in contact with industrial firms proceed with a great deal of caution. I understand that shyster lawyers are beginning to stir things up in Picher and Miami, which makes the situation with respect to the Tri-State Association still more difficult.

(PE 169 [0477-0478]). A May 5, 1933 memo reflects a conference among Lanza, and Gardner and Cummings of Saranac, resulting in agreement that certain reports of studies made in Picher, Oklahoma should not be published then "in view of the very unusual state of affairs obtaining in various parts of the country, with respect to law suits for occupational diseases and particularly the

unsatisfactory conditions in the Picher, Oklahoma District." (PE 182 [0488-489]).

Formation Of The Industrial Hygiene Foundation

The silica dust problem lead to creation of the Industrial Hygiene Foundation. According to Met Life's Lanza in "Silicosis and Asbestosis" (1938):

Silicosis and asbestosis burst upon the amazed consciousness of American industry during the period 1929-1930. . . Arising out of the period of economic depression, the situation with respect to silicosis and asbestosis became manifest as a medico-legal phenomena of a scope and intensity that was at once preposterous and almost unbelievable. Damage suits, under the common law, were instituted against employers by employees, alleging pulmonary dust diseases, in industrial centers all over the United States, to an amount in excess of one hundred million dollars.

(PE 387 [1018-1019]).

The concern of insurance companies about silicosis claims in the early 1930s was reflected in Lanza's contribution to the 1939 Fourth Saranac Laboratory Symposium on Silicosis (PE 425 [1084-1085]):

Out of a clear sky and with dramatic suddenness, the insurance companies were faced with a situation that was in many respects terrifying. They naturally found themselves in a very uncomfortable position. The success of silicosis damage suits was appalling and there was enough in the situation to retard at times the ordinary flow of common sense. Many employers found themselves with employees on their payroll who already had silicosis and in respect to whom a liability already existed, liability not previously covered by insurance and for which no reserves had been accumulated...I think it must be admitted that granting that the insurance companies were suddenly faced, as were the employers, with a condition of affairs that certainly is unprecedented in the whole history of medico-legal affairs. they succeeded in rallying around with a considerable amount of effectiveness.

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¹⁰ See,also PE 228 [0536-0538]; PE 388 [1054-1055]

On January 15, 1935, approximately 250 people representing over 50 industries met at the Mellon Institute of Industrial Research in Pittsburgh, Pennsylvania. Representatives of the sand, glass and refractory industries prompted the meeting. J-M's Brown was present, as was Met Life (Lanza was one of the speakers). The speeches and discussion covered "the very menacing character of the problem" and "the necessity of some form of united action by the afflicted industries." (PE 275 [0703, 0708]). Among "the problems common to all industries were the following: (1) The menace of ambulance chasing lawyers in combination with unscrupulous doctors." (Id.) It was thought desirable to eliminate the jury and make various dust diseases compensable under workers compensation laws, which would "eliminate the shyster lawyer and the quack doctor." ([0704, 0708]). J-M's Brown was named as one of several persons to serve on a Temporary Organization Committee - Industrial Dust Problem to formulate ways to bring about cooperation among the industries and combat those phases of the dust problem common to all. (Id.) Brown pointed out that the members of the asbestos industry did not care to be associated in the public or employee minds with industries whose problem was silicosis. But, Brown indicated that numerous aspects of the problem were the same and J-M likely would cooperate if such could be done without undue publicity. (Id.)

Recommendation, in which it was noted that the plan for what would eventually become the Industrial Hygiene Foundation was to "set[] up authoritative and approved standards for the control of industrial dusts which, if complied with by industries, or by industrial companies, will act as a defense against personal injury suits." (PE 269 [0680]). As Brown noted in a 1936 letter, "The Air Hygiene Foundation [an early name of the IHF] is . . . the creature of industry and is the

one institution upon which employers can rely completely for a sympathetic appreciation of their viewpoint." (PE 361 [0766]).

The idea of removing asbestos disease damage suits from the tort system by making asbestosis compensable under worker compensation statutes was embraced as early as 1931 by Lanza. He felt that "this is the only protection which the industry has, and that permitting the disease to remain outside the compensable class lends encouragement to unethical lawyers and physicians to work up claims." (ME 3937 [0418] memo by Sager of meeting, 7-15-31).

Lanza said the Temporary Committee had consulted with him, outlining their plans on trying to formulate procedures, and made it "perfectly plain" that the industries were looking to Met Life "for advice and leadership in this endeavor to set up a coordinating agency to deal with dust problems." (PE 292 [0717-0718, 0730-0731]).

Met Life's Vice President Armstrong, in a letter to its General Counsel, pointed out that "a little stake in the research aspect of it [silicosis]. . . may actually be quite advantageous and logical in view of the significance of the dust problem to our extensive Group and Industrial interests" (PE 292 [0715-0728]).

Early, Unpublished Studies

In the same time frame, Met Life proclaimed that in addition to the field and laboratory work undertaken for industrial management:

[T]he Company makes available to industry and to the medical profession the results of its studies and investigations in reports, monographs and scientific papers, and its pamphlets and posters in popular style for workers and their families.

(ME 3814 [0646]). In fact, by 1935, Met Life had conducted a study of Canadian asbestos mines and mills which had found significant disease levels. That study was not reported. And, another study, of five American plants had been

published only after alterations requested by J-M

Work on these studies began in 1926, when Met Life agreed to pay \$5,000 per year to McGill University in Montreal, Canada for a proposed survey to be made under terms and conditions approved by Met Life. (PE 19 [0065-0067]). Among information that Met Life considered would be of great value to it were studies of hazardous processes and studies of morbidity and mortality in the relation to the major industrial pursuits, with the establishment of a Met Life Canadian office and extension of its operations there. (PE 20 [0069]).

Met Life prepared a report on asbestos mines and mills (the "Canadian study"), which it characterized as having been conducted jointly by Met Life and McGill University. (PE 118 [0367, 0396]). The study was of four mines, open pit or quarry, and mills of Quebec. One facility was operated by J-M. ([0364, 0393]). The study revealed considerable asbestosis among the miners and mill workers, and associated with asbestosis was a large percentage of cases with definite cardiac enlargement. ([0370-0371, 0399-0400]). On July 9, 1931 Met Life sent a copy of the Canadian Study to J-M's Wardwell, noting that the report would be given no publicity except with the consent of the firms concerned. (PE 118 [0364, 0393]). The report never was published.

Met Life also prepared a report of a study of dust conditions in the Manville, New Jersey J-M plant, conducted in October and December 1929. The study was the first unit in a series planned for the asbestos industry in the U.S. The purpose was to determine whether harmful effects to workers could be demonstrated. (PE 67 [0131]). The Industrial Health Service of Met Life planned to undertake studies to be correlated with autopsy results and animal experimentation. ([0133]). The Met investigation was to include a "study of dust conditions in asbestos plants [and] physical examinations of asbestos workers, correlated with known exposure to dust." (PE 67 [0132-33])

The entire study covered five plants operated by several companies, including J-M. (PE 273 [0690]). In 1930 a Study of Dust Conditions in the Manheim Plant of the U.S. Asbestos & Rubber Division of the Raybestos-Manhattan Inc. (performed by the Industrial Health Service of Met Life) noted that it was the "third unit in a series of studies of the asbestos industry in the United States and Canada for the purpose of determining the extent and nature of atmospheric pollution to which asbestos workers are exposed and whether there can be demonstrated any harmful effect to such workers." (PE 80 [0219, 0253]).

Met Life did physical examinations of employees with three or more years working in the asbestos industry, looking for symptoms associated with "what English authorities term 'asbestosis.'" ([0248, 0279]) Twenty of fifty-four employees had chest x-rays done, with ten showing "definite evidence of asbestos dust injury to the lungs." (Id.). "The X-ray films of this study definitely inform us that individuals exposed to the inhalation of asbestos will in time show structural changes in their lungs - pneumoconiosis." ([0249]).

In March 1931, Lanza of Met Life sent J-M a report of the study of the five American plants. J-M's Manville plant was Plant A. (PE 113 [0331]). Lanza's previously expressed view of the Manville plant was that he "found it a very fine plant indeed." (ME 3936 [0156]). As part of the five plant American study, Met Life conducted dust counts, (PE 113 [0338-0339]) did physical exams and took x-rays of 126 workers, "selected more or less at random" from those with more than three years employment in the industry. (PE 113 [0348]). More than half the workers (67 of the 126 examined) were diagnosed with asbestosis; 39 were classed as "doubtful." ([0350]). Dust counts in spinning areas were relatively low (3 of 4 plants below 5 million particles per cubic foot ("MPPCF")), but nine cases of asbestosis were found among those working in spinning areas. (*Id.*, Table 1 [344] and Table 5 [351]).

Conclusion No. 6 of the five plant report states that "it is possible that asbestos may cause pneumoconiosis more readily than free silica." (PE 113 [0363]). Lanza sent the report to J-M's Wardwell, stating it "is confidential and will be given no publicity by us except with the consent of the firms concerned." (PE 113 [0331],). This report was not published in its original form.

In 1932, upon the recommendation of Dr. Fellows of Met Life, J-M examined 1,140 employees (all of them) at its Manville factory. Lanza recommended that J-M contact Dr. Meriwether, Surgeon in Charge, U.S. Bureau of Mines in Picher, Oklahoma, to read the chest x-rays. Per the report, 327 (29%) of the Manville workers had x-ray evidence of "pneumoconiosis," which is what J-M called the condition of persons who had both asbestos exposure at J-M and a previous employment history in a dust occupation. (PE 1208 [0081, 0095-0096]). The 1932 Manville factory report noted that over 16% of the asbestosis cases came from the textile department. This was the department where the five-plant study found exposures of respirable dust to be 2.5 MPPCF and below. (PE 113 [0331-0363])

In an unpublished address in November, 1933, Lanza commented upon the U.S. five plant study that Met Life had conducted. He noted that Met Life had:

made a great many dust counts in those mills and, in the main, the amount of dust in the air did not seem excessive as judged by the standards or what we had been accustomed to find in making dust counts for silica dust.

