

**PUBLISHED**

**UNITED STATES COURT OF APPEALS**

**FOR THE FOURTH CIRCUIT**

ARDITH CAVALLO,

Plaintiff-Appellant,

and

LAWRENCE CAVALLO,

Plaintiff,

No. 95-2540

v.

STAR ENTERPRISE; TEXACO REFINING  
AND MARKETING (EAST),  
INCORPORATED; SAUDI REFINING, INC.,  
Defendants-Appellees.

LAWRENCE CAVALLO,

Plaintiff-Appellant,

and

ARDITH CAVALLO,

Plaintiff,

No. 95-2541

v.

STAR ENTERPRISE; TEXACO REFINING  
AND MARKETING (EAST),  
INCORPORATED; SAUDI REFINING, INC.,  
Defendants-Appellees.

Appeals from the United States District Court  
for the Eastern District of Virginia, at Alexandria.  
T. S. Ellis, III, District Judge; Albert V. Bryan, Jr.,  
Senior District Judge.  
(CA-94-1499-A)

Argued: April 3, 1996

Decided: November 20, 1996

Before ERVIN, Circuit Judge, LAY, Senior Circuit Judge of the United States Court of Appeals for the Eighth Circuit, sitting by designation, and TRAXLER, United States District Judge for the District of South Carolina, sitting by designation.

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Affirmed in part and reversed and remanded in part by published opinion. Judge Ervin wrote the opinion, in which Senior Judge Lay and Judge Traxler joined.

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#### **COUNSEL**

**ARGUED:** Allen Huberth Sachsel, Fairfax, Virginia, for Appellants. Richard Edward Wallace, Jr., HOWREY & SIMON, Washington, D.C., for Appellees. **ON BRIEF:** Mark C. Hayes, LAW OFFICE OF MARK C. HAYES, P.C., Alexandria, Virginia; Donnell R. Fullerton, DONNELL R. FULLERTON, P.C., Fairfax, Virginia; John E. Drury, LAW OFFICE OF JOHN E. DRURY, Washington, D.C., for Appellants. Anthony F. King, Nancy C. Libin, HOWREY & SIMON, Washington, D.C., for Appellees.

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#### **OPINION**

ERVIN, Circuit Judge:

Ardith and Lawrence Cavallo sued Star Enterprise, **1** which operates a petroleum distribution terminal located near their home, alleging various damages from an underground petroleum release in 1990 and a fuel spill in 1991. Their complaint included four causes of action: Count I--"Negligence with Respect to AVJet Fuel Spill"; Count II--

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**1** Star Enterprise is a joint venture partnership between Texaco Refining and Marketing (EAST), Inc., and Saudi Refining, Inc. We refer to the defendants collectively as "Star."

"Negligent Petroleum Release and Negligent Abatement and Remediation of the Petroleum Release"; Count III--"Common Law Trespass"; and Count IV--"Liability Under the State Water Control Law." The district court dismissed Counts II, III, and IV under Fed. R. Civ. P. 12(b)(6), holding that they were barred by statutes of limitation and federal preemption. After discovery, the court granted Star's motion for summary judgment on Count I.

The Cavallos appeal. They contend that the district court applied an incorrect statute of limitation, misconstrued federal preemption doctrine, and erred in excluding the testimony of two of their experts.<sup>2</sup> We agree with the Cavallos that the Complaint and the EPA Orders provide insufficient information to determine whether their claims are preempted. Thus we reverse the court's dismissal of Count II, that portion of Count III containing the loss of use and enjoyment claim, and Count IV and remand for further proceedings. We uphold the dismissal of that portion of Count III containing the personal injury claim, however, even though the court rested its decision on preemp-

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<sup>2</sup> In addition to the questions they raise in their opening brief, the Cavallos add two new arguments in their Reply Brief: (1) that the statute of limitation applicable to their trespass and statutory claims is five years rather than two years, and (2) that "[t]he district court erred by failing to convert Star's Rule 12(b)(6) motion into a motion for summary judgment and by taking judicial notice of incomplete documents." The Cavallos abandoned the statute of limitation issue at oral argument, stating that they were not appealing it but might ask the district court to reconsider the question if we remand. Also at oral argument, the Cavallos noted that they had raised the conversion issue before the district court.

