# Hickson v. Air & Liquid Sys. Corp.

Court of Appeals of Washington, Division One

October 29, 2021, Oral Argument; January 24, 2022, Filed

No. 81585-7-I

### Reporter

2022 Wash. App. LEXIS 146 \*

DUANE H. HICKSON and DARLENE M. HICKSON, husband and wife, Appellants, v. AIR & LIQUID SYSTEMS CORPORATION, as successor by merger to BUFFALO PUMPS, INC.; BECHTEL CORPORATION: CBS CORPORATION, a Delaware corporation, f/k/a VIACOM, INC., successor by merger to CBS CORPORATION, a Pennsylvania corporation, f/k/a WESTINGHOUSE ELECTRIC CORPORATION; C.H. MURPHY/CLARK-ULLMAN, INC.; ELEMENTIS CHEMICALS, INC., f/k/a HARCROS CHEMICALS, INC., as successor-in-interest to HARRISON CROSFIELD (PACIFIC) and BENSON CHEMICAL COMPANY; ELLIOTT COMPANY, d/b/a ELLIOTT TURBOMACHINERY COMPANY; FOSTER WHEELER LLC; FRASER'S BOILER SERVICE, INC.; GENERAL ELECTRIC COMPANY; GOULD PUMPS (IPG), LLC; IMO INDUSTRIES, INC., individually and as successorin interest to DE LAVAL TURBINE, INC.; INGERSOLL-RAND COMPANY; METALCLAD INSULATION, LLC; METROPOLITAN LIFE INSURANCE COMPANY; NIPPON DYNAAWAVE PACKAGING COMPANY, LLC; NORTH COAST ELECTRIC COMPANY; PFIZER, INC.; P-G INDUSTRIES, INC., as successor-in-interest to PRYOR GIGGEY CO., INC.; SEQUOIA VENTURES, LLC, f/k/a and as successor-in-interest to BECHTEL CORPORATION, BECHTEL, INC., BECHTEL MCCONE COMPANY, BECHTEL GROUP, INC.;

UNION CARBIDE CORPORATION; WEYERHAEUSER

COMPANY, individually and as successor-in-interest to WILLAMETTE INDUSTRIES, INC., R-W PAPER COMPANY, and WESTERN KRAFT; and WEYERHAEUSER NR COMPANY, Defendants, ATLANTIC RICHFIELD COMPANY; and BRAND INSULATIONS, INC., Respondents.

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**Prior History:** [\*1] Judgment or order under review. Date filed: 01/21/2020. Judge signing: Honorable Bradford G. Moore.

# **Core Terms**

insulation, pipe, exposure, <u>asbestos</u>, refinery, removal, summary judgment, causation, deposition, pipe-covering, flanges, gasket, mesothelioma, <u>asbestos</u> exposure, period of time, <u>asbestos</u>-containing, environmental, covering, six-week, exposed, significant exposure, install, fibers, circumstantial evidence, sufficient evidence, potential exposure, <u>asbestos</u> product, material fact, intermittently, speculation

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**Judges:** Authored by Marlin Appelwick. Concurring: Bill Bowman, John Chun.

Opinion by: Marlin Appelwick

# **Opinion**

APPELWICK, J. — Hickson appeals from summary judgment dismissing his claim that he developed mesothelioma following his work as a pipefitter at ARCO's Cherry Point Refinery, a worksite that contained Brand <u>asbestos</u>. The trial court granted summary judgment because Hickson did not testify to or provide expert testimony that his mesothelioma was caused by *asbestos* exposure while working at Cherry

Point. We affirm.

#### **FACTS**

In 1970, Atlantic Richfield Company (ARCO) contracted with Brand Insulations, Inc. as a subcontractor to install thermal insulation at the ARCO refinery at Cherry Point in Ferndale, Washington.

