

JAMES WACK, JANE F. BEATTIE	:	IN THE SUPERIOR COURT OF
and JOAN K. MARBURGER,	:	PENNSYLVANIA
INDIVIDUALLY and as EXECUTORS OF	:	
THE ESTATE OF ADDIE Z. WACK,	:	
Deceased,	:	
	:	
Appellants	:	
	:	
v.	:	
	:	
FARMLAND INDUSTRIES, INC.,	:	
TURKEY HILL MINIT MARKETS, INC.,	:	
IDEAL CONVENIENT MARKETS, INC.,	:	
THE SICO COMPANY and	:	
HAFER PETROLEUM COMPANY, LTD.,	:	
Appellees	:	No. 303 EDA 1999

Appeal from the Order entered January 8, 1999,  
in the Court of Common Pleas of Montgomery  
County, Civil No. 88-09930

BEFORE: McEWEN, P.J., CAVANAUGH, J. and EAKIN, J.

OPINION BY EAKIN, J.:

FILED: December 27, 1999

¶ 1 James Wack, Jane F. Beattie and Joan K. Marburger, individually and as executors of the Estate of Addie Z. Wack, appeal from the order granting summary judgment in favor of Farmland Industries, Inc., Turkey Hill Minit Markets, Inc., Ideal Convenient Markets, Inc., the SICO Company and Hafer Petroleum Company, Ltd. Appellants alleged drinking water contaminated by gasoline which leaked from appellees' storage tank exposed their mother, Addie Wack, to contaminants (including benzene) which caused her to develop adenocarcinoma of the buccal cavity, a rare form of cancer affecting her salivary glands. Farmland, Turkey Hill and Ideal owned and operated a convenience store containing the storage tank. SICO leased the property to

install its storage tanks, serviced the gas-dispensing system and supplied and monitored the gas. Hafer installed the storage tanks and on occasion serviced the gas-dispensing system.

¶ 2 After the close of discovery, Hafer filed (and all other appellees joined) a motion in limine to preclude the testimony of Dr. G. John DiGregorio, plaintiffs' causation expert, asserting it failed to meet the requirements for expert scientific testimony. The trial court granted the motion, finding appellants failed to show Dr. DiGregorio's opinion was generally accepted within the scientific community. The court reasoned "Dr. DiGregorio's opinion has not been subjected to any peer review" and he "has not produced an epidemiological study or any other type of study demonstrating a causal relationship between benzene exposure and adenocarcinoma of the minor salivary glands." Trial Court Opinion, 2/16/99, at 4. Without this testimony, appellants could not prove causation and the court granted appellees' motion for summary judgment. This timely appeal followed.

¶ 3 Appellants raise two issues for our review:

- I. DO THE DEFENDANTS HAVE THE BURDEN OF PROOF TO SHOW BY CLEAR AND CONVINCING EVIDENCE THAT PETROLEUM DID NOT CAUSE THE DECEDENT'S CANCER?
- II. DID APPELLANTS' EXPERT TESTIMONY COMPLY WITH THE STANDARD OF PROOF OF CAUSAL RELATION THAT IS GENERALLY ACCEPTED IN THE SCIENTIFIC COMMUNITY AS SET FORTH IN *BLUM V. MERRELL DOW PHARMACEUTICALS, INC.*?

¶ 4 Summary judgment is proper only where there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law. *McClung v. Breneman*, 700 A.2d 495, 496 (Pa. Super. 1997); *see* Pa.R.C.P. 1035.2. Our scope of review of a grant of summary judgment is plenary. *Albright v. Abington Memorial Hospital*, 696 A.2d 1159, 1165 (Pa. 1997). In considering the propriety of summary judgment, a court must examine the record in the light most favorable to the nonmoving party; all doubts must be resolved against the moving party. *Id.* We will disturb the trial court's grant of summary judgment only if it abused its discretion or committed an error of law. *Merriweather v. Philadelphia Newspapers, Inc.*, 684 A.2d 137, 140 (Pa. Super. 1996), *appeal denied*, 693 A.2d 967 (Pa. 1997).

