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

JEAN C. COX	:	CIVIL ACTION
	:	
v.	:	
	:	
FOSTER WHEELER, LLC et al.	:	NO. 24-305

MEMORANDUM

Bartle, J. October 27, 2026

This is a wrongful death and survival action brought under 28 U.S.C. § 1333 by Jean C. Cox, the widow and the administratrix of the Estate of David Cox, against defendant John Crane Inc. and others. Cox, a pipefitter and insulator employed by the Philadelphia Naval Shipyard from 1974 to 1987, was diagnosed with lung cancer in August 2022 and died less than two weeks later.[1] Plaintiff alleges his death resulted from exposure to asbestos contained in John Crane's packing and gasket materials. She has brought claims for strict liability, negligence, breach of warranty, and negligent misrepresentation.

Before the court is the motion of defendant John Crane Inc. to partially exclude the testimony of plaintiff's material science expert, Dr. Steven Compton. Defendant seeks to exclude Dr. Compton's testimony on the asbestos content of,

1 Plaintiff had also alleged that Cox served in the Navy between 1970 and 1974. Plaintiff has conceded that she has no evidence that defendant's products were on any ships on which he served during this period. Pl.'s Resp. in Opp'n to Def. John Crane Inc.'s Mot. to Exclude Captain Woodruff 15, Dkt. No. 188.

releasability of asbestos from, and concentration of asbestos in John Crane products that Cox allegedly encountered while working at the Philadelphia Naval Shipyard.

I

Rule 702 of the Federal Rules of Evidence provides:

> A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if the proponent demonstrates to the court that it is more likely than not that:
>
> (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
>
> (b) the testimony is based on sufficient facts or data;
>
> (c) the testimony is the product of reliable principles and methods; and
>
> (d) the expert's opinion reflects a reliable application of the principles and methods to the facts of the case.

The court is charged as a gatekeeper. See Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 589, 597 (1993). Pursuant to Rule 104(a), this court must decide preliminary questions about whether the expert meets the requirements of Rule 702. It must determine if: (1) the expert is qualified; (2) the proposed testimony is reliable, that is supported by scientific methods and procedures; and (3) the proposed testimony fits the case, that is "sufficiently tied to the facts of the case." Cohen v. Cohen, 125 F.4th 454, 460 (3d Cir. 2025).

Defendant argues that Dr. Compton's opinions are unreliable because his methodology is faulty and his opinions are impermissibly speculative. It also contends that because Dr. Compton is not an industrial hygienist, he is not qualified to correlate data collected during industrial hygiene studies to the facts of this case.

II

Dr. Compton is a physicist and microscopist. He received a Bachelor of Science and Ph.D. in Physics from the University of Georgia. He has worked for MVA Scientific Consultants ("MVA"), an analytical microscopy laboratory, since 2009, and he has served as its Executive Director since 2014.

Since 2009, his research focus has been on asbestos, including the content of asbestos in products, the release of asbestos from products, and testing and monitoring techniques for detecting the presence of asbestos in products, settled dust, and air samples. Dr. Compton has analyzed materials for the presence of asbestos fibers, performed tests to determine how much asbestos products such as gaskets and insulation may release, and conducted simulations of end-product use and asbestos exposure. As a result, he has knowledge on whether certain products historically contained asbestos and whether those products release asbestos when disturbed. He has worked on issues related to industrial hygiene and environmental

forensics, including the investigation and characterization of materials of unknown composition.

In his report, Dr. Compton opines that some gaskets and packing, including those manufactured by John Crane, contain chrysotile asbestos. These products often contain low levels of amphibole asbestos as well, because chrysotile mines are also host to amphibole minerals. Dr. Compton's report includes the results of twenty-seven tests on gaskets and packing samples created by a variety of manufacturers, including John Crane. Table D1 of the report, for example, measures the amount of chrysotile asbestos and amphibole asbestos contained in several products, including six John Crane gaskets and packing products.[2] During his deposition, Dr. Compton testified that some of these John Crane products were noted as being able to withstand high temperatures and being suitable for marine and industrial uses. He concludes that the tested John Crane products, including ones made for marine environments and to withstand high temperatures, contained both chrysotile asbestos and amphibole asbestos.

2 The table also notes that samples of other John Crane products had been examined but does not include the asbestos content results of these samples.

Dr. Compton relies on the testimony of Albert Pappalardo[3], a former co-worker of Cox, to support his opinions related to Cox. He notes that Pappalardo stated that Cox "worked right next to pipefitters and boilermakers handling (removing and replacing) asbestos-containing gaskets, packing, and insulating materials" while Pappalardo and others serviced pumps, valves, steam traps, and flanges. Pappalardo worked with gasket and packing material produced by John Crane. Pappalardo, however, did not identify any specific John Crane products during any of his depositions.

