

No. 25-919

---

---

IN THE  
**Supreme Court of the United States**

---

UNION CARBIDE CORPORATION; COVESTRO LLC,  
*Petitioners,*

v.

LEE ANN SOMMERVILLE, individually,  
and on behalf of all others similarly situated,  
*Respondent.*

---

**On Petition for a Writ of Certiorari to the  
United States Court of Appeals  
for the Fourth Circuit**

---

**BRIEF IN OPPOSITION TO  
PETITION FOR CERTIORARI**

---

ADAM J. GOMEZ  
KELLY L. TUCKER  
GRANT & EISENHOFER, P.A.  
123 Justison Street  
Wilmington, DE 19801  
(302) 622-7000

JOSH AUTRY  
*Counsel of Record*  
MORGAN & MORGAN, PA  
199 Water St  
Suite 1500  
New York, NY 10022  
(859) 899-8785  
jautry@forthepeople.com

STEPHEN EDWARDS  
MORGAN & MORGAN, PA  
2005 Market St  
Suite 600  
Philadelphia, PA 19103  
(215) 446-9793

*Counsel for Respondent*

April 6, 2026

## **QUESTION PRESENTED**

Whether this Court should intervene in a fact-bound dispute over the admissibility of expert testimony, where the district court's errors would have been reversed under the law of any circuit.

## TABLE OF CONTENTS

	Page
QUESTION PRESENTED.....	i
TABLE OF AUTHORITIES.....	v
INTRODUCTION.....	1
STATEMENT OF THE CASE .....	3
A. Source Parameters.....	6
B. Historical Emissions Data.....	7
C. Meteorological Data.....	9
D. Background EtO Levels.....	10
E. District Court’s Conclusion and Final Order .....	11
REASONS FOR DENYING THE PETITION ...	14
I. The District Court Would Have Been Reversed in Any Circuit. ....	14
A. Unlawful Heightened Scrutiny.....	15
B. “Validation” Requirement .....	19
C. Improper Credibility Determinations.	20
D. Unwarranted “Scientific” Findings.....	22
E. Disregarding Dr. Sahu’s Supplemental Report .....	23
II. The Fact-Bound Nature of this Case Renders it a Poor Vehicle. ....	24

**TABLE OF CONTENTS—Continued**

	Page
III. The Purported Split Is Illusory Because Every Circuit Allows for Exclusion of Expert Opinions That Lack Record Support or Fail to Reliably Connect Data and Conclusions. ....	24
A. The Fourth Circuit .....	26
B. The First Circuit.....	29
C. Other Circuits.....	32
CONCLUSION .....	34

**TABLE OF AUTHORITIES**

<b>CASES</b>	<b>Page(s)</b>
<i>Acad. Bank, N.A. v. AmGuard Ins. Co.</i> , 116 F.4th 768 (8th Cir. 2024), <i>reh’g</i> <i>denied</i> , No. 23-1375, 2024 WL 4499662 (8th Cir. Oct. 16, 2024) .....	33
<i>Adams v. Ameritech Servs., Inc.</i> , 231 F.3d 414 (7th Cir. 2000).....	19
<i>Belville v. Ford Motor Co.</i> , 919 F.3d 224 (4th Cir. 2019).....	28
<i>Bower v. Westinghouse Elec. Corp.</i> , 522 S.E.2d 424 (W. Va. 1999).....	4
<i>Bresler v. Wilmington Trust Co.</i> , 855 F.3d 178 (4th Cir. 2017).....	28
<i>Bricklayers &amp; Trowel Trades International Pension Fund v. Credit Suisse Securities (USA)</i> , 752 F.3d 82 (1st Cir. 2014) .....	29
<i>Carmichael v. Verso Paper, LLC</i> , 679 F. Supp. 2d 109 (D. Me. 2010) .....	30
<i>Casas Office Machines, Inc. v. Mita Copystar Am., Inc.</i> , 42 F.3d 668 (1st Cir. 1994) .....	30
<i>City of Pomona v. SQM N. Am. Corp.</i> , 750 F.3d 1036 (9th Cir. 2014).....	13, 20
<i>Crowe v. Marchand</i> , 506 F.3d 13 (1st Cir. 2007) .....	30
<i>Daubert v. Merrell Dow Pharmaceuticals, Inc.</i> , 509 U.S. 579 (1993).....	1, 2, 12-18, 20, 23-25, 27, 28, 30, 33

**TABLE OF AUTHORITIES—Continued**

	Page(s)
<i>Doucette v. Jacobs</i> , 106 F.4th 156 (1st Cir. 2024).....	32
<i>E. Auto Distribs., Inc. v. Peugeot Motors of Am., Inc.</i> , 795 F.2d 329 (4th Cir. 1986).....	27
<i>EEOC v. Freeman</i> , 778 F.3d 463 (4th Cir. 2015).....	26, 27
<i>Exafer Ltd v. Microsoft Corp.</i> , -- F.4th --, No. 2024-2296, 2026 WL 627886 (Fed. Cir. Mar. 6, 2026) .....	33
<i>Gen. Elec. Co. v. Joiner</i> , 522 U.S. 136 (1997).....	18, 25, 32
<i>Gopalratnam v. Hewlett-Packard Co.</i> , 877 F.3d 771 (7th Cir. 2017).....	25
<i>Gulf S. Insulation v. U.S. Consumer Prod. Safety Comm'n</i> , 701 F.2d 1137 (5th Cir. 1983).....	18
<i>Henderson v. Lockheed Martin Corp.</i> , No. 6:21-cv-1363, 2024 WL 6896218 (M.D. Fla. Oct. 23, 2024) .....	5, 19
<i>In re Joint E. &amp; S. Dist. Asbestos Litig.</i> , 52 F.3d 1124 (2d Cir. 1995) .....	20, 23
<i>In re Lipitor (Atorvastatin Calcium) Mktg., Sales Pracs. &amp; Prods. Liab. Litig. (No. II) MDL 2502</i> , 892 F.3d 624 (4th Cir. 2018).....	25, 27
<i>Irvine v. Murad Skin Research Labs., Inc.</i> , 194 F.3d 313 (1st Cir. 1999) .....	30

**TABLE OF AUTHORITIES—Continued**

	Page(s)
<i>Kennedy v. Collagen Corp.</i> , 161 F.3d 1226 (9th Cir. 1998).....	32
<i>Le Doux v. Western Express, Inc.</i> , 126 F.4th 978 (4th Cir. 2025).....	27
<i>Milward v. Acuity Specialty Prods. Grp., Inc.</i> , 639 F.3d 11 (1st Cir. 2011).....	30-32
<i>Primiano v. Cook</i> , 598 F.3d 558 (9th Cir. 2010).....	18
<i>Rappuhn v. Primal Vantage Co.</i> , No. 23-10050, 2024 WL 2930448 (11th Cir. June 11, 2024).....	12, 20
<i>Rodriguez v. Hospital San Cristobal</i> , 91 F.4th 59 (1st Cir. 2024).....	32
<i>Sardis v. Overhead Door Corporation</i> , 10 F.4th 268 (4th Cir. 2021).....	28, 29
<i>Sierra Club v. Energy Future Holding Corp.</i> , No. 6:12-cv-00108, 2014 WL 12690021 (W.D. Tex. Jan. 29, 2014).....	5
<i>Summers v. Missouri Pac. R.R. Sys.</i> , 132 F.3d 599 (10th Cir. 1997).....	23
<i>Teradata Corp. v. SAP SE</i> , 124 F.4th 555 (9th Cir. 2024), <i>cert. denied</i> , 146 S. Ct. 118 (2025).....	33
<i>Tyger Construction Co., Inc. v. Pensacola Construction Co.</i> , 29 F.3d 137 (4th Cir. 1994).....	26
<i>United States v. Ala. Power Co.</i> , 730 F.3d 1278 (11th Cir. 2013).....	4-5, 19