Under the decisions of this and the majority of circuits, an issue first argued in a reply brief is not properly before a court of appeals. See Hunt v. Nuth, 57 F.3d 1327, 1338 (4th Cir. 1995) (citing United States v. Caicedo-Llanos, 960 F.2d 158, 164 (D.C. Cir. 1992)), cert. denied, 116 S. Ct. 724 (1996); 9 James Wm. Moore, Moore's Federal Practice ¶ 228.02[2-3] (1995) ("The case law is to the effect that the appellant cannot raise new issues in a reply brief . . ."). That the question was raised in the district court is immaterial. The Cavallos' omission of the issue from their initial brief denied Star an opportunity to respond, so considering it now "would be unfair to the appellee and would risk an improvident or ill-advised opinion on the legal issues raised." Hunt, 57 F.3d at 1338.

tion, because it fails to state a claim under Virginia law. And we affirm the court's summary judgment on Count I, finding that the district court acted within its discretion by excluding the expert testimony.

I

Star's distribution terminal ("the Tank Farm") is located in Fairfax, Virginia, less than a mile west of the Cavallos' home. It includes office and warehouse space, a truck loading rack, underground storage tanks holding up to forty thousand gallons, and above-ground storage tanks holding over seventeen million gallons. Drainage on the site is controlled by a containment dike and an on-site pond--water from the former is pumped into the latter--and the pond's contents are treated and released into local creeks.

On September 14, 1990, Fairfax residents noticed an oil "sheen" on the surface of Crook Branch Creek. Star soon acknowledged that a large amount of aviation fuel, diesel fuel, and gasoline had leaked into the soil and groundwater. Investigation by the Virginia State Water Control Board revealed an underground "plume" of various fuels. Thereafter, at the Board's request, the Environmental Protection Agency ("EPA") assumed responsibility for the investigation pursuant to the Resource Conservation and Recovery Act ("RCRA") § 7003, 42 U.S.C. § 6973. The EPA and Star negotiated an Administrative Consent Order--subsequently superseded by an Administrative Order--which required Star to implement corrective measures under EPA supervision. In accordance with the Orders, the EPA assumed control of Star's remediation efforts on July 3, 1991.

Another significant spill occurred on December 9, 1991. A valve was left open, allegedly due to the negligence of one of Star's employees or agents, and thirty-four thousand gallons of aviation fuel were released. The spill, contained by the dike, remained on the Tank Farm grounds for two weeks.

On the evening of the 1991 spill, the Cavallos were exposed to fuel vapors in a parking lot about five hundred feet from the Tank Farm. Both noticed an oil-like odor, and Mrs. Cavallo allegedly experienced an immediate irritating reaction. She was treated by several doctors,

including Dr. Joseph Bellanti, Director of Allergy-Immunology at Georgetown Medical Center. Dr. Bellanti testified that Mrs. Cavallo suffered from sinusitis, conjunctivitis, and pulmonary dysfunction. His testimony was complemented by that of Dr. David Monroe, a toxicologist, who reported that the exposure caused Mrs. Cavallo to experience burning eyes, conjunctivitis, sinusitis, and throat irritation. In addition to their exposure on the night of the 1991 spill, the Cavallos claim that since that time they continually have been exposed in their home to vapors from the Tank Farm. Mrs. Cavallo alleges that she continues to suffer physical symptoms caused by her exposure to the vapors, and both Cavallos claim damage to their property.

## II

We review de novo the district court's summary judgments and 12(b)(6) dismissals. See, e.g., Schatz v. Rosenberg, 943 F.2d 485, 489 (4th Cir. 1991) (Rule 12(b)(6) dismissal), cert. denied sub nom., Schatz v. Weinberg and Green, 112 S. Ct. 1475 (1992); Goodman v. RTC, 7 F.3d 1123, 1126 (4th Cir. 1993) (summary judgment). But the parties disagree on the standard by which we review the district court's decision to exclude expert testimony. The Cavallos argue, quoting the Third Circuit's decision in In re Paoli R.R. Yard PCB Litigation, that trial judges should not be given the same deference in their decisions to exclude expert evidence as they are given in their decisions about other types of evidence:

The decision to exclude expert testimony resulting in a summary judgment is subject to a "hard look" review by the appeals court, i.e., a less deferential review than the traditional abuse of discretion standard in light of "a significant risk that district judges will set the threshold too high and will in fact force appellants to prove their case twice."

