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STATE OF VERMONT WINDSOR COUNTY, SS

Paul H. Blanchard Plaintiff

v.

Goodyear Tire & Rubber Co.; Connecticut River Development Corp.

Defendants

SUPERIOR COURT Docket No. 837-12-07 Wrcv

DECISION ON MOTIONS FOR SUMMARY JUDGMENT

Plaintiff Paul Blanchard was diagnosed with a rare lymphoma in 2005. He attributes his injury to benzene exposure that allegedly occurred between 1968 and 1973 while he was a teenager playing on a ballfield on the grounds of the former Goodyear rubber manufacturing plant in Windsor, Vermont. He alleges that the field itself was polluted, and that there was a gully in the outfield that conveyed foul-smelling and oily stormwater discharge away from the manufacturing plant. He suspects that the discharge included gasoline or other petroleum products, of which benzene is a component. He further alleges that there is a causal link between his benzene exposure and his Primary CNS (central nervous system) Large B-cell lymphoma.

Defendant Goodyear Tire and Rubber Company ("Goodyear") has filed a motion for summary judgment in which it contends that plaintiff has failed to produce sufficient evidence of any exposure to benzene, much less exposure to benzene in an amount that could be considered harmful. See *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986) (explaining that summary judgment is appropriate where plaintiff has failed to make a showing "sufficient to establish the existence of an element essential to [his] case and on which [he] has the burden of proof at trial"). Defendant similarly contends that plaintiff has not presented any expert opinion on specific causation.

Defendant Connecticut River Development Corp. ("CRDC") has also filed a motion for summary judgment in which it incorporates Goodyear's arguments, and further argues that it is not liable as a successor owner who did not employ the alleged causative agent in its operations.

Given that the motions for summary judgment challenge the ability of plaintiff to meet his burden of production upon the elements of exposure and causation, the analysis for the court is whether plaintiff has come forward with sufficient evidence to create a genuine issue for trial. V.R.C.P. 56(e); *Poplaski v. Lamphere*, 152 Vt. 251, 254–55 (1989). In this analysis, the court views the evidence in the light most favorable to

plaintiff and gives plaintiff the benefit of all reasonable inferences supported by the circumstantial evidence. *Price v. Leland*, 149 Vt. 518, 521 (1988).

I.

Here, the following facts are established for purposes of summary judgment. From 1936 until 1986, Goodyear operated a manufacturing facility in Windsor, Vermont. The site is approximately 17.4 acres adjacent to the Connecticut River and is located at [address redacted] in Windsor. During its 50 years of operation Goodyear made rubber soles, heels and tubes at the site. In 1986, Goodyear closed the facility and sold the land to CRDC. Goodyear provided an indemnity agreement to CRDC, the scope or applicability of which is not before the Court at this time.

While the plant was in operation, a portion of the 17.4 acres lying to the south of the manufacturing buildings was used as a ball field by area children. It was referred to as the Goodyear field. There is no evidence that Goodyear objected to the use of the field for this purpose or sought to exclude children from entering on or using the field.

Plaintiff was born and raised in the town of Windsor, and his family lived in various homes near the Goodyear plant. In 1968, plaintiff's family moved to a home just south of the plant, at [address redacted]. Plaintiff was twelve years old at the time. Plaintiff spent a considerable amount of time over the next five years playing ball with other neighborhood children on the Goodyear field. He estimates that they spent thirty hours per week playing on the field during the summer, and somewhat less during the school year.

One of the most memorable features of the field, according to plaintiff, was a gully that ran through the outfield. Plaintiff recalls that the gully was frequently, but not always, filled with water about six or eight inches deep. The water was "discolored" and it emanated a strong, pungent odor. Another neighborhood child who played on the field recalled that the water "stunk real bad" and that it had an "odd metallic type color" resembling "an oil slick on top of water." Plaintiff's younger brother similarly recalled that the water was "never clear," and that it left an oily film on anything that went into the water. Of course, from time to time, the ball did go into the water, and when that happened it became someone's responsibility to fish it out.