Dr. Compton testified at his deposition that the six asbestos-containing John Crane products in Table D1, along with other John Crane products he examined, were comparable to the products likely handled by Pappalardo while near Cox. The tested products had product descriptions that noted they were for industrial and marine uses, and they were "capable of being used in high temperature situations." The steam equipment on which Pappalardo worked in Cox's vicinity would have generated high temperatures.

Dr. Compton opines that installing and removing pipes used in marine and industrial worksites would have caused

3 Pappalardo testified in multiple asbestos cases. Because Cox passed away shortly after his cancer diagnosis, he was not deposed.

asbestos fibers to be released from asbestos-containing gaskets, packing, and insulation covering pipes. The asbestos fibers released during work activities would then "find their way into the breathing zone of the person performing the activity and into the breathing zones of others in the vicinity of the work" and settle on nearby surfaces. Dr. Compton opines that, as a bystander to similar work done by Pappalardo and others using asbestos-containing John Crane products, Cox would have been exposed to asbestos from John Crane products.

Dr. Compton's report also included tables quantifying the different amounts of asbestos fibers released into the air depending on how someone interacted with the asbestos-containing products and dust. He testified during his deposition that Cox's exposure to the asbestos fibers would ultimately depend on a variety of factors, including the concentration of asbestos in the asbestos-containing product or dust, the type of activity performed on the product or dust, and Cox's proximity to that activity. Dr. Compton concluded that Cox's exposure to asbestos "would have varied depending on the specific activities performed by Mr. Cox and others in his vicinity," but that this exposure would have been "orders of magnitude higher than ambient asbestos levels" as estimated by the Agency for Toxic Substances and Disease Registry ("ATSDR").

Defendant challenges five of Dr. Compton's opinions. These include: (1) opinions about the asbestos content of any John Crane products Cox may have encountered; (2) opinions that John Crane products contained amphibole asbestos; (3) opinions concerning the releasability of asbestos fibers from any John Crane products Cox may have encountered; (4) opinions regarding the quantity of asbestos allegedly released from John Crane products Cox may have encountered; and (5) opinions comparing the concentration of dust around Cox from John Crane products to the concentration of ambient asbestos.

III

Defendant argues that several of the challenged opinions are unreliable because they are not grounded in and do not reliably flow from the facts of this case and are based on an unreliable methodology. The proffered expert's opinion must "be based on the methods and procedures of science rather than on subjective belief or unsupported speculation." In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 742 (3d Cir. 1994) (citation modified). There must be "good grounds" for the expert's belief. Id.

Factors the court may consider in evaluating whether a methodology is reliable include:

> (1) whether a method consists of a testable hypothesis; (2) whether the method has been subject to peer review; (3) the known or

> potential rate of error; (4) the existence and maintenance of standards controlling the technique's operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put.

In re TMI Litig., 193 F.3d 613, 664-65 (3d Cir. 1999) (quoting In re Paoli R.R. Yard PCB Litig., 35 F.3d at 742). The party proffering the expert need only show by a preponderance of evidence that the expert's opinions are reliable, and not that they are correct. In re Paoli R.R. Yard PCB Litig., 35 F.3d at 744. The expert's conclusions must "reliably flow from the facts known to the expert and the methodology used." In re TMI Litig., 193 F.3d at 665-66. The test of reliability is "a flexible one" that focuses "on principles and methodology, not on the conclusions that they generate." Daubert, 509 U.S. at 594-95.

First, defendant argues that Dr. Compton's opinions on the asbestos content of John Crane products Cox may have encountered, the releasability of asbestos fibers from those John Crane products, and the quantity of asbestos fibers released from those products are unreliable. It highlights that Dr. Compton has opined that the amount of asbestos someone is

exposed to depends on the amount of asbestos in the product or dust and how the product or dust is manipulated.

Defendant maintains that the testimony of Pappalardo, the only witness to testify on Cox's alleged exposure to John Crane products, is too inconsistent and unspecific to form the basis for Dr. Compton's opinions on John Crane's products. Pappalardo did not identify specific John Crane products near Cox making it unclear how much asbestos, if any, was in them.

Pappalardo, however, did testify that he worked with John Crane products, including in Cox's vicinity. Dr. Compton infers that these products had to be able to withstand high heat and steam and be suitable for industrial or marine uses because Pappalardo and Cox worked near and with steam equipment on ships. Dr. Compton measured the asbestos content of John Crane gaskets and packing that were also appropriate for such environments. He conducted simulations on and measured how different uses, such as the uses described by Pappalardo, of asbestos-containing products, such as John Crane's gaskets and packing materials, result in different releases of asbestos and asbestos exposure.

