



**In Re: ASBESTOS PRODUCTS LIABILITY LITIGATION (No. VI).
JOE P. FREEMAN and GLORIA K. FREEMAN v. AMF, INC., et al.,**

MDL-875,E.D. Pa. Case No: 11-60070

**UNITED STATES DISTRICT COURT FOR THE EASTERN
DISTRICT OF PENNSYLVANIA**

2012 U.S. Dist. LEXIS 31650

**February 17, 2012, Decided
February 17, 2012, Filed**

SUBSEQUENT HISTORY: Transferred by *In re Asbestos Prods. Liab. Litig.*, 2012 U.S. Dist. LEXIS 24045 (J.P.M.L., Feb. 24, 2012)

Approved by, Adopted by, Summary judgment granted by *In re Asbestos Prods. Liab. Litig.*, 2012 U.S. Dist. LEXIS 32058 (E.D. Pa., Mar. 8, 2012)

PRIOR HISTORY: *In re Asbestos Prods. Liab. Litig.*, 2012 U.S. Dist. LEXIS 20853 (J.P.M.L., Feb. 16, 2012)

COUNSEL: [*1] For JOE P FREEMAN, GLORIA K FREEMAN, Plaintiffs: JULIE L. CELUM, KYLA G. COLE, LEAD ATTORNEYS, WATERS & KRAUS LLP, DALLAS, TX; PAUL DUNFORD HENDERSON, LEAD ATTORNEY, ORANGE, TX; PETER A. KRAUS, LEAD ATTORNEY, WATERS & KRAUS, DALLAS, TX.

For AMF INCORPORATED, SUED INDIVIDUALLY AND AS SUCCESSOR-IN-INTEREST TO B&B ENGINEERING AND SUPPLY COMPANY, INC. AND B&B INSULATORS, A NEW JERSEY CORPORATION, Defendant: TORI SMITH LEVINE, LEAD ATTORNEY, WILSON ELSEER MOSKOWITZ EDELMAN & DICKER, DALLAS, TX; AUDRA M. DEAN, WILSON ELSEER MOSKOWITZ EDELMAN DICKER LLP, DALLAS, TX; SEAN M. HIGGINS, WILSON ELSEER MOSKOWITZ EDELMAN & DICKER, LLP, HOUSTON, TX.

For ARMSTRONG INTERNATIONAL, INC., A MICHIGAN CORPORATION, Defendant: CLAY M. WHITE, LEAD ATTORNEY, WHITE SHAVER, TYLER, TX.

For CBS CORPORATION, F/K/A VIACOM, INC, SUED INDIVIDUALLY AND AS SUCCESSOR-BY-MERGER TO CBS CORPORATION, A DELAWARE CORPORATION, Defendant: DARRYL E. ATKINSON, LEAD ATTORNEY, PAINE TARWATER & BICKERS, AUSTIN, TX.

For CRANE CO., SUED INDIVIDUALLY AND AS SUCCESSOR-IN-INTEREST TO CHAPMAN VALVE CO., A DELAWARE CORPORATION, Defendant: MICHAEL JOHN RAMIREZ, LEAD ATTORNEY, K & L GATES, LLP, DALLAS, TX; MICHAEL J. ZUKOWSKI, K&L GATES, PITTSBURGH, [*2] PA.

For THE DOW CHEMICAL COMPANY, SUED INDIVIDUALLY AND AS SUCCESSOR-IN-INTEREST TO DOWTHERM, A DELAWARE CORPORATION, Defendant, Cross Defendant: ARTHUR R. ALMQUIST, LEAD ATTORNEY, MEHAFFY AND WEBER, HOUSTON, TX.

For FOSTER WHEELER ENERGY CORPORATION, A DELAWARE CORPORATION, FOSTER WHEELER L L C, A DELAWARE CORPOATION, Defendants, Cross Defendants: CORI CUDABAC STEINMANN, LEAD ATTORNEY, SEDGWICK LLP, DALLAS, TX; MARIA K. KAROS, LEAD ATTORNEY, SEDGWICK DETERT MORAN & ARNOLD - DALLAS, DALLAS, TX.

For GOULDS PUMPS INCORPORATED, A DELAWARE CORPORATION, Defendant, Cross Defendant: LEONARD H. FULLER, III, LEAD ATTORNEY, NAMAN HOWELL AMITH & LEE LLP, WACO, TX.

For INGERSOLL-RAND COMPANY, A NEW JERSEY CORPORATION, Defendant, Cross Defendant: LAURA A. FRASE, LEAD ATTORNEY, FORMAN PERRY WATKINS KRUTZ TARDY LLP, DALLAS, TX.

For SPIRAX SARCO, INC., A DELAWARE CORPORATION, Defendant, Cross Defendant: ROBERT L. ADAMS, LEAD ATTORNEY, SMITH & ADAMS LTD, HOUSTON, TX.

For THE WILLIAM POWELL COMPANY, AN OHIO CORPORATION, Defendant, Cross Defendant: BARBARA JANE BARRON, LEAD ATTORNEY, MEHAFFY & WEBER, BEAUMONT, TX; PETER J. LYNCH, CHRISTIE PABARUE MORTENSEN & YOUNG, PHILADELPHIA, PA.

For JOHN CRANE, INC, A DELAWARE [*3] CORPORATION, Defendant, Cross Defendant: JAMES A. NEWSOM, LEAD ATTORNEY, SPROTT, RIGBY, NEWSOM, ROBBINS, LUNCEFORD & BELL, P.C., HOUSTON, TX; LAURA E. KUGLER, BAILEY CROWE & KUGLER, DALLAS, TX; WILLIAM J. SMITH, DICKIE, MCCAMEY & CHILCOTE, PHILA., PA.