**TABLE OF AUTHORITIES—Continued**

	Page(s)
<i>United States v. Barton</i> , 909 F.3d 1323 (11th Cir. 2018).....	20
<i>United States v. La. Generating, LLC</i> , 929 F. Supp. 2d 591 (M.D. La. 2012) .....	5
<i>United States v. Hudak</i> , 156 F.4th 405 (4th Cir. 2025) .....	28
<i>United States v. Markovich</i> , 95 F.4th 1367 (11th Cir. 2024) .....	33
 <b>CONSTITUTION</b>	
U.S. Const. art. III.....	11
 <b>STATUTES</b>	
42 U.S.C. § 7661c(a) .....	8
Emergency Planning and Community Right-to-Know Act, 42 U.S.C. § 11001, <i>et seq.</i> .....	8
 <b>RULES</b>	
Fed. R. Evid. 104(a).....	14, 17
Fed. R. Evid. 702 .....	1, 2, 4, 5, 7, 11, 12, 14-20, 23-25, 28, 29, 32, 33
Fed. R. Evid. 702(a).....	29
Fed. R. Evid. 702(b).....	1, 11, 15, 20, 24, 25, 29, 32, 33
Fed. R. Evid. 702(c) .....	11, 32
Fed. R. Evid. 702(d).....	11, 32

**TABLE OF AUTHORITIES—Continued**

	Page(s)
Fed. R. Evid. 702 advisory committee's notes to 2000 amendments.....	16
Fed. R. Evid. 702 advisory committee's notes to 2023 amendments.....	16, 17

**OTHER AUTHORITIES**

29 CHARLES ALAN WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE AND PROCEDURE (2d ed. 2025 update) .....	16
<i>Emissions Inventory</i> , W. VA. DEP'T OF ENV'T PROT., <a href="https://dep.wv.gov/daq/planning/inventory/Pages/default.aspx">https://dep.wv.gov/daq/planning/inventory/Pages/default.aspx</a> (last visited March 12, 2026) .....	8
Matthew W. Swinehart, Note, <i>Remedying Daubert's Inadequacy in Evaluating the Admissibility of Scientific Models Used in Environmental Tort Litigation</i> , 86 TEX. L. REV. 1281 (2008) .....	18

## INTRODUCTION

The First and Fourth Circuits are not islands of lawless resistance to the 2023 amendments to Federal Rule of Evidence 702. Applying settled law, including cases decided after the 2023 amendments, these courts regularly examine the factual bases of expert testimony as part of their reliability analysis under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). They allow testimony from experts whose opinions are based on sufficient facts or data and exclude those who don't. And where, as happened here, lower courts overstep the bounds of their "gatekeeping" role and invade the province of the jury, the First and Fourth circuits reverse.

Thus, there is no fissure between the circuits in their application of Rule 702. Petitioners, however, posit that in the First and Fourth circuits, the judicial gatekeepers are asleep at their posts, leaving junk science to run amok. What is worse, they suggest that the appellate judges presiding over this dereliction of duty have snubbed the enlightened counsel of the Rules Committee, stubbornly clinging to a rule that defies reason and precedent. According to Petitioners, this Court's intervention is the only hope for bringing these rogue jurisdictions into alignment with the law.

This is simply untrue. The First and Fourth circuits each recognize that expert opinion can be excluded because it "lacks sufficient support in the record or . . . there is simply too great an analytical gap between [the expert's] data and the opinion proffered." App'x 27a n.7 (opinion below). These principles fully implement Rule 702(b)'s "sufficient facts or data" requirement. They also coexist peacefully with the related rule that questions regarding the "factual underpinnings" of an expert's testimony typically go to weight, rather than

admissibility. Neither circuit enforces this latter rule in the categorical fashion claimed by Petitioners, i.e., as an absolute bar to *any* consideration of the factual basis of expert opinion. Instead, the rule merely codifies the commonsense notion that, after an expert has provided cogent reasons for his choice of data or other factual inputs, the trier of fact should usually resolve disputes about the validity of those inputs, rather than the district judge in *Daubert* proceedings.

Here, the Fourth Circuit honored this well-established principle by reversing an overreaching judge who grossly exceeded his gatekeeping role. Among other errors, the trial court imposed a judge-crafted, heightened standard of admissibility that is completely untethered from the text of Rule 702. Inspired by a series of law review articles critiquing the use of air dispersion modeling in environmental litigation, the court declared that experts using such a model must employ “[a]n in-depth data investigation, a searching historical analysis, an excruciating attention to detail, and a methodology designed to wring error out of the process . . . .” *Id.* 62a–63a. This exacting benchmark far exceeds Rule 702’s requirement that expert testimony be based on “sufficient facts or data.” On top of this glaring error, the trial court also resolved conflicts in the evidence, made credibility determinations between the parties’ experts, and hazarded amateur findings on “the science of wind” that even the dissenting Fourth Circuit judge acknowledged were improper.

Plagued by these errors, the district court’s opinion would have been reversed under the law of any circuit. Thus, even if there were a circuit split concerning how to apply Rule 702’s “sufficient facts or data” requirement (which, to be clear, there is not), this case would

be a poor vehicle to address it because this Court's intervention would not change the outcome below.

Finally, the granularity of the district court's analysis makes this a thoroughly fact-bound case. Contrary to Petitioners' narrative, this is not a case where the appeals court rubber-stamped a patently defective expert opinion by mechanically applying an inappropriately deferential rule of law. Rather, because the district court's analysis was subtle and fastidious, the Fourth Circuit reversed on equally painstaking grounds. The appeals court traced five nuanced evidentiary errors committed by the district court, which ranged from the lower court's improper resolution of a debate about the accuracy of toxic airborne exposure data from state and federal regulators, to the propriety of synthesizing weather data from multiple locations when modeling emissions of air pollution, to an invented requirement that an expert independently "validate" emissions data recorded by the opposing party. If this Court grants the Petition, it will find itself mired in these questions instead of deciding a clean legal issue. For this additional reason, this case is a poor vehicle for this Court's review.

## **STATEMENT OF THE CASE**

### **I.**

Since 1978, Petitioners have operated a facility in South Charleston, West Virginia (the "Facility") that manufactures ethylene oxide ("EtO"). EtO is an odorless, colorless gas with industrial applications that range from sterilizing medical devices to creating synthetic fibers like polyester. It is also a potent carcinogen, a fact that government bodies in the United States have acknowledged since at least 1977. App'x 91a.

Despite these risks to human health, Petitioners released significant quantities of EtO into the community surrounding the Facility over a period of decades.<sup>1</sup> This stream of toxic, airborne emissions put the inhabitants of this community at an increased risk of contracting numerous cancers, including leukemia and breast cancer.

Respondent Lee Ann Sommerville is one such affected community member. As a resident of the Class Area she will need to undergo medical testing, for the rest of her life, designed to detect cancers she is at an increased risk of developing because of Petitioners' EtO emissions.

To redress this harm, Respondent filed suit in the District Court for the Southern District of West Virginia on behalf of herself and a class of similarly situated persons. She asserted a medical monitoring claim under West Virginia law, which allows plaintiffs to recover the cost of “medical testing” when their “exposure to toxic chemicals creates an enhanced risk of disease . . . .” *Bower v. Westinghouse Elec. Corp.*, 522 S.E.2d 424, 431 (W. Va. 1999) (citation omitted).

