

**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

MARILYN F. QUIRIN, Special)	
Representative of the Estate of)	
RONALD J. QUIRIN, Deceased,)	
)	Judge Joan B. Gottschall
Plaintiff,)	
)	Case No. 13 C 2633
v.)	
)	
LORILLARD TOBACCO COMPANY,)	
et al.,)	
)	
Defendants.)	

MEMORANDUM OPINION & ORDER

Plaintiff Marilyn F. Quirin, special representative of the estate of Ronald J. Quirin (“Quirin”), has sued defendant Crane Co. on a negligence theory, alleging that Mr. Quirin developed and died from mesothelioma substantially caused by his exposure to asbestos-containing materials while working with Crane Co. valves during his naval service. Now before the court is Crane Co.’s motion for summary judgment. Crane Co. argues that it owed no legal duty to Mr. Quirin and therefore cannot be held liable for negligence. Because a genuine dispute of fact exists as to whether Crane Co. owed a duty to Mr. Quirin and whether Crane Co.’s products were a proximate cause of his injuries, the motion is denied.

I. LEGAL STANDARD FOR SUMMARY JUDGMENT

Summary judgment is appropriate when the movant shows there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law. Fed. R. Civ. P. 56; *Smith v. Hope Sch.*, 560 F.3d 694, 699 (7th Cir. 2009). “[A] factual dispute is ‘genuine’ only if a reasonable jury could find for either party.” *SMS Demag Aktiengesellschaft v. Material Scis. Corp.*, 565 F.3d 365, 368 (7th Cir. 2009). The court ruling on the motion construes all facts and

makes all reasonable inferences in the light most favorable to the nonmoving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). Summary judgment is warranted when the nonmoving party cannot establish an essential element of its case on which it will bear the burden of proof at trial. *Kidwell v. Eisenhower*, 679 F.3d 957, 964 (7th Cir. 2012).

II. FACTS

Mr. Quirin was diagnosed with mesothelioma on or about December 27, 2011. In 2012, Mr. Quirin and his wife, Marilyn, filed a complaint against numerous defendants in the Circuit Court of Cook County, alleging claims for injuries caused by asbestos exposure. Mr. Quirin passed away on March 31, 2013, and Mrs. Quirin was appointed his executor. The case was removed to federal court on diversity grounds in April 2013, and Plaintiff's Fifth Amended Complaint was filed in this court on April 26, 2013. The defendants that remain in the case are Crane Co., Georgia-Pacific LLC, Hollingsworth & Vose Co., and Lorillard Tobacco Co. Against each defendant, Quirin brings negligence claims under the Wrongful Death Act and the Illinois Survival Act. Quirin alleges that the defendants failed to exercise ordinary care and caution in various ways, such as by including asbestos in their products, marketing and distributing products containing asbestos, failing to provide warnings to people working around the products, and failing to provide instructions as to safe methods for working with asbestos-containing products.

Crane Co. has moved for summary judgment on Quirin's negligence claims. For purposes of the motion, the court takes the following facts from the parties' Local Rule 56.1 Statements of Facts ("SOFs"), to the extent that they are supported by admissible evidence and relevant to issues raised in Crane Co.'s motion.

Quirin's allegations against Crane Co. focus exclusively on the period of Mr. Quirin's naval service. Mr. Quirin enlisted in the United States Navy in September 1953. After basic training and machinist mate school, his first naval assignment was aboard the *USS Tolovana*, from May 1954 to August 1957. The *Tolovana* was a fleet tanker built during World War II, approximately nine years prior to Mr. Quirin's service. Mr. Quirin first worked as an apprentice machinist and was then promoted to machinist mate third-class. He was assigned to take care of auxiliary pumps, steam lines, and winches aboard the ship.

In performing his machinist mate duties, Mr. Quirin had to remove or repair valves when they no longer sealed properly. Crane Co. sold industrial valves, used to control the flow of fluids. Quirin's expert in Navy practices, Captain William Lowell, testified that he reviewed documents for the original construction of the *Tolovana*, which indicated that the ship utilized over a thousand Crane Co. valves. Mr. Quirin, who was deposed twice before his death, also recalled that Crane Co. was the main brand of valve present on the *Tolovana* and that the Crane valves were embossed with the brand's name.