(PE 208 [0512]). Lanza also stated that half of the men x-rayed "showed definite early fibrosis." (0513]). Fibrosis caused by asbestos exposure is and was known as asbestosis. Lanza also stated there was no dust hazard or asbestos hazard in connection with mining operations. ([0510]).

Lanza and Vane in 1939 published an article that stated that one of the "confusing" aspects of asbestosis cases was that they did not originate in

connection with mining asbestos. (PE 405, Lanza & Vane, "Industrial Dusts and the Mortality from Pulmonary Disease," [2576]). The same statement, in substance, appeared in Lanza and Vane publications in 1940. (PE 452 [1086-1094], 453 [1095-1098]). These published statements were at odds with the actual, unpublished report of the study of asbestos disease in Canadian mines and mills conducted by Met Life. (PE 118 [0364-0416]). Again, in 1942, in a letter to Manfred Bowditch, then the Massachusetts Director of the Division of Occupational Hygiene, Lanza reiterated that they had found evidence of asbestosis in those "who fabricate asbestos and not in those who mine it." (PE 474 [1160-1162], Lanza to Bowditch, 2-16-42).

In 1945, Wheatley and Lanza corresponded on the subject of a clinic to be operated in the mining area. They recognized that, in fact, disease existed and would be "uncovered" by such a clinic. Wheatley said that the mine operators at Thetford Mines were "behind the eight ball." (PE 582 [1370, 1372]) and, "They will uncover a lot of old asbestosis as well as tuberculosis by their industrial health program.... Since asbestosis is compensable, this is going to cost them much money." (*Id.*). This reflection of serious disease that would be "uncovered" conflicts with Lanza's reported statements that Canadian miners do not get asbestosis. (PE 208, PE 409, PE 452, PE 474).

Publication Of The Five Plant Study - Conclusions Altered

On November 28, 1933, Lanza attended a meeting at J-M with Vandiver Brown and S.A. Williams of J-M and others. Lanza advised that he was very much interested in completing the asbestos industry study. The study would involve a re-examination of the plants and employees previously x-rayed, and include Johns-Manville's plants at Waukegan, Gretna, Pittsburg, Redwood City, and Manville, as well as the mines at Asbestos, Quebec. If the plan were approved, then Met Life would be responsible for taking dust counts, x-raying the employees, recommending where to eliminate dust and the equipment needed to eliminate dust, and training of J-M's employees to take dust counts. (PE 217 [0518-0523]). The minutes of a December 29, 1933 meeting reflect that J-M and Raybestos agreed to have Met Life update the survey on dust conditions in their factories. (PE 221 [0524-0529]).

Representatives of J-M, Raybestos, and Lanza met on January 4, 1934 at the office of J-M's S.A. Williams. Lanza was advised that both companies had agreed to permit Met Life to complete the investigation, and that the companies agreed to "avail themselves of the generous assistance offered by Metropolitan Life Insurance Company in solving their problem." (PE 225 [0530-0535]). It appears that further dust counts, including more plants than originally examined, were contemplated. The meeting was advised that the companies would be in a relatively better position in litigation were they to have an outside expert (not inhouse) who could testify he had made recommendations to control dust and they had been followed. Lanza offered to interview Dr. Drinker of Harvard to see if he were qualified and available. ([0532]).¹¹

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¹¹ Dr. Drinker was the "premiere industrial hygiene expert in the United States at the time." Egilman (January 29, 2008 a. m. at p.15:16-19.

Lanza submitted a galley proof of the Met Life report on the U.S. plant studies to J-M's Brown. The galley is not in evidence. Some of its contents can be gleaned from the correspondence about it, and from the earlier unpublished report (PE 113). On December 10, 1934, Brown wrote Lanza pointing out that the galley omitted the following sentence that had appeared in Lanza's original (PE 113 [0331-0363]): "Clinically, from this study it [pulmonary fibrosis from exposure to asbestos] appeared to be a type milder than silicosis." (PE 260 [0586]). Brown wrote that he planned to transmit the proofs to Mr. Hobart (outside counsel for J-M in asbestos cases) for comments.

Hobart wrote to Brown on December 15, 1934 (PE 262), and Brown forwarded his comments to Lanza on December 21. (PE 264). Hobart, among other things, reminded Brown that in dealing with the New Jersey Legislative Committee which was considering adding asbestosis as a compensable workers compensation disease, J-M had consistently urged that asbestosis was substantially different from silicosis, both as to the clinical nature of the disease and the reasonable probability of its incidence. He therefore disliked to have the report published with a suggestion that asbestosis was similar to silicosis. Hobart noted that if J-M wished to oppose a bill including asbestosis as compensable it would be very helpful to have an official report that asbestosis and silicosis were different and it could be troublesome if a conclusion might be drawn from the report that they were not.

Hobart did not like the suggestion that asbestos dust may cause disease more readily than granite dust, from which many cases of silicosis originate. It appears that the 1931 (unpublished) report and the galley both contained a statement, in Conclusion No. 6, that "it is not practicable as yet to establish standards for the dust content of air and in view of the many low dust counts in this report, compared with the U.S. Public Health standard for silica dust, it is

possible that asbestos may cause pneumoconiosis more readily than free silica (SiO2)." It appears from the Hobart letter that the galley had substituted "granite dust" in place of "free silica (SiO2)." Hobart wanted Met Life to eliminate all of Conclusion No. 6 after the word "air." (PE 262 [0592-0600]).

On December 18, 1934 Brown sent the galley, with his and Hobart's comments, to M.F. Judd of Raybestos, noting that he had talked to Lanza and thought Lanza would accede to most of the requests. (PE 263 [0601]).

Brown's December 21 letter (PE 264 [0602-0604]) returned Lanza's galley to him with Hobart's letter, containing his comments on aspects of the study Hobart considered "undesirable from the industry standpoint." Brown wrote that he trusted Lanza to give Brown and Hobart's comments his "most serious consideration," and he felt confident he could depend on Lanza and McConnell (Met Life's Medical Director at the time) "to give us this 'break."

Brown wrote Judd on December 24, 1934, noting that it was "best to comply with Dr. Lanza's request that it [the galley] be returned promptly." (PE 266).

The Met Life study was published under the auspices of the federal government in Public Health Reports, January 4, 1935. (PE 273). The published report made the changes described above, requested by J-M. Hence, the published report conveyed the thought that asbestosis was milder than silicosis, and omitted the observations that asbestos might cause disease more readily than silica and that it was not "practical as yet to establish standards for the dust content of air"

The published report also concluded that: "Asbestosis as observed in this series of cases has not resulted in marked disability in any case." (PE 273 [0700]). However, it noted that: "Cases of definite cardiac enlargement were frequently found to be associated with asbestosis." (Id., [0699]). This conclusion

was supported by the observation that every roentgenologist who reviewed the films noted "a very unusual incident of enlargement of the heart." (Id., [0697]).

There was no medical or scientific justification proffered by J-M for the alterations from the galley to the published report. The changes were made by Met Life because J-M asked for them. It is a fair inference that J-M requested the changes to aid it in postponing general public recognition of the dangers of asbestos, and in avoiding or minimizing legal liability to its employees. The result was to downplay the serious nature of the asbestos hazard. That the alterations were significant is evident from the correspondence that caused them, and from Lanza's request that the galleys be returned.

Lanza's subsequent public pronouncements on asbestosis also tended to minimize the serious nature of asbestos disease and the extent of its incidence, especially compared to silicosis. In 1936 he wrote that: "Asbestos ...in this country has not been shown to cause much disability, although a few deaths have been recorded." (ME 3865 [3646], Lanza, "Dust Diseases as They Affect the Construction Industry,"). 12 He also published an article called "Pneumoconiosis" in "Minnesota Medicine." He observed that the number of workmen exposed to asbestos dust "is very much smaller than for silica and strenuous efforts have been made by the asbestos plants to control their dust hazard." Thus, he wrote, "there probably never will be the opportunities for clinical study of asbestosis such as made possible by silica occupations." He stated that a "small number of deaths from asbestosis have been reported;" mostly other disease was also found, "which tends to confuse the role of asbestos in these cases, but in some cases death undoubtedly resulted from

¹² It is noteworthy that Lanza published this observation during the Great Depression when unskilled workers fortunate enough to have a job were highly motivated to keep it, even at the expense of their health.

uncomplicated asbestosis." (ME 3849, [3867]). See also PE 452 ([1088, 1090]).

Lanza also edited the book, "Silicosis and Asbestos," published in 1938.

These publications were in the main aimed at technical and medical professionals—some were for corporate management—none were aimed or targeted at workers.

The complete absence of any worker communication on asbestos is notable as Met Life had, as is discussed above, positioned itself to give advice and health education directly to the workers, at their homes, through pamphlets distributed to them, by films, radio and posters, and through their employers. It did in fact educate workers on numerous occupational health-related subjects, including specifically, silicosis. Although it published about asbestos-related disease in medical and scientific journals, albeit in a manner which downplayed the significance of asbestosis, it never advised workers, through any of the several communication channels it had adopted, of the risks they faced daily from asbestos dust.