Among other proof, Respondent supported her claim with the expert opinion of Dr. Ranajit Sahu. Dr. Sahu is a Ph.D.-level mechanical engineer with over thirty years of experience in environmental and pollution-related projects, including emissions modeling. App'x 45a. Courts across the country—including the Fifth and Eleventh Circuits—have approved his emissions modeling work as reliable under Federal Rule of Evidence 702. *See United States v. Ala. Power Co.*, 730

---

<sup>1</sup> Respondent's claims concern the period from 1978 to 2019 (the “Class Period”). App'x 2a. The area surrounding the Facility is known as the Kanawha Valley (the “Class Area”). *Id.* 80a.

F.3d 1278, 1288 (11th Cir. 2013); *United States v. La. Generating, LLC*, 929 F. Supp. 2d 591, 596 (M.D. La. 2012); *Sierra Club v. Energy Future Holding Corp.*, No. 6:12-cv-00108, 2014 WL 12690021, at \*8 (W.D. Tex. Jan. 29, 2014); *Henderson v. Lockheed Martin Corp.*, No. 6:21-cv-1363, 2024 WL 6896218, at \*2–3 (M.D. Fla. Oct. 23, 2024).

## II.

After analyzing Petitioners’ operations at the Facility, Dr. Sahu prepared an air dispersion model designed to reconstruct the flow of EtO emissions and measure the levels of exposure inflicted upon the surrounding community. Dr. Sahu built his model by selecting relevant data points and then using a computer algorithm to project the effect of those forces over time. App’x 19a n.4 (explaining AERMOD modeling program). These inputs included “source parameters,” or descriptions of pollutant-emitting activities at the Facility, emissions data submitted to regulators, and meteorological data. *Id.* 19a. As the Fourth Circuit later acknowledged, Dr. Sahu presented detailed reasoning regarding how he chose these inputs. *Id.* 20a. After applying this method, Dr. Sahu concluded Petitioners exposed the surrounding community to levels of EtO far in excess of normal, background levels.

Before trial, the district court granted Petitioners’ motion to exclude Dr. Sahu’s testimony. *Id.* 42a. The court based its ruling on its disapproval of the data utilized by Dr. Sahu, and his explanations therefor, in four key areas, discussed in turn below. Overarching these more particular findings, however, was the district court’s conclusion that the uncertainties inherent in air dispersion modeling necessitated a heightened standard of reliability under Rule 702. In

the court's view, such a model is only admissible if it applies "an in-depth data investigation, a searching historical analysis, an excruciating attention to detail, and a methodology designed to wring error out of the process." *Id.* 62a–63a, 87a (cleaned up). The court ultimately concluded that Dr. Sahu failed to meet this heightened standard, and erroneously excluded his opinions on that basis.

### **A. Source Parameters**

Regarding source parameters, the district court faulted Dr. Sahu for aggregating emissions data from two different facilities operated by Petitioners: the Facility and another plant located in nearby Institute, West Virginia. Dr. Sahu explained that the model allows the user to isolate data for any particular emission source at either facility, thereby alleviating this "disaggregat[ion]" concern. *Id.* 62a. Notwithstanding this proof, the district court, without citation to contrary fact, inexplicably held that the model "cannot determine the reliability of the estimated exposure from the Defendants' operations based on the information provided." *Id.*

The district court also criticized Dr. Sahu's decisions to use "modeling conducted in 2019 by the West Virginia Department of Environmental Protection" ("WVDEP") to model source parameters for the entire Class Period and to model all Facility emissions as "fugitive" during the years 1985–89. *Id.* 63a–65a.<sup>2</sup> Dr. Sahu, however, explained that these assumptions were

---

<sup>2</sup> Fugitive emissions are "releases to air that don't occur through a confined air stream[,] such as via equipment leaks." App'x 19a n.3 (cleaned up) (citation omitted). By contrast, "point source" emissions "occur through identifiable confined air streams, such as stacks, ducts or pipes." *Id.*

necessary given the lack of specificity in Petitioners' emissions records. *Id.* 65a (“Such sources may have been capable of being modeled with greater precision had [Petitioners] taken efforts to describe these sources more precisely in the ordinary course of business—but they did not.”).

### **B. Historical Emissions Data**

Next, the district court took issue with certain assumptions Dr. Sahu used to fill gaps in historical emissions data. For the year 1984, the court faulted Dr. Sahu for relying on data *submitted by Petitioners* to the WVDEP as part of its “1984 Emission Inventory.” *Id.* 68a. Despite being prepared by the operators of the Facility for use by regulators, the court concluded this data was “patently unreliable” because after submitting it, Petitioners sent a letter to the WVDEP expressing reservations about its validity. *Id.* 68a–69a. Dr. Sahu explained that he thought these reservations were unfounded, and that Petitioners had given him no real reason to doubt the 1984 data. *Id.* 68a. He also made the reasonable assumption that “the company would not provide misleading data to its regulator.” *Id.* 69a. But to the district court, this was not enough: Dr. Sahu was obligated to “validate” the 1984 data himself. *Id.* 69a–70a. The court did not explain, however, what this “validation” would look like, nor did it cite Rule 702 or any other source of law for this requirement.

For the years 1985–89, the court criticized Dr. Sahu for relying on another type of submission to the WVDEP: Petitioners’ “Toxic Air Pollutant Facility Registration Summary Sheets.” *Id.* 71a. The court cited Petitioners’ expert’s view that these sheets reflect *maximum* possible emissions, rather than *actual* emissions. *Id.* But Dr. Sahu interpreted these records differently: because the emissions figures on the

summary sheets varied substantially over time, they would have had to represent actual emissions, as a true emissions ceiling for the Facility would not fluctuate without emissions point or infrastructure changes. *Id.* 72a. Dr. Sahu explained there was no evidence of substantial changes in operations at the Facility from 1985 to 1989. *Id.* (“There were no process changes [Dr. Sahu] could identify in the record between 1989 and the gap years . . .”). This, again, could not satisfy the district court: it found Petitioners’ expert more persuasive. *Id.*

For the period from 1990–2019, the court found it unacceptable that Dr. Sahu utilized Petitioners’ own emissions data submitted under the EPA’s Toxics Release Inventory (“TRI”) and WVDEP’s annual emissions inventory.<sup>3</sup> Parroting Petitioners’ expert, the court held that because this data was not compiled for the express purpose of “exposure reconstruction,” Dr. Sahu was obligated to “validate” it himself before using it in his model. *Id.* 74a–75a. Again, the court did not explain what this additional step of “validation” would consist of.

Lastly, the court faulted Dr. Sahu for modeling Petitioner Covestro’s emissions at a constant rate throughout the Class Period despite the availability of site-specific data showing otherwise. *Id.* 67a. But, as

---

<sup>3</sup> The TRI is a database maintained by the EPA pursuant to the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. § 11001, *et seq.*

WVDEP maintains an annual emissions inventory pursuant to its responsibilities under Title V of the Clean Air Act. 42 U.S.C. § 7661c(a) (requiring emissions reporting by permit holders); *see also Emissions Inventory*, W. VA. DEP’T OF ENV’T PROT., <https://dep.wv.gov/daq/planning/inventory/Pages/default.aspx> (last visited March 12, 2026).

the Fourth Circuit later noted, Dr. Sahu corrected this issue in a supplemental report. *Id.* 27a. Without explanation, the district court ignored this submission. *Id.* 67a.