Crane Co. valves were made of metal. The metal in the valves was not itself the source of any asbestos fibers. Quirin alleges, however, that Mr. Quirin worked with asbestos-containing gaskets, packing material, pipe covering, and insulation that were used with Crane Co. valves, and that he inhaled asbestos fibers emanating from those materials. Gaskets are sealing devices used to seal the connection points between equipment and piping, in between lengths of piping, and inside certain equipment. Some of the valves on the *Tolovana* attached to adjacent piping with bolted flanges, which were sealed with "flange gaskets." Packing is a sealing device used to create a seal around moving parts, such as in the stem of a valve.

Not all of the gaskets and packing used with the valves contained asbestos. The Navy also used gaskets made of rubber, paper, leather, canvas, and metal, and packing made of cotton, flax, ramie, rayon, lead, leather, and carbon. But Crane Co. knew that some of its valves would be used in high-temperature operations. Quirin's expert Dr. Carl Brodtkin testified that the "gasket and packing material that during that timeframe in the hot steam-powered applications that [Mr. Quirin] was working with would have to a high degree of medical certainty represented [sic] asbestos-containing materials." (Pl.'s SOF Ex. 3 (Brodtkin Dep.) 48:23-49:1.) Captain Lowell testified, "It would be my opinion, more likely than not, that the Crane valves had asbestos packing. And on those valves that didn't have metallic bonnet gaskets, such as the cargo system or the low pressure steam system like was up on deck, it would be my opinion, more likely than not, that the bonnet had sheet asbestos gaskets." (Pl.'s SOF Ex. 2 (Lowell Dep.) 68:4-19.)

Pipe covering and insulation were other sources of asbestos fibers to which Mr. Quirin was allegedly exposed. Some pipelines on the *Tolovana* were insulated externally. Captain Lowell testified that the Maritime Administration specifications for class T3-S2 tankers such as the *Tolovana* specified 85 percent magnesia insulation (which contained up to 15 percent asbestos), and that, in his opinion, that type of insulation would have been used on the ship. (Def.'s SOF Ex. D (Lowell Dep.) 30:3-19.) Captain Lowell did not know the manufacturer of the pipe insulation used on the *Tolovana*. The valves in the insulated pipelines had to be at least partially insulated as well. Mr. Quirin testified that the valves he encountered were insulated "up to the flange," but not in their entirety. The valves were not pre-insulated when they were supplied by Crane Co. The shipbuilder (whose identity is not in the record) insulated them after they were installed.

Mr. Quirin testified that he worked on the valves, although he could not say how often he did this work. He fabricated individual gaskets by cutting them out of larger sheets of gasket material. To access the valves, Mr. Quirin had to cut back the insulation, a process that took 15-30 minutes and created dust, which he breathed. He next had to remove the old gasket from the valve flanges with a wire brush or chisel. This also created dust, which he breathed. Mr. Quirin also removed stem packing from valves. He had to take the cover, or bonnet, off the valve, removing the bonnet gasket. (Pl.'s SOF Ex. 1 (Quirin Dep.) 33:12-23.) He then removed the stem packing from the valve with a tool. (*Id.* at 34:2-5.) The removal of the stem packing created debris and fiber. (*Id.* at 34:15-16.) Mr. Quirin then replaced the bonnet gasket and the flange gasket. (*Id.* at 34:17-35:15.) Once a valve was in place, Mr. Quirin had to reinsulate it. This often required cutting round, two-piece pipe insulation with knives, which created dust and debris which Mr. Quirin breathed. He then had to "mud" the area around the valve, up to the flanges. Mr. Quirin mixed the insulating mud himself, which created dusty conditions.