The "Q&A Memo"

At the same time that the silicosis crisis was awakening industry and insurance companies to the legal exposures presented by dust disease, J-M was facing eleven personal injury lawsuits alleging asbestosis. The cases and their implications were so important that in 1933 J-M's Board of Directors, its general outside counsel at Davis, Polk and Wardell and the Hobart law firm which was defending the cases became involved. J-M settled the cases, with a covenant from the plaintiffs' lawyer that he would bring no further such cases. (PE 1460, 1462, 1463).

The "Q&A Memo," or the "Waukegan Memo," as the parties to this litigation called it, consists of a memorandum headed "QUESTIONS ASKED DR. A.J. LANZA AND HIS ANSWERS VERBATIM." (PE 200). With it is a letter

dated August 29, 1933 from "General Headquarters," by S.A. Williams, Vice President, to A. R. Fisher, Manager, Manville Factory. These individuals frequently appear on documents pertaining to J-M's handling of the health aspects of exposure to asbestos over the years. *See, e.g.,* PEs 217, 221, 225. Mr. Williams later became president of J-M. This letter reflects that the memo is a copy made by Mr. Kottcamp's office (he was the J-M Waukegan plant manager) of questions asked Lanza by the J-M local physician and his answers. Kottcamp was also copied on the letter.

In response to Question No. 1, Lanza advised that respirators are not satisfactory. ([0505]). Question No. 2, in substance, asked whether Lanza agreed with the physician's recommendation "that employees definitely be made aware of the fact that asbestos dust is hazardous to their health." The physician's idea was to place posters at conspicuous places, signed by the physician, stating that the dust is injurious, advising use of respirators and cleansing of hands. Lanza responded that this was partially answered by No. 1, i.e., respirators were not satisfactory. Lanza answered that he doubted if the hazard was sufficient to justify warning posters, and added: "This is especially true in view of the extraordinary legal situation." Lanza stated that if anything is said, "it would be better to make a general statement that the Company is taking steps to control the amount of dust in the air for general health purposes." ([0505]).

Questions 3, 4 and 6 dealt with significance of asbestos bodies in sputum, use of stereoscopic films and advisability of x-raying every employee, and whether a dusty operational area in the plant should be isolated from those with little dust. ([0506-0507]). Question No. 5 and the answer attributed to Lanza are as follows:

Question No.5.

I have made a diagnosis of asbestosis on an employee who has been working in the card room of the textile department six years. This place is extremely dusty. He is not disabled. In my judgment the best disposition of such a case is to remove him from the dust and give him a job in some other part of the plant. From your remarks in Chicago I believe this was your advice as to the disposition of such cases.

Answer:

It is difficult to answer this question. I think it would depend upon the man's age, the nature of his work, his length of service, and other considerations which might have some bearing. If he is well along in years and shows no disability, it may be just as well to leave him alone. One of the difficulties and vexations in trying to deal with the problems of pneumoconiosis is that economic as well as production factors need be balanced against the medical factors.

([0507]).

In 1931 Lanza had expressed the view that an employee whose lungs show signs of fibrosis "should be transferred to a location in the plant where the exposure is not so great." (ME 3937 [0418]). Defense expert Moore conceded that Lanza's position was not to move workers to a "safe" area, but if anything, to move them to a less dusty area. (Moore Tr., 2-8-08, afternoon session, pp. 38-39).

The Q & A Memo was the subject of a Met Life in limine motion based upon lack of authenticity and other objections. At that time the Court concluded that plaintiff had made a sufficient showing – including the location and manner in which the document was found, a prior admission by Met Life of its authenticity in other litigation, and the absence of any evidence of fabrication -- to allow the document into evidence. The Court recognized that the question of authenticity would ultimately be for

the trier of fact. Since the Court is now the trier of fact the reasons why the document has been accepted as authentic should be stated.

In addition to the evidence noted above, the comments attributed to Lanza in this document are consistent with other documents in evidence which he authored, and comments made by him at speeches. See, e.g., PE 425 [1085]; ME 3842 [0738]. It is also consistent with Lanza's willingness to accept J-M's requests to downplay or suppress research information unfavorable to J-M from the five plant study, despite Met Life's stated mission (ME 3800), and Lanza's willingness to compromise his own belief, that Met Life's research and findings in the area of dust disease should be of benefit both to the employers who funded the research and to their employees whose health was at stake. (PE 425; ME 3747).

A 1935 letter by Lanza to Dr. Pendergrass sets forth his stated belief that men who show early silicosis should be changed to a less dusty occupation in the company, but added this caveat, consistent with his advice in the Q&A Memo: "Of course, there are legal and compensation angles that arise and the company officials may not agree." The letter also stated that physical examinations should not be for the sole benefit of the employer, there should be something in it for the man, and the advantage to them is they may obtain accurate information as to their physical condition and perhaps be further protected for further exposure to a hazard and sometimes from further progress of their disease. He added: "Unfortunately, it is not always possible to adhere to this standard." (ME

3842 [0738]). The Q&A Memo reflects the same unbalanced emphasis on the interests of employers, reflected in this 1935 letter, whose authenticity was not seriously questioned.

In 1934, Met Life studied dust conditions at J-M's Waukegan plant. Met Life's report set forth recommendations for dust control or use of respirators. (ME 3841 [0560-0561], report of study that began 6-11-34). The report does not contain any recommendation that J-M provide warnings to its workers about the asbestos dust hazards, but shows many locations with asbestos dust levels greater than 5 million particles per cubic foot. The Court sees no inconsistency in the fact that Lanza visited Waukegan in 1933 and that Met Life conducted a dust study of that plant in 1934. The Annual Reports of the Industrial Hygiene section discussed above make a point of how many individual customer visits Lanza had each year, both at Met Life headquarters and in the policyholders' offices. And as late as 1953 Met Life was encouraging personal visits "where problems can be discussed frankly" ME 3747 [2025] (visits to Met Life headquarters).

Expert testimony established what may seem obvious. Even in the 1930s educating workers about the risks of harmful effects from their work environment was recommended. (Moore Tr., 2-08-08, afternoon session, p. 30:26-31:8). The standard notion was that workers should be informed of the risks of adverse effects on their health. (*Id.*). Merewether, Medical Inspector of Factories in England, published in 1930 that preventative measures include education of the individual to a "sane appreciation of the risk." (*Id.*, p. 29:11-24). Good industrial hygiene practice in those days included at least two prongs: dust suppression and education of the workers. (*Id.*, p. 32:11-33.10). The state of the art in the published literature in the 1930s was that employees should be made aware of

hazards so that they could be motivated to protect themselves. (Cohen Tr., 2-11-08, morning session, p. 77:2-6). (ME 3842 [0738]). The advice not to provide warnings to workers that asbestos is hazardous violated medical ethics and was unwarranted, because Lanza knew at the time that asbestos could be fatal, and because literature available to him made clear what he already knew -- that workers should be informed of the risks from this disease. (Horn Tr., 1-23-08, pp. 63:12-66:6).

It was not good practice from a public health standpoint, and was unethical for a doctor, to diagnose a person with asbestosis and not tell that person he had the disease. (Abrams Tr., 1505-06; 1620-21). Medical standards at the time required that the doctor tell an employee if medical examination or x-ray showed something is abnormal, and the company for whom the employee worked had the same obligation. (D. Egilman Tr., 1-28-08 afternoon session, p. 31:7-20). (ME 3842 [0738]). The advice not to recommend that the job be changed to a less dusty one was not proper advice for a doctor to give in 1933. (Horn Tr., 1-23-08, pp. 66:7-67:3, 67:10-26). When there was clear evidence, in the 1930s, of an occupational asbestos disease, the recommendation and practice was to tell workers. (Moore Tr., 2-08-08, afternoon session, p. 37:20-38:25). Lanza's view was not to move a worker to a safe area, but to one of reduced dust exposure where the hazard is not so great. (Id., p. 38:26-39:10).

Although only one document in evidence in addition to the Q&A memo reflects consideration by J-M of giving "proper warning to employees of unnecessary exposure to dust" (PE 1208 [0080, 0097]), that was in 1932. As discussed above, after the 1933 Q&A memo the great weight of the evidence establishes that J-M did consider warning its employees, and did not in fact warn them. Plaintiff at the Stockton plant was never warned. The workers at J-M's plants at Stockton, Long Beach, Pittsburg, Redwood City or Waukegan who

testified were not warned, at least until long after plaintiff's employment with J-M ceased. (Iturraran Tr., 1-30-08, pp. 16:17-17:5; Parker Deposition, p. 64 (Long Beach Plant); Cavallaro Dep., pp. 39-40 (Pittsburg Plant); Anderson Deposition, pp. 8, 12 (Waukegan Plant). Their testimony is consistent with J-M's handling of workers compensation and health issues "by our Legal Department on a hush-hush basis." (PE 1144 [2330]).

The evidence supports the inference that J-M was aided in the establishment of this policy by the advice in the Q&A memo. This inference is drawn in light of (1) the 1932 recommendation to provide warnings that preceded the Q&A memo; (2) the J-M recommendation set forth in the 1933 Q&A Memo not to warn; (3) the presence of that memo at J-M's "General Headquarters"; (4) Met Life's and Dr. Lanza's preeminent position in industrial hygiene matters; (5) Met Life's close association with J-M; and (6) the "rather meager" emphasis placed on health by J-M's own safety department which made Met Life's guidance that much more influential throughout the 1930s and 1940s.