### C. Meteorological Data

The district court also quarreled with Dr. Sahu's choice of meteorological data inputs. Dr. Sahu relied on data from multiple locations to model weather conditions around the Facility over the Class Period. His primary reason for doing so was the lack of on-site data: Petitioners could only provide "on-site wind speed and wind direction data collected between" 1985 and 1986. *Id.* 77a. Not only was this data limited in time: it did not address "other required meteorological parameters" that impact EtO air dispersion, including "atmospheric pressure, relative humidity, cloud cover, and precipitation." *Id.*

Dr. Sahu also needed data from higher elevations to reconstruct emissions from "elevated point source[s]" at the Facility. *Id.* 25a. And he inputted weather data from outside the Kanawha Valley because he sought to model the flow of EtO "in the wider area." *Id.* 81a.

Ignoring these explanations, the district court held that Dr. Sahu's meteorological inputs were not "representative" enough. *Id.* 79–80a. Opining from the bench on "the science of wind," the court deemed it improper to utilize weather data from multiple locations because "a single location . . . cannot have multiple wind speeds coming from various directions at one specific time." *Id.* 24a, 80a.<sup>4</sup>

---

<sup>4</sup> In the Fourth Circuit, even the dissenting judge recognized the district court's overreach on this point. App'x 39a n.9

The court also claimed Dr. Sahu “ignor[ed] the topographical characteristics of the region” by utilizing data from other locations. *Id.* 80a. In so doing, the court ignored Dr. Sahu’s explanations of how data from multiple elevations would actually best represent “South Charleston’s mountainous geography,” particularly in light of the limitations of localized data. *Id.* 25a.

Finally, the court faulted Dr. Sahu for using the 1985–86 wind speed and direction data as a constant for the entire Class Period (1984–2019). *Id.* 80a. But again, Dr. Sahu explained his use of this data: there was no better data available outside 1985–86, and Dr. Sahu combined this data with additional inputs regarding other meteorological factors across a longer timeframe to reach his conclusions. *Id.* 80a–81a.

#### **D. Background EtO Levels**

Lastly, the district court held that Dr. Sahu chose the wrong figures to represent background levels of EtO in the Class Area. “Background’ refers to exposure levels experienced by the general population as opposed to the levels [Respondent] alleges she was exposed to due to [Petitioners’] negligence.” *Id.*

Dr. Sahu used the national annual average for EtO exposure contained in the EPA’s National Air Toxics Assessment (“NATA”) as his background figure. *Id.* 82a. The district court found this figure too detached from localized conditions around the Facility: in its view, the preferred data source was a single local monitoring report issued by the WVDEP based on “four . . . 24-hour sampling events.” *Id.* 26a.

---

(“It strikes me as unwise for courts to opine on ‘the science of wind’—whatever that entails—unless absolutely necessary.”).

Dr. Sahu explained he did not use the WVDEP's monitoring data because "[f]our days of data cannot be used to calculate risk over a 70-year period." *Id.* 26a. Thus, despite there being two imperfect data sources, without explanation as to why it was superior or met its heightened reliability standard, the district court decided to credit Petitioners' choice of data inputs over Respondent's. *Id.* 88a. In so doing, the court held that Dr. Sahu failed to meet its specific, heightened standard for air modeling experts. *Id.* 87a.

### **E. District Court's Conclusion and Final Order**

Ultimately, the district court excluded Dr. Sahu's testimony in its entirety because it was allegedly "not based upon sufficient facts or data." *Id.* 88a. In the alternative, the court also held that Dr. Sahu's testimony was not the product of "reliable principles and methods," and that he had not "reliably applied" his methods to the facts of the case. *Id.* The court thus invoked every Rule 702 subpart aside from relevancy. *See* Fed. R. Evid. 702(b)–(d).

In a later ruling, the court granted summary judgment to Petitioners on Article III standing grounds that are not the subject of the current Petition. App'x 89a.

### **III.**

A divided panel of the Fourth Circuit reversed the district court's exclusion of Dr. Sahu's testimony.<sup>5</sup> The appeals court held that the district court abused its discretion in arriving at each of its "supposedly

---

<sup>5</sup> The panel also reversed the district court's ruling on Respondent's standing to sue. App'x 6a–17a. Petitioners do not seek review of that decision.

independently-sufficient reasons” for excluding Dr. Sahu. *Id.* 20a.

Regarding source parameters, the court held that the district court wrongly favored Petitioners’ expert on disputed data-choice issues. *Id.* (“The district court . . . simply ignored or discounted Dr. Sahu’s proffered explanations in favor of those that [Petitioners’] expert, Dr. Ranjit Machado, offered.”). This, the court observed, “was not a true critique of Dr. Sahu’s ‘methodology,’ but a veiled credibility determination based on Dr. Sahu’s choice of which data to input into his model.” *Id.* Given the presence of conflicting expert testimony and multiple sets of available data, the questions raised by the district court “affect[ed] the weight and credibility of [Dr. Sahu’s] assessment, not its admissibility.” *Id.* 21a. To bolster this point, the appeals court also cited an Eleventh Circuit case decided after the 2023 amendments to Rule 702 explaining that “[c]rediting one expert over another . . . misapplies *Daubert* and intrudes on the province of the jury.” *Id.* (citing *Rappuhn v. Primal Vantage Co.*, No. 23-10050, 2024 WL 2930448, at \*4 (11th Cir. June 11, 2024)).

The appeals court then rebuked the district court for imposing the “extratextual” requirement that Dr. Sahu “validate” data before using it in his model. *Id.* As the court put it, “[n]othing in Rule 702 requires an expert witness to ‘validate’ data.” *Id.* What is more, the district court never “explain[ed], in practical terms, *how* Dr. Sahu was supposed to undertake ‘validation.’” *Id.* (emphasis in original).

Regarding historical emissions data, the appeals court again found the district court abused its discretion by crediting Petitioners’ expert over Respondent’s in fact disputes regarding the reasons an expert might

choose one data set over another. It concluded the district court erred by crediting Petitioners' reservations about the data they reported to WVDEP, and by disregarding "Dr. Sahu's testimony justifying his . . . interpretation of the" Toxic Air Pollutant Facility Registration Summary Sheets. *Id.* 22a–23a. On this latter point, the appeals court relied on case law across various circuits, including the Eighth and Second, and specifically quoted the Ninth Circuit in finding that "[s]uch a 'factual dispute is best settled by a battle of the experts before the fact finder, not by judicial fiat.'" *Id.* 23a (quoting *City of Pomona v. SQM N. Am. Corp.*, 750 F.3d 1036, 1048–49 (9th Cir. 2014)).

Moving on to meteorological data, the appeals court again criticized the district court for "ignor[ing] Dr. Sahu's testimony" explaining his choice of data, specifically as to "why using wind data from various altitudes was proper . . . and why [he] chose to use onsite data from 1985–86 to model 1984–2019." *Id.* 25a. Per *Daubert*, the appeals court concluded that to the extent any of these explanations were unsatisfying to Petitioners, their recourse lay in "cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof" at trial. *Id.* (quoting *Daubert*, 509 U.S. 579, 596 (1993)). The appeals court also rebuked the district court fashioning itself an amateur scientist and reaching unsupported findings regarding "the science of wind," and crediting its own amateur conclusions over Dr. Sahu's testimony regarding wind data. *Id.* 24a–25a.

Finally, regarding background EtO levels, the appeals court held that the debate between the parties' experts regarding whether to use the NATA baseline figures or the more local but time-limited data from

WVDEP presented a “credibility determination[]” the district court was not entitled to make. *Id.* 26a.