For CBS CORPORATION, F/K/A VIACOM, INC, SUED INDIVIDUALLY AND AS SUCCESSOR-BY-MERGER TO CBS CORPORATION F/K/A WESTINGHOUSE ELECTRIC CORPORATION, A DELAWARE CORPORATION, Cross Claimant: DARRYL E. ATKINSON, LEAD ATTORNEY, PAINE TARWATER & BICKERS, AUSTIN, TX.

For CRANE CO., SUED INDIVIDUALLY AND AS SUCCESSOR-IN-INTEREST TO CHAPMAN VALVE CO., A DELAWARE CORPORATION, Cross Defendant: MICHAEL J. ZUKOWSKI, K&L GATES, PITTSBURGH, PA.

For THE WILLIAM POWELL COMPANY, AN OHIO CORPORATION, Cross Defendant: BARBARA JANE BARRON, LEAD ATTORNEY, MEHAFFY & WEBER, BEAUMONT, TX; CATHERINE OLANICH RAYMOND, CHRISTIE PABARUE MORTENSEN & YOUNG PC, PHILADELPHIA, PA; GEORGE S. BOBNAK, PETER J. LYNCH, CHRISTIE PABARUE MORTENSEN & YOUNG, PHILADELPHIA, PA.

For JOHN CRANE, INC, A DELAWARE CORPORATION, Cross Defendant: JAMES A. NEWSOM, LEAD ATTORNEY, SPROTT, RIGBY, NEWSOM, ROBBINS, LUNCEFORD & BELL, P.C., HOUSTON, TX; LAURA E. KUGLER, BAILEY CROWE & [*4] KUGLER, DALLAS, TX.

For AMF INCORPORATED, SUED INDIVIDUALLY AND AS SUCCESSOR-IN-INTEREST TO B&B ENGINEERING AND SUPPLY COMPANY, INC. AND B&B INSULATORS, A NEW JERSEY CORPORATION, Cross Defendant: SEAN M. HIGGINS, WILSON ELSEER MOSKOWITZ EDELMAN & DICKER, LLP, HOUSTON, TX.

JUDGES: DAVID R. STRAWBRIDGE, UNITED STATES MAGISTRATE JUDGE.

OPINION BY: DAVID R. STRAWBRIDGE

OPINION

REPORT AND RECOMMENDATION

DAVID R. STRAWBRIDGE, USMJ

Presently before the court are the motions for summary judgment on causation filed by defendant John Crane, Inc. ("John Crane") (Docs. 102 & 176) ¹ together with the responses and defendant's replies (Docs. 123, 129, 132, 212, & 223) and the motion for summary judgment filed by Crane Co. (Doc. 174) together with the response and defendant's reply (Docs. 210 & 222). ² After carefully considering the briefing and the parties' arguments at the November 4, 2011 oral argument, we are compelled to recommend that summary judgment be granted in favor of the defendants. ³

1 John Crane has styled both of its submissions as "Motion[s] for Summary Judgment on Causation" (Docs. 102 & 176). However, it is apparent that the first motion contains the principal brief while the second is merely a supplemental memorandum [*5] bringing to the court's attention a relevant Texas Supreme Court case, *Merck & Co., Inc. v. Garza*, 347 S.W.3d 256, 264 (Tex. 2011), which was decided on August 26, 2011, six weeks after the first motion was filed.

2 In the Fall of 2011, Judge Robreno determined that judicial economy would best be served by ruling directly on all dispositive motions in MDL-875 cases, except for those currently being addressed by magistrate judges. Because we were in the process of having oral arguments on these motions, we determined that it would be in the court's best interest for us to retain the motions and submit a Report and Recommendation to Judge Robreno upon completion of our analysis.

3 There are several other motions pending in this case that could prove dispositive, including the motions to exclude the testimony of Frank Parker, III (Docs. 144 & 151) and the motions relating to the testimony of John Maddox, M.D. (Docs. 138, 147, & 149). We have carefully reviewed the briefing, arguments, and evidence for all of these motions and conclude that there is a fairly high likelihood that one or more of the motions would indeed be case dispositive. However, in light of our recommendation that judgment [*6] be entered in favor of the defendants due to plaintiffs' failure to meet the stringent causation standards under Texas law, it is unnecessary to fully address these motions at this time.

I. Factual and Procedural History

Joe Freeman was diagnosed with pleural mesothelioma after working some 34 years, between 1959 and 1993, at the E.I. Du Pont Nemours Plant in Orange County, Texas ("Du Pont"). Mr. Freeman worked as a mechanic-in-training for the first four years of his employment at Du Pont and then as a millwright and pipe-fitter for the remainder of his long career. He alleges that, during this time, he was regularly exposed to asbestos from the defendants' products and that his mesothelioma was "a direct and proximate result" of the exposure to these products.

Pls.' First Am. Compl. ¶ 26. He filed suit in the United States District Court for the Eastern District of Texas and the case was transferred to this court on January 20, 2011.

While plaintiffs originally sued numerous parties, John Crane and Crane Co. are the only remaining defendants who have not settled or otherwise been dismissed. With respect to John Crane, Mr. Freeman alleges that he was exposed to its chrysotile asbestos-containing [*7] gaskets and packing while repairing and replacing pumps. Mr. Freeman testified that during his career at Du Pont, he replaced "at least 30,000 to 40,000" gaskets, a slight majority of which were manufactured by John Crane. (Response, Doc. 123, Exh. 1 ("Freeman deposition"), pp. 273-76). He also testified that he cut John Crane sheet gasket material "maybe ten times a year." (*Id.*, pp. 734-35). Plaintiffs' industrial hygienist, Frank Parker, III, estimated that Mr. Freeman's total quantified dose of asbestos exposure attributable to John Crane products was .552 fiber-years/cc. (*Id.*, Exh 7 ("Parker Affidavit"), pp. 25-26).