¶ 5 Appellants contend the burden of proof shifts to appellees under the Storage Tank and Spill Prevention Act, 35 P.S. §§ 6021.101, 6021.1311(a). Appellees counter the Act does not provide for a private action for personal injury claims.<sup>1</sup> The section dealing with private actions states:

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<sup>1</sup> Appellees also argue the Act does not apply because it was not properly pleaded. It is unclear from the record when or if this issue was raised before the trial court, which addressed applicability of the Act without reference to the sufficiency of the complaint. Appellees also maintain appellants failed to meet the requirement a plaintiff give written notice of a violation to the department and to any alleged violator at least sixty days prior to commencing an action. 35 P.S. § 6021.1305(d). A private action may be initiated immediately only upon such notice, where the violation constitutes an imminent threat to the health or safety of the plaintiff, or would affect a legal interest of the plaintiff. 35 P.S. § 6021.1305(e). Appellees argue the lack of both an imminent threat and written notice precludes the action.

Except as provided in subsection (d), any person having an interest which is or may be affected may commence a civil action on his behalf to compel compliance with this act or any rule, regulation, order or permit issued pursuant to this act by any owner, operator, landowner or occupier alleged to be in violation of any provision of this act or any rule, regulation, order or permit issued pursuant to this act...No such action may be commenced if the department has commenced and is diligently prosecuting a civil action....

35 P.S. § 6021.1305(c).

¶ 6 *Centolanza v. Lehigh Valley Dairies, Inc.*, 658 A.2d 336 (Pa. 1995), considered whether the Storage Tank Act allowed private parties to bring an action to collect cleanup costs and diminution in property value. The Supreme Court noted the phrase “compel compliance” is not defined in the Act, and the common usage definitions are unhelpful. The Court held it was unable to interpret definitively the legislature’s intention; until there is direction from the General Assembly, Section 6021.1305 must be construed liberally. *Centolanza*, at 340.

¶ 7 In deciding the Storage Tank Act permits actions to recover costs for cleanup and diminution of property value, the Supreme Court looked to the purpose of the Act, to protect public health and safety and “provide liability for damages sustained within this Commonwealth as a result of a release.” 35 P.S. § 6021.102(b). In light of this stated purpose, as well as the Supreme Court’s directive to interpret Section 6021.1305 liberally, we

conclude private actions for personal injury claims are permitted under the Act.<sup>2</sup>

¶ 8 Appellants argue the burden of proof shifts to appellees according to Section 6021.1311:

Except as provided in subsection (b), it shall be presumed as a rebuttable presumption of law in civil and administrative proceedings that a person who owns or operates an aboveground or underground storage tank shall be liable, without proof of fault, negligence or causation, for all damages, contamination or pollution within 2,500 feet of the perimeter of the site of a storage tank containing or which contained a regulated substance of the type which caused the damage, contamination or pollution. Such presumption may be overcome by clear and convincing evidence that the person so charged did not contribute to the damage, contamination or pollution.

35 P.S. § 6021.1311(a).

¶ 9 This Section holds owners or operators of storage tanks liable not for *any* type of damage within 2,500 feet of their storage tanks; it does so only if the substance contained in the tank is “of the type that caused the damage.” While the statutory presumption is available to private citizens, *see Centolanza*, at 340-41, it applies only after this causal link has been shown. That is, appellants may take advantage of the presumption and the shift in the burden of proof without proving appellees’ product caused the cancer, *if* they prove a product of the same type caused the cancer. The

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<sup>2</sup> Appellants assert the Act includes actions for bodily injury because Sections 6021.701(a), 6021.704(a)(1), 6021.705(b) and 6021.705(c)(3) mention compensation for bodily injury. However, these sections deal only with financial responsibility and indemnification, not private actions.

question is whether appellants could prove exposure to benzene causes adenocarcinoma of the type contracted by Mrs. Wack.

¶ 10 Appellants sought to make this proof through Dr. DiGregorio. Admission of expert testimony is within the trial court's discretion and such ruling will not be disturbed unless there has been a clear abuse of that discretion. *McKenzie v. Westinghouse Electric Corp.*, 674 A.2d 1167, 1171 n.3 (Pa. Commw. 1996), *appeal denied*, 689 A.2d 237 (Pa. 1997). With respect to novel scientific evidence, however, this discretion is tempered by the standard established in *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923). The "*Frye* test" was adopted by the Pennsylvania Supreme Court in *Commonwealth v. Topa*, 369 A.2d 1277 (Pa. 1977). The *Frye* test directs "[a]dmissibility of the evidence depends upon the *general* acceptance of its validity by those scientists active in the field to which the evidence belongs." *Topa*, at 1281 (emphasis in original). The *Topa* court explained the underlying rationale for this standard:

The requirement of general acceptance in the scientific community assures that those most qualified to assess the general validity of a scientific method will have the determinative voice. Additionally, the *Frye* test protects prosecution and defense alike by assuring that a minimal reserve of experts exists who can critically examine the validity of a scientific determination in a particular case. Since scientific proof may in some instances assume a posture of mystic infallibility in the eyes of a jury of laymen, the ability to produce rebuttal experts, equally conversant with the mechanics and methods of a particular technique, may prove to be essential.