Plaintiff and his friends also recall that the grass on the field was discolored. Rick Chambers, the aforementioned neighborhood child, described the grass as having a "grayish hue" and said that "the discoloration of the ground and the grass, plus the, you know, the pungent odor of the liquid in this little gully that ran through the outfield was always something that we noticed and talked about." There are other recollections in the record to the effect that the rubber plant conducted burns from time to time that resulted in clouds of black particulates settling across the neighborhood, including on the field.

As for the location of the gully in relation to the plant, it is undisputed that it was basically to the south of the plant and that it carried stormwater away from a few paved

areas of the plant in a generally downhill and southeasterly direction. It is also undisputed that there were no discharge pipes involved with the gully. However, the parties do disagree as to the extent to which different areas of the plant would have actually drained into the gully, i.e., whether the general groundwater flow across the plant is to the southeast or whether it makes a turn to the east-southeast at some point, whether it is feasible that groundwater from x location within the plant grounds could flow either as surface water or groundwater to y location outside the plant grounds, whether any of this has changed since 1973 due to changes in topography, and so forth. None of these disputes are central to the summary-judgment decision, and the court has simply assumed for purposes of this decision that plaintiff is correct in his interpretation of the flow data.

Not much is known about any releases or contamination that may have occurred during the operation of the rubber manufacturing plant. In 2006, the State of Vermont brought a clean-up action against Goodyear and CRDC concerning the site, and a clean-up agreement was reached in 2007. As part of the settlement, Goodyear paid for an environmental assessment of the plant site that was conducted by the Jacques Whitford Company. The project manager for the assessment was Robert Nicoloro, who has been disclosed as an expert by both Blanchard and Goodyear in this litigation.

As part of the assessment, Whitford established numerous monitoring wells and took numerous soil borings at various locations on the Goodyear site. No monitoring wells or soil borings were taken on the area which was once occupied by the ball field.

In connection with the assessment, Whitford prepared a site investigation report, which was completed in 2009 and is considered to be the most complete summary of the present environmental site conditions and the potential sources of contamination from historic operations at the plant. The report identified eleven "areas of interest" at the plant and listed corresponding contaminants of concern for each of those areas of interest. Plaintiffs contend that at least five of these areas are within the general proximity of the drainage gully, including a manufacturing area, a storage area, a loading dock, some transformers, and some aboveground and underground storage tanks. The contaminants of concern in these areas include lubricating oils, solvents, gasoline and other petroleum products, sulfuric acids, PCBs, CVOCs, DEHP, DEHA, MEK, and other volatile organic compounds such as paint. See Plaintiff's Ex. 2. Mr. Nicoloro, who prepared the site investigation report, generally assumes that these contaminants were or could have been released into the environment at these areas by way of normal plant operations. For example, vehicles were refueled at the loading dock, so it is possible that some gasoline was spilled from time to time during refueling. Although there is some detectable evidence of contamination in these areas, there is no evidence of any specific releases occurring at these sites.

Mr. Nicoloro reports that even if there were some spills, there is no evidence to suggest any surface migration of benzene from the plant to any areas south of the plant, such as the ballfield. However, his opinion on this point seems to be based upon a review

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¹ It is undisputed that benzene is a component of gasoline and the petroleum compounds involved here.

of certain drawings, which leads back to the disputed issues of soil topography and groundwater flow. Moreover, it is not clear whether his opinion took into account the reports of contaminated water made by the children who played on the field. For these reasons, the court does not interpret Mr. Nicoloro's opinion as evidence that there was no benzene migration from the plant to the ballfield, but rather as a statement that he is not personally aware of any such migration. As such, the court does not consider the statement to be important in light of the standard of review applicable here.