Dr. Brodtkin opined that many of the materials Mr. Quirin removed to access the valves he repaired on the *Tolovana*, including blankets, insulating cement, and pipe covering, would likely have contained asbestos. He concluded that these materials would have been regular sources of exposure to asbestos while Mr. Quirin worked in the pump rooms and deck winches. Dr. Brodtkin opined that work with the pumps and valves constituted significant components of Mr. Quirin's cumulative exposure to asbestos.

Crane Co. did not manufacture asbestos-containing materials itself, but some Crane Co. valves contained an internal bonnet gasket and internal stem packing at the time of shipment, which could have contained asbestos. (Pl.'s SOF Ex. 4 (Pantaleoni Dep.) 160:18-161:3.) Crane Co. also sold asbestos-containing gaskets and packing separately for use with its valves. Crane

Co. sold an asbestos-containing sheet packing material branded as “Cranite” from approximately 1920 to the mid-1970s. Cranite packing was composed of 75-85 percent asbestos and was never sold in an asbestos-free alternative. In addition, Crane Co. purchased asbestos-containing gaskets and packing for use as component parts with its valves from third parties, including Garlock and Johns-Manville, and resold those products. Crane marketed and advertised Johns-Manville pre-shrunk asbestocel insulation for use in processes with temperatures up to 300 degrees Fahrenheit, and magnesia-asbestos insulation for use with valves operating at temperatures up to 600 degrees Fahrenheit. Crane Co. also sold Johns-Manville insulating cement for external application on its valves. Crane Co. shipped valves containing asbestos-containing gaskets and packing from its facilities and sold asbestos-containing replacement gaskets, packing, and insulation from its network of supply houses. Non-asbestos materials were available from the company as well. Crane advertised that it could provide “[e]verything for the job.” (Pl.’s SOF Ex 17 (1946 Crane Co. Advertisement).)

Gaskets and packing were “wear” items that the Navy replaced with some frequency. Crane Co. knew that the packing and gasket material would be removed and replaced if the valve itself were still serviceable. Captain Lowell testified that it is more likely than not that any original gaskets or packing supplied with Crane Co. valves at the time of the *Tolovana*’s construction would have been changed out several times before Mr. Quirin arrived on the ship. Mr. Quirin testified that he did not know whether the flange gaskets or packing material in pumps were replaced before his service on the ship began. (Def.’s SOF Ex C (Quirin Dep.) 151:211-152:2.)

There is no direct evidence that Crane Co. supplied any replacement gaskets or packing that Mr. Quirin used on board the *Tolovana*, any “flange gaskets,” or any of the insulation

affixed to the exterior of the valves. Quirin acknowledges that adequate substitutes for use with Crane Co.'s products existed. He did not recall the manufacturer of the insulation, gaskets, or packing that he encountered while working on Crane Co. valves. Mr. Quirin testified that he did not know whether he had changed packing that was original to a Crane Co. valve. (Def.'s Mot. Summ. J. Ex. A (Quirin Dep.) 150:25-151:8.) Sometimes Mr. Quirin removed old valves and replaced them with new ones. There were also times when he repaired valves he had installed himself.

Mr. Quirin did not recall seeing any warnings on Crane Co. valves. It is undisputed that the only warning ever associated with a Crane valve regarding asbestos was a permanent warning tag Crane Co. attached to its asbestos-containing valves in the mid-1980s. The tag did not mention the risk of cancer. It stated the valve contained asbestos-containing gaskets or packing.

Dr. Andrew M. Harvey, a doctor associated with Crane Co., was a member of the National Safety Council ("NSC") as early as 1914. Crane Co. was a member of the NSC in 1939.¹ By 1951, the NSC informed its members that "[a]t the present time, it is generally agreed that the most important sources of Industrial Diseases of the lungs are free or uncombined silica and asbestos." Crane Co. engineer Thomas Ireland became a member of the American Society of Mechanical Engineers ("ASME") in 1934. ASME published a trade magazine called *Mechanical Engineering* which contained articles dealing with the hazards of dust and occupational diseases, including asbestos-related disease.