To conclude, the appeals court held that “in accordance with Federal Rules of Evidence 104(a) and 702, Sommerville has established by a preponderance of evidence that Dr. Sahu’s testimony is admissible.” *Id.* 27a.

In dissent, Chief Judge Diaz cited a host of Fourth Circuit cases affirming the exclusion of experts whose opinions were based on faulty data or lacked a sufficient basis in record evidence. *See id.* 34a–37a.

In response to Judge Diaz’s criticisms, the majority reaffirmed that district courts can always “decide that an expert’s opinion lacks sufficient support in the record or that there is simply too great an analytical gap between [an expert’s] data and the opinion proffered.” *Id.* 27a n.7 (cleaned up). But when a district court excludes an expert “based on (1) its *mere disagreement* with an expert’s choice of data or (2) its *own* assessment of the correctness of an expert’s opinions,” it exceeds its gatekeeping role under *Daubert*. *Id.*

## **REASONS FOR DENYING THE PETITION**

### **I. The District Court Would Have Been Reversed in Any Circuit.**

The district court committed a series of blatant, fundamental errors that would have earned it reversal in any circuit. In turn, the appeals court analyzed these errors in detail—it did not simply rubber-stamp Dr. Sahu’s testimony because Petitioners challenged its factual basis. This creates vehicle concerns for this Court because there are clear, alternative grounds on which to affirm. It also highlights that the Fourth Circuit’s rule regarding the role of an expert’s data in

the Rule 702 reliability analysis is not the categorical bar that Petitioners claim.

The district court committed five glaring, overarching errors by 1) erecting a unique, heightened reliability standard for experts engaged in air dispersion modeling; 2) requiring Dr. Sahu to independently “validate” data *Petitioners* submitted to regulators; 3) making credibility determinations between competing experts on issues of the appropriate choice of data; 4) issuing unwarranted, amateur scientific findings from the bench; and 5) ignoring corrections introduced by Dr. Sahu’s supplemental report. These errors go the heart of trial courts’ gatekeeping role under *Daubert* and Rule 702—correcting them does not depend on any specific formulation of Rule 702(b)’s “sufficient facts or data” requirement.<sup>6</sup>

### **A. Unlawful Heightened Scrutiny**

Based on its own hostility toward the science of air dispersion modeling, the district court concocted a standalone, heightened standard for experts in this field: in the court’s view, such experts must employ “[a]n in-depth data investigation, a searching historical analysis, an excruciating attention to detail, and a methodology designed to wring error out of the process . . . .” App’x at 62–63a. This exacting benchmark far exceeds Rule 702’s requirement that the proponent of expert testimony show it is more likely than not that the expert’s opinion is “based on sufficient facts or data . . . ,” Fed. R. Evid. 702(b), and

---

<sup>6</sup> In any event, the Fourth Circuit expressly held that Respondent “established by a preponderance of the evidence that Dr. Sahu’s testimony is admissible.” App’x 27a.

is not supported by law in any circuit as shown in Section C(iii), *infra*.

In keeping with the flexibility of the *Daubert* inquiry, there is not a hard and fast definition of what constitutes “sufficient facts or data” to support an expert opinion. *See Daubert*, 509 U.S. at 594–95 (describing reliability analysis as “flexible” and “focused on principles and methodology, not . . . the conclusions that they generate”). However, the Advisory Committee’s Notes indicate the inquiry is “quantitative rather than qualitative . . .” Fed. R. Evid. 702 advisory committee’s notes to 2000 amendments. Thus, “[t]he question is whether the expert considered **enough** information to make the proffered opinion reliable.” 29 CHARLES ALAN WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE AND PROCEDURE § 6268 (2d ed. 2025 update) (emphasis added).

Rule 702’s text also provides guidance, as “[t]he word ‘sufficient’ signifies that the expert may properly base her opinion on something less than *all* the pertinent facts or data.” *Id.* (emphasis added). “Thus, sufficiency is not a matter of whether the judge believes in the facts or data on which the expert relies.” *Id.*; *see also* Fed. R. Evid. 702 advisory committee’s notes to 2000 amendments (“The emphasis in the amendment on ‘sufficient facts or data’ is not intended to authorize a trial court to exclude an expert’s testimony on the ground that the court believes one version of the facts and not the other.”).

“[O]nce the court has found it more likely than not that the [sufficient facts or data] requirement has been met, any attack by the opponent will go only to the weight of the evidence.” Fed. R. Evid. 702 advisory committee’s notes to 2023 amendments. Crucially, this framework does not “require[] the court to nitpick an expert’s opinion in order to reach a perfect expression

of what the basis and methodology can support.” *Id.* And where experts disagree on the proper basis for scientific opinion, the Advisory Committee Notes express a preference for adversarial testing, not outright exclusion:

It will often occur that experts come to different conclusions based on contested sets of facts. Where that is so, the Rule 104(a) standard does not necessarily require exclusion of either side’s experts. Rather, by deciding the disputed facts, the jury can decide which side’s experts to credit. Proponents do not have to demonstrate to the judge by a preponderance of the evidence that the assessments of their experts are correct, they only have to demonstrate by a preponderance of evidence that their opinions are reliable . . . The evidentiary requirement of reliability is lower than the merits standard of correctness.

*Id.* (cleaned up) (citation omitted).

Here, the district court’s approach deviated wildly from these principles. Rather than analyze whether it’s more likely than not that Dr. Sahu considered “enough information to make [his] opinion reliable,” the court raised the much higher bar of whether Dr. Sahu employed “[a]n in-depth data investigation, a searching historical analysis, an excruciating attention to detail, and a methodology designed to wring error out of the process . . .” App’x 62a–63a. This is not an application of Rule 702 or *Daubert* standards; instead, it is a standalone rule without support in the law. Viewing the case through this improper lens, the district court discredited Dr. Sahu’s data extrapolations, even though such extrapolations are inherent in

air dispersion modeling. *Cf. Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) (“Trained experts commonly extrapolate from existing data.”); *see also Primiano v. Cook*, 598 F.3d 558, 565 (9th Cir. 2010) (“Lack of certainty is not, for a qualified expert, the same thing as guesswork.”).

Stated another way, far afield from the text of Rule 702, the district court essentially crafted a “*precision*” prerequisite for expert testimony. To justify this requirement, the court reached all the way back to a pre-*Daubert* decision by the Fifth Circuit—that did not even consider Rule 702—for the proposition that “[t]o make *precise* estimates, *precise* data [is] required.” App’x 67a (citing *Gulf S. Insulation v. U.S. Consumer Prod. Safety Comm’n*, 701 F.2d 1137, 1146 (5th Cir. 1983)). The district court thus erred by straying outside the framework of Rule 702, *Daubert*, and its progeny.

It is telling that the district court’s opinion is replete with quotations from law review notes and articles that advocate abandoning the *Daubert* admissibility inquiry when courts evaluate environmental modeling experts. *See, e.g.*, Matthew W. Swinehart, Note, *Remedying Daubert’s Inadequacy in Evaluating the Admissibility of Scientific Models Used in Environmental-Tort Litigation*, 86 TEX. L. REV. 1281, 1283 (2008) (“*Daubert* is not the appropriate way to evaluate model reliability, or at least it requires significant amendment to provide a credible analytic process.”); *see also* App’x 54a, 58a, 59a, 87a (relying on Swinehart article). Heavily influenced by these articles, the district court left *Daubert* behind in pursuit of an academic quest to rectify the so-called “troubled marriage between science and law” purportedly reflected in litigants’ use of dispersion modeling. App’x 58a. Any circuit would

have reversed this blatant legal error. This case is thus not about whether the Fourth Circuit should follow the dictates of Rule 702 (it does); this case is about whether a district court can amend Rule 702 based upon its personal views of a particular field of science (it cannot).