Mr. Nicoloro also sampled some of the soil and groundwater on the site. He detected low levels of benzene at some of the locations on the property, but he believes that these detections were mostly attributable to an unspecified report of a recent off-site petroleum release somewhere to the west of the plant property. He believes that the benzene mostly migrated to the plant property as part of the general groundwater flow. Plaintiff disputes this opinion, but it does not seem to the court that the 2009 test results have anything to say one way or the other about whether the property was contaminated by benzene between 1968 and 1973. Any positive results could be explained by releases that occurred in the intervening years, and any negative results could be explained by the fact that benzene is highly volatile and mobile. Moreover, there are no test results at all for the ballfield; it was not sampled for the presence of benzene.² It is therefore presently unknown whether the ballfield is contaminated or not, and even if it was, there would be questions about whether present contamination is relevant to prove that the ballfield was contaminated by benzene in 1973. As a result, in light of the standard of review, the court has not drawn any inferences or otherwise based its decision in any way upon the sampling results described in this paragraph.

CRDC has not used benzene at the site. Plaintiff does not claim CRDC was responsible for contamination of the site but argues liability as successor owner of a contraindicated site.

Plaintiff has produced two experts to testify as to general causation and specific causation. The first expert is Dr. David Goldsmith, an epidemiologist who has provided an opinion that occupational exposure to benzene is generally associated with a risk of non-Hodgkin's lymphoma, of which Primary CNS Large-B cell lymphoma is a subtype. The second expert is Dr. Camilo Fadul, a neuro-oncologist who testified that he has reviewed plaintiff's medical records and come to the conclusion that plaintiff's cancer was not caused by an immunodeficiency disorder, which is one of the known causes of plaintiff's specific form of cancer.

At his deposition, Dr. Goldsmith admitted that plaintiff's evidence of exposure was speculative. He stated that he had assumed that plaintiff was exposed to benzene on

² There were some monitoring wells and soil samples taken between the southeast corner of the plant and the ball field. These samples did not show the presence of benzene in any detectable amounts. In other words, sampling in the area between the place of detection of trace amounts of benzene and the ball field did not show any detectable benzene. Of course, as explained above, the court is not drawing any inferences based upon this observation because it does not explain what the soil and water conditions on the ball field during the assumed period of exposure.

the ballfield, but that "[t]he reality is that no one is going to be able to know if the groundwater, at the time he was there, contained solvents or not." He noted that it was reasonable to infer that there was some chemical in the gully rather than just simple water, based on the reports of odors and discoloration, but that "[w]hat it was and what quantities, we just don't know and probably will never know."

Even assuming that benzene was present in the gully, Dr. Goldsmith explained that the amount of time that plaintiff spent playing ball on the field "doesn't say anything about his exposure to benzene," but rather "says something about his playing time on that field." Nevertheless, assuming that there was benzene in the gully, and that plaintiff's exposure to benzene was at a level equivalent to occupational exposure to benzene, Dr. Goldsmith asserted that there was a causal association between benzene exposure and non-Hodgkin's lymphoma. His opinion was based on epidemiological studies showing a relative risk of more than 2.0, which means that occupational exposure to benzene essentially doubles the risk of developing non-Hodgkin's lymphoma.

Dr. Fadul then testified at his deposition that one of the leading known causes of plaintiff's specific form of non-Hodgkin's lymphoma was a deficiency with the immune system, but that plaintiff did not have any known problems with immune suppression. Dr. Fadul also testified that many cases of Primary CNS Large B-cell lymphoma are of unknown etiology. In essence, Dr. Fadul ruled out an immunological cause of plaintiff's cancer, but his opinion did not go further than that.

In the end, therefore, plaintiff's evidence of exposure to benzene is limited to the inference to be drawn from the following evidence: (1) there was benzene present at the rubber manufacturing plant as a result of the storage and use of gasoline and other petroleum products; (2) gasoline presumably spilled from time to time during normal plant operations; (3) there was a gully conveying stormwater runoff from the paved portions of the plant area to the ballfield and beyond; (4) the stormwater in the gully looked and smelled oily; (5) the grass on the field was gray; and (6) by virtue of playing on the field, plaintiff was exposed to whatever was in the stormwater and the soil by means of inhalation and dermal contact. See Plaintiff's Opposition to Defendant's Motion for Summary Judgment, filed Dec. 30, 2009, at 25 (summarizing this evidence). And assuming he was exposed to benzene, plaintiff's evidence of causation is that benzene can be ruled in as a potential cause of his non-Hodgkin's lymphoma, and an immunological cause can be ruled out.