With respect to Crane Co., Mr. Freeman alleges that he was exposed to chrysotile asbestos-containing gaskets and packing while performing work on Crane Co. and Chapman Valve Co. ("Chapman") valves. ⁴ He testified that: (1) between 1960 and 1972, he replaced gaskets in smaller Crane Co. valves "at least three or four times a week" and gaskets in Chapman valves "[twice] a month"; (2) between 1963 and 1972, he worked on larger Crane Co. valves "a minimum of once a month"; and (3) between 1960 and 1972, he replaced the packing in Crane Co. valves "at least once every two [*8] months" and Chapman valves "once every two months." (Response, Doc. 210, Exh. 1 ("Freeman Deposition"), pp. 127, 133-36, 140-43). Mr. Parker estimated that Mr. Freeman's total quantified dose of asbestos exposure attributable to Crane Co. and Chapman valves was 3.606 fiber-years/cc. (*Id.*, Exh. 15 ("Parker Affidavit"), pp. 17-18).

4 Plaintiffs sued Crane Co. both individually and as a successor-in-interest to Chapman.

II. Legal Standard

Under *Federal Rule of Civil Procedure* 56(c), summary judgment is appropriate where "the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." The moving party bears the initial burden of demonstrating the absence of a genuine issue of any material fact. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 323, 106 S. Ct. 2548, 91 L. Ed. 2d 265 (1986). Once the moving party has met this burden, the party opposing the motion must do more than simply show that there is some metaphysical doubt as to the material facts. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586, 106 S. Ct. 1348, 89 L. Ed. 2d 538 (1986). Rather, the responding party must "set out specific facts showing [*9] a genuine issue for trial." *Fed. R. Civ. P.* 56(e)(2). Where the record taken as a whole could not lead a rational trier of fact to find for the non-moving party, there is no genuine issue for trial and summary judgment is appropriate. *Matsushita*, 475 U.S. at 587.

III. Discussion

A. Choice of Law

In multi-district litigation, the transferee court is required to "apply the same state substantive law, including choice of law rules, that would have been applied in the jurisdiction in

which the case was filed." *Faddish v. Warren Pumps, LLC*, 09-70626, 2010 U.S. Dist. LEXIS 112772, 2010 WL 4178337 at * 2 n.3 (E.D. Pa. Oct. 22, 2010) (quoting *Menowitz v. Brown*, 991 F.2d 36, 40 (2d Cir. 1993)). All of the parties have based their briefs on Texas state law and, given that all of the events in this case occurred in Texas, the plaintiffs are Texas residents, the defendants have done business in Texas, and the case was filed in Texas, we conclude with no hesitation that both Texas choice of law rules and substantive law apply. See *Duncan v. Cessna Aircraft Co.*, 665 S.W.2d 414, 421 (Tex. 1984) (holding that the law of the state with the most significant relationship to the particular substantive issue will be applied).

This application [*10] of Texas law obligates us to apply that law as interpreted by the Texas Supreme Court "in an effort to predict how that court would decide the precise legal issues before us." *Gares v. Willingboro Twp.*, 90 F.3d 720, 725 (3d Cir. 1996). In the absence of specific guidance from the Texas Supreme Court, "we must consider the decisions of intermediate appellate courts for assistance in predicting how" the Texas Supreme Court would rule. *Id.* We must also "be sensitive to the doctrinal trends [of Texas law], and the policies which inform the prior adjudications by the [Texas] state courts." *Clark v. Modern Group Ltd.*, 9 F.3d 321, 326-27 (3d Cir. 1993) (quoting *Erie R.R. v. Tompkins*, 304 U.S. 64, 78, 58 S. Ct. 817, 82 L. Ed. 1188 (1938)).

A consideration of the relevant Texas Supreme Court case law and the Appellate Court cases that interpret that law in the asbestos context leads us to the recommendation that judgment be entered in favor of the defendants.

B. Causation

1. Texas Supreme Court Cases

Defendants contend that plaintiffs have failed to meet the causation standard for asbestos cases established by the Texas Supreme Court in *Borg-Warner Corp. v. Flores*, 232 S.W.3d 765 (Tex. 2007). In *Borg-Warner*, the plaintiff [*11] contended that his asbestosis was caused by handling, *inter alia*, Borg-Warner asbestos containing brake pads while working as a brake mechanic. 232 S.W.3d at 766. The Texas Supreme Court held that in order to prove causation, a plaintiff must establish that "the defendant's conduct or product [was] a substantial factor in bringing about the plaintiff's injuries." *Id.* at 770. The Court then announced a specific test setting out the manner in which causation could be established. In order to prove that a defendant's product was a substantial factor in the contraction of his or her asbestos related disease, a plaintiff must first establish that he or she had been exposed "to a specific product on a regular basis over some extended period of time in proximity to where the plaintiff actually worked." *Id.* at 769. This is commonly known as "frequency, regularity, and proximity" as articulated by the Fourth Circuit in *Lohrmann v. Pittsburgh Corning Corp.*, 782 F.2d 1156 (4th Cir. 1986). For the purposes of this Report and Recommendation, we will assume that plaintiffs have met this requirement by proffering, *inter alia*, Mr. Freeman's testimony.