Further, the record contains no evidence of any private advice communicated to J-M by Lanza or anyone else at Met Life that they should post warnings regarding asbestos and should advise their workers of the information received by x-rays of their lungs. The record makes clear that through Lanza Met Life had the ear of senior management at J-M throughout the 1930s and 1940s. Yet the content of conversations between Lanza and J-M executives in the record gives no hint of Lanza encouraging warnings and disclosures. Further, Lanza's demonstrated willingness to assist J-M in avoiding adverse disclosures shows that despite his professed interest in the health of workers, if individual workers' health interests conflicted with management's perceived production and other economic interests, Lanza was content to see management avoid its responsibilities to its workers.

It is true that the record contains no document referring to the Q&A Memo and only a few documents evidencing that despite paying lip service to occupational health issues J-M would continue to expose its workers to asbestos without warning them or advising them of their own health status. The absence of a reference to the Q&A Memo is not surprising, given J-M's "hush hush" approach to this issue and its concern, shared by Lanza, of its exposure to litigation. Nonetheless, the reality of what J-M did to its workers is clear and demonstrates what the actual policy of the company was in the 1930s, continuing through the 1940s while Lanza remained in close communication with J-M on behalf of Met Life, and extending through the 1960s.

. For example, the deposition of Charles Roemer describes a meeting in 1942 or 1943 at J-M Headquarters, with Vandiver Brown, general counsel of J-M, his brother (president of the company), and other J-M officials. Roemer told the Browns that as soon as his company, Unarco, learned of changes in a man's lungs, it notified the parties, and workers' compensation claims were filed. One of the Browns accused Roemer's company of being "a bunch of fools because by doing that it will cost the company much more money than if they let them continue to work." Then:

"I'll never forget, I turned to Mr. Brown, one of the Browns made this crack, and I said, 'Mr. Brown, do you mean to tell me you would let them work until they dropped dead?' He said, 'Yes. We save a lot of money that way."

(Roemer Dep., pp. 25-28).

Met Life and the J-M Plants

In addition to the studies described above, Met Life surveyed J-M plants in 1934-36 (including Redwood City, Pittsburg, Los Angeles (PE 1157 [2361-2362]), in 1941 (PE 460 [1100]), 1942 (PE 470 [1151]); 1945 (PE 555 [1359-1360]),

1946 (PE 1157 [2362]), 1947 (PE 623 [1474]), 1948 (PE 684 [1685]), 1949 (PE 1157 [2362]) and 1950 (PE 763 [1954]). In 1950, after J-M had its own survey personnel, it still sent samples to Met Life for analysis. (PE 798 [1963]).

Met Life's intercession in 1945 headed off an impending New Jersey investigation, at J-M's Manville plant, based on "a number of unhealthy working conditions." Met Life's findings that the "asbestosis hazard was adequately controlled" caused the case to be closed. (PE 555 [1359-1360]).

The "Special Inquiries" section of the 1945 report also notes that Met Life's "Group policyholders are again sending in for interpretation X-rays of the chests of their employees, now that our doctors have returned from service." In addition, "[q]uestions having to do with all phases of medicine from all sources are sent to Dr. Lanza's office. These cover a wide range, i.e., cancer, heart disease" (*Id.*, p. 5 [1363]).

Met Life's plant survey work for J-M continued into 1950. (PE 792 [1962], Met Life report on dust concentrations at Waukegan, 9-8-50; PE 798 [1963], Executive Bulletin, Industrial Hygiene, 9-26-50; PE 799 [1964-1966], Industrial Hygiene Survey, Impinger Sampling, 9-29-50).

An internal 1953 Johns-Manville memorandum stated that a recent survey by Met Life in 1949 (and by Travelers in 1952 and J-M itself in 1952) "confirmed the fact that dust concentrations are in excess of the prescribed normal of 5.0 million parts of dust per cubic feet of air." (PE 1601 [2033, 2035, 2037, 2039]).

The Saranac Laboratory Cancer Findings

Lanza had been one of two persons "instrumental in establishing Saranac Laboratory in the industrial consultation field," with fees going to Saranac from various corporations amounting to \$50,000 a year by 1935. (PE 321 [0748-0750]). Saranac had begun research with respect to dust inhalation in relation to tuberculosis. By 1935, Met Life had contributed \$5,000 a year for several years

to Saranac for studies on the pathological effects of dust. (PE 292 [0716, 0729]). Dup??

In November 1936, eleven asbestos companies, including J-M, agreed to underwrite experiments with asbestos dust to be conducted by Dr. Leroy Gardner at Saranac, sharing the costs among the companies Met Life was involved in the Saranac asbestos study from its inception. (PE 357).; (PE 358 [0761]); (PE 382).

Through an exchange of letters with J-M's Vandiver Brown, Dr. Gardner of Saranac agreed to proceed, agreed the results would be the property of the contributors and agreed reports would be submitted for their approval before publication. (PE 358 and 359).

On February 24, 1943, in a letter to Brown, Gardner observed that the question of cancer susceptibility (following asbestos exposure) now seemed more significant than he previously imagined. Gardner believed (incorrectly as it turned out) that he could obtain support for repeating the cancer work from the cancer research group; as this would take two-three years, he believed it would be better omitted from the present report. (PE 488). The letter included an outline of a proposed monograph which reflected that there were on record 10 cases of lung cancer in asbestos workers, that this incidence was excessive, and that the evidence was suggestive but not conclusive that asbestos may precipitate development of cancer in susceptible individuals. (PE 488 [1206-1222], Proposed Monograph, Part I, p.1 [1212]). The monograph (Part II) noted that asbestos may actually favor development of tumors in susceptible species ([1218]). It pointed out:

"In 11 mice inhaling long fiber asbestos for 15 to 24 months, 8 developed malignant tumors in their lungs and 6 of them had tumors in other organs. The incidence rate of 81.8% is excessive.

Gardner's monograph also reflected that 13.6% of mice inhaling asbestos for not longer than 12 months developed tumors. The monograph recited the much lower incidence of lung cancer in mice exposed, as controls, to other dusts. ([1219]).

In May 1946, Brown recognized that Gardner's approach to the question of cancer in relation to asbestos dust was typically very cautious and very scientific, unwilling to accept any theory as fact until the evidence was overwhelming. Brown knew — and believed his fellow experts knew — "that when Dr. Gardner states a finding, it is quite likely to be correct." (PE 605 [1398-1400]).

Gardner sought funding for further experiments from the National Cancer Institute, stating he was "startled to discover" the 81.8% excessive incidence. While he stated the "results with asbestos mean nothing," he said he wished to repeat the experiment under properly controlled conditions, and applied for a grant. (PE 490 [1223-1224). Gardner wrote again to Doctor Hektoen of NCI on September 29, 1943, observing that evidence continued to accumulate that asbestosis predisposed to cancer and that he did not believe that "we can afford to neglect the matter much longer." (PE 498 [1230-1231]). His application for a grant was turned down. (PE 508)

Gardner died in 1946. Kenneth Lynch, M.D., Dean of the Medical College of the State of South Carolina, was a recognized authority on dust diseases. Dr. Lynch was an important early scientific researcher and publisher on asbestos and lung cancer. (Cohen Tr., 2-11-08, morning session, pp. 89:28-90:3). The topic of asbestos exposure possibly causing lung cancer was first discussed in the literature in 1935, with an article by Dr. Lynch, as well as one by Dr. Gloyne of Great Britain. (Cohen Tr., 2-11-08, morning session, p. 29:19-26). Dr. Carbone acknowledged Lynch as a "pioneer" in the field. (Id., p. 70:21-71:1)

In December 1946, Lanza, who had become a member of the Board of Trustees of the Trudeau Foundation, which governed Saranac (ME 3924 [4174]), asked Lynch to look over Gardner's notes and memoranda, which had been typed, and provide comments and suggestions. [Id.] Lynch assured Lanza that he would do what service he could in reading Gardner's uncompleted report, and making suggestions. (PE 619). Lynch reviewed Gardner's manuscript and suggested that the uncompleted manuscript be edited and closed where Gardner left off "and offered for publication practically as he had written it." (PE 621 [0621]).

At a meeting held January 21, 1947 at J-M, with several J-M officials present, Lanza reported on his visit to Saranac, his posthumous review of Gardner's materials, and his contacts with Lynch to get the materials in order. (PE 630). J-M's Woodard remarked on the "definite job" the company had to do in Canada to affect the results of propagandizing about the harmful effects of asbestos dust. Brown called attention to the stipulation with Saranac requiring company consent to publication. He expressed hope that Lynch would take out any objectionable materials, "as for example any relation between asbestos dust and cancer, such as the reference which Dr. Gardner had made to this in his monograph." Lanza assured Brown that any report by Lynch would be submitted to J-M before being published elsewhere. (PE 630 [1496]).

At Lanza's request, Gardner's secretary sent his materials to Lynch. (PE 634). Bowditch, then Field Director at Saranac, wrote Brown on March 18, 1947, describing Gardner's notes that had been sent to Lynch, as including (PE 638 [1512-1513]):

"4. 81.8% of mice inhaling large fiber asbestos develop lung cancer, a figure sixteen times that of the average for other dusts. 13.6% of mice inhaling short fiber asbestos develop lung cancer, a figure seven times the average for other dusts. These results are suggestive, rather than conclusive."

Brown replied to Bowditch, expressing concern over paragraph 4, stating none of Gardner's interim reports expressed such an abnormal incidence of cancer and noting in a blind copy to Woodard: "The finding referred to looks like dynamite." (PE 640).

On June 30, 1947, Lynch wrote Lanza that Gardner's partially completed manuscript "could properly be published as a final report," that to add material would perhaps not be proper, but "to publish his manuscript practically as he has written it, with an explanation, would be to properly represent him." In Lynch's view, Gardner undoubtedly meant to add to the transcript, but said, "it is worthy as it stands." (PE 652 [1578]).