Brief of Appellants at 3 (quoting 35 F.3d 717, 733 (3d Cir. 1994)). As the defendants point out, however, this court recently reached the opposite conclusion. In Benedi v. McNeil-P.P.C., Inc., a Fourth Circuit panel stated that "Daubert [v. Merrell Dow Pharmaceuticals, Inc.] clearly vests the district courts with discretion to determine the admissibility of expert testimony." 66 F.3d 1378, 1384 (4th Cir. 1995)

(citing 113 S. Ct. 2786 (1993)). Accordingly, we review the district court's decision only for abuse of discretion.

### III

#### A

The district court dismissed Count III which contained both a personal injury claim by Mrs. Cavallo and a claim for the loss of the use and enjoyment of the Cavallo's real property resulting from exposure to vapors under the federal preemption doctrine. See complaint Para. 79. In addition to defending the court's preemption analysis, Star offers an alternative ground for upholding the district court's dismissal. Under Virginia law, it argues, the Cavallos must show physical impact on their property, and "wafting vapors. . . [are] insufficient as a matter of law." To support its position, Star cites another Fourth Circuit case involving the Tank Farm--Adams v. Star Enterprise, 51 F.3d 417, 422-25 (4th Cir. 1995).

The Adams plaintiffs, a group of landowners, sued for diminution of their property values and for health risks allegedly caused by their subdivision's proximity to an underground "plume" of petroleum products leaked from the Tank Farm. The landowners did not claim that the plume actually contaminated their soil, nor that they detected vapors from the leak on their property. The harm they alleged consisted of a stigma attached to their subdivision and a "fear of being exposed to toxic materials." Id. at 422 & n.5. The court held that the landowners' claims could not proceed, because Virginia law allowed recovery only if "the activity or condition complained of was actually physically perceptible from the plaintiff[s'] property." Id. at 422-23 (emphasis added).

Star argues that "wafting vapors" are not "physically perceptible" under Adams. We disagree. The context for the Adams court's focus on physical perception was its discussion of Foley v. Harris, in which the Virginia Supreme Court allowed recovery against a defendant whose wrecked cars were visible from the plaintiffs' property. 286 S.E.2d 186, 190-91 (Va. 1982). The Adams court distinguished Foley because the Foley plaintiffs, unlike those in Adams, could sense the source of the offense from their own property. Adams, 51 F.3d at 422-

23. Smell, like sight, certainly constitutes physical perception. And, although the Cavallos do not allege that they smelled the vapors, the physical symptoms Mrs. Cavallo suffered also might suffice. We conclude, based upon Adams, that the portion of Count III relating to the loss of use and enjoyment claim may be cognizable under Virginia law and that it was error to dismiss it under Fed. R. Civ. P. 12 (b)(6) upon the alternative ground suggested by Star. Since the damage alleged in Adams was based simply upon a fear of future events and these allegations are much more direct, we hold that they are sufficient to sustain the loss of use and enjoyment portion of Count III under Virginia law.

We reach a different result, however, with reference to that portion of Count III asserting a personal injury claim by Mrs. Cavallo. The Virginia Supreme Court stated in Foley that "[t]he discomfort and annoyance [complained of] must . . . be significant and of a kind that would be suffered by a normal person in the community." Foley, 286 S.E.2d at 190, 191 (emphasis added). Mrs. Cavallo is not such a person; in fact, she alleges specifically that she is "highly susceptible" to petroleum vapors. Complaint ¶ 50. Hence, the personal injury portion of Count III is not cognizable under Virginia law and was properly dismissed.