¹ Crane Co. disputes that it was a member of the NSC in 1939, arguing that the exhibit cited by Quirin, *Transactions of the 28th National Safety Congress* 408 (October 1939), is not legible. The court has examined the exhibit and finds it legible. It lists "Dr. J. H. Chivers, The Crane Co., Chicago, Ill." as an officer of the Health Committee. (Pl.'s SOF Ex. 9.)

Crane Co. and its former director of engineering may have been a member of, or participated on committees of, the American Petroleum Institute (“API”). (Pl.’s SOF Ex. 13 (Def.’s Answer to Interrogatories) 9.) In 1945, the API published a report which noted, “[t]here are many substances . . . which have been reported as having similar cancer producing ability. Among these may be mentioned asbestos” In 1951, the API released a study confirming, “reports of eight deaths due to cancer among insulators . . . two were reported as bronchogenic cancer, two as lung cancer, one rectum, on GI track, one bladder and one peritoneum, the latter being possible mesothelioma.”

During the 1940s, Crane Co. advertised in magazines in which the risks of asbestos exposure were discussed. In 1946, Crane Co. advertised in an issue of *Southern Power and Industry* magazine that reported that asbestos dust was “toxic.” Crane Co. also advertised in a later issue which reported, “there are certain dust exposures which may result in acute health hazards. This is especially true of dust containing . . . free silica, asbestos, or other toxic materials.”

Crane Co. sold asbestos-containing valves as early as 1858 and did not stop using asbestos-containing materials until the mid-1980s, when asbestos was eliminated from Crane Co. products because of decreased consumer demand for products that incorporated asbestos and Crane Co.’s inability to obtain asbestos-containing components.

III. ANALYSIS

Crane Co. argues that it had no legal duty to warn Mr. Quirin of the dangers of asbestos-containing materials manufactured and supplied by other entities. Although those materials were used in connection with or in proximity to its own products, it did not make, sell, or otherwise place those materials into the stream of commerce. It further argues that Quirin has produced no

evidence that Crane Co. itself manufactured or supplied any of the asbestos-containing materials to which Mr. Quirin was exposed. According to Crane Co., although it sold valves that incorporated, at the time of sale, internal gaskets and stem packing containing asbestos, there is no evidence that Mr. Quirin encountered those materials, given that his service on the *Tolovana* began nine years after the ship was built. Crane Co. argues that any original gaskets and packing it supplied would have worn out and been replaced before Mr. Quirin boarded the ship.

A. The Applicable Law

The court must first decide what law governs this case: maritime law or the law of Illinois. Quirin asserts that it is “undisputed” that Illinois law applies but provides no explanation of why that is the case. (Pl.’s Mem. in Opp. to Mot. for Summ. J. 2 n.2.) Crane Co. suggests that the governing law “may” be maritime law, but it argues that there is no conflict between Illinois law and maritime law on the question of whether Crane Co. owed Mr. Quirin a legal duty.

This case was removed to federal court based on diversity jurisdiction, pursuant to 28 U.S.C. § 1332. The fact that the case is before this court pursuant to diversity rather than admiralty jurisdiction, however, “does not preclude the application of maritime law.” *Carey v. Bahama Cruise Lines*, 864 F.2d 201, 206 (1st Cir. 1988); *see also Kermarec v. Compagnie Generale Transatlantique*, 358 U.S. 625, 628 (1959) (“[Plaintiff] was injured aboard a ship upon navigable waters. It was there that the conduct of which he complained occurred. The legal rights and liabilities arising from that conduct were therefore within the full reach of the admiralty jurisdiction and measurable by the standards of maritime law.”).

Whether maritime law governs a tort action turns on two factors: (1) whether the situs of the tort was maritime, and (2) whether the tort bore a significant relationship to traditional

maritime activity; these are also referred to as the “location” and “nexus” tests. *See Jerome B. Grubart, Inc. v. Great Lakes Dredge & Dock Co.*, 513 U.S. 527, 534 (1995); *Carey*, 864 F.2d at 206 (citing *Foremost Ins. Co. v. Richardson*, 457 U.S. 668, 673 (1982)); *Lambert v. Babcock & Wilcox, Co.*, 70 F. Supp. 2d 877, 883 (S.D. Ind. 1999).