Duane Hickson worked as a pipefitter throughout his life. He performed work at various jobsites, including a United States Navy vessel at the Long Beach Naval Shipyard, Weyerhaeuser Company, and Washington Public Power Supply nuclear plant in Hanford, Washington. In 1984, Hickson worked at ARCO's Cherry Point refinery. In April 2019, Hickson was diagnosed with mesothelioma. Hickson<sup>1</sup> sued ARCO and Brand alleging [\*3] that <u>asbestos</u> exposure at Cherry Point caused his mesothelioma.<sup>2</sup> The trial was scheduled to begin on February 20, 2020. Hickson passed away on February 6, 2020.

Hickson had been deposed by his attorneys prior to his death to preserve his testimony. His expert witness, Dr. Carl Brodkin, had the opportunity to review the deposition transcript and to interview Hickson about his work history and his occupational exposure to *asbestos* products. Dr. Brodkin also had the benefit of reviewing

<sup>&</sup>lt;sup>1</sup> Duane's wife, Darlene Hickson, joined him in the lawsuit. After Duane's death, the case was converted to a wrongful death and survivorship action brought by Darlene as the personal representative of Duane's estate. Going forward we refer to "Hickson" for simplicity's sake. No offense is intended.

<sup>&</sup>lt;sup>2</sup> In his initial complaint, Hickson also sued over 20 companies he had previously worked at that he claimed were responsible in part for his developing mesothelioma. The depositions of Hickson and Dr. Brodkin addressed all claims. Only the orders granting summary judgment to ARCO and Brand are on appeal. According to ARCO, most of the other defendants settled with the plaintiff and were voluntarily dismissed.

discovery materials when he prepared his written report. Based on those materials, Dr. Brodkin concluded in his deposition that he could not testify at trial that Hickson had <u>asbestos</u> exposure while working at ARCO. Thirteen days later, additional evidence was disclosed by ARCO.

ARCO moved for summary judgment, alleging that Hickson had failed to demonstrate that he had been exposed to <u>asbestos</u> at Cherry Point, that he had no expert testimony to establish causation, and that all his claims were purely speculative. While citing to case law about hypothetical opinions, Hickson's response to the summary judgment motion asserted that Brodkin had testified that if certain exposure was demonstrated he would testify [\*4] to causation. He further argued that discovery material received subsequent to Brodkin's deposition testimony provided evidence of that exposure. Hickson did not supplement Dr. Brodkin's deposition testimony with any new evidence.

The court granted ARCO's summary judgment, finding that Hickson did not show a genuine issue of material fact as to causation with the evidence provided. Brand also filed a motion for summary judgment which the court granted on the same grounds.

Hickson appeals the orders granting summary judgment of their claims against ARCO and Brand.

# **DISCUSSION**

"The court reviews summary judgment decisions de novo, engaging in the same inquiry as the trial court." *Morgan v. Aurora Pump Co., 159 Wn. App. 724, 728, 248 P.3d 1052 (2011)*. "When ruling on a summary judgment motion, the court is to view all facts and reasonable inferences therefrom most favorably toward the nonmoving party." *Id.* (quoting *Lybbert v. Grant County, 141 Wash.2d 29, 34, 1 P.3d 1124 (2000)*). "Summary judgment is proper if the pleadings,

depositions, answers, and admissions, together with the affidavits, show that there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law." *Morgan, 159 Wn. App. at 729*, CrR 56(c). To survive summary judgment, Hickson would need to demonstrate that there was a genuine issue of material fact [\*5] that he had been exposed to *asbestos* and that his exposure to *asbestos* caused his mesothelioma. *See Morgan, 159 Wn. App. at 736*.

# A. Exposure

Hickson claims that he was exposed to <u>asbestos</u> when he disturbed insulation while working at Cherry Point. He states that it can be reasonably inferred that this insulation contained <u>asbestos</u>. He argues the resulting occupational exposure to <u>asbestos</u>-containing materials caused his mesothelioma.