Lanza replied on July 2, stating he was quite in agreement with what Lynch said, noting that all concerned were looking to Saranac, and it would be of immense help to industry and constituted authorities if Gardner's work would soon be available. (PE 653). Lanza also noted that there had been "quite a stirring up of activity on the part of State Industrial Commissions and similar bodies in the United States and Canada, with the result that there has been threatened legislative actions or procedures based upon assumptions as to the effects of asbestos which may or may not be correct." (Id. [1580]). On July 22, Lanza reported to J-M that Lynch told him Gardner's work was in good shape. J-M's Woodard noted that Lanza would go over the information and check with J-M as to what to do "so to make the best possible use of the material in the shortest possible time." (PE 658 [1624]).

Lynch arranged Gardner's manuscript into a proposed single publication. He left the experimental report (i.e., including mouse cancer data) as it was, remarking about the material as a whole that it "is valuable and publishable as it stands." (PE 659 [1625]). Lynch sent the materials to Lanza, and stated that he believed "that you [Lanza] can induce the Journal of Industrial Hygiene to take it

in this form." (Id).

A J-M memorandum of a meeting with Lanza on August 6, 1947, reflects Lanza's report that Lynch had sent the material worked up from Gardner's notes and memoranda, and Lanza thought it could be presented as an entity, as a Saranac report. (ME 3932). Lanza reported reluctance on the part of Dr. Vorwald (who had or soon would take Gardner's place) to release the material lest subsequent developments from Gardner's work be at variance from his conclusions. Lanza, however, "was of the opinion that the report, as put together, will stand by itself (*Id.* [1631, 1634]). Lynch remained of the same view: "Gardner's material is publishable as it stands and that perhaps revision by anyone else might not truly represent him." (PE 670 [1635]).

J-M in June, 1948 pushed Saranac to do everything it could to bring the Gardner monograph to a conclusion as soon as possible. Woodward's reasons were:

There is a real ferment under way in Quebec on this whole subject of industrial health. Laymen with little knowledge of occupational disease problems are writing articles in magazines and newspapers, organized employees have apparently become exercised over a situation that is anything but clear, and the Government itself has made some statements and taken certain steps that might well get the mining industry in general, and ourselves in particular, into real difficulties.

We hope that the information from Saranac will be of real help in getting at some matters that are facts and not conjectures.

(PE 701 [1694-1695]).

In September 1948, Gatke Corp., one of the Saranac asbestos study sponsors, wrote Brown that it hoped cancer would be stricken from the published report. (PE 705). Brown suggested eliminating reference to tumors, and confining the report to the animal experiment, because he believed Vorwald would be difficult to deal with, but if the publication was limited to animal

experiments, the companies' right to suggest changes or forbid publication was unquestionable, in Brown's view. (PE 713).

Brown sent a copy of Part I of the Saranac report to the other companies involved on a confidential basis. He convened a meeting of the companies involved for November 11, 1948. (PE 714). The meeting took place as scheduled with all but one company represented. It was the unanimous opinion that the reference to cancer and tumors should be deleted, a point they would insist upon. (PE 500).

On November 30, 1948, Woodard discussed with Lanza (who had not yet officially retired from Met Life and remained a Trustee of the Trudeau Foundation) having Lanza take up with Saranac the matter of revisiting the report and putting it in the shape agreed upon. Woodward wrote: "Dr. Lanza has agreed to do this for us. I might add that this is just another instance where Dr. Lanza is freely giving his time and effort in helping us along on this program and I think he deserves the thanks of all of us." (PE 720 [1772-1773]).

On December 14, 1948, Lanza sent a letter to Vorwald at Saranac reporting that the underwriting companies met and that the group felt that all references to cancer or tumors should be omitted, which would likewise call for elimination of all tables relating to the subject. (PE 725). The letter made other suggestions as well. While the letter is on New York University letterhead, Lanza was still employed by Met Life. He had written Vorwald on November 30, 1948, under Met Life's letterhead as "Associate Medical Director," stating that Part I of Vorwald's Asbestos Report was a "perfectly grand piece of work." (PE 721 [1769-1771]). He wrote Vorwald on December 16, using a Met Life letterhead, again signed as Met Life's "Associate Medical Director," asking that copies of the Saranac report be made available to Woodard promptly for use in a meeting with authorities in Montreal to discuss the asbestos situation in Quebec. (PE 726).

In March 1949 Brown examined the revised report, and wrote that he believed it adopted the substance of all the suggestions made by the companies. (PE 740). The revised report deleted references to cancer. Compare PE 706, 9-30-48 report, ¶ 75 and ¶ 92 (containing discussion), PE 734 (marked up copy changing date to 1-31-49 and marking out cancer references), and PE 735 (report of 1-21-49, with no reference in ¶ 75, and all of ¶ 92 deleted). As altered, the Saranac report was viewed as helpful to industry. In July 1949, J-M's Woodard pushed for prompt publication, as companies were "in dire need of the publication" because of claims pending. (PE 755 [1951-1953]).

In May 1949, Met Life's McConnell wrote to Marshall of Raybestos-Manhattan, disputing the causal link between cancer and asbestos:

"During the last few years quite a number of articles claim that carcinoma of the lungs was, found due to asbestos. Those I have read do not give much substantiating evidence, but you will find that it is being quoted fairly widely. We certainly have not been able to substantiate any of these claims in the work we have been doing since 1930."

(PE 748 [1946-1948]). The significance of this misleading statement is not that it was made to someone at Raybestos, who already knew of Gardner's findings. Rather, it is significant because it shows Met Life's willingness to overstate its involvement in and the results of cancer research while debunking the findings of others – a willingness repeated by Lanza who shared McConnell's views while they worked together at Met Life, and expressed them publicly after he retired. The only evidence in the record of any research sponsored by Met Life touching upon this subject is the Vorwald and Karr study, discussed below. That study, like Gardner's, was not looking for a link between asbestos and cancer in animals. Unlike Gardner's study, Vorwald and Karr did not happen upon any results suggestive of a link. Yet Met Life, through McConnell and Lanza, suggested that the topic had been studied and no link had been found. The

impact of these views on the negative association based upon Met Life sponsored research is discussed below.

The Saranac report was published in the A.M.A. "Archives of Industrial Hygiene and Occupational Medicine," January, 1951. Although the draft references to cancer were deleted, an introductory footnote represents that it was complete. (PE 827 [1969]):

This series of studies of asbestosis, initiated at the Saranac Laboratory more than twenty years ago by the late Dr. Leroy V. Gardner, director of the laboratory, was nearly completed at the time of his death in October 1946. Although partial reports and informal reviews of some of the experiments had been given from time to time by Dr. Gardner, this paper presents for the first time a complete survey of the entire experimental investigation.

Just as there was no specific experiment concerning the effect of inhaled asbestos dust on the development of cancer, there was no specific experiment concerning the effect of inhaled asbestos dust on non-tuberculosis infection.

Brown suggested deletion of the statement that "asbestos dust does not exert a significant effect on the susceptibility of non-tuberculosis pulmonary infection."

As his reason for considering this deletion, Brown wrote that:

It is also stated that the experiments were not pointed towards determining this question. For this reason (which is the same as is applicable to the portion dealing with tumors) and even though the conclusion arrived at is generally favorable, it might be desirable to omit this sentence pending further experimentation. (parenthesis in original).

(PE 707 [1706-07]).

When Lanza directed Saranac to make changes to the report, he did not instruct Saranac to delete the "favorable" findings as to non-tuberculosis pulmonary infection, but he did instruct Saranac to delete the cancer findings. (PE 725 [1774-79]). And Saranac did as instructed. (PE 827 [2009]).

Lanza's participation in this alteration of the Saranac report is inconsistent with his recognition in 1937 that it would be highly undesirable for any special interest to block the publication of bona fide articles. Lanza had stated to Gardner then that if conclusions are faulty or based on insufficient evidence the proper thing to do is come back at the writer through the publishing journal such that if the objection is successful, everybody is better off. (PE 371).

Lanza's willingness to help get the cancer findings deleted is consistent with his later statement, expressed to Dr. William Smith of New York University, that Dr. Herbert Abrams, a preventive medicine specialist who was Chief of the California Bureau of Adult Health from 1947 through 1952 (Abrams Tr., 1482-83, 1509, 1575) had been creating a problem for J-M (with respect to diatomaceous earth exposures at J-M's Lompoc, California plant) and that Lanza had put the lid on Abrams. (W. Smith Dep, pp. 34-35). It was also consistent with Lanza/s redfaced anger, when confronted by Smith with English data showing a risk of cancer from asbestos, and his expressed view that "cancer investigators were troublemakers" who "had no idea of the problems they created for industries and for insurance companies." (*Id.*, pp. 41-42). It was also in line with Lanza's successful efforts to have Dr. Hueper, who was doing studies to identify possible occupational tumor hazards at the National Cancer Institute, pulled off his field studies (*Id.*, pp. 45-50), and later to have Dr. Vorwald fired as director at Saranac because he wished to do cancer research there. (*Id.*, pp. 67-69).

The Court infers that the deletion of the cancer findings from the Saranac report was significant, and the draft report with the findings was publishable, as shown by these contemporaneous facts:

(a) Gardner's original proposed monograph in 1943 (PE 488) included the cancer findings and indeed underlined them;

- (b) When Saranac sent Gardner's notes to Dr. Lynch, it sent a letter to J-M expressly calling attention to the cancer findings (PE 638);
- (c) J-M's Brown thought the findings looked like "dynamite" (PE 640);
- (d) Dr. Lynch, a recognized authority, three times wrote that the Gardner material, including the cancer findings, was publishable (PE 652, PE 659, PE 670);
- (e) Lanza express the view that the material as worked up by Dr. Lynch could be presented as an entity, and would stand by itself (ME 3932 [1631, 1634]);
- (f) The companies involved in underwriting the Saranac experiments met twice about the report and insisted the findings be deleted with no mention of any scientific reason for their opposition;
- (g) Saranac included the cancer findings in its draft report (PE 706) and deleted the findings (PE 734), only upon the insistence of the companies (PE 720 and PE 725).