In addition to the *Lohrmann* factors, the Court [*12] announced that a plaintiff must also produce "defendant-specific evidence relating to the approximate dose to which the plaintiff was exposed, coupled with evidence that the dose was a substantial factor in causing the asbestos-related disease." *Id.* at 773. In this case, Mr. Freeman retained Mr. Parker to quantify the approximate doses of asbestos exposure attributable to each defendant. ⁵

5 Defendants raise serious issues regarding the computations and methodology used by Mr. Parker in other motions. *See e.g.* (Docs. 144 & 151). We do not resolve these issues here, and instead, we will assume that his quantifications are sound for the purposes of this Report and Recommendation.

Once a plaintiff has proffered these requisite approximate doses, he or she must compare those doses with other evidence to show that each defendant-specific dose of asbestos exposure has substantially increased his or her chances of contracting the asbestos-related disease. *Id.* The Texas Supreme Court found this comparison necessary after rejecting the theory that every exposure to asbestos was, *de facto*, a significant cause in developing asbestosis, holding instead that there must be evidence establishing a threshold [*13] level at which exposure to asbestos significantly increases the risk of developing the disease. *Id. at 773.*

Typically, although not strictly required (at least by the *Borg-Warner* court), a plaintiff will submit epidemiological studies to establish that the dose level attributable to each defendant's product is above a threshold level of asbestos exposure after which the exposure becomes a substantial factor in contracting the asbestos-related disease. *Id. at 772* (concluding that while epidemiological studies are not necessary to prove causation, properly designed and executed epidemiological studies may be part of the evidence supporting causation in a toxic tort case) (internal quotation marks omitted). As discussed in detail below, plaintiffs' causation expert, John C. Maddox, M.D., has, in part, relied upon such studies.

According to *Borg-Warner*, when epidemiological studies are used for this purpose, the studies must comport with the factors established in *Merrell Dow Pharmaceuticals, Inc. v. Havner*, 953 S.W.2d 706 (Tex. 1997). *Borg-Warner*, 232 S.W.3d at 771-72; *Merck & Co., Inc. v. Garza*, 347 S.W.3d 256, 264 (Tex. 2011) (concluding that "*Havner's* requirements necessarily apply [*14] to *all* epidemiological evidence") (emphasis added).⁶ In *Havner*, the Texas Supreme Court established that in order for epidemiological evidence to be deemed scientifically reliable, the plaintiff must proffer two or more epidemiological studies that: (1) show a doubling of the risk of contracting the disease in the exposed population as compared to the unexposed or control population which is statistically significant at the 95% confidence level; and (2) concern subjects which are similar to the plaintiff including, *inter alia*, exposure to the same substance and similar or lesser exposure or dose levels than the plaintiff. *Havner*, 953 S.W.2d at 718, 720, 724, 727; *see also Garza*, 347 S.W.3d at 265-67; *Borg-Warner*, 232 S.W.3d at 771-72.

6 In their "Response to Defendant John Crane's (Second) Motion for Summary Judgment on Causation" (Doc. 212), plaintiffs request that, if we find *Garza* applicable to asbestos cases, that we grant them leave to "amend their responsive briefing and obtain additional expert testimony if necessary to meet this departure from existing Texas law governing causation in asbestos litigation." (Doc. 212, p. 2). We decline this request since *Garza* does not change [*15] the *Borg-Warner* causation standard. The Texas Supreme Court in *Borg-Warner* established that epidemiological evidence used by a plaintiff in an asbestos case would be judged under the standards set by *Havner*. *Borg-Warner*, 232 S.W.3d at 771-72. *Garza* merely reinforces this holding. *Garza*, 347 S.W.3d at 264. The larger question is whether the court in *Borg-Warner* should have utilized the *Havner* factors. While we have serious reservations regarding this question, we are bound by the *Borg-Warner* decision which applies the *Havner* factors to asbestos cases involving protracted multiple exposures.

In *Borg-Warner*, after granting review of the appellate court decision upholding a trial verdict for plaintiff, the Texas Supreme Court concluded that plaintiff had failed to properly quantify his exposure to Borg-Warner's brake pads and further noted that the plaintiff did not provide epidemiological studies showing that brake mechanics faced at least a doubled risk of asbestosis due to their exposure to brake dust. *Borg-Warner*, 232 S.W.3d at 771-72. As a result, the Supreme Court reversed the decision of the appellate court. *Id.* at 774.

2. Texas Court of Appeals Cases

Three cases from Texas Courts [*16] of Appeal have applied the *Borg-Warner* gauntlet of tests to asbestos related diseases. These cases are particularly salient because they are factually similar to Mr. Freeman's case in that all three: (1) involved occupational exposure to either chrysotile asbestos fibers alone, or to both chrysotile and amphibole asbestos fibers where the remaining defendants' products contained chrysotile fibers only; (2) involved a diagnosis of mesothelioma; and (3) required specific causation determinations of whether certain products were substantial factors contributing to mesothelioma by applying the *Borg-Warner* causation tests.⁷

7 A plaintiff must establish both: (1) general causation: whether a substance is capable of causing a particular injury or condition in the general population; and (2) specific causation: whether a substance caused a particular individual's injury. *Garza*, 347 S.W.3d at 262 (quoting *Havner*, 953 S.W.2d at 714). Especially in asbestos cases, general causation is rarely an issue and the court must focus solely on specific causation.