## B

An agreement between the parties treats all the Cavallos' claims as filed on December 8, 1993. The district court ruled that all counts but Count I are necessarily barred by the interaction of the statutes of limitation and federal preemption, because: (1) the counts involve remediation efforts at the Tank Farm, (2) the statutes of limitation bar all claims based on events occurring before December 8, 1991, and (3) preemption bars all claims based on events occurring after September 1991, when the EPA took control of remediation efforts. Because we affirm on other grounds the district court's dismissal of the physical injury claim in Count III, supra part III.A, we limit our preemption analysis to Count II, the portion of Count III containing the loss of use and enjoyment claim, and Count IV only.

This court summarized the law of preemption in Worm v. American Cyanamid Co.:

The principles of preemption resolve conflicts between federal and state law on the authority of Article VI of the Constitution, which provides:

This Constitution, and the Laws of the United States which shall be made in Pursuance thereof . . . shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.

U.S. Const. Art. VI, § 2. From this Supremacy Clause flows the well-established principle that federal legislation, if enacted pursuant to the Congress' constitutionally delegated authority, can nullify conflicting state or local actions. See, e.g., Gibbons v. Ogden, 22 U.S. (9 Wheat.) 1, 210-11, 6 L.Ed. 23 (1824).

Preemption may occur on two bases, the first of which turns on discovering the intent of Congress. Congress may expressly provide that federal law supplants state authority in a particular field or its intent to do so may be inferred from its regulating so pervasively in the field as not to leave sufficient vacancy within which any state can act. See, e.g., Rice v. Santa Fe Elevator Corp., 331 U.S. 218, 230, 67 S.Ct. 1146, 1152, 91 L.Ed. 1447 (1947). But even absent an express or implied congressional intent to preempt state authority in a field, state law is nevertheless preempted by operation of law to the extent that it actually conflicts with federal law. See Wisconsin Public Intervenor v. Mortier, \_\_\_ U.S. \_\_\_, 111 S.Ct. 2476, 2482, 115 L.Ed.2d 532 (1991); Pacific Gas & Elec. Co. v. State Energy Resources Conserv. & Dev. Comm'n, 461 U.S. 190, 204, 103 S.Ct. 1713, 1722, 75 L.Ed.2d 752 (1983).

. . . When we address the question of whether state law actually conflicts with federal law, we resolve the more specific inquiries of whether "it is impossible to comply with both state and federal law" or "whether the state law stands as an obstacle to the accomplishment of the full purposes

and objectives" of federal law. See Silkwood v. Kerr-McGee Corp., 464 U.S. 238, 248, 104 S.Ct. 615, 621, 78 L.Ed.2d 443 (1984).

With these principles stated, we proceed to an examination of [the statute in question], first to determine if Congress intended by its enactment to supplant state authority in the field, and if not, whether state tort and warranty law conflicts with the federal regulatory scheme.

970 F.2d 1301, 1304-05 (4th Cir. 1992).

Two years after Worm, in Feikema v. Texaco, Inc., 16 F.3d 1408 (4th Cir. 1994), this court addressed whether state-court relief would conflict with an EPA Consent Order. The Feikema plaintiffs sought damages and an injunction requiring

excavation, treatment and replacement of contaminated soil to a specified depth and over a specified area; . . . "enhanced ground water extraction and bio-remediation to reduce the off-site contamination"; and . . . construction of a "free phase hydrocarbon trench removal system across the water table."

Id. at 1416. Because the EPA Order in Feikema focused on a particular incident, and thus was not intended to supplant state authority in the entire field, the court applied only the second, actual-conflict prong of the Worm inquiry:

[W]hen the EPA, acting within valid statutory authority of the RCRA and not arbitrarily, enters into a consent order, that order will also preempt conflicting state regulation, including a federal court order based on state common law.  
...

... [T]he test for determining whether state law conflicts with federal law is whether "it is impossible to comply with both state and federal law" or whether "the state law stands as an obstacle to the accomplishment of the full purposes and objectives" of federal law.

Feikema, 16 F.3d at 1416 (quoting Worm, 970 F.2d at 1305) (emphasis added) (other citations omitted). Noting that the Consent Order "addresse[d] the same site and conditions covered by the homeowners' suit," the Feikema court determined that an injunction would conflict with the EPA's activities and thus was preempted. Id.