Here, both requirements for the application of maritime law are satisfied. The alleged exposure to asbestos occurred during Mr. Quirin’s naval service, specifically while he performed maintenance on a vessel that traveled in navigable waters.² The “location” test is thus satisfied because the alleged asbestos exposure occurred on a vessel on navigable waters, while the “nexus” test is satisfied because the alleged exposure arose as a result of Mr. Quirin’s sea-based work maintaining the vessel. The asbestos MDL court, applying Third Circuit law, has similarly concluded that, if an allegedly defective product was produced for use on a naval vessel, an ensuing tort inflicted on a sea-based service member working on that vessel is governed by maritime law. *See, e.g., Salisbury v. Asbestos Corp. Ltd.*, No. 2:12-60168, MDL No. 875, 2014 WL 345214, at *3 (E.D. Pa. Jan. 29, 2014); *Conner v. Alfa Laval, Inc.*, 799 F. Supp. 2d 455 (E.D. Pa. 2011). *See also Cabasug v. Crane Co.*, No. 12-00313 JMS/BMK, 2013 WL 3855548, at *7-10 (D. Haw. July 25, 2013) (applying maritime law where exposure to asbestos occurred while ship was in dry dock); *Lambert*, 70 F. Supp. at 884 (“Unsafe working conditions aboard a vessel have consistently been held to pose a potentially disruptive impact upon maritime commerce.”); *Wells v. Liddy*, 186 F.3d 505, 524 (4th Cir. 1999) (“All cases involving a tort committed on navigable water, whether brought under federal admiralty jurisdiction, in state

² During the time of Mr. Quirin’s service, the *Tolovana* was deployed annually to the western Pacific, where it provided logistical support to troops and even assisted in evacuating French and Vietnamese from North Vietnam. *See* <http://www.usstolovana.org/html/history.html>.

court . . . , or in federal court under diversity jurisdiction, are governed by admiralty law.” (internal quotation marks omitted)).

Although it may, as Crane Co. argues, be a distinction without a difference at this point in the litigation, the court concludes that maritime law governs Quirin’s negligence claims against Crane Co.

B. Quirin’s Negligence Claims

The elements of a negligence action under maritime law are “essentially the same as land based negligence under the common law.” *Pearce v. United States*, 261 F.3d 643, 647 (6th Cir. 2001) (quoting 1 THOMAS J. SCHOENBAUM, ADMIRALTY AND MARITIME LAW § 5-2, at 170 (3d ed. 2001)). Under maritime law, “to prevail in a negligence action, a plaintiff must establish that the defendant’s breach of duty is the but-for and proximate cause of the injury complained of.” *In re Deepwater Horizon*, ___ F.3d ___, 2014 WL 103836, at *27 (5th Cir. Jan. 10, 2014). Thus, the threshold question before the court is whether Crane Co. owed Mr. Quirin a duty of care. A duty of care under maritime law may encompass a failure to warn the plaintiff of harm that is reasonably foreseeable; the duty depends on the defendant’s knowledge of the risk. *Daible v. Point Landing, Inc.*, 616 F.2d 825, 827 (5th Cir. 1980). *See also Filer v. Foster Wheeler, LLC*, ___ F. Supp. 2d ___, 2014 WL 345221, at *5 (E.D. Pa. Jan. 29, 2014) (“[M]aritime law recognizes both strict product liability causes of action (i.e., defective warning or defective design) and a negligent failure-to-warn cause of action.”). The existence of a legal duty, given a set of facts, is a question of law for the court to decide. *See* 57A Am. Jur. 2d Negligence § 78 (2014) (collecting state-law cases); *In re Garvey Marine, Inc.*, 424 F. Supp. 2d 1109, 1114 (N.D. Ill. 2006) (“In maritime cases, as in land-based negligence cases, the determination of a legal duty is a question of law.”).