### B. “Validation” Requirement

The district court took the remarkable position that Dr. Sahu’s opinion was unreliable because he failed to independently “validate” emissions data submitted by Petitioners to regulators. *See* App’x 70a, 74a–76. Stated differently, the court held that an expert was not entitled to rely on pollution data ***created by the party seeking to exclude the expert and reported to regulators*** who have the authority to impose fines for inaccurate or incomplete emissions reporting. This “glaring abuse of discretion,” App’x 21a, would have been reversed in any circuit. *See, e.g., Ala. Power*, 730 F.3d at 1287 (“[T]here was a sufficient evidentiary basis under Rule 702—including Alabama Power’s own records and predictions—to support [the expert’s] assertions . . . .”); *Adams v. Ameritech Servs., Inc.*, 231 F.3d 414, 427 (7th Cir. 2000) (“The underlying information . . . came from the defendants ultimately, and as such we see no problem in [expert’s] decision to rely on it.”); *Henderson*, 2024 WL 6896218 at \*2 (“If the actual emissions are lower than what Lockheed’s records say they are, Lockheed’s experts can explain to the jury why—but Sahu using Lockheed’s own numbers as his source does not make his methodology unreliable.”).

Furthermore, as the Fourth Circuit correctly noted, the district court’s validation requirement was wholly “extratextual,” as “[n]othing in Rule 702 requires an expert witness to ‘validate’ data.” App’x 21a. It was

also unworkably vague, prompting even the dissenting judge to guess at the lower court's meaning. *Id.* 37a.

Rule 702 requires “sufficient” data to form a reliable opinion. Fed. R. Evid. 702(b). Validation is an additional step stemming not from *Daubert*'s concept of reliability, but from the district court's idiosyncratic views on the science of air dispersion modeling. In any circuit, a district court manufacturing an extratextual admissibility requirement would result in reversal.

### **C. Improper Credibility Determinations**

Every circuit agrees that district courts cannot make credibility determinations or resolve fact disputes in the course of the Rule 702 inquiry. *See, e.g., City of Pomona*, 750 F.3d at 1044; *United States v. Barton*, 909 F.3d 1323, 1333 (11th Cir. 2018) (“[I]t would have gone beyond the gatekeeping function of the trial court to exclude Zuleger's testimony on the basis of a credibility determination favoring [the competing expert].”); *In re Joint E. & S. Dist. Asbestos Litig.*, 52 F.3d 1124, 1133 (2d Cir. 1995) (“Trial courts should not arrogate the jury's role in evaluating the evidence and the credibility of expert witnesses by simply choosing sides in the battle of the experts.”) (cleaned up); App'x 23a. This remains true post-2023 amendments to Rule 702. *See Rappuhn*, 2024 WL 2930448, at \*4 (“[C]rediting one expert over another . . . misapplies *Daubert* and intrudes on the province of the jury.”). The district court flouted these principles by consistently “ignor[ing] or discount[ing] Dr. Sahu's proffered explanations in favor of those that [Petitioners'] expert, Dr. Ranjit Machado, offered.” App'x 20a. The court made at least four of these improper credibility calls:

- *Meaning of “Summary Sheets”*: The parties’ experts offered competing interpretations of historical “Toxic Air Pollutant Facility Registration Summary Sheets” submitted by Petitioners to the WVDEP. Petitioners’ expert believed these sheets reflect maximum rather than actual emissions at the Facility. Dr. Sahu disagreed, contending that the change in the supposed “maximum” figures over time showed they represent actual emissions. The district court improperly resolved this conflict by “ignor[ing] Dr. Sahu’s testimony justifying his contrary interpretation of the summary sheets.” *Id.* 23a.
- *Crediting UCC’s Reservations About 1984 Emissions Data*: To reconstruct “EtO emissions . . . for 1984,” Dr. Sahu relied on data Petitioners submitted to the West Virginia Air Pollution Control Commission. *Id.* 68a. When they submitted this data, Petitioners included a letter stating certain reservations about its validity. Dr. Sahu believed these “conclusionary” reservations provided no real basis to doubt the accuracy of the 1984 figures. *Id.* He also explained he reasonably assumed “the company would not provide misleading data to its regulator[.]” *Id.* 69a. Again, the district court sided with Petitioners, choosing to credit the claims in their letter over Dr. Sahu’s “reasons for why he did not believe [Petitioners’] claim that [their] 1984 data were inaccurate.” *Id.* 22a.

- *Choice of Meteorological Inputs:* To model weather conditions over the Class Period, Dr. Sahu utilized a combination of meteorological data from the Facility and other locations with similar geography. As with many of his other inputs, Dr. Sahu relied on data from other locations because reliable on-site data was lacking. *Id.* 25a. He also explained how data from multiple elevations would accurately represent “South Charleston’s mountainous geography.” *Id.* The district court ignored these explanations, ultimately finding Dr. Sahu’s reasoning “unpersuasive.” *Id.* 81a.
- *Use of NATA Figures to Set Background EtO Levels:* Dr. Sahu used the NATA national average for EtO exposure to represent the “background” exposure level in the Class Area. Petitioners’ expert opined that local monitoring data from the WVDEP would more accurately represent conditions around the Facility, but Dr. Sahu explained he decided against using the local data because it was based on limited sampling: just four days of testing, which was insufficient to create an annual average. *Id.* 26a. As the appeals court recognized, by resolving this evidentiary dispute in favor of Petitioners’ expert, the district court “waded into credibility determinations.” *Id.*

#### **D. Unwarranted “Scientific” Findings**

The district court also excluded Dr. Sahu’s testimony because his opinion conflicted with the court’s own amateur understanding of “the science of wind.” *Id.*

24a. Without citing to any source, the court declared that “a single location . . . cannot have multiple wind speeds coming from various directions at one specific time.” *Id.* 80a. The entire appellate panel agreed that this conclusion was both scientifically suspect and legally unnecessary. *Id.* 24a, 39a n.9.

This kind of overreach would earn reversal under the law of any circuit. *See, e.g., In re Joint E. & S. Dist. Asbestos Litig.*, 52 F.3d at 1137 (reversing directed verdict based on exclusion of expert testimony because “the district court impermissibly made a number of independent scientific conclusions . . . in a manner not authorized by *Daubert*”); *Summers v. Missouri Pac. R.R. Sys.*, 132 F.3d 599, 604 (10th Cir. 1997) (holding that “district courts must be careful not to don the amateur scientist’s cap in ruling on scientific validity”) (citation omitted); *see also Daubert*, 509 U.S. at 601 (Rehnquist, J., concurring in part and dissenting in part) (observing that Rule 702 does not confer on district courts “either the obligation or the authority to become amateur scientists in order to perform” their gatekeeping role).

### **E. Disregarding Dr. Sahu’s Supplemental Report**

Lastly, the district court inexplicably excluded Dr. Sahu’s opinions based on conclusions that he amended in a supplemental report. App’x 27a. Ignoring record evidence that supports the reliability of an expert’s opinion is an obvious error that would have been reversed in any circuit.

## **II. The Fact-Bound Nature of this Case Renders it a Poor Vehicle.**

If this Court grants the Petition, it will find itself mired in the minute factual questions undergirding the district court's opinion. The Fourth Circuit's decision bears this out: there, the appeals court painstakingly analyzed each of the district court's factual errors and evidentiary missteps. If there were a need for new jurisprudence regarding Rule 702(b)'s "sufficient facts or data" requirement (which, to be clear, there is not), this case would not be the vehicle for it.