"It is well settled that asbestos plaintiffs in Washington may establish exposure to a defendant's product through direct or circumstantial evidence." Id. at 729. A not need to personally identify plaintiff does manufacturers of asbestos products to which he was exposed, but can rely on testimony of witnesses who can identify the manufacturers of asbestos products present at the workplace. Id. The testimony does not need to be detailed to show exposure. Id. If circumstantial evidence is used, the plaintiff must provide reasonable inferences to establish the facts. Id.; see Arnold v. Sanstol, 43 Wn.2d 94, 99, 260 P.2d 327 (1953) ("The facts relied upon to establish a theory by circumstantial evidence must be of such a nature and so related to each other that it is the only conclusion that fairly or reasonably can be drawn from them.")

The fact that **[\*6]** <u>asbestos</u> containing insulation was present on some but not all piping at Cherry Point is not in dispute. Dr. Brodkin's report documents its presence and the potential for exposure to *asbestos*.

Potential exposure to old/existing ACM [(asbestos containing material)] pipe-covering insulation (during removal for flange access) on ~6"-8" pipe rack systems — (not characterized with respect to refinery unit or whether hot/steam system, or date of installation of existing pipe-covering). If evidence that pipe-covering Mr. Hickson removed was on hot/steam systems installed ≤ 1975 (e.g. original to refinery [1969-1972 — Ralph M. Parsons/Brand Insulation]), then there would be identified ACM exposure. ARCO Responses to Interrogatories — (8/6/09 Jones v. Saberhagen, et al — Whatcom Co. No. 09-2-00969-1) & RM Parson Contract (11/5/69) indicate specifications for unibestos, Thermobestos, Paboo for piping and equipment insulation. In 12/4/12 Deposition Testimony, Michael McGinnis (Project Engineer for Bland Insulation during ARCO Cherry Point construction), confirms use of ACM insulation during construction (as well as non-ACM), including various pipe insulation & insulating cement. 11/29/71 [\*7] Metalclad Invoices for ARCO Cherry [Point] Refinery construction document various ACM insulation (RM Parsons Co.) including 85% magnesia cement; blue mud, & Thermobestos pipecovering. *Asbestos* sampling/monitoring in the 1980's documents the existence of ACM pipecovering extant at the ARCO Refinery in various locations (e.g. scrap metal area pipe-covering [8/2/84], steam line vacuums [6/25/85], boiler and [5/6/88-5/23/88]. turbine steam lines and boilerhouse de-aerator system [4/7/89-4/8/89], as well as non-ACM material (e.g. glass wool: fiberglass, mineral wool, and cellulose). Sampling of vacuumed boilerhouse dust from pipes and vessels in 7/84 document asbestos ("too loaded to count"). A July 1-13, 1987 "Asbestos Identification Survey" for the ARCO Cherry Point Refinery (Olsen Consulting) identifies ACM pipe-covering insulation

in various refinery locations (eg. process control bldg. [(building)] main steamline; elbows "fittings", administration bldg. pipe elbows, fittings; lab bldg. pipe elbows & fittings; security bldg. pipe elbow: fittings; [with] mixed chrysotile and amosite, as well as non-ACM pipe covers.

(Some alterations in original.)

Dr. Brodkin was retained by Hickson's [\*8] counsel to provide an expert opinion about whether any significant exposure to <u>asbestos</u> occurred at Cherry Point (and other locations) and whether that exposure was a significant cause of Hickson's mesothelioma. Before drawing any conclusions about exposure at Cherry Point, Dr. Brodkin had the benefit of reviewing Hickson's deposition, conducting an interview with Hickson, and accessing information about the refinery. Hickson testified relating to Cherry Point:

Q Handing you what's been marked as Exhibit 20, can you identify that for us, please?

A Yeah. That --that's the ARCO refinery at Cherry Point where we worked.

Q And in taking this pen, can you circle on Exhibit 20 the area at Cherry Point where you did your work over that six-week period of time while working for Trico?

A . . . . I would do this area right in this vicinity here (indicating).

. . . .