For results of animal experiments to merit publication during the period 1937 through the 1950s, it was not necessary that the experiments had utilized control groups, or that cancer findings were planned to be within the scope of the experiments. An example is the Vorwald and Karr 1938 article discussed above entitled, "Pneumoconiosis & Pulmonary Cancer," which reported the results of animal experiments without controls, with unplanned results, using animals that may have not been susceptible to cancer.

Vorwald and Karr worked at the Saranac Laboratory when they published their 1938 article. As of 1935, Saranac Laboratory had undertaken a "study of the pathological effects of the inhalation of asbestos dust through animal experimentation, with the aid of a grant from the Metropolitan Life Insurance Co." (PE 273 [0700-0701]). It did not find cancer in animals. It was published without controls, and was not planned to investigate any connection of asbestos with

cancer. (Cohen Tr., 2-11-08, morning session, p. 62:2-63:8, 63:13-65:5). The Vorwald and Karr publication was significant at the time in the field of industrial hygiene and occupational medicine. Others in the field cited it to the effect that asbestos does not cause cancer. (D. Egilman Tr., 1-29-08, afternoon session, pp. 39:17-19, 39:24-40:27).

Similarly, the Nordmann & Sorge article published in 1941 was referred to by Lynch in his 1957 publication, "Pulmonary Tumors in Mice Exposed to Asbestos Dust." (Carbone Tr., 2-07-08, afternoon session, pp. 6:5-11, 7:13-24). According to Lynch, the Nordmann & Sorge article was the only published statement as of 1957 that supported the induction of tumors in experimental animals by the inhalation of asbestos. (*Id.*, p. 7:13-24). Referring to the Nordmann & Sorge article, Lynch noted that the number of animals used by Nordmann & Sorge (10 mice) was very small and that no suitable control animals were monitored. (*Id.*, pp. 9:28-10:4). Yet it was published, and viewed as significant by defense expert Dr. Cohen. (Cohen, 2-11-08, morning session, pp. 29:27-31:5). The Nordmann article was referred to in a JAMA editorial in 1949. (Id., pp. 32:26-33:9). Lynch's publication itself cited the unpublished Gardner findings that three of 22 animals exposed to short fiber asbestos contracted cancer. (Carbone Tr., 2-07-08, afternoon session, p. 11:22-12:16, 13:23-27).

Met Life's expert witness, Dr. Carbone, was adamant that Gardner's cancer findings were not publishable or, if published, would have been inconsequential. Yet he acknowledged that results need not be planned to be publishable, *i.e.*, an accidental result can be published. (Carbone Tr., morning session, 2-6-08, p. 83:19-23). The 1951 Saranac article (PE 827) referred to a 1931 published report by Schuster of asbestosis in a dog. ([1972]). Dr. Carbone said that this case report on the dog was published because the researcher was interested in it, it got his curiosity. Dr. Gardner thought his mouse cancer

findings were interesting enough that he wanted to repeat them, although he did not attach much significance to them by themselves. (Carbone Tr., 2-07-08, morning session, pp. 63:14-25). Indeed, as Gardner presciently observed in 1943: "I do not believe that we can afford to neglect the matter much longer." (PE498).

In Dr. Egilman's opinion confirms that the findings of cancer in mice reported by Gardner were publishable. (Dr. Egilman Tr., 1-29-08, afternoon session, p. 45:10-15). Dr. Egilman has done research and investigation and taught courses on the development of scientific knowledge and how the knowledge was used with respect to substances and occupational health issues. (Dr. Egilman Tr., 1-28-08, morning session, p. 25:7-18). He has taught on the development of scientific knowledge with respect to acceptance, rejection or the equivocal nature of the relationship between exposures and disease causation. (*Id.*, p. 28:6-13). He is editor-in-chief of the International Journal of Occupational and Environmental Health. (*Id.*, p. 43:28-44:4).

TLVs and Cancer

The significance to this action of Met Life's involvement in non-publication of Gardner's observations of cancer in mice is the impact it had on the determination of acceptable levels of exposure to asbestos dust in the years following 1951. To put the matter in context we first discuss the background of dust exposure guidelines and regulations in the United States.

The first recommended guidelines for dust exposures were published by Dr. Lanza when he was employed by the U.S. Department of the Treasury, in 1917. The dust was silica. (D. Egilman Tr., 1-29-08, morning session, pp. 9:20-10:14). Once formed in the 1930s, as discussed above, the IHF promoted use and adoption of standards for exposures to toxic dust. Its main focus was on silica and asbestos. (*Id.*, p. 21:13-22).

The scientific discussion of exposure standards was informed by the concept of "dose response." Merewether in 1930 presented the concept of dose-response with regard to asbestos-related diseases. Dose response is the concept that as the amount of dust one would inhale over a lifetime increases, the chances of getting the disease as well as the severity increase. (Cohen Tr., 2-11-08, morning session, pp. 83:28-84:20). It was known by the end of the 1930s that reducing exposure to asbestos would reduce risk of development of disease, and probably known that severity of disease would go down. (*Id.*, p. 85:3-17). And by the 1950's it was generally accepted that reduction in exposure would reduce the risk of cancer. (*Id.*, pp. 85:18-86:1).

Occupational physicians and industrial hygiene professionals in the 1930s assumed that asbestosis would be dose-responsive. In general, more time spent in a dusty environment would result in a greater chance of more severe disease. ((Moore Tr., 2-8-08, afternoon session, pp. 23-25) Reduction of asbestos exposure was understood to reduce both incidence and severity of disease. Asbestosis was understood to be a progressive disease, as reported by Merewether in 1930, whose statements would have been taken seriously. (*Id.*, pp. 42:27-43:9).

The American Conference of Government Industrial Hygienists ("ACGIH") was a voluntary, private, non-profit organization of those in government with responsibility to investigate and control industrial diseases. (T. Mancuso Tr., pp. 1358-59). Its TLV Committee developed guidelines for levels of dusts and fumes. (*Id.*, p. 1360). Industry was the sole source from which the ACGIH could obtain information which could form the basis for its recommendations. (*Id.*, pp.

1368-69). ¹³ TLVs were intended as rough guidelines to protect workers and the ACGIH did not want them adopted as enforceable standards. (*Id.*, pp. 26:9-28; pp. 27:25-28:3; Abrams Tr., p. 1511).

Nonetheless, the guidelines did become standards. *Compare* California 1945 Industrial Safety Orders (with "suggested") dust levels, *with* 1955 Order (no longer "suggested") (RJN, PE 1817). Government agencies adopted the guidelines as enforceable regulations. (D. Egilman Tr., 1-29-08, afternoon session, pp. 27:9-28:14).

The predecessor of the ACGIH first set a TLV for asbestos in 1939 and 1942, of 5 million particles per cubic foot ("MPPCF"). (D. Egilman, 1-29-08, morning session, pp. 25:19-26:3, 28:15-29:4). The standard remained at 5 MPPCF until 1970. (*Id.*, pp. 29:6-21). The disease that the ACGIH took into account in setting the TLV in 1946 was asbestosis, not cancer. (*Id.*, pp. 30:1-8; T. Mancuso Tr., pp. 1379-80). The same was true in 1955 when the ACGIH revisited the TLV for asbestos. (Cohen Tr., 2-11-08, morning session, p. 86:23-27). The current TLV or "PEL" is intended to be cancer protective. (D. Ringo Tr., 2-11-08, morning session, p. 10).

Egilman testified without contradiction that during the 1950s, TLV levels would drop 100 to 1000-fold for a substance identified as a carcinogen, according to the medical and scientific literature of the mid- to late-1950s. (*Id.*, p. 27:16-23). One example in the record is nickel carbonyl. The ACGIH established a TLV for that substance in 1947. Unlike the asbestos industry and its consultants, Industry representatives for nickel carbonyl identified it as a

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¹³ "Threshold Limit Values" ("TLV") were standards for average levels over a working lifetime. A "Maximum Allowable Concentration" ("MAC") was a level of exposure that should not be exceeded at any point in time. (D. Egilman Tr., 1-29-08, morning session, pp. 23:26-24:14).

carcinogen in 1953, and the TLV was reduced immediately by a factor of 1000. (D. Egilman Tr., 1-29-08, afternoon session, pp. 26:17-27:9).

The TLV for asbestos was lowered dramatically in the early 1970's on the basis of it being a carcinogen. (D. Egilman Tr., 1-29-08, morning session, p. 30:17-23). Once the TLV was lowered, asbestos-containing products were withdrawn with substitutes used instead, and warnings went on products. (D. Egilman Tr., 1-29-08, afternoon session, pp. 29:17-30:2). Asbestos exposures in manufacturing plants were dramatically lowered. (*Id.*, pp. 32:1-15).

It is reasonable to infer, as Egilman testified, that if the TLV for asbestos had been lowered in or before 1959 by a factor of between 100 and 1,000, the exposure levels to plant workers such as plaintiff would have been reduced dramatically.(*Id.*, p. 32:16-28) That is because the standards were being enforced by public agencies. (*Id.*, p. 33:2-7). Because mesothelioma is a doseresponse disease, plaintiff's risk of contracting it would have been dramatically reduced as well.