II.

It is generally well-established that causation in toxic tort cases requires plaintiffs to show that they were exposed to a specific substance, that the specific substance is generally capable of causing the injury that plaintiff suffered, and that the specific substance actually caused plaintiff's injuries in this case. *Golden v. CH2M Hill Hanford Group, Inc.*, 528 F.3d 681, 683 (9th Cir. 2008); *Mancuso v. Consolidated Edison Co. of New York, Inc.*, 967 F.Supp. 1437, 1445–46 (S.D.N.Y. 1997). The first of these requirements—exposure—requires plaintiff to demonstrate the actual level of his

exposure to a specific substance as well as the level of exposure that is generally hazardous to human beings. Westberry v. Gislaved Gummi AB, 178 F.3d 257, 264 (4th Cir. 1999). The requirement that the plaintiff demonstrate exposure to a specific substance is important because it sets the table for a demonstration that exposure to that particular substance is generally capable of causing plaintiff's illness, and that it actually caused plaintiff's illness in this case. But it is widely acknowledged that "it is impossible as a matter of practice to quantify with hard proof—such as the presence of the alleged toxic substance in the plaintiff's blood or tissue—the precise amount of the toxic substance to which an individual plaintiff was exposed." Plourde v. Gladstone, 190 F.Supp.2d 708, 722 (D. Vt. 2002). Thus, it generally suffices for exposure levels to be "roughly established through reliable circumstantial evidence." Id.

Here, however, the circumstantial evidence is not sufficient to support an inference that plaintiff was exposed to benzene in any amount. The testimony from plaintiff and his childhood friends reasonably supports the inferences that there were chemicals present in the stormwater in the gully, and that the ballfield was contaminated by some substance. But there is no way of knowing without resort to speculation whether the chemicals in the stormwater were gasoline or some other benzene-containing petroleum product as opposed to one of the other contaminants of concern that could have been released in the vicinity of the stormwater gully, such as lubricating oils, sulfuric acids, DEHP, DEHA, MEK, PCBs, CVOCs, other volatile organic compounds, other solvents, or some other chemical altogether. There is no evidence in the record that makes it probable that benzene was in the gully as opposed to any of these other chemicals. As plaintiff's own expert testified, there is simply no way of knowing "[w]hat it was" that plaintiff was exposed to.

It is surely of little solace to say that plaintiff's case fails because he was unable to establish that he was exposed to benzene as opposed to, say, DEHP or PCBs, since one might reasonably feel that human exposure to those chemicals is dangerous too. But it is important to his legal claim for damages that plaintiff establish a probability, as opposed to a mere possibility, that his injuries were caused by exposure to benzene specifically. Cf. White v. Dow Chemical Co., 321 Fed. Appx. 266, 273–74 (4th Cir. 2009) (plaintiff must establish more than "mere possibility" of exposure to specific chemical). The reason for this is that causation in a toxic tort case requires expert opinion establishing an association between plaintiff's illness and the chemical to which he was allegedly exposed, and here, plaintiff's evidence of causation is limited to the association between his illness and benzene. Hence, if plaintiff was not exposed to benzene but rather some other chemical in the gully, then he has not proven a causal link between his exposure and his illness. Since plaintiff has not produced evidence here showing that it was probable, rather than merely possible, that he was exposed to benzene, defendant's

³ The court does not address here the question of whether Dr. Goldsmith's opinion ruled in toluene or other petroleum-related solvents as well. Dr. Goldsmith's expert report is not in the record and his deposition is unclear on this point. The larger issue, however, is that there is no evidence of causation between plaintiff's illness and many of the other chemicals that could have been present in the stormwater. Nor is there any evidence that makes it more likely than not, without resort to speculation, that benzene was in the water as opposed to some other chemical.

motion for summary judgment must be granted. *Id.*; see also *Celotex Corp. v. Catrett*, 477 U.S. 317, 319–20 (1986) (explaining that summary judgment is appropriate in toxictort cases when plaintiff has not produced evidence sufficient to prove that he was exposed to a particular chemical or product).