Q . . . . [H]anding you what's been marked as Exhibit 21, I'd like you to look at that and ask you . . . whether or not it fairly and accurately depicts some of the piping systems that you were working on at ARCO?

. . . .

A Yes, it does.

. . . .

Q Did you work on piping systems at ARCO, sir? A Yes. . . . .

Q . . . . Okay. Did you do that a little [\*9] bit or did you do that a lot?

A The whole six weeks you're work[ing] on piping systems.

. . . .

Q . . . . with that foundation . . . in mind, can you tell me whether or not Exhibit 21 fairly and accurately depicts the piping systems that you worked with at ARCO Cherry Point over that six-week period of time?

A It does because there's -- there's piping here -- not exactly that piping, but there's a good example of valves that may need to have gaskets replaced or the valve had a drip on it and they wanted to fix it and you take it out and you put all new gaskets and new valve in and --

Q And can you tell me whether or not the -- any of the piping systems that you worked on at ARCO Cherry Point over that six-week period of time were insulated?

A Lots of them.

Q Okay. And was it possible for you to perform your work on piping at ARCO Cherry Point over that sixweek period of time without removing the insulation?

A No. There was -- there was insulation moved back. We had a -- it was either a 30- or a 36-inch pipe which was one of the larger ones in the refinery . . . and those required a Flexitallic gasket so you -- we actually had to have a crane come in there and . . . they built a scaffolding [\*10] and they Visqueen the area.

And that -- that project was handed off several times and I never got to fully complete the project, but there was . . . <u>asbestos</u> on the . . . scaffolding and . . . in the area where they

pulled it back because that particular flange had bolts, stud bolts that big around (indicating), and they had to have a -- what you would call a multiplier. It ain't something you just go up and put a wrench on. You --

Q Okay. So what, if anything, would occur when the <u>asbestos</u> was removed from pipes at ARCO Ferndale --

A Well, you'd have --

Q -- during that six-week period of time that you worked there?

A Well, you'd have the debris from any . . .

. . . .

. . . of the insulation all over the place where you were and you'd change the gasket and you'd try and compete the project and . . . that one I didn't get it complete. We worked on it. . .

. [T]hey put some little gal weighed about a hundred pounds working with me and -- and that was entertaining, her trying to handle some of that big stuff and --

Q . . . . Hand --

A -- and then they moved us.

Q Handing you what's been marked as Exhibit 22 (22A), does that photograph assist you in explaining how the insulation was peeled back [\*11] in order to do your work at ARCO Ferndale over that six-week period of time?

. . . .

A You had -- the insulation might be closer to the flanges and then it had to be moved back like what we're trying to show on our exhibit so you could get the bolts out.

Q... So recognizing that Exhibit 22 (22A) does not appear to be <u>asbestos</u> insulation, can you tell me whether or not it nevertheless fairly and accurately depicts the manner in which insulation was peeled

back in order to access the flanges of the pipes that you worked on at ARCO Ferndale over the sixweek period of time?

. . . .

[A] Go through that again, would you please?

[Q] Does Exhibit 22 (22A) fairly and accurately depict the manner in which insulation was removed from pipes --

A Yeah.

Q -- at ARCO Ferndale in order to access the flanges to do --

A Yes.

Q -- the work?

A Yes, it does. Other than like this exhibit, that's -- you can see it's fiberglass. It's not the . . . insulation that . . . we had removed so that we could do our job.

In his written report, Dr. Brodkin summarized Hickson's work at Cherry Point as follows:

Mr. Hickson worked in various refinery locations ("all over the place" [not further characterized]). He installed a new [\*12] [flexitallic] gasket on a large bore pipe [with] prior removal of insulation and old gasket material by others ("all the insulation was stripped back" (30"-36" pipe). He performed some [garlock] gasket installations ("drop a gasket in") noting it was not necessary to completely open flanges to remove old gaskets. Mr. Hickson's work on 6"-8" pipe racks included the following (install [with] pre-cut gaskets) on unknown systems.