Regarding the damages claims, the Feikema court expressed greater reluctance to preempt state law. It quoted the Supreme Court's opinion in Nader v. Allegheny Airlines, Inc.:

A common-law right, even absent a saving clause, is not to be abrogated "unless it be found that the preexisting right is so repugnant to the statute that the survival of such right would in effect deprive the subsequent statute of its efficacy; in other words, render its provisions nugatory."

426 U.S. 290, 298 (1976) (quoting Texas & Pacific R. Co. v. Abilene Cotton Oil Co., 204 U.S. 426, 437 (1907)), quoted in Feikema, 16 F.3d at 1413. Moreover, the Feikema court found indications in RCRA's legislative history that some state causes of action should be permitted: "[W]hile Congress intended for the EPA to have broad authority to act in an imminent hazard situation, it also intended such action to complement other efforts and remedies." Feikema, 16 F.3d at 1415 (citing Report of the Committee on Environment and Public Works, S. Rep. No. 98-284, 98th Cong., 1st Sess. 56 (1983)). Because the Consent Order did not provide for damages payments to homeowners, the court found, awarding damages to the plaintiffs would not conflict with the Consent Order. Consequently, it allowed the damages claims to proceed. Id. at 1417-18.

Judge Murnaghan wrote separately in Feikema to emphasize that the court was not applying a different standard to damages than to equitable relief. Id. at 1418 (Murnaghan, J., concurring). He stressed that, whatever the relief sought, a "claim is preempted only to the extent that it may actually conflict with the EPA's Consent Order and only while that Order remains in effect." Id. (Murnaghan, J., concurring). In Feikema, he wrote, preemption applied to the injunction claim but not the damages claims because, on the particular facts of the case, an injunction would conflict with the Consent Order but a damages award would not. Id. (Murnaghan, J., concurring).

The EPA Orders in this case, like those in Feikema, do not contemplate compensation for damages to private parties. Thus the Cavallos contend that the damages they seek, like the award sought in Feikema, would not conflict with the EPA Orders. The district court disagreed with the Cavallos, relying on Judge Murnaghan's concurrence, and held that the Orders preempted any damages claims based on remediation efforts within the scope of the Orders:

[D]amages claims are preempted insofar as they arise from remediation efforts under the scope of the EPA Orders. The damages sought here distinguish the case from those damages which were allowed in Feikema. Damage liability for activities in conformity with the EPA Orders conflicts with the federal interest as effectively as an injunction.

Memorandum Opinion and Order at 5, in Joint Appendix at 197 (citing 16 F.3d 1408, 1418 (4th Cir. 1994) (Murnaghan, J., concurring)).

The district court used the correct "conflict" test, and we agree that Star cannot be held liable "for activities in conformity with the EPA Orders." But that does not end the inquiry, as the district court appears to have assumed. Although all of Star's allegedly tortious acts occurred after the EPA took control of remediation, the EPA Orders encompassed only remediation efforts, and all of Star's activities at the Tank Farm did not involve remediation. Moreover, even EPA-directed remediation efforts might be actionable if improperly performed. To determine whether damages would conflict with the EPA Orders, then, we must look beyond the temporal scope of the Orders and the scope of the activities they encompassed. Damages claims conflict with EPA Orders only if the allegedly tortious activities (1) were required, directed, or supervised by the EPA, and (2) were performed properly.

In Count II, the Cavallos allege "negligence, carelessness and recklessness" by Star in:

a. Improperly operating, supervising, and/or managing the [Tank Farm] Facility;

- b. Improperly designing, installing and repairing and updating of the Facility;
- c. Failure to properly test and inspect Facility equipment;
- d. Failure to properly and promptly notify Plaintiff and Mantua residents of the Petroleum releases at the Facility[;]
- e. Failure to properly and promptly remediate[sic] and recover/remove the Petroleum Releases[;] and
- f. Failure to properly mitigate venting of storage tanks.

Complaint ¶ 72, in Joint Appendix at 38. Count IV is based in part on the December 1991 spill, and in part on Star's regular venting of its tanks. Complaint ¶¶ 86-87, in Joint Appendix at 21.