Crane Co. argues that Quirin has produced no evidence that it supplied or manufactured any asbestos-containing material to which Mr. Quirin was exposed while working on the *Tolovana*. Therefore, it contends, it owed no duty to Mr. Quirin, and Quirin cannot meet a threshold requirement for a negligence claim. Crane Co.'s arguments in support of its motion for summary judgment raise two questions. First, did Crane Co. have a duty to warn Mr. Quirin of hazards arising from other manufacturer's products, where Crane Co. itself did not supply those products? And second, has Quirin presented sufficient evidence to create a triable question of fact as to whether Mr. Quirin was exposed to asbestos-containing products that were manufactured or supplied by Crane Co. itself? Each question requires the court to carefully examine the evidence in the record. *See Cabasug*, 2013 WL 6212151, at *6 (emphasizing that in asbestos cases, courts should not apply tests "by rote," but must instead examine "the particular facts presented").

1. Duty to Warn of Hazards of Other Manufacturers' Products

Crane Co. correctly points out that it cannot be liable for a manufacturing defect in an asbestos-containing product that it did not make or supply. In *Lindstrom v. A-C Products Liability Trust*, 424 F.3d 488, 494-95 (6th Cir. 2005), for example, the Sixth Circuit granted summary judgment in a maritime asbestos case in favor of a valve manufacturer, where "it would have been impossible for [the plaintiff] to have handled any original packing or gasket material attributable to [the defendant], and the plaintiff did not name the defendant "as one of the companies that manufactured replacement valve packing containing asbestos." *Id.* at 494.

Lindstrom did not discuss a failure-to-warn claim, however, and the question concerning the court at the moment is not whether Crane Co. is liable for supplying a product in a defective or unreasonably dangerous condition, but whether Crane Co. was required to warn Mr. Quirin of

hazards related to asbestos-containing materials supplied by third parties that were used in connection with Crane Co.'s valves.

Crane Co. points to various cases in which courts have concluded that manufacturers like Crane Co. are not liable for the dangers of asbestos-containing replacement parts supplied by a third party. *See, e.g., O'Neil v. Crane Co.*, 266 P.3d 987, 995-96 (Cal. 2012); *Simonetta v. Viad Corp.*, 197 P.3d 127 (Wash. 2008); *Braaten v. Saberhagen Holdings*, 198 P.3d 493, 495-500 (Wash. 2008). This is sometimes referred to as the "bare metal defense." *See, e.g., Various Plaintiffs v. Various Defendants*, 856 F. Supp. 2d 703, 712 (E.D. Pa. 2012). Although most of these cases were decided under state law, the application of maritime law does not require a different analysis. Indeed, "maritime law is an amalgam of traditional common-law rules, modifications of those rules, and newly created rules," and it often relies on state sources. *E. River S.S. Corp. v. Transamerica Delaval, Inc.*, 476 U.S. 858, 865 (1986). The asbestos MDL court in Pennsylvania, applying maritime law, has also recognized the "bare metal defense." *Various Plaintiffs*, 856 F. Supp. 2d at 712 (citing *Conner v. Alfa Laval, Inc.*, 842 F. Supp. 2d 791, 800-01 (E.D. Pa. 2012)).

Not all courts have strictly applied this rule, and even the asbestos MDL court has recognized exceptions to it. In *Salisbury*, the asbestos MDL court rejected a shipbuilder's argument that it had no duty to warn about asbestos insulation installed on a ship unless the plaintiff could "establish that the asbestos insulation to which he was exposed is the same asbestos insulation that Defendant originally installed aboard the ship (as opposed to replacement insulation later installed by the shipowner)." *Salisbury*, 2014 WL 345214, at *8. The court concluded that it fell to the jury "to determine whether Defendant's failure to warn about the insulation at issue (whether original or replacement insulation) was reasonable under the

circumstances.” *Id.* Other district courts have broadly construed the duty to warn, so that the foreseeable use of a defendant’s product in connection with asbestos-containing materials supplied by a third party created a duty to warn on the part of the defendant. *See, e.g., Chicano v. Gen. Elec. Co.*, No. Civ.A 03-5126, 2004 WL 2250990, at *6 (E.D. Pa. 2004) (applying Pennsylvania law to find “a genuine issue of material fact as to whether . . . GE could reasonably foresee that its turbines would be combined with asbestos-containing insulation, which together constituted a defective product, absent appropriate warnings of the dangers of asbestos.”).