Plaintiffs contend that the *Borg-Warner* tests should apply only to general causation since *Havner*, upon which *Borg-Warner* is partially based, concerned [*17] general causation (whether the drug Bendectin could cause limb reduction birth defects). However, it is clear that the inquiry in *Borg-Warner* concerned specific causation since the purpose of the test announced by the court was to determine an approximate asbestos dose for *each individual* defendant and determine whether that *particular* dose was sufficient to more than double the risk of contracting the disease. This is not a general inquiry into whether asbestos can cause mesothelioma, but rather a specific inquiry into whether a *particular* substance or product helped cause a *particular* person's injury. The appellate court in *Stephens* articulated this distinction in recognizing that a plaintiff could prove specific causation circumstantially by taking general causation evidence such as epidemiological studies and showing that he or she is similar to the subjects in those studies. *Georgia-Pacific Corp. v. Stephens*, 239 S.W.3d 304, 311 (Tex. App. Houston (1st Dist.) 2007) (quoting *Coastal Tankships, U.S.A., Inc. v. Anderson*, 87 S.W.3d 591, 602 n.21 (Tex. App. Houston 2002)).

The first case, *Georgia-Pacific Corp. v. Stephens*, 239 S.W.3d 304 (Tex. App. Houston (1st Dist.) 2007), was decided [*18] two months after *Borg-Warner*. In *Stephens*, the plaintiffs (Stephens and his wife) alleged that Stephens contracted mesothelioma from working with, *inter alia*, Georgia-Pacific joint compound which contained chrysotile asbestos fibers. The Houston Court of Appeals acknowledged "that Texas law requires that a plaintiff must prove that the defendant's product specifically caused his asbestos-related injury." 239 S.W.3d at 309. The court then reiterated the *Borg-Warner* causation standard requiring sufficient frequency, regularity, and proximity of contact with Georgia-Pacific's joint compound and an approximate

quantification of Stephens' exposure to the product coupled with epidemiological evidence showing that the exposure resulted in at least twice the risk of contracting mesothelioma had he not been exposed. *Id. at 312*. The court also restated that any epidemiological studies used by plaintiffs to meet these requirements had to involve subjects with similar exposure histories to Stephens. ⁸ *Id. at 310, 320*.

8 In addition to explicitly acknowledging that in order to meet *Havner's* similarity test the studies must involve doses similar to or lower than Stephens' dose, *Stephens 239 S.W.3d at 320*, [*19] the court implicitly interpreted *Havner's* requirement that the study subjects and the plaintiff be exposed to the same "substance" as meaning that the substances must either be the same type of product (i.e. joint compound) or at least contain the same type of asbestos fibers used in the product (i.e. chrysotile fibers). *See Id. at 308* (recognizing that a plaintiff must prove that the defendant's product caused his injury), *id. at 314-15* (discussing exposure to asbestos dust in joint compound, chrysotile's relation to mesothelioma, and occupational exposure to joint compound).

Given that, under *Borg-Warner*, the plaintiff must compare his or her quantified exposure from a specific product to the results of the chosen studies, it follows that the studies must involve at least the same type of asbestos fibers as those in each defendant's product. This has been explicitly recognized in *Smith v. Kelly-Moore Paint Co., Inc.*, 307 S.W.3d 829 (Tex. App. Fort Worth 2010), discussed below. We recognize the monumental burden this places upon Texas asbestos plaintiffs. We are unable to avoid however, a recognition that it is, in fact, the natural outcome of the Texas Supreme Court's decision.

The plaintiffs [*20] in *Stephens* did not proffer an approximate dose of chrysotile asbestos from Georgia-Pacific's joint compound to which Stephens was exposed or evidence of a minimum threshold of exposure to chrysotile dust that could lead to an increased risk of mesothelioma. *Id. at 314-15, 318*. Instead, plaintiffs' expert witnesses on causation opined that every exposure to asbestos above background levels was a substantial factor in the development of mesothelioma. *Id. at 315*. The court concluded, *inter alia*, that plaintiffs' evidence was insufficient under *Borg-Warner* because: (1) there was no quantification of Stephens' approximate dose to Georgia-Pacific's joint compound; (2) the epidemiological studies relied upon by plaintiffs to establish a causal connection did not postulate a minimum exposure level at which there was a statistically increased risk of developing mesothelioma; and (3) the theory that any exposure to asbestos above background levels could be a substantial factor in contracting the disease was rejected by *Borg-Warner. Id. at 320-21*.

The second appellate case to address the *Borg-Warner* standard in this context was *Smith v. Kelly-Moore Paint Co., Inc.*, 307 S.W.3d 829 (Tex. App. Fort Worth 2010). [*21] In *Smith*, the court framed the specific issue raised as: whether the plaintiffs (personal representatives of Smith's estate) had produced sufficient evidence that Smith, in his capacity as a drywall installer, had been "exposed to chrysotile asbestos from Kelly-Moore's joint compound product at a exposure or dose sufficient to have been a substantial factor in his developing mesothelioma." 307 S.W.3d at 832. As in *Stephens*, the Fort Worth Court of Appeals applied the *Borg-Warner* causation test that the plaintiff must establish frequency, regularity and proximity of contact to the specific product, plus establish a reasonably quantified exposure to the product falling above a specified danger threshold level. *Id. at 833*. Similarly, the court reiterated that any epidemiological studies used to meet this burden must show a doubling of the risk and must,

inter alia, have dose levels comparable or lower to that of the plaintiff. *Id.* The *Smith* court also reaffirmed that, since the plaintiff must establish a threshold dose of chrysotile exposure after which there is a significantly increased risk of contracting the disease, an expert's opinion that: (1) there is no minimum safe level of exposure [*22] to asbestos above background levels or (2) proof of significant exposure to asbestos dust is proof of specific causation, is insufficient to establish causation. ⁹ *Id.* at 837-39.

9 One of Smith's causation experts who espoused this theory was Dr. Maddox. *See Smith*, 307 S.W.3d at 837-38. Dr. Maddox is also Mr. Freeman's causation expert and has rendered a similar opinion in this case, as is more fully discussed below.