To the extent they occurred after December 8, 1991, 3 incidents of improper operation, supervision, management, design, installation, repair, and updating of the Tank Farm or its equipment may be actionable if not compelled by the EPA Orders. Likewise, failure by Star to notify the Cavallos of petroleum releases may support their claims if the releases or failures to notify were not authorized or approved by the EPA. For example, the Complaint indicates that the December 10, 1991, AVJet spill was a mistake--not contemplated by EPA Orders or officials--and alleges that Star waited eight days before notifying the EPA. Complaint ¶¶ 26-43, in Joint Appendix at 28-31. Damages caused by that spill, or by Star's failure to notify the Cavallos during the period before it notified the EPA, thus are not preempted by the EPA Orders.

The EPA Orders did encompass all of Star's remediation efforts, so failures "to properly and promptly remediate and recover/remove the Petroleum Releases" are likely to be preempted. Similarly, the Cavallos allege that venting was "regularly performed," apparently

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3 The district court held that claims based on events before December 8, 1991, are barred by the statute of limitations, see supra part III.B, and the Cavallos do not appeal that ruling, see supra n.2.

under EPA supervision, so claims of improper venting probably are preempted. Even remediation and venting, however, are actionable if Star tortiously failed to notify the EPA of the releases--a jury might find, for instance, that the delay after the December 1991 spill was negligent--or if Star improperly implemented EPA instructions.

In sum, the fact that allegedly tortious conduct occurred within the temporal and subject-matter scope of an EPA Order does not necessarily compel preemption of a damages claim based on that conduct. We cannot conclusively determine, from the face of the Complaint and the text of the EPA Orders, that the Orders or EPA instructions pursuant to the Orders compelled all of Star's allegedly improper activities and its manner of performing them. Thus we cannot determine whether damages based on those activities would conflict with EPA authority, or, in turn, whether the preemption doctrine applies.

C

The Cavallos assert that, because their claims are grounded in Virginia state law and originally were filed in Virginia state court, the admissibility of expert testimony should be governed by Virginia law. As Star points out, however, this court held expressly in Scott v. Sears, Roebuck & Co. that federal rules apply to the admission of expert testimony in diversity cases:

Unlike evidentiary rules concerning burdens of proof or presumptions, the admissibility of expert testimony in federal court sitting in the diversity jurisdiction is controlled by federal law. State law, whatever it may be, is irrelevant.

789 F.2d 1052, 1054 (4th Cir. 1986). But the Cavallos respond that Daubert, which was decided seven years after Scott, implemented a heightened burden of proof--"established toxicological methodology" instead of "greater weight of all the evidence." Because Scott specifically excepted burdens of proof, they contend, the rule it established is invalid after Daubert and Virginia law should apply. Their argument is meritless. A standard for admission of testimony, however stringent, is not a burden of proof. Daubert governs whether evidence is admitted, not how persuasive it must be to the factfinder. Consequently, Scott remains good law even after Daubert, and the

district court correctly applied federal law in determining whether to admit the experts' testimony.

On the merits of the expert-testimony question, the Cavallos' brief succinctly stated the essence of their position:

The trial court concluded that neither Dr. Bellanti nor Dr. Monroe strictly adhered to the established toxicological methodology in forming their conclusions that Ms. Cavallo's exposure to AVJet vapors from the December 1991 spill caused her various chronic illness[es], and that their testimony, therefore[,] is not supported by appropriate validation as required by Daubert v. Merrell Dow, 113 S.Ct. at 2795.

Cavallos' Brief at 17 (citation to Joint Appendix omitted).

The parties agree that Daubert is the leading case on this issue. But neither party emphasizes that the Supreme Court itself viewed Daubert as a liberalization, not a tightening, of the rules controlling admission of expert testimony. The Court recognized that the question had been governed for seventy years by the standard first set out by the D.C. Circuit in Frye v. United States--that scientific expert testimony must be based on principles that are "sufficiently established to have gained general acceptance in the particular field in which [they] belong[ ]." 293 F. 1013, 1014 (D.C. Cir. 1923) (emphasis added). It held, however, that the Frye test had been superseded by Fed. R. Evid. 702.

Rule 702 provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education, may testify thereto in the form of an opinion or otherwise.