The divergent conclusions reached in these cases cannot be completely reconciled. By the court’s reading of the cases, three approaches to the problem at hand have been employed. Some courts have concluded that a defendant is liable whenever the use of asbestos in connection with its product is foreseeable. *See, e.g., Chicano*, 2004 WL 2250990, at *6. Conversely, other courts have concluded that a defendant is never liable when the material containing asbestos was supplied by a third party. *See, e.g., Cabasug*, 2013 WL 6212151, at *12. Finally, some courts have followed a middle road, finding a duty where the use of asbestos-containing materials was specified by a defendant, was essential to the proper functioning of the defendant’s product, or was for some other reason so inevitable that, by supplying the product, the defendant was responsible for introducing asbestos into the environment at issue. *See, e.g., Salisbury*, 2014 WL 345214, at *8.

This court will follow that middle path. In general, consistent with the bare metal defense, a manufacturer is not liable for materials it did not supply. But a duty may attach where the defendant manufactured a product that, by necessity, contained asbestos components, where the asbestos-containing material was essential to the proper functioning of the defendant’s product, and where the asbestos-containing material would necessarily be replaced by other

asbestos-containing material, whether supplied by the original manufacturer or someone else. For example, in *Salisbury*, the defendant shipbuilder used asbestos-containing insulation strips in constructing the ship. The MDL court, which has generally accepted the bare metal defense, concluded that a duty to warn of the hazards of asbestos attached because the shipbuilder itself used asbestos, even if the strips were later replaced with strips made by a different manufacturer. 2014 WL 345214, at *8. The California Supreme Court, which approved of the bare metal defense in *O'Neil*, also left room for an exception to the rule. It qualified its conclusion that the defendant, Crane Co., could not be held liable for products manufactured by third parties by noting that “the evidence did not establish that the defendants’ products *needed* asbestos-containing components or insulation to function properly. It was the Navy that decided to apply asbestos-containing thermal insulation to defendants’ products and to replace worn gaskets and packing with asbestos-containing components.” 266 P.3d at 1004 (emphasis added). Here, in contrast, the record contains sufficient evidence for a reasonable jury to conclude that Crane Co.’s valves required asbestos-containing components to function in the high-heat applications for which they were marketed. On those facts, a duty to warn of foreseeable risks could attach.

This is in contrast to a situation where the asbestos-containing material at issue was used in proximity to the manufacturer’s product, but the product was not specifically designed to incorporate asbestos. Under these circumstances, the hazard resulted only from the dangerous proximity of the products. As the California Supreme Court explained, manufacturers are not required to investigate and warn of “the potential risks of all other products” that might be used with their own product. *Id.* at 1006. The duty attaches only when the manufacturer incorporated the asbestos-containing material into its product, meaning that asbestos would inevitably be introduced into the stream of commerce along with the product.

Applying this distinction to the case at hand, the court concludes that a reasonable jury could find facts that imposed upon Crane Co. a duty to warn Mr. Quirin about asbestos exposure resulting from gaskets and packing used with its valves, even if it did not supply the gaskets and packing actually encountered by Mr. Quirin. Quirin has pointed to evidence indicating that at least some of Crane Co.'s valves *needed* asbestos-containing components to function properly in the high-heat applications on the *Tolovana* for which they were supplied. Crane Co. was aware that its valves would be used in high heat applications, and it provided specifications for such use. Asbestos was used in gaskets and packing because of its resistance to heat; that is why Crane Co. valves were supplied with asbestos-containing materials in the first place. Although Crane Co. cites evidence that non-asbestos materials could be used with Crane Co. valves, nothing in the record indicates that such materials were suitable for high-heat applications, and Quirin's expert Brodtkin opined that the "gasket and packing material . . . in the hot steam-powered applications" would have contained asbestos. Quirin's expert Lowell offered a similar opinion. Furthermore, even if replacement gaskets and packing for the Crane Co. valves were supplied by a third party, it is reasonable to infer that those replacement parts would have been substantially identical to the components originally supplied by Crane Co. Given these facts, a reasonable jury could find that Crane Co. had a duty to warn about the hazards of asbestos exposure resulting from work on its valves.