On a more narrow issue, relevant to this case, the *Smith* court held that the *Borg-Warner* causation tests, which grew from a consideration of a claim of asbestosis (which typically results from either long-term, high-level exposure to asbestos or relatively brief exposure to extremely high levels of asbestos), also applied to claims of mesothelioma (which is a signature asbestos disease that can be contracted from low doses of asbestos exposure). *Id.* at 834; *see also Borg-Warner*, 232 S.W.3d at 771 (discussing the differences between the two diseases). *Smith* held that the Texas Supreme Court in *Borg-Warner*, while recognizing the distinctions between the two diseases, did not limit its holding to asbestosis cases and that the court purposefully announced a "standard to be applied [*23] in cases in which a plaintiff 'claim[s] to be injured by an asbestos-containing product.'" *Id.* (quoting *Borg-Warner*, 232 S.W.3d at 768-69). The *Smith* court accurately concluded that *Borg-Warner* did not limit its holding to a specific disease or fiber type. Instead, before announcing its new substantial factor test, the court in *Borg-Warner* acknowledged the difficulty of proving asbestos claims in general and recognized that courts had struggled with appropriate causation standards in cases involving all alleged asbestos-related cancers. *Borg-Warner*, 232 S.W.3d at 772-73.

Further, the *Smith* court, following *Borg-Warner*, stated explicitly that, in order for study subjects to be deemed similar to Smith, the plaintiffs were required to compare Smith's chrysotile exposure dose from Kelly-Moore's joint compound to epidemiological studies "regarding the effect of exposure to only chrysotile fibers." *Smith*, 307 S.W.3d at 837-39. As discussed above (*see* n.8, *supra*), the rule that a plaintiff must compare his or her quantified exposure to epidemiological studies regarding the same type of asbestos fibers as those in the defendant's product is the natural result of *Borg-Warner's* application of [*24] *Havner* to its specific causation analysis. *See Borg-Warner*, 232 S.W.3d at 773 (holding that the defendant-specific dose evidence must be coupled with evidence showing that each defendant's dose was a substantial factor in causing the asbestos-related disease).

Finally, we note that the *Smith* court determined that two epidemiological studies: Rödelasperger, et al., *Asbestos and Man-Made Vitreous Fibers as Risk Factors for Diffuse Malignant Mesothelioma: Results From a German Hospital-Based Case-Control Study*, Am. J. Indus. Med. 39:262-275 (2001) and Iwatsubo, et al., *Pleural Mesothelioma: Dose-Response Relation at Low Levels of Asbestos Exposure in a French Population-based Case-Control Study*, Am. J. Epid. 148(2):133-142 (1998), both of which feature prominently in the present case, did not meet *Borg-Warner's* standards since neither provided a minimum threshold exposure dose nor did they differentiate between asbestos fiber types. *Smith*, 307 S.W.3d at 838-39.

Ultimately, the court concluded that plaintiffs had not met their burden in that, as in *Stephens*, they: (1) did not establish a "minimum exposure level leading to an increased risk of

development of mesothelioma from exposure to chrysotile-only [*25] asbestos, such as that contained in Kelly-Moore's joint compound" or (2) present expert causation testimony linking Smith's chrysotile exposure to the requisite scientific evidence necessary under *Borg-Warner*. *id.* at 839 (internal quotation marks omitted).

The final case in this appellate court trilogy, *Georgia-Pacific Corp. v. Bostic*, 320 S.W.3d 588 (Tex. App. Dallas 2010), further renders the causation standard in Texas ever more difficult to meet. Bostic was a drywall installer who allegedly contracted mesothelioma through exposure to, *inter alia*, Georgia-Pacific joint compound. 320 S.W.3d at 592-94. While the Dallas Court of Appeals did engage in the now familiar *Borg-Warner* specific causation substantial factor analysis, it held more significantly that a plaintiff must establish "but for" causation when engaging in this analysis. *Id.* at 595-96. The court required that a plaintiff must present evidence that "the asbestos in the defendant's product was a substantial factor in bringing about the plaintiffs injuries' and without which the injuries would not have occurred." *Id.* at 596 (quoting *Borg-Warner*, 232 S.W.3d at 770) (emphasis added). As a result, the court found the testimony [*26] of plaintiffs' causation expert to be insufficient because he could not "opine that [Bostic] would not have developed mesothelioma absent exposure to Georgia-Pacific asbestos-containing joint compound." *Id.*

While the *Bostic* court cited to *Borg-Warner* in support of its "but for" causation holding, that holding runs afoul of the most basic concepts underpinning *Borg-Warner*. The Texas Supreme Court in *Borg-Warner* established its substantial causation test precisely to obviate "the need to demonstrate that fibers from the defendant's particular product were the ones, or among the ones, that actually produced the malignant growth." *Borg-Warner*, 232 S.W.3d at 773. We fail to see how the *Borg-Warner* substantial factor test can co-exist with a requirement that the plaintiff must establish that every defendant's product was a *cause-in-fact* of the disease. Given this position and in reliance upon the jurisprudence of the Texas Supreme Court, we will not consider this case on a "but for" causation standard.

Setting aside this holding, there are other conclusions made by the court in *Bostic* which are instructive and reinforce the holdings of *Borg-Warner*, *Stephens*, and *Smith*. First, the court reiterated [*27] that *Borg-Warner* rejected the causation theory that any and every exposure to asbestos significantly contributed to a plaintiff's mesothelioma. *Bostic*, 320 S.W.3d at 597-98 (citing *Borg-Warner*, 232 S.W.3d at 773 and *Stephens*, 239 S.W.3d at 311, 314-15, 321). Second, the court concluded that the plaintiffs had failed to properly quantify Bostic's exposure to Georgia-Pacific joint compound by merely producing testimony that he worked with or around the product "many times." *Id.* at 599-600. Third, the court again set out the assertion that plaintiffs must show a threshold above which exposure to chrysotile fibers significantly increases the risk of developing mesothelioma and held that the plaintiffs had failed to do so. *Id.* at 600-01.