The standards did not drop to take account of asbestos as a carcinogen until 1970 in part because it was the stated view of an influential minority of people, who were the most prominent people in occupational health and were affiliated with industry's Saranac Laboratory and/or the IHF, that asbestos was not a carcinogen. They communicated that view to Dr. Herbert Stokinger, who was the chair of the chair of the ACGIH's TLV committee responsible for setting and resetting TLVs. (*Id.*, 33:8-24) Those prominent persons in the minority were Lanza, Vorwald and Cartier. (*Id.*, pp. 34:8-12).

While at Met Life, Lanza used his influence to cast doubt on the association between asbestos and lung cancer. As far back as 1935 Lanza publicly stated that the clinical picture presented in North America for asbestos-related disease was considerably milder than in England and South Africa. (PE

317 [0745]. In 1952, Lanza read a paper, "Asbestosis" in which he repeated the observation that experience with asbestosis in England appeared to differ sharply with those in Canada and the U.S. and advised that the authorities in Great Britain regard asbestosis as a very serious disease, and:

. . . seemed to be convinced that cancer of the lungs is a frequent sequela. This is not the experience in either Canada or in the United States

(PE 887 [2020]). However, in referring to the idea that the different types of asbestos varied markedly in their pulmonary effects in 1937, Lanza, wrote privately that while the Canadian asbestos people had advanced that idea to explain why asbestos seemed more clinically severe in England than in the U.S., "their argument was motivated by self-interest rather than to make a scientific contribution." (PE 381 [0780, 0781]).

The minority view that asbestos did not cause cancer was based primarily on negative animal studies, the 1938 Vorwald and Karr publication (done while they were at Saranac), and the 1951 Saranac publication (PE 827), which was interpreted as a negative cancer study for asbestos by subsequent commentators. (D. Egilman Tr., 1-29-08, afternoon session, pp. 49:26-50:14). For example, the article published by Isselbacher, Hardy & Klaus in 1952, in the American Journal of Medicine, entitled "Asbestosis and Bronchogenic Carcinoma" (PE 1724), stated most English observers were satisfied there was a statistically significant increase in pulmonary malignancy among asbestos workers, but some American writers considered that experience to date did not support that contention. (Cohen Tr., 2-11-08, morning session, pp. 59:23-60:9). It cited for that view two references, one being the Vorwald & Karr 1938 article.

In 1965, Smith, Miller, Elsaspen & Hubard, in a paper entitled "Tests for Carcinogenicity of Asbestos" (PE 1724), also cited the 1951 Saranac publication

as a negative cancer study. (Carbone Tr., 2-07-08, afternoon session, pp. 20:8-21:24).

Sir Richard Doll's 1955 publication in the British Journal of Industrial Medicine entitled "Mortality from Lung Cancer in Asbestos Workers" also cited as a negative animal experiment result the 1938 Vorwald & Karr article. (*Id.*, p. 60:10-26). The skeptical minority were listed as Cartier, Warren, Lanza and Vorwald (Cohen, p. 65:6-14).

By 1955 many physicians and scientists had published that asbestos causes cancer. Dr. Cohen testified that it was the predominant view that asbestos caused lung cancer as of the early 1950s. (Cohen Tr., 2-11-08, morning session, p. 35:5-11). However, there was still debate, dispute, and controversy that continued through the 1950s. (*Id.*, pp. 55:18-56:10). According to Dr. Cohen, there wasn't much discussion or debate after Richard Doll's 1955 article regarding asbestos as a cause of lung cancer. (*Id.*, pp. 37:9-38:3). By 1959, Dr. Cohen's opinion is that it was pretty much unanimous, not totally, that asbestos caused asbestosis, and lung cancer was usually mentioned as a sequelae or complication of asbestosis and asbestos. (*Id.*, pp. 38:24-39:8). In 1964, Dr. Selikoff published his most notable publication, an article reporting increased rates of lung cancer, mesothelioma, and other cancers among pipe insulators. (*Id.*, pp. 51:20-52:5).

Nonetheless, California's exposure limits for asbestos remained at 5 MPPCF until the advent of OSHA in 1972. (Cohen Tr., 2-11-08, morning session, p. 49:5-15). The TLV which had been the basis for the California standard was not lowered earlier, in part because of scientific indifference, in part because the most important respected authorities, including Lanza and Vorwald, relied on the absence of animal data to claim that asbestos does not cause cancer, and, after 1958, because of the publication of the Braun-Truan report, "An

Epidemiological Study of Lung Cancer in Asbestos Miners." (PE 997). (Dr. Egilman Tr., 1-29-08, afternoon session, pp. 53:17-54:14).

A February 1956 letter from J-M's Kenneth Smith to Daniel Braun, Medical Director of the Industrial Hygiene Foundation, noted that a case of asbestosis and lung cancer was litigated in Canada in favor of the claimant. Smith sought details concerning the case. (PE 952 [2070-71]). Braun wrote Hugh Jackson, manager of J-M's Industrial Health Program, in December of 1956 listing several published articles suggesting lung cancer among persons exposed to asbestos. (PE 972 [2076-2079]). J-M had reason to concern itself with the looming connection in the U.S. between asbestos and cancer. The Braun-Truan report followed.

The published Braun-Truan report (PE 997), done by the IHF, changed its findings from the 1957 draft report (PE 988), to delete the statement that an observed rate of 12.5% rate of lung cancer among workers dying with asbestosis was significantly larger than would be expected. The 1958 published report was a major piece of evidence to support the proposition that asbestos was not a carcinogen, and had a major influence on the ACGIH in not lowering the TLV. (*Id.*, [2185-2186]). On January 20, 1958, Herbert Stokinger wrote to Daniel Braun, medical director of the IHF, commenting on the published 1958 Braun-Truan report, and stated that he "was particularly pleased to learn the main conclusion of the paper was against the association of lung cancer with asbestosis, for [he] had come to a similar conclusion on obviously far less information but was afraid to say so for this reason." (PE 999).

Unlike its direct involvement with the Gardner material in the late 1940s, there is no evidence showing that Met Life played a role in causing the change from the 1957 draft Braun-Truan report to the published version. The 1956-57 activity report of the IHF shows both Met Life and J-M were members of the IHF in

1957. Dr. Shepard of Met Life was a member of the IHF Medical Committee, as was Dr. Smith of J-M and Dr. Braun, the co-author of the report. J-M had a representative, L.M. Jackson, on the IHF Legal Committee. J-M's then president, A.R. Fisher (to whom Williams sent the Q&A Memo in 1933) was on the IHF Board of Trustees. Dr. Lanza was on the IHF Board of Trustees, and a member of the IHF Research Advisory Council. (PE 950).

J-M's Jackson and Smith reviewed the draft Braun-Truan report and made comments on the deletion of the association of asbestos with cancer, and gave other editorial suggestions. (PE 996). However, there is no evidence that Met Life's Shepard played any role in having the changes made. Nor is there any evidence that Lanza, whose association with Met Life on behalf of J-M appears from the evidence presented to have ended with the Lompoc incident in 1952, played any role.

ANALYSIS

J-M Committed a Battery On Henry Plooy

Applying the legal standards discussed above, the evidence is clear that J-M committed a battery on plaintiff. J-M intended that he be exposed to asbestos dust which J-M knew to be extremely harmful. Its intent to harm plaintiff can be readily inferred from its failure to provide warnings to its workers so that they could take steps to protect themselves, its failure to advise workers when their x-rays disclosed abnormalities in their lungs, and the efforts J-M went to over the years to avoid or delay any association of asbestos and lung cancer, including its involvement in the Braun-Traun study. Plaintiff was unaware of the dangers to which he was being exposed on a daily basis. He did not, and, given that he was unaware of the dangers, could not, consent to J-M's harmful

touching of him. Since there was virtually no evidence that plaintiff was exposed to asbestos from any other source there is no question but that his exposure to asbestos at J-M was a substantial factor in causing him to contract mesothelioma.

J-M Defrauded Henry Plooy

The same evidence which supports a finding of battery against J-M demonstrates that J-M did not reveal material information to plaintiff, which was a substantial factor in causing his injury. The parties did not spend much time proving or seeking to negate the claim that J-M made representations to its workers that it was safe for them to perform the tasks asked of them in the conditions in which J-M placed them. However, given that J-M had a duty to provide workers such as plaintiff with a safe workplace, a representation to that effect was implicit in the employer-employee relationship. The evidence discussed above makes clear that J-M knew that this implicit representation was untrue and that it intended its workers, including plaintiff, to rely upon it in reporting for work every day. Plaintiff did rely upon it to his detriment.

Met Life Aided And Abetted J-M's Intentional Wrongs

The evidence discussed above makes clear that for the better part of two decades Met Life knew through Lanza and others in the Industrial Hygiene section of its Welfare Division that J-M was routinely exposing its workers to levels of asbestos dust that could cause asbestosis. Met Life knew that asbestosis was a very serious disease which had proven to be fatal in some cases. It knew that asbestosis was dose dependent and that continuing to

expose workers to more asbestos would increase both the likelihood that they would be injured and the severity of their injuries. It also knew that J-M was not posting common language warnings of the type Met Life had previously recommended in other contexts. And it knew from the studies it performed for J-M and the surveys it conducted of various J-M plants as late as 1950, that, contrary to Lanza's public claims on behalf of the industry, whatever efforts J-M had made to reduce dust exposure over the years, they were not succeeding. Met Life thus "had actual knowledge of the specific primary wrong" (Casey v. U. S. Bank Nat. Assn. (2005) 127 Cal. App. 4th 1138, 1144) being perpetrated by J-M on its asbestos workers through 1950. Given Met Life's knowledge of J-M's similar efforts to conceal the dangers of exposure to diatematious earth at its Lompoc, California facility through 1952 it is reasonable to infer that Met Life's knowledge concerning the intentional exposure to asbestos fibers and the concealment of the health risks from those exposures continued at least through that time period.