In contrast, Crane Co. had no duty to warn Mr. Quirin about asbestos-containing insulation, pipe coverings, or cement, where it did not supply the original insulation and other materials used with the piping systems into which its valves were incorporated. The record contains no evidence that Crane Co. specified that its valves had to be used with asbestos-containing insulation or that the valves required such insulation to function properly.

The court acknowledges that its conclusion differs from that reached by those courts that have relied on the “bare metal defense” to strictly limit liability where a manufacturer did not make the actual product allegedly causing asbestos exposure. It is not convinced, however, that a manufacturer should avoid liability on a failure-to-warn theory, where it designed its products to be used with asbestos-containing materials and actually incorporated asbestos-containing materials into the products it sold. On those facts, a jury could conclude that it was not just foreseeable, but inevitable, that the product would subject those working with it to the possible hazards of asbestos exposure. The manufacturer of the product was in a position to warn of dangers apparent at the time the product was sold.

2. Circumstantial Evidence of Exposure to Crane Co. Products

It is undisputed that a manufacturer is liable for harm resulting from design or manufacturing defects in its own products and is liable for harm resulting from its negligent failure to warn of the risks created by its own products. *See Conner v. Alfa Lavel, Inc.*, 842 F. Supp. 2d 791, 796-97 (E.D. Pa. 2012) (citing Restatement (Third) of Torts: Prods. Liab. § 2 (1998)). Drawing reasonable inferences in favor of Quirin for purposes of the motion for summary judgment, a reasonable jury could conclude that Crane Co. supplied asbestos-containing materials to which Mr. Quirin was exposed, and thus owed him a duty with respect to those materials.

Crane Co. argues that Quirin can point to no evidence that Mr. Quirin was exposed to asbestos-containing material sold by Crane Co. It is true that no such *direct* evidence exists. The asbestos-containing gaskets, packing, and insulation used on the *Tolovana* were not labeled with the name of the manufacturer. But courts recognize that plaintiffs in asbestos cases may have to rely on circumstantial evidence, especially given the long latency periods for diseases

like mesothelioma. *See, e.g., Cabasug*, 2013 WL 6212151, at *4. The question is therefore not whether Quirin can point to direct evidence that the products were Crane Co.'s, but whether Quirin has identified sufficient circumstantial evidence to allow a jury to infer that Mr. Quirin was exposed to Crane Co.'s products, and that the exposure was substantial enough to contribute to his injury. *See id.*

Here, examining the facts at hand, there is sufficient circumstantial evidence of such exposure to avoid summary judgment. Crane Co. supplied valves which were shipped with asbestos-containing gaskets and packing. Although the valves originally installed on the *Tolovana* would have had these "wear" parts replaced by the time Mr. Quirin boarded the ship, Mr. Quirin testified that he at times replaced Crane Co. valves with new valves, rather than simply replacing the worn materials, and that he then worked on valves he had installed himself. The new Crane Co. valves installed by Mr. Quirin could have incorporated asbestos-containing gaskets and packing; Quirin has presented evidence that Crane Co. shipped valves incorporating those materials.

In addition, Crane Co. supplied replacement gaskets and packing manufactured by third parties, as well as pipe covering and insulation, including asbestos-containing Cranite material. Crane Co. was the main valve supplier on the *Tolovana*, and it is reasonable to infer that it supplied replacement parts and materials required for the operation of the ship's piping systems. Indeed, Crane Co. points to no evidence that the Navy purchased the replacement parts from any company other than Crane Co.

This circumstantial evidence suggests that asbestos-containing materials supplied by Crane Co. were used on the *Tolovana* at the time of Mr. Quirin's service. Although Quirin cannot present direct evidence that Crane Co. manufactured or supplied the materials in question,