3. Application of the Law to this Case

In light of the case law discussed above, it is clear that under current Texas jurisprudence, in order for plaintiffs to establish specific causation to impose liability upon John Crane and Crane Co. for Mr. Freeman's mesothelioma, they must prove that his exposure to these defendants' products was a substantial factor in causing his disease. *Borg-Warner*, 232 S.W.3d at 770; *Smith*, 307 S.W.3d at 833. More specifically, [*28] plaintiffs must: (1) show that Mr. Freeman was in frequent, regular, and close contact with the products; (2) establish an approximate quantified dose of chrysotile asbestos fibers he received from being exposed to each of those products; and

(3) show that each of those doses was above a threshold level of exposure to chrysotile fibers at which point the doses could have become substantial factors in causing his mesothelioma. *Borg-Warner*, 232 S.W.3d at 769, 773; *Bostic*, 320 S.W.3d at 600; *Smith*, 307 S.W.3d at 833; *Stephens*, 239 S.W.3d at 312. Accordingly, plaintiffs may not rely merely upon expert testimony that each exposure to chrysotile fibers above background levels is a substantial factor in causing his mesothelioma. *Borg-Warner*, 232 S.W.3d. at 773; *Bostic*, 320 S.W.3d at 597-98, 600-01; *Smith*, 307 S.W.3d at 837-39; *Stephens*, 239 S.W.3d at 320-21.

Further, any epidemiological studies plaintiffs use to show the link between Mr. Freeman's exposure to the defendants' products and his mesothelioma must: (1) show a statistical doubling of the risk of contracting the disease; and (2) involve the same type of asbestos fibers present in defendants' products and dose levels similar to those [*29] experienced by Mr. Freeman. *Borg-Warner*, 232 S.W.3d. at 771-72; *Smith*, 307 S.W.3d at 833; *Stephens*, 239 S.W.3d at 310, 312, 320. Moreover, plaintiffs must proffer at least two such studies. *Garza*, 347 S.W.3d at 265-67; *Havner*, 953 S.W.2d at 727; see also *Borg-Warner*, 232 S.W.3d. at 771-72.

We are mindful of the rather onerous burden this standard places on the asbestos plaintiff.¹⁰ However, we are bound by the law as set out by the Texas Supreme Court and must give serious consideration to the only three Texas appellate court decisions that interpret the relevant case law in the asbestos context. *Gares*, 90 F.3d at 725. This is particularly true since all three opinions come to the same conclusions and arrive from different judicial districts, thus, illuminating the "doctrinal trends" of Texas jurisprudence on these issues. *Clark*, 9 F.3d at 326 -327.

10 Indeed, we are not alone in recognizing the exacting causation standards in Texas. Brent M. Rosenthal, *Toxic Torts and Mass Torts*, 64 SMU L. Rev. 583, 593 (2011) (recognizing that under *Borg-Warner's* progeny, "even detailed proof of heavy exposure to asbestos is not enough to guarantee a victim of mesothelioma a jury determination of whether [*30] the exposure caused this 'signature disease'"); David E. Bernstein, *Getting to Causation in Toxic Tort Cases*, 74 Brook. L. Rev. 51, 59 (2008) (recognizing that *Borg-Warner* is "perhaps the strictest recent opinion on exposure"); Adrienne Bramlett Kvello, *The Best of Times and the Worst of Times: How Borg-Warner and Bankruptcy Trusts Are Changing Asbestos Settlements in Texas*, 40 The Advocate (Texas) 80, 81 (2007) (recognizing the opinion that *Borg-Warner* is the "final nail in the coffin" for asbestos litigation in Texas).

As mentioned above, Mr. Freeman testified regarding his contact with the two defendants' products and engaged an industrial hygienist, Mr. Parker, to quantify his exposure to each defendant's products. Assuming for the purposes of considering the causation question that plaintiffs met both of these requirements, they must next demonstrate that each of those dose levels is above a specified chrysotile dose level which has been scientifically shown to substantially increase the risk of contracting mesothelioma such that Mr. Freeman's exposure to each of the defendants' products can be shown to be a substantial factor in the development of his mesothelioma. In order to [*31] meet this burden, plaintiffs commissioned Dr. Maddox, who is board certified in anatomic and clinical pathology and hematology. It is upon Dr. Maddox's reports and opinions that we now focus, as they most clearly illustrate how plaintiffs' evidence fails to meet the difficult *Borg-Warner* standard.¹¹

11 Our recommendation today is not meant to be a denigration of the work of Dr. Maddox. As we have recently recognized, Judge Robreno has ruled favorably on the admissibility of Dr. Maddox's opinions under Pennsylvania law in this MDL. *Rabovsky v. Air & Liquid Sys. Corp.*, MDL-875, 10-03202, 2012 U.S. Dist. LEXIS 9169, 2012 WL 252919, at *4 -5 (E.D. Pa. Jan. 25, 2012) (citing *Schumacher v. Amtico*, 10-01627, Doc. 143, p. 2 n. 1). We only observe that Dr. Maddox's opinions here, even if we are to assume their validity, do not meet the exacting *Borg-Warner* specific causation standard.