During that same time period, and with knowledge of the specific primary wrong, Met Life provided J-M with "substantial assistance" in many forms. Met Life volunteered to undertake studies of J-M and other asbestos plant workers, and provided J-M and the others with the results of those studies as well as its recommendations. It volunteered to continue reading plant worker x-rays and conducting air samples, and did so. It trained J-M employees so that they could continue sampling on their own, and made themselves available to interpret the results. It made its people available for "more candid" consultations at Met Life's

office. It acceded to J-M's requests, made for political and legal, not scientific reasons, to edit the published 1935 study results and facilitated the omission of the cancer data from the Gardner materials in the late 1940s. It provided advice to J-M at the level of individual plant doctors, as in the Q&A Memo, and at the level of the corporate office on numerous issues related to the manner in which J-M could find out more about the dangers of asbestos and take steps to protect itself and its workers, while not sharing that information with its workers or with the working public. And, it used Dr. Lanza's preeminent position in industrial hygiene to help J-M find eminent experts who could testify for it and minimize the dangers of exposure to asbestos in contacts with legislators and regulators.

Met Life disputes the significance of Lanza's "public relations" efforts and presented evidence that at least some were based on good science at the time. The Court does not accept that argument, based on the weight of the evidence. Moreover, given "that even 'ordinary business transactions' [the alleged aider and abetter] performs for a customer can satisfy the substantial assistance element of an aiding and abetting claim if [it] actually knew those transactions were assisting the customer in committing a specific tort" (*Casey, supra*, 127 Cal. App. 4th at 1145) that argument is largely beside the point. J-M wanted the dangers of asbestosis minimized and the potential link between asbestos and cancer concealed as long as possible to serve its self-interest, not for scientific purposes. Met Life provided substantial assistance in accomplishing those goals. J-M wanted to keep its employees largely in the dark about the serious health risks to which it was exposing them while taking steps to reduce those

risks when consistent with the company's perceived economic interests. Met Life substantially assisted J-M through the many ways shown by the documentary evidence of consultations, plant studies, evaluations of x-rays and advice described above.

Further, the absence of any evidence of Met Life advising J-M corporate executives in Lanza's many meetings with them to warn its workers; to provide candid assessments of x-ray results to workers; or to remove all workers with early signs of lung disease from exposure to asbestos supports the inference that Met Life never counseled J-M to take these steps. That inference is further supported by the affirmative evidence of Met Life's willingness to make exceptions to the accepted standards it acknowledged in scholarly works when necessary for economic reasons, such as production and litigation/workers' compensation exposure reasons. Given Met Life's pre-eminent position in industrial hygiene and occupational medicine at the time, its failure to give such counsel to J-M plainly assisted J-M in failing to address the problem appropriately.

Causation

Plaintiff has argued that there were two ways in which the asbestos hazard to plaintiff and other J-M plant workers could have been decreased or eliminated—worker warnings and dramatic reduction of dust levels. With respect to warnings, as is discussed in more detail above, the evidence supports a finding that Met Life's advice not to provide workers with warnings was given, was received and was followed by J-M. The evidence is also clear that despite

its commitment to provide workers with health warnings itself, and the many examples of such common language warnings circulated by Met Life over a period of about 40 years, it chose not to provide any such warning, which made it easier for J-M to continue its policy and practice of not warning workers.

This is not to ignore the evidence of J-M's strong desire to cover up the dangers to which its workers were exposed throughout the relevant period even as it followed some of Met Life's advice concerning physical examinations, x-rays, dust counts and dust reduction. Rather, it is to find that Met Life was a substantial factor in J-M's conduct in failing to warn its workers, which conduct continued through plaintiff's period of employment.

Plaintiff has introduced substantially more evidence of causation of plaintiff's injuries in this case than the Court found to be insufficient as a matter of law in *Saelzer, supra*. As the Court in *Rutherford* cautioned, too much weight should not be placed on the word "substantial." The Court need not and does not find that Met Life's advice was the only cause of J-M's failure to provide worker warnings. But the record in this case contains ample evidence making it more likely than not the advice was a substantial factor within the meaning of established California law throughout the relevant time period -- even though Met Life's role in J-M's industrial hygiene program apparently ended in the early 1950s. No persuasive evidence was presented that J-M had any reason to change the course upon which Met Life helped to place it. And it did not.

As to reduction of dust levels, although Met Life did counsel dust reduction through technology, Met Life went along with adopting the industry standard of 5

MMPC despite its research showing that J-M workers who were exposed to smaller levels showed signs of illness. Met Life facilitated J-M's desire to delete Gardner's cancer observations from the published 1951 Saranac report. That report, together with Vorwald's earlier article provided ammunition for industry spokesmen to help convince the ACGHI TLV Committee not to drop the TLV for asbestos. The evidence was not really disputed that once an industry acknowledged a link between a dangerous substance and cancer, as they had for nickel carbonyl during the early and mid 1950s the TLV was promptly lowered dramatically. The same thing happened with asbestos in the early 1970s, when the industry could no longer credibly deny it.

Although the evidence is that from 1958 on the Braun-Truan report played a major role in delaying the reduction of the TLV for asbestos and Met Life played no active role in the editing of that report, it is more probable than not that the suppression of the Gardner cancer observations from 1948 on kept the debate with the industry spokesmen, like Lanza and Vorwald, alive until the publication of Braun-Truan. That conduct was a link in the chain that resulted in the delay in reducing the TLV until it was too late to benefit plaintiff. Hence plaintiff's evidence of causation with respect to Met Life's acquiescence in an unsafe TLV and suppression of the Gardner findings also meets the substantial factor test under California law.

Damages

Henry Plooy's non-medical economic damages amount to \$613,007, present day value, as set forth in Robert Johnson's undisputed economic

analysis. (PE 1717). Past medical expenses total \$925,000 according the uncontested testimony of Dr. Barry Horn. (Horn Tr., 1-23-08, p. 46). Future medical expenses are likely to total \$500,000, which according to Robert Johnson's report (PE 1717), has a present day value of \$502,362. Total economic damages are \$2,040,369.

Plaintiff has not been cured of the mesothelioma. Malignant tissue is still present in his chest, following an operation to remove a lung, lining of the lung, part of the diaphragm, and part of his pericardium. (Horn Tr., pp. 32:12-33:8, 48:19-49:10). He will have chemotherapy, assuming he agrees to continue to be managed aggressively. (*Id.*, pp. 48:7-17, 51:1-11). But his life expectancy, based on the average for this disease, is twenty-four months from March, 2007. (*Id.*, pp. 57:12-19). The terminal stages of this disease for Mr. Plooy will be marked with very considerable pain, heavy narcotics, shortness of breath, debilitating weight loss, and necessity of constant care, including hospitalization on more than one or two occurrences. (*Id.*, pp. 53:4-56:24).

The evidence was undisputed that mesothelioma is one of the worst injuries from which anyone can suffer, and that Mr. Plooy is suffering from one of the worst courses for mesothelioma (Horn Tr., pp. 40-41; p. 55). The disease will result in future hospitalizations (*Id.*, p. 56), intense pain (*Id.*, p. 53-54,) nausea and vomiting from chemotherapy (*Id.*, p. 50), extreme shortness of breath resulting in suffocation (*Id.*, p. 55), large doses of narcotics (*Id.*, p. 55), and will require 24 hour, 7 days a week nursing care (*Id.*, p. 55). In addition the evidence of Mr. Plooy's emotional and mental distress and his knowledge and distress of the years of life he planned to enjoy is compelling. I find Henry Plooy's non-economic damages to be \$6,000,000.00.

Joanne Plooy met Henry when she was 16, they married when she was 17 and together have raised 6 children and have 14 grandchildren. The testimony is

that they did everything together and were inseparable. (Heidi Brandner Tr., 1-28-08, p. 20; Joanne Plooy Tr., 1-30-08, p. 52.) He doted on her, taking her on the most mundane errands in order to be together. They were looking forward to a comfortable retirement continuing to enjoy their family and their relationship. That has all changed now and Joanne is primarily a caretaker and nurse. Mr. Plooy describes her as "an angel." I find Joanne Plooy's non-economic damages to be \$3,000,000.00.

CONCLUSION

The Court will shortly be issuing its rulings on the relatively few exhibits as to which rulings were reserved at trial. Pursuant to Rule 3.1590(f), California Rules of Court, unless objections are filed and served within 15 days of the service of this Proposed Statement of Decision or within such other time as the parties may agree upon in a stipulation and proposed order, judgment will be entered in the form appended hereto.

Dated: March, 2008.	
	Judge of the Superior Court

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA IN AND FOR THE COUNTY OF ALAMEDA

HENRY PLOOY and JOANNE PLOOY,	No. RG 07329961
	[PROPOSED JUDGMENT]

Plaintiffs,

VS.

METROPOLITAN LIFE INSURANCE COMPANY, et al.,

Defendants.

Dept: 17

Action Filed: June 8, 2007 Trial Date: January 16, 2008

For the reasons set forth in the Statement of Decision filed herewith, it is ORDERED, ADJUDGED AND DECREED that plaintiff Henry Plooy shall have judgment against defendant Metropolitan Life Insurance Company in the amount of \$8,040,369. Plaintiff Joanne Plooy shall have judgment against defendant Metropolitan Life Insurance Company in the amount of \$3,000,000. Plaintiffs shall recover their costs herein.

Dated: April ___, 2008.

Judge of the Superior Court