Petitioners attempt to paper over the fact-bound nature of this case by oversimplifying the disputes that were central to the courts below. *See* Petition at 10–11 (reducing panel majority's opinion to a single legal principle). But as the foregoing discussion shows, the district court's over-exacting approach produced evidence-intensive rulings that do not depend on any specific formulation of Rule 702's "sufficient facts or data" requirement. If this Court grants review, its time will be expended on these matters rather than developing the law of *Daubert* on a clean record.

## **III. The Purported Split Is Illusory Because Every Circuit Allows for Exclusion of Expert Opinions That Lack Record Support or Fail to Reliably Connect Data and Conclusions.**

Petitioners' summary of the First and Fourth Circuit's approach to Rule 702(b)'s "sufficient facts or data" requirement is a baseless caricature. Contrary to their argument, those circuits do not follow a categorical rule forbidding any and all scrutiny of the factual bases of expert opinion. Rather, like every other federal court of appeals, the First and Fourth

circuits regularly sanction the exclusion of expert testimony that either lacks sufficient support in the record or rests on an untenable “analytical gap between the data and the opinion proffered.” *Joiner*, 522 U.S. at 146. These principles, which the Fourth Circuit affirmed in this case, *see* App’x 27a n.7, fully accommodate Rule 702(b)’s requirement that an expert’s opinion rest on “sufficient facts or data.”

The phrase on which Petitioners seize—that “questions regarding the factual underpinnings of the [expert witness’] opinion affect the weight and credibility of the witness’ assessment, not its admissibility”—does not operate as a “get-out-of-*Daubert*-free card.” *In re Lipitor (Atorvastatin Calcium) Mktg., Sales Prac. & Prods. Liab. Litig. (No. II) MDL 2502*, 892 F.3d 624, 641 (4th Cir. 2018). Instead, it merely underscores the widely recognized notion that picking apart an expert’s supporting data, literature, or other source material is typically the province of cross-examination and other forms of adversarial rebuttal. *See Gopalratnam v. Hewlett-Packard Co.*, 877 F.3d 771, 781 (7th Cir. 2017) (“The district court usurps the role of the jury . . . if it unduly scrutinizes the quality of the expert’s data and conclusions rather than the reliability of the methodology the expert employed.”).

A review of the jurisprudence of the First and Fourth circuits shows that these courts take seriously their obligation to “gatekeep” expert testimony that rests on an unsound factual basis. Further, none of the cases cited by Petitioners involve the type of legal error they claim: judges categorically refusing to consider the factual bases of an expert’s opinion as part of the Rule 702 reliability analysis. Instead, each case faithfully performs the screening required by Rule 702(b) while honoring *Daubert*’s preference for adver-

sarial testing of disputed or doubtful expert opinion. Petitioners' claims notwithstanding, there are no rogue jurisdictions in need of correction by this Court.

### A. The Fourth Circuit

The Fourth Circuit has a robust body of law affirming the exclusion of expert opinion that lacks a sufficient factual basis. For example, in *Tyger Construction Co., Inc. v. Pensacola Construction Co.*, 29 F.3d 137, 144 (4th Cir. 1994), the appeals court affirmed the district court's exclusion of an expert whose opinion was "based on assumptions which [found] no support in the record." The expert made a host of assumptions that were either contradicted by the record or simply made up out of whole cloth. 29 F.3d at 143–44. The appellate panel reversed the district court's decision to admit this testimony after scrutinizing each faulty assumption in detail. *Id.* at 142–45.

Crucially, *Tyger* repudiated the "trial judge's belief . . . ***that the question of whether an expert's opinion had an adequate basis in fact should be handled by opposing counsel through cross examination and in jury argument.***" *Id.* (emphasis added). The court held that admitting an unreliable expert opinion on this basis "was an abuse of discretion" because district courts "may not abdicate [their] responsibility to ensure that only properly admitted evidence is considered by the jury." *Id.* at 143.

*Tyger* is no outlier. In *EEOC v. Freeman*, 778 F.3d 463 (4th Cir. 2015), the appeals court affirmed the exclusion of an expert who relied on a database that inexplicably omitted critical data about the defendant's hiring practices. The court held that the "sheer number of mistakes and omissions in [the expert's]

analysis,” including the unexplained absence of “hundreds of [job] applicants,” rendered it unreliable. *Id.* at 467. Notably, in concurrence, Judge Agee specifically rejected the EEOC’s argument that “[p]urported flaws in [the expert’s] analyses concerned data . . . and therefore concerned weight/credibility issues for trial, not admissibility.” *Id.* at 472 (cleaned up). Judge Agee wrote that “no court has accepted the agency’s argument” because it “ignores *Daubert*’s instruction that the district court must act as a gatekeeper.” *Id.*

Similarly, in *Le Doux v. Western Express, Inc.*, 126 F.4th 978, 984 (4th Cir. 2025) the appeals court affirmed the exclusion of an accident reconstructionist who, in tandem with a weather modeling expert, sought to depict the conditions of a highway accident during heavy rain. The court deemed the reconstructionist’s method unreliable “because he used inaccurate time stamps” that made it impossible to accurately predict when the rain began, which was a key issue in the case. *Id.* at 985. Thus, because the expert relied on spurious data, the district court properly excluded his testimony.

The Fourth Circuit has also excluded expert testimony that “cherry-picks’ relevant data . . . .” *Lipitor*, 892 F.3d at 634 (citation omitted). And its pre-*Daubert* jurisprudence upholds the same core principle of screening expert testimony without a proper factual foundation. *See E. Auto Distribs., Inc. v. Peugeot Motors of Am., Inc.*, 795 F.2d 329, 338 (4th Cir. 1986) (affirming exclusion of expert “[i]n light of the unsupported and speculative assumptions underlying [his] calculations”).

Just as consistently, the Fourth Circuit affirms the exclusion of expert testimony based on there being “too

great an analytical gap” between the expert’s conclusions and the available data. *See United States v. Hudak*, 156 F.4th 405, 409–10 (4th Cir. 2025) (affirming exclusion based on “striking incongruence” between expert’s conclusion that mental health issues prompted defendant’s aggressive behavior and “her report, which included almost no facts about the period of time in which the conduct occurred”); *Belville v. Ford Motor Co.*, 919 F.3d 224, 234 (4th Cir. 2019) (affirming exclusion based on “considerable gap between [expert’s] theory and any evidentiary proof of causation”).

These precedents are not undermined by the statement from *Bresler v. Wilmington Trust Co.*, 855 F.3d 178, 195 (4th Cir. 2017), that “questions regarding the factual underpinnings of the expert witness’ opinion affect the weight and credibility of the witness’ assessment, not its admissibility.” (cleaned up). As the Fourth Circuit recognized here, that notion does not vitiate district courts’ obligation to exclude expert testimony that is without a sufficient factual basis or suffers from an “analytical gap” problem. App’x 27a n.7. Instead, *Bresler’s* rule means that “a district court may not exclude expert testimony based on (1) its *mere disagreement* with an expert’s choice of data or (2) its *own* assessment of the correctness of an expert’s opinions.” *Id.* This is fully consonant with *Daubert’s* principle of reliability, under which “[t]he focus . . . must be solely on principles and methodology, not on the conclusions that they generate.” 509 U.S. at 595.