The Daubert Court noted that Rule 702 does not mention Frye's "general acceptance" test. Moreover, it stated:

A rigid "general acceptance" requirement would be at odds with the "liberal thrust" of the Federal Rules and their "general approach of relaxing the traditional barriers to 'opinion' testimony." Beech Aircraft Corp. v. Rainey, 488 U.S. [153,] 169 (1988). . . . That austere standard, absent from and incompatible with the Federal Rules of Evidence, should not be applied in federal trials.

113 S. Ct. at 2794 (emphasis added) (citations to nonquoted sources omitted).

The Daubert Court held that two questions control admission of scientific expert testimony: "whether the reasoning or methodology underlying the testimony is scientifically valid and. . . whether that reasoning or methodology properly can be applied to the facts in issue." Id. at 2796. In lieu of the Frye test, it decided, the validity of the methodology or reasoning is determined using a flexible inquiry based on five factors: (1) whether the testimony has been tested, (2) whether it has been published or exposed to peer review, (3) its rate of error, (4) whether there are standards and controls over its implementation, and (5) whether it is generally accepted. Id. at 2796-97. If valid, the Court wrote, whether the testimony can "properly be applied to the facts in issue" is determined by reference to other rules of evidence, id. at 2797, such as the relevance and prejudice provisions of Rule 401, id. at 2794, and Rule 403, id. at 2798.

The Daubert Court concluded by reemphasizing that scientific evidence is to be admitted more liberally under Rule 702 than it was under Frye, and that exclusion is the least favored means of rendering questionable scientific evidence ineffective:

Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence. Additionally, in the event the trial court concludes that the scintilla of evidence presented supporting a position is insufficient to allow a reasonable juror to conclude that the position more likely than not is true, the court remains free to direct a judgment, and likewise to grant summary judgment. These conventional devices,

rather than wholesale exclusion under an uncompromising "general acceptance" test, are the appropriate safeguards where the basis of scientific testimony meets the standards of Rule 702.

Id. at 2798 (citations omitted).

In the instant case, the district court concluded that the bases of the doctors' opinions were not sufficiently established to warrant their admission into evidence:

In sum, neither Dr. Monroe nor Dr. Bellanti sufficiently adhered to the established toxicology methodology in forming [his] conclusions that Ms. Cavallo's exposure to AVJet vapors from the December 1991 spill caused her various chronic illnesses. Their testimony, therefore[,] is not "supported by appropriate validation" as required by Daubert, and is ultimately unreliable. In the final analysis, the opinions of Drs. Monroe and Bellanti are based largely on hypothesis and speculation. This is not to say that the doctors are insincere in their opinions, or that their opinions may not some day be validated through scientific research and experiment. It may well be that the AVJet spill forever "sensitized" Ms. Cavallo to petroleum vapors and various other household chemicals. But the published scientific literature and test results simply do not support that conclusion at this time. And the price paid for this seemingly stringent standard of reliability is that, unavoidably, some legitimate injuries will be left unredressed.

Memorandum Opinion at 39-40, in Joint Appendix at 1799-800 (footnotes omitted).

The district court's interpretation is restrictive in this case, but it is not inconsistent with Daubert. Although Daubert eliminated the requirement of general acceptance, the five factors it established still require that the methodology and reasoning used by a witness have a significant place in the discourse of experts in the field. The district court determined that the testimony of Dr. Bellanti and Dr. Monroe did not have such a place. By making that determination, the court

properly exercised its discretion. The Cavallos have shown that the question of admission is close, but we defer to the court's decision to exclude the evidence and affirm its summary judgment on Count I.

IV

The face of the Complaint and the text of the EPA Orders are insufficient to determine whether EPA involvement preempts Count II, the loss and use and enjoyment claim of Count III, and Count IV. Whatever the preemption doctrine's effect, however, the personal injury claim of Count III does not state a claim under Virginia law. Moreover, the district court acted within its discretion by excluding testimony by the Cavallos' experts. Accordingly, we affirm the district court's summary judgment on Count I and its dismissal of the personal injury claim of Count III, but we reverse its dismissal of Count II, the loss of use and enjoyment claim of Count III, and Count IV and remand them for further proceedings.

AFFIRMED IN PART AND REVERSED AND REMANDED IN PART