Direct Removal of Old/Existing Pipe Covering for [F]lange [A]ccess

Mr. Hickson intermittently had to remove pipecovering insulation, noting "if the insulation is up to where the bolts are there, then it has to be moved back"; "you have to remove it in order to get the bolts out"; [with] general recollection of pipecovering removed (not a specific piping system). Work all outdoors.

Dr. Brodkin's understanding was that Hickson "intermittently had to remove pipe-covering insulation" working outdoors. He indicates Hickson cannot recall specifically which piping systems he worked on or removed insulation from. Hickson's response to summary judgment conceded that he could not remember the precise locations he worked with in the refinery.

A close reading of Hickson's deposition [\*13] reveals that he did not offer any testimony establishing that he removed *asbestos* containing insulation from pipes. It establishes that Hickson sometimes removed insulation. He described insulation having been removed on a 30-36 inch pipe, but does not say he removed it. His counsel next asked what would occur "if asbestos was removed" from pipes, he replied you would have insulation all over the place. This was the only reference to asbestos in the Cherry Point portion of Hickson's deposition. Notably, Hickson did not say that when insulation had to be removed to do his gasket work, that he did the removal. He did not say that he removed asbestos insulation at all, let alone on a specific piping system or on a regular basis. As a result, the need to use circumstantial evidence to connect where Hickson worked to the location of *asbestos* containing insulation became very important.

Not surprisingly, when Dr. Brodkin was deposed about Hickson's time at Cherry Point, he said he could not testify that Hickson was exposed to <u>asbestos</u> at the ARCO refinery:

[Q] You are an expert in occupational and environmental medicine, correct?

A Yes.

Q And one of the things that you do in that line of work [\*14] is evaluate whether certain exposures or

alleged exposures are sufficient to increase someone's risk of an <u>asbestos</u> disease, correct?

A That's true.

Q And you do the same thing to determine whether you can render an opinion as to whether a certain exposure was a cause of -- a substantial factor in causing someone's <u>asbestos</u>-related disease, correct?

A Yes. Based on reviewing evidence, I can reach that determination or rule it out.

Q And potential exposure isn't sufficient to allow you to render those opinions as to increased risk and causation, correct?

A That's true. That would require additional speculation.

Q What you need to do in order to render an opinion on increased risk or causation is engage in a careful and thorough assessment of occupational and environmental history to identify any biologically significant exposures; is that correct? A That's correct.

Q And as you use the term identified exposure in this case, is that synonymous with the biologically significant exposure identified through a careful and thorough assessment of the occupational and environmental history?

A Yes, it would be.

Q In this case, have you been provided with evidence from environmental history with respect [\*15] to a job he did at ARCO's Cherry Point refinery for about a month in 1984?

A The main material I was provided was through Mr. Hickson's deposition testimony. He indicated that he was on that site and performed various activities with piping at the ARCO facility in 1984.

Q Did you carefully and thoroughly review that occupational and environmental history?

A Yes, I did.

Q Were you able to determine based upon that careful and thorough assessment whether Mr. Hickson experienced an identified exposure to <u>asbestos</u> at the Cherry Point refinery to a reasonable degree of medical certainty?

A I did not identify <u>asbestos</u> exposure at the ARCO facility. I did indicate, and I have indicated in my report, that he did work over a period of four to six weeks with insulation, removing insulation to -- the pipe covering insulation to access flanges on a pipe racking system for six- to eight-inch pipe.

But that insulation material in 1984 was not sufficiently characterized either in terms of the refinery application, the temperatures, whether it was on a hot system, or the location for me to identify that as *asbestos* containing

I have noted that that is a potential exposure based on the current information. [\*16] I certainly was provided discovery documents that document during the '69 to '72 construction of ARCO the use of <u>asbestos</u>-containing insulation materials. But I don't have sufficient evidence to say that in 1984, Mr. Hickson worked with original <u>asbestos</u>-containing materials or some non <u>asbestos</u>-containing material.