In reaching this conclusion, the court has kept in mind the standards of review applicable to summary-judgment motions—namely, that the evidence is to be viewed in the light most favorable to plaintiff and that all reasonable inferences are to be drawn in plaintiff's favor. The court has accordingly granted plaintiff all of the inferences that can be reasonably drawn on the element of exposure based on the evidence presented. The shortcoming identified above is that the circumstantial evidence does not support an inference that there was benzene in the gully as opposed to some other chemical. Making that leap requires speculation, which is not permissible at the summary-judgment stage. See Richards v. Nowicki, 172 Vt. 142, 150 (2001) (explaining that opponents of summary judgment cannot rely upon speculation or hypothetical possibilities to meet their burden of production). Mr. Nicoloro's report was that any of the contaminants of concern could have been spilled during normal plant operations, and he had no specific information about any actual releases. As such, all that can be said is that it is possible that plaintiff was exposed to benzene, but there is nothing to support the conclusion that such exposure was probable. See Estate of George v. Vermont League of Cities and Towns, 2010 VT 1, ¶ 42 (Dooley, J., concurring) (explaining that summary judgment is appropriate when evidence shows that "it is merely possible, rather than probable," that claimant's exposure caused his injury).

Nor is there any evidence to show the amount of exposure to whatever chemical was in the stormwater gully. As explained above, although evidence of the amount of exposure is important because it ensures that plaintiff was exposed to a chemical in an amount sufficient to be hazardous to human health, it is not generally necessary to quantify the amount of exposure with hard proof, and it is ordinarily sufficient to roughly establish the amount of exposure through circumstantial evidence. *Plourde v. Gladstone*, 190 F.Supp.2d 708, 722 (D. Vt. 2002). Here, however, even assuming that there was some benzene in the gully, it is impossible to guess at how much exposure occurred. Even plaintiff's own expert admits that he is unable to make "any realistic quantifications" about the amount of benzene to which plaintiff was exposed based on the evidence presented. As the expert explained, plaintiff's testimony about the amount of time he spent on the ballfield "doesn't say anything about his exposure to benzene," but rather "says something about his playing time on that field." In other words, based on the evidence produced in the response to the summary judgment motion, it is pure speculation to say that plaintiff was exposed to benzene (assuming it was benzene) in a level sufficient to be hazardous to human health. See Mancuso v. Consolidated Edison Co. of New York, Inc., 967 F.Supp. 1437, 1450–51 (S.D.N.Y. 1997) (explaining that it is improper to assume that a plaintiff must have somehow been exposed to a high enough dose to exceed the threshold necessary to cause the illness, because this is circular reasoning).

Looking at the problem from a different angle, there are many cases, as here, in which plaintiffs are unable to prove the precise amount of their toxic exposure due to the passage of time or the lack of monitoring. In these cases, "courts have looked favorably on causation testimony that is primarily based on differential diagnosis, a scientific analysis which entails the weighing of relevant evidence, listing all likely causes of the patient's observed symptoms or injury, then eliminating all but one cause." *Plourde*, 190 F.Supp.2d at 722. A differential diagnosis can provide evidence of causation because it "identifies the cause of a medical problem by eliminating the likely causes until the most probable one is isolated." *Magistrini v. One Hour Martinizing Dry Cleaning*, 180 F.Supp.2d 584, 609 (D.N.J. 2002). In proving causation through differential diagnosis, it is not necessary to rule out all possible causes, but the expert must rule out "obvious alternative causes." *Heller v. Shaw Industries, Inc.*, 167 F.3d 146, 156 (3d Cir. 1999) (quotation omitted).