Defendant also argues that these three opinions on the asbestos content and release of asbestos from John Crane products rely on irrelevant tests and studies. Some of the tests listed among Dr. Compton's reliance materials are not

related to John Crane products specifically. Dr. Compton also relied on a study in which he measured the amount of asbestos released from scraping gasket residue from a Crane Co. valve recovered from a naval vessel. Defendant contends that Dr. Compton cannot identify the manufacturer of the gasket that was tested in this study. Defendant additionally points to a "lack of contemporaneous air sampling data." But several of the studies and tests that Dr. Compton relies on are specific to John Crane gaskets and packing produced for marine and industrial uses. That Dr. Compton did not rely on all available studies and relied on studies unrelated to John Crane do not make his opinions on John Crane products unreliable.

Dr. Compton's opinions on the asbestos content of John Crane products encountered by Cox, the releasability of asbestos fibers from those products, and the quantity of asbestos fibers released from those products are therefore based on sufficient facts and methodology to be considered reliable. They will not be excluded.

Next, defendant seeks to exclude Dr. Compton's opinion that John Crane products contained amphibole asbestos as speculative. Specifically, it asserts that Dr. Compton will offer testimony that "a few (but not most or all) of [John Crane]'s asbestos-containing packing and gasket products were

contaminated with a fractional percentage of" amphibole asbestos and that Cox was exposed to amphibole asbestos.

Dr. Compton generally opined in his report that gaskets and packing manufactured with chrysotile asbestos often contain small quantities of amphibole asbestos, because chrysotile mines also contain amphibole minerals. He references Table D1 in support, which as noted above, shows the percentage of mass of chrysotile and amphibole for various asbestos-containing products, including four John Crane products.[4] Dr. Compton testified that these John Crane products were manufactured for industrial and marine uses and were able to endure high heat and steam, which was consistent with the uses described by Pappalardo. In other words, the kinds of John Crane products that would have been used near Cox could have contained amphibole materials.

Defendant counters that there is no evidence that Cox worked near the John Crane products that were analyzed and shown to contain amphibole. It also points to other studies conducted by MVA in which only two out of sixteen different samples of John Crane packing materials were found to contain amphibole asbestos. Dr. Compton did not reference these studies.

4 There are six John Crane gaskets and packing listed in Table D1, but the percentage of mass of amphibole was calculated for only four of the products.

Defendant additionally contends that amphibole "contamination" was sporadic and that there is no evidence that they were uniformly included in John Crane products, so it would be speculative for Dr. Compton to opine that Cox ever worked in the vicinity of John Crane products containing amphibole asbestos.

Experts are not required to cite every possible study or test result, and failure to do so does not make their opinion unreliable and inadmissible. While defendant points to evidence that contradicts Dr. Compton's opinions, plaintiff need only show by a preponderance of the evidence that his opinions are reliable, not correct. See In re Paoli R.R. Yard PCB Litig., 35 F.3d at 744. Dr. Compton has based his opinion that John Crane products contained amphibole asbestos on his knowledge of chrysotile and amphibole mines, studies conducted by him and MVA, and Pappalardo's testimony on the kinds of materials used around Cox. His opinion reliably flows from the facts known to him and his methodology, and his opinion on amphibole asbestos will not be precluded. See In re TMI Litig., 193 F.3d at 665-66.

Finally, defendant contends that Dr. Compton's opinion comparing the level of asbestos around Cox to ambient levels of asbestos should be excluded because it improperly relies on a 2001 publication by the ATSDR. It argues that this publication is "based on a modern measurement when no alleged asbestos

exposure took place" rather than a measurement of ambient asbestos from when Cox was allegedly exposed at the Philadelphia Naval Shipyard and therefore irrelevant. Dr. Compton also relied on a 2011 ATSDR report. This ultimately goes to the weight of Dr. Compton's opinions, and defendant may cross-examine him or proffer contrary evidence. This opinion is admissible and will not be precluded.

IV

In challenging Dr. Compton's opinion that John Crane products released asbestos fibers and quantifying such releases, defendant argues that Dr. Compton is not qualified to analyze industrial hygiene studies. To be qualified, an expert witness must possess specialized expertise. Schneider ex rel. Est. of Schneider v. Fried, 320 F.3d 396, 404 (3d Cir. 2003). Our Court of Appeals has interpreted this requirement liberally. Id.

As noted above, Dr. Compton has a Ph.D. in Physics and is a microscopist. During his seventeen years at MVA, his research has focused on asbestos, including the release of asbestos fibers. He has performed tests to measure how much asbestos products release and has worked on issues related to industrial hygiene and environmental forensics. In sum, he has nearly two decades of experience researching asbestos and has quantified asbestos releases himself. Dr. Compton is qualified to analyze industrial hygiene studies and to proffer opinions

quantifying the release of asbestos fibers from John Crane products.

V

The motion of defendant John Crane, Inc. to partially exclude the testimony of Dr. Compton will be denied.