So I have noted that that's a potential exposure during that four-week period in 1984, but there's not sufficient evidence based on what I have reviewed to identify it.

Q So putting a finer point on it, you will not testify based upon what you know now, you will not testify in this case that Mr. Hickson's risk of <u>asbestos</u>-related disease was increased because of his work at Cherry Point to a reasonable degree of medical certainty; is that correct?

A True. Based on the current information, that resulted in exposure. would be correct.

Q And you also will not testify that his work at Cherry Point was a substantial contributing factor to causing his asbestos-related disease, correct?

A That's true. Based on the current [information] I have reviewed, that's correct.

Q Are you planning to review any additional information?

A I have not requested additional information. As I said, my practice, if provided [\*17] additional information, would be to read and consider it. If it impacted any of my opinions regarding Mr. Hickson's exposures or health-related effects. I would then submit a separate addenda.

Dr. Brodkin knew that breaking open asbestos containing insulation was a potentially significant exposure. Because he reviewed Hickson's deposition, Dr. Brodkin knew of the testimony about asbestos on the scaffolding. This did not prove sufficient for him to conclude there was a significant exposure. The direct evidence fell short of establishing actual biologically significant exposure. The circumstantial evidence however established potential for such exposure. Dr. Brodkin stated potential exposure is not sufficient to assess risk or causation; it would require speculation. He was correct.

Hickson argues that Brodkin's opinion was given prior to the completion of ARCO's production of answers to discovery. But, whether the later produced materials would have changed Dr. Brodkin's opinion is speculation. He did not supplement his report or provide a declaration based on the new evidence. And, the summary judgment materials do not appear to resolve where Hickson performed his duties or that he disrupted [\*18] asbestos containing insulation that

If we were to conclude to the contrary, that a question of material fact existed as to any exposure, this conclusion would not resolve the issue of causation.

### B. Causation

The trial court granted summary judgment stating that Hickson did not submit sufficient evidence to establish a genuine issue of material fact as to causation. In an asbestos case, the plaintiff must show a causal connection between the injury, the product, and the manufacturer. Morgan, 159 Wn. App. at 729; RCW 7.72.030(1). Even if there was sufficient evidence of exposure to survive summary judgment, Hickson must still satisfy the Lockwood test to establish that sufficient evidence shows asbestos was a substantial factor in causing mesothelioma. Morgan, 159 Wn. App. at 739; Lockwood v. AC & S, Inc., 109 Wn.2d 235, 248-49, 744 P.2d 605 (1987).

The Lockwood test has four factors: "(1) plaintiff's proximity to the asbestos product when the exposure occurred and the expanse of the work site where asbestos fibers were released; (2) the extent of time the plaintiff was exposed to the product; (3) the types of asbestos products to which plaintiff was exposed and the ways in which the products were handled and used, and (4) the evidence presented as to medical causation of the plaintiffs particular disease." Morgan, 159 Wn. App. at 730.

Dr. Brodkin [\*19] stated that he would not testify to causation of Hickson's mesothelioma based on exposure to asbestos at the ARCO site. Hickson offered no other expert testimony. Instead, he argues that Dr. Brodkin provided a hypothetical answer in his deposition on which the court could conclude his opinion would support causation. He further argues that the discovery materials received subsequent to Dr. Brodkin's deposition provide the facts necessary to satisfy the hypothetical. This argument relies on a portion of Dr. Brodkin's deposition:

Q So our discussion so far is really focused on the component of your methodology for determining identified exposure, the element of the known source of *asbestos* exposure, correct?

A A well-characterized source, yes.

Q Now I want to ask you about whether or not, assuming you could get by that first element of your methodology, that is a known source of <u>asbestos</u> exposure, have you seen evidence of a well-characterized activity that disrupts the source to generate airborne fibers sufficient to overcome the body's respiratory defenses?