*Topa*, at 1282 (quoting *United States v. Addison*, 498 F.2d 741, 744 (D.C. Cir. 1974)).

¶ 11 In *Blum v. Merrell Dow Pharmaceuticals, Inc.*, 705 A.2d 1314 (Pa. Super. 1997), this Court further clarified the *Frye* test and emphasized it is used to assess the quality of expert scientific evidence prior to admission, so as not to mislead jurors with unreliable evidence. *Blum*, at 1317.<sup>3</sup> See also *Checchio v. Frankford Hospital-Torresdale Division*, 717 A.2d 1058 (Pa. Super. 1998)(discussing the *Frye* standard for admissibility of scientific evidence). In *Blum*, parents brought suit against the manufacturer of the prescription drug Bendectin, alleging the mother's use

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<sup>3</sup> The *Frye* test has been superseded in federal court by the Federal Rules of Evidence, as interpreted in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). *Daubert* has been characterized as setting forth a more relaxed test for admitting scientific evidence. See *Commonwealth v. Crews*, 640 A.2d 395, 400 n.2 (Pa. 1994). Our consideration is controlled not by *Daubert* but by *Frye*, which remains the law in Pennsylvania. Pa.R.E. 702; see *Tagliati v. Nationwide Insurance Co.*, 720 A.2d 1051, 1054 n.4 (Pa. Super. 1998), *appeal denied*, 1999 WL 512105 (Pa. July 21, 1999). *Commonwealth v. Blasioli*, 713 A.2d 1117, 1119 n.1 (Pa. 1998); *Blum*, at 1317 n.2.

Rule 702 of the Pennsylvania Rules of Evidence, which addresses testimony by experts, "does not alter Pennsylvania's adoption of the standard in *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), which requires scientific evidence to have 'general acceptance' in the relevant scientific community ... Pennsylvania courts have not yet decided whether the rationale in *Daubert* supersedes or modifies the *Frye* test in Pennsylvania." Pa.R.E. 702, Comment—1998. The Pennsylvania Rules of Evidence went into effect October 1, 1998.

We note the Pennsylvania Supreme Court has accepted *allocatur* in *Blum. Blum ex rel. Blum v. Merrell Dow Pharmaceuticals, Inc.*, 735 A.2d 1267 (Pa. Jan. 19, 1999).

of the drug during pregnancy led to their child's birth defect. A jury found in favor of the Blums, awarding damages totaling over \$24 million. The trial court denied Merrell Dow's motion for judgment notwithstanding the verdict but this Court reversed on appeal, holding the trial court abused its discretion in admitting certain scientific expert testimony on causation. Absent causation evidence, judgment should have been entered in favor of Merrell Dow as a matter of law. *Id.*, at 1316.

¶ 12 *Blum* recognized admissibility requires both the causal relationship and the methodology to be generally accepted by the scientific community. *Id.*, at 1322; *see also Blasioli*, at 1119 (both the theory and technique underlying novel scientific evidence must be generally accepted by the relevant scientific community). The trial court in *Blum* was presented with epidemiological evidence, statistical probabilities and animal studies with no corroborating human data, but the expert produced no published epidemiological studies showing a statistically significant relationship between the drug and birth defects. The expert arrived at his conclusions by recalculating published data, and none of the conclusions of plaintiffs' experts were ever published or otherwise subjected to critical peer review. The trial court, while recognizing the unorthodox nature of plaintiffs' expert testimony, expressed confidence in the power of cross-examination to expose testimony that is unreliable or incredible. On appeal, we rejected the trial court's rationale, finding the plaintiffs did not meet their burden of



showing their experts' reasoning and methodologies were generally accepted in the relevant scientific communities. We reasoned:

[I]n dealing with complex scientific theories, cross-examination is not the appropriate tool to test the speciousness or accuracy of the expert's testimony where the evidence on which that testimony is based is not deemed reliable.... [T]he judge as gatekeeper decides whether the expert is offering sufficiently reliable, solid, trustworthy science. The question is: is the science good enough to serve as the basis for the jury's findings of fact, or is it dressed up to look good enough, but basically so untrustworthy that no finding of fact can properly be based on it. If the latter is true, the integrity of the trial process would be tainted were the jury to consider it.