Plaintiff contends that his experts have produced a differential diagnosis that is sufficient to submit the case to the jury, but it does not appear to the court that this is an accurate summation of the opinions his experts have provided. Dr. Goldsmith did not "rule in" all the potential causes of plaintiff's disease, but rather provided an opinion that occupational exposure to benzene is generally capable of causing non-Hodgkin's lymphoma. And Dr. Fadul did not "rule out" all other obvious alternative causes other than benzene exposure, but rather simply testified that plaintiff's cancer was not caused by an immunological deficiency. Taken together, these opinions do not amount to a differential diagnosis, because they do not exclude other obvious alternative causes of his illness, such as exposure to a variety of other chemicals on the ballfield or at other times in his life, or simply the possibility that the cause of his cancer is unknown at this time (which Dr. Fadul testified is the conclusion in many cases). See Pritchard v. Dow Agro Sciences, 2010 WL 936767 at *19 (W.D. Pa. Mar. 11, 2010) (explaining that expert opinion on specific causation was lacking where it did not rule out possibility that plaintiff's cancer was the result of an idiopathic or unknown cause). In other words, plaintiff's evidence of causation is that his illness might have been caused by benzene, and definitely was not caused by an immunological disorder. However, this is not sufficient to prove that it was probable, as opposed to merely possible, that benzene exposure caused plaintiff's illness, since "standing alone, the presence of a known risk factor is not sufficient basis for ruling out idiopathic origin in a particular case, particularly where most cases of the disease have no known cause." Id. As a result, the court must conclude that plaintiff has failed to produce sufficient evidence of specific causation, and summary judgment is appropriate on this independent ground as well.

III.

In reaching the foregoing conclusions, the court has kept in mind that there is tension between the need of the tort system to compensate those who have been injured by the wrongful acts of another with the limits of science in its ability to isolate and identify the causes of extremely complicated diseases. The delicate balance is tested particularly in those cases where the causes of a disease remain relatively unknown, and where the evidence of exposure reaches more than forty years into the past. In the end,

however, there is the principle that "a defendant cannot be found liable for injury unless the preponderance of the evidence supports cause in fact." *Estate of George v. Vermont League of Cities and Towns*, 2010 VT 1, ¶ 28 (quoting *Merrell Dow Pharmaceuticals, Inc. v. Havner*, 953 S.W.2d 706, 718 (Tex. 1997)). It is for this reason that the balance must be measured by asking whether plaintiff's evidence is sufficient to prove, without resort to speculation or conjecture, that it is more likely than not that his injuries were caused by the alleged exposure. Here, for the reasons explained in more detail above, plaintiff has not produced sufficient evidence to cross that threshold.

It is also important to note that the court has resolved the motion for summary judgment as a matter of the sufficiency of the evidence, e.g., *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986), rather than by testing the expert opinions under the standards set forth by V.R.E. 702 and *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579, 589–95 (1993). The ruling is that plaintiff's evidence is not sufficient to survive summary judgment even when the expert opinions are assumed to be admissible and the circumstantial evidence is viewed in the light most favorable to plaintiff, with all reasonable inferences drawn accordingly.

Finally, plaintiff's complaint also names CRDC as a defendant under a theory of successor liability. Given the court's ruling that Goodyear is entitled to summary judgment, it follows that CRDC is entitled to an order granting their motion for summary judgment as well.

ORDER

- (1) Defendant Goodyear Tire & Rubber Company's Motion for Summary Judgment (MPR #5), filed Nov. 24, 2009, is *granted*;
- (2) Defendant Connecticut River Development Corporation's Motion for Summary Judgment (MPR #8), filed Dec. 8, 2009, is *granted*; and

(3)	A final judgment order shall	l issue separately.	
Dated	at Woodstock, Vermont this	day of	_, 2010.
		Harold E. Eaton, Jr.	
		Presiding Judge	