A *Yes.* If it were an <u>asbestos</u>-containing material, my opinion would relate to insulation removal, <u>asbestos</u>-containing insulation removal. [\*20] And I have noted on Page 2 of the diagnosis and assessment section an exposure range ranging from 0.2 up to 60 fibers per cc [(cubic centimeter)] associated with removal of <u>asbestos</u>-containing insulation.

So if it were an <u>asbestos</u>-containing material, there would be a significant intensity of exposure.

Q How did you come up with those ranges?

A I am citing two studies that inform my opinion about that. The first would be Balzer and Cooper from 1968.<sup>3</sup> Insulation removal was associated with a .2 to 26.3 fiber per cc range.

And then Marr in Industrial Hygiene Foundation Journal, 1964, with block and pipe covering Q Did Mr. Hickson testify to any specific example of him ever removing <u>asbestos</u> -- or excuse me — removing insulation?

A Yes. I've noted it on Page 27 of the occupational and environmental history section, direct removal of old existing pipe covering to access the flanges. That would be intermittent, but he did indicate that he had to remove pipe covering insulation on -- at various times to access the vaults.

Q And would it matter to your opinion how [\*21] many times that occurred or how long he was engaged in that activity?

A Yes, I would say that this -- I would describe it as an intermittent exposure because he didn't, integral to the activity, have to knock off insulation for each flange.

Q I guess what I'm asking is . . . would there be a level of activity that you've described that would constitute a de minimus exposure in your parlance as opposed to an identified exposure based upon what Mr. Hickson said?

A Yeah, the removal of pipe covering to access a flange would be an identified exposure.

Q Regardless of he said it was always raining, if it was raining, he took five minutes to move the stuff back, in your opinion that would an identified exposure?

A Yes. Now, those conditions I would consider, but they could put it at the lower range of the exposure.

Q Okay. But just to be clear, just as hypothetically if you were able to determine that there was a day during this period of time when Mr. Hickson spent

insulation removal noted a .8 to 10 million particles per cubic foot, which converted to fibers per cc could be up to 60 fibers per cc.

<sup>&</sup>lt;sup>3</sup> Dr. Brodkin did not further identify the sources that he was referring to.

five minutes pulling back insulation from a flange, and it was pouring down rain the whole time, your opinion would be that that was an identified exposure as you use that term in this case?

A Just to clarify, is your question that [\*22] this is a one-time event?

Q Yes.

A I would probably not identify that because in a one-time event, there would be too much uncertainty. I mean, maybe in an outdoor situation the wind was blowing the other way with one time. I think there would be too much uncertainty there.

Q So how many more than one would it take for you to say right now we're beyond the range of de minimus into identified?

A *I don't think there's a bright-line number*. But I think when you get to, you know, three or four times removing it, it becomes much more robust. It's not just the issue of one time the wind was blowing the other direction.

Q And is much more robust the same thing as identified exposure?

A It's more robust. Obviously the more times it's done, the more robust it is.

(Emphasis added.)

Hickson worked on pipes outdoors. Wind and rain are factors that would affect the intensity of exposure to any airborne <u>asbestos</u>. Hickson stated that "lots" of pipes were insulated. At best, the record establishes that Hickson intermittently removed pipe-covering insulation. Dr. Brodkin could not say with certainty how many <u>asbestos</u> exposures of the type alleged to have happened here would be enough to establish causation. [\*23] He said there is no bright line number of exposures. The lack of a bright light exposure number illustrates why expert opinion is required on causation.

And, here, nothing establishes that he actually removed <u>asbestos</u> containing insulation, or even that it was removed by someone else in his presence. Nothing establishes how often, for how long, or under what environmental conditions any alleged <u>asbestos</u> exposure occurred. The jury would be required to speculate as to both exposure and causation.

The evidence at summary judgment did not support a conclusion that Hickson satisfied the <u>Lockwood</u> factors. The trial court did not err in granting summary judgment.

We affirm.

/s/ Appelwick, J. WE CONCUR: /s/ Bowman, J, /s/ Chun, J.

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