*Id.*, at 1322.

¶ 13 The nature and quality of the challenged scientific evidence in this case is similar to that proffered in *Blum*. Dr. DiGregorio unequivocally opined Mrs. Wack's carcinoma was caused by her exposure to the benzene that leaked from appellees' tanks and relied on four published studies to support his conclusion. Appellees and their experts maintain Dr. DiGregorio relied on studies addressing exposure to petroleum products and benzene as a cause of leukemia which do not support his conclusion that such exposure causes adenocarcinoma of the type suffered by Mrs. Wack.

¶ 14 Review of the studies proffered by Dr. DiGregorio and appellants shows any mention of buccal cancer or cancer of the oral cavity was not in the form of a firm conclusion, and suggests additional study and data analysis is warranted.<sup>4</sup> The record leads us to conclude the studies are not

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<sup>4</sup> Dr. DiGregorio's April 22, 1992 expert report was also less than definitive:

as supportive (or even relevant to this case) as Dr. DiGregorio would have it. At best, the studies suggest a *possible* link between exposure to petroleum products and the incidence of buccal carcinoma. Neither Dr. DiGregorio nor the studies on which he relies make a distinction between Mrs. Wack's rare type of adenocarcinoma and the more common squamous cell carcinoma of the buccal cavity. Thus, even if we accept the proposition that the cited studies support a general causal connection between exposure to petroleum products and buccal cancer, the studies plainly do not support a causal link between benzene and Mrs. Wack's specific and rare form of cancer.

¶ 15 As we noted in *Blum*, epidemiology, which generalizes results gleaned from population samples, "provides useful information as to whether there is a relationship between an agent and a disease and, when properly interpreted, can provide insight into whether the agent can cause the disease." *Id.*, at 1324. Dr. DiGregorio testified he has done an

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Benzene and related compounds are known carcinogens, particularly inducing leukemia. There have been reported one or two cases of liver cancer. The references listed above suggest an increased risk of cancer of the buccal cavity and pharynx with chronic exposure to petroleum and chemical air emissions and a small increased risk of cancers of the oral cavity in workers exposed to gasoline vapor and benzene. It is my opinion that these studies lend support for the conclusion that Mrs. Wack's cancer was caused by her chemical exposure noted above.

Expert Report of DiGregorio, 4/22/92, at 2. Even in his 1993 testimony, Dr. DiGregorio hedged his conclusions: "Benzene has now been associated with leukemia, lymphoma, solid tumors. And evidence is now appearing in the literature that it's *probably* associated with buccal carcinoma." DiGregorio Deposition, 4/19/93, at 115 (emphasis added).

epidemiological evaluation on the effects of benzene, but admitted he has done no studies on patients and has not yet progressed to a point where he can reach or publish any conclusions. DiGregorio Deposition, 4/19/93, at 152-53. As discussed above, it is arguable whether he appropriately analyzed the results of studies on which he relied. And as in *Blum*, Dr. DiGregorio did not publish his opinion regarding such a causal link or otherwise subject it to peer review.

¶ 16 Simply put, the cited studies do not support a causal link between exposure to benzene (and petroleum by-products) and the type of cancer suffered by Mrs. Wack, nor do they demonstrate such link is generally accepted in the scientific community. Dr. DiGregorio's opinion falls far short of demonstrating (within the dictates of *Frye*) that the leaking petroleum products were a substantial factor in causing Mrs. Wack's adenocarcinoma.

¶ 17 The trial court concluded Dr. DiGregorio's opinion would fail to pass muster even under the *Daubert* standard, noting testimony does not become "scientific knowledge" merely because it is proffered by a scientist. *See* Trial Court Opinion, at 5 n.1. *Daubert* requires a court to make a "preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." *Id.*, at 592-93. Even under this "more relaxed" standard, there was no abuse of discretion in denying this testimony.

¶ 18 As Dr. DiGregorio's opinion lacks the indicia of scientific reliability required under *Frye* and *Blum*, we find no abuse of discretion in the trial court's precluding Dr. DiGregorio's testimony and granting summary judgment in favor of appellees.

¶ 19 Order affirmed.