Dr. Maddox opined that "all of Mr. Freeman's non-trivial exposures to asbestos above background levels were substantial factors in causing the development of his malignant mesothelioma" and that "[b]ecause [*32] asbestos dust is so strongly associated with mesothelioma, proof of significant exposure to asbestos dust is proof of specific causation." (Affidavit and Supplemental Expert Report of Dr. Maddox, Doc. 123, Exh. 8, pp. 1-2, 10, *see also* pp. 12, 19). Dr. Maddox further opined that, based upon his experience and the vast body of research done on this topic, it is generally accepted in the scientific community that there is no safe threshold of asbestos exposure under which the exposure does not significantly contribute to the development of mesothelioma and that "attempts to define any such minimum level of exposure . . . have been dismissed as 'logical nonsense.'" (*Id.*, p. 13).

We render no opinion regarding the scientific accuracy of these statements. However, what we must acknowledge is that such theories (often referred to as "each and every exposure" theories) were found insufficient by the Texas Supreme Court and the three Texas Courts of Appeal after finding that a plaintiff must instead establish a threshold dangerous dose of particular asbestos fibers (in this case chrysotile) and compare his or her defendant-specific dose thereto. *Borg-Warner*, 232 S.W.3d at 771-73; *Bostic*, 320 S.W.3d at 597-601; [*33] *Smith*, 307 S.W.3d at 833, 837-39; *Stephens*, 239 S.W.3d at 312, 320-21. Indeed, several of these specific statements by Dr. Maddox were rejected in *Smith*. 307 S.W.3d at 837-38. The court in *Smith* also recognized that Dr. Maddox's opinion did not differentiate between asbestos fiber types, which is required under the *Borg-Warner* rubric. *Id.* at 837.

In the second half of his supplemental report, Dr. Maddox did attempt to compare Mr. Freeman's approximated numerical defendant-specific asbestos doses to the results from the Rödelserger and Iwatsubo epidemiological studies. (Doc. 123, Exh. 8, pp. 16-19). As discussed above, both of these studies were found lacking in *Smith* for their failure "to provide the minimum dose evidence required under *Borg-Warner*" and for their failure to "differentiate[] among fiber types." *Smith*, 307 S.W.3d at 838-39; *see also* (*Id.*, Exh. 8, Sub-Exh. 64 ("Iwatsubo study"), p. 141 (stating that the researchers "could not examine mesothelioma risk according to fiber types because [their] study design . . . did not allow [them] to identify those subjects whose exposure was only to chrysotile fibers"); Sub-Exh. 65 ("Rödelserger study"), p. 272 (warning that "the type [*34] of asbestos -- chrysotile or amphibole -- is unknown in spite of its well-known importance")). We must concur that the studies run afoul of the *Havner* requirement that they involve subjects similar to the plaintiff. ¹² *Havner*, 953 S.W.2d at 720; *Borg-Warner*, 232 S.W.3d at 771-72; *Smith*, 307 S.W.3d at 833, 837-39; *Stephens*, 239 S.W.3d at 310. Similarly, the mortality studies cited by Dr. Maddox fail to meet *Havner's* requirements, nor do they provide any evidence of threshold dose levels. (Doc. 123, Exh. 8, pp. 19). While Dr. Maddox also submitted an opinion that chrysotile exposure can cause mesothelioma, it is a general causation conclusion with no real comparison of the supporting studies and articles to Mr. Freeman's specific exposures. (Doc. 123, Exh. 8, pp. 19-22.).

12 Plaintiffs contend that this holding "has not been followed as the Texas MDL Court subsequently held that . . . ample epidemiological studies, such as Rödelisperger and Iwatsubo . . . are applicable, relevant and sufficient to support causation for a plaintiff with Mr. Freeman's exposure history." (See Doc. 123, p. 17 n.12). We conclude that plaintiffs' depiction of the allegedly supporting exhibit, a transcript from [*35] a June 11, 2010 hearing before Judge Mark Davidson of the District Court of Harris County, Texas, 11th Judicial District, is not accurate. In the transcript, Judge Davidson refused to revisit his holding regarding the efficacy of these two studies in establishing general causation after defense counsel attempted to raise the issue of why the two studies were not useful for establishing specific causation. Judge Davidson did not actually visit the issue of whether the studies had value in determining specific causation. (Doc. 123, Exh. 9).

While it is not entirely clear what would be sufficient evidence to meet the *Borg-Warner* causation analysis, it is clear that the opinions of Dr. Maddox and the epidemiological studies upon which he relies are insufficient to prove specific causation under Texas law. Mr. Freeman has failed to link his approximated defendant-specific chrysotile dose numbers with a quantified dangerous threshold level of chrysotile exposure shown in two or more epidemiological studies that meet the *Havner* factors.

IV. Conclusion

As a result of the forgoing analysis, based on the law as set forth by the Texas Supreme Court, plaintiffs have failed to establish that Mr. Freeman's [*36] approximated doses of chrysotile asbestos fibers from John Crane's and Crane Co.'s products were substantial factors in the development of his mesothelioma. Therefore, we recommend that the motions for summary judgment filed by John Crane and Crane Co. be granted and the case closed. Given the case preclusive effect of our recommendation, we further recommend that all other motions in this case be terminated.

Our recommendation follows.

RECOMMENDATION

AND NOW, this 17th day of February, 2012, it is respectfully recommended that John Crane, Inc.'s Motions for Summary Judgment on Causation (Docs. 102 and 176) and Crane Co.'s Motion for Summary Judgment (Doc. 174) be **GRANTED** and the case be **CLOSED**.

The parties may file objections to this Report and Recommendation. See *Local Civ. Rule 72.1*. Failure to file timely objections may constitute a waiver of any appellate rights.

BY THE COURT:

/s/ David R. Strawbridge

DAVID R. STRAWBRIDGE

UNITED STATES MAGISTRATE JUDGE