Lastly, Petitioners’ depiction of the Fourth Circuit as a rogue jurisdiction that fails to heed the 2023 amendments to Rule 702 runs headlong into *Sardis v. Overhead Door Corporation*, 10 F.4th 268 (4th Cir. 2021), where the court ***praised the proposal that preceded the amendments.*** The *Sardis* Court

extolled the Advisory Committee on Evidence Rules' effort to correct the "pervasive problem" of judges "not apply[ing] the preponderance standard of admissibility to [Rule 702's] requirements of sufficiency of basis and reliable application of principles and methods, instead holding that such issues were ones of weight for the jury." *Id.* at 283–84. *Sardis* squarely refutes Petitioners' position that Fourth Circuit precedent is "irreconcilable with . . . the clear direction provided by the 2023 amendments to Rule 702." Petition at 18.

### **B. The First Circuit<sup>7</sup>**

The First Circuit also recognizes that expert testimony should be excluded if it lacks an evidentiary basis or is plagued by too many "analytical gaps." For example, in *Bricklayers & Trowel Trades International Pension Fund v. Credit Suisse Securities (USA)*, 752 F.3d 82, 91 (1st Cir. 2014), the appeals court affirmed the district court's exclusion of an economist who arbitrarily chose "event dates" that drove his calculation of losses on certain stock trades. The court rejected the plaintiffs' argument that the district court excluded their expert based on a "credibility determination," finding instead that that the expert's chosen dates were "unrelated to the [plaintiffs'] allegations and therefore [did] not 'help the trier of fact to understand the evidence or to determine a fact in issue.'" *Id.* at 92 (quoting Fed. R. Evid. 702(a)).

*Bricklayers* is of a piece with numerous other cases holding that district courts "may exclude expert testimony . . . that . . . has no foundation or rests on

---

<sup>7</sup> Because the Fourth Circuit's jurisprudence complies with Rule 702(b), this Court should not use this case as a vehicle to render an advisory opinion on any independent flaws it identifies with the First Circuit's approach.

obviously incorrect assumptions or speculative evidence.” See, e.g., *Casas Office Machines, Inc. v. Mita Copystar Am., Inc.*, 42 F.3d 668, 681 (1st Cir. 1994); *Irvine v. Murad Skin Research Labs., Inc.*, 194 F.3d 313, 321 (1st Cir. 1999) (“Absent adequate factual data to support the expert’s conclusions his testimony was unreliable.”).

As in the Fourth Circuit, these principles easily harmonize with the rule that “[w]hen the factual underpinning of an expert’s opinion is weak, it is a matter affecting the weight and credibility of the testimony—a question to be resolved by the jury.” *Milward v. Acuity Specialty Prods. Grp., Inc.*, 639 F.3d 11, 22 (1st Cir. 2011) (citation omitted). This principle does not completely bar district court consideration of the factual bases of an expert’s testimony. See *Carmichael v. Verso Paper, LLC*, 679 F. Supp. 2d 109, 119 (D. Me. 2010) (“The adequacy of an evidentiary foundation for the admissibility of an expert opinion can be properly challenged with a *Daubert* motion.”). Rather, it merely reinforces *Daubert*’s express preference for “vigorous cross-examination over exclusion.” *Id.*; see also *Crowe v. Marchand*, 506 F.3d 13, 18 (1st Cir. 2007) (“Objections . . . which question the factual underpinnings of an expert’s investigation[] **often** go to the weight of the proffered testimony, not to its admissibility.”) (emphasis added).

*Milward* bears this out. There, the appeals court reversed the district court’s exclusion of a highly qualified expert<sup>8</sup> who used the “weight of the evidence”

---

<sup>8</sup> The expert was “acknowledged as a leading expert on the study of the toxic effects of chemicals and drugs on the human body, with particular emphasis on the mechanisms by which benzene and its metabolites cause damage to both cells and the human organism as a whole.” 639 F.3d at 15.

methodology to draw a causal connection between a rare type of leukemia and the plaintiff's "workplace exposure to benzene-containing products . . ." 639 F.3d at 13, 16. In a nutshell, the expert's methodology involved a cumulative finding inferred from a range of sources, none of which was independently sufficient to support the ultimate conclusion. *Id.* at 23.

The district court took aim at the studies relied upon by the expert, raising doubts as to whether each one, standing alone, supported a causal inference between benzene exposure and leukemia. The lower court also cited countervailing studies that, in its view, disproved causation. *Id.* at 20–21. The First Circuit found two errors in this approach: first, it "repeatedly challenged the factual underpinnings of [the expert's] opinion, and took sides on questions that are currently the focus of extensive scientific research and debate—and on which reasonable scientists can clearly disagree." *Id.* at 22. Second, by demanding that each study relied on by the expert *independently* prove causation, the district court misunderstood the cumulative nature of the "weight of the evidence" method. *Id.* at 23.

Thus, *Milward* did not simply wave the expert's opinion on to trial, as Petitioners contend. Petition at 20–21. Instead, it reversed an overzealous district court that waded into disputed scientific questions that should have been resolved at trial. *Milward* thus stands for the uncontroversial proposition that when a district court exhaustively interrogates the expert's factual basis rather than screening it for reliability, it "cross[es] the boundary between gatekeeper and trier of fact." 639 F.3d at 22.<sup>9</sup>

---

<sup>9</sup> *Milward* also reiterated that "expert testimony may be excluded if there is too great an analytical gap between the data

Petitioners cite *Doucette v. Jacobs*, 106 F.4th 156 (1st Cir. 2024) and *Rodriguez v. Hospital San Cristobal*, 91 F.4th 59 (1st Cir. 2024), as evidence that the First Circuit continues to apply an errant rule. But *Doucette* shows the opposite. There, the appeals court affirmed the exclusion of a physician’s testimony based on her “failure to ground her conclusions in the specifics of the record – or even to consider key aspects of the record . . . .” 106 F.4th at 170. These failings “meant that [her] report fell short of Rule 702’s requirements that her ‘testimony [be] based on sufficient facts or data’ and that she ‘reliabl[y] appl[y] [her] principles and methods to the facts of the case.’” *Id.* (quoting Fed. R. Evid. 702(b), (d)).

Crucially, *Doucette* cited both *Milward*’s “factual underpinnings” rule **and** *Joiner*’s rule regarding “analytical gaps.” *Id.* at 169. And the case ended with the exclusion of an unreliable expert. *Doucette* is thus living proof that these rules complement each other and do not, as Petitioners contend, render the First Circuit a rogue jurisdiction where courts blink at every challenge to the factual basis of an expert’s testimony.<sup>10</sup>

### C. Other Circuits

Since the 2023 amendments to Rule 702, other circuits, too, have cautioned district courts against

---

and the opinion proffered.” 639 F.3d at 15. It simply concluded that, on the facts before it, “the gap was of the district court’s making.” *Id.* at 22 (quoting *Kennedy v. Collagen Corp.*, 161 F.3d 1226, 1230 (9th Cir. 1998)).

<sup>10</sup> *Rodriguez* also affirmed the exclusion of unreliable expert testimony, but not on “sufficient facts or data” grounds. 91 F.4th at 72 (affirming district court’s conclusion that expert’s opinion was not “the product of reliable principles and methods”) (quoting Fed. R. Evid. 702(c)).

delving too deeply into experts' factual bases when conducting *Daubert's* reliability analysis. See, e.g., *Exafer Ltd v. Microsoft Corp.*, -- F.4th --, No. 2024-2296, 2026 WL 627886, at \*3 (Fed. Cir. Mar. 6, 2026) (reversing exclusion in part because Microsoft's own documents supported expert opinion); *Teradata Corp. v. SAP SE*, 124 F.4th 555, 571 (9th Cir. 2024), cert. denied, 146 S. Ct. 118 (2025) ("As with Asker's other conclusions, a trier of fact might disagree. But at this stage, it is not our role to determine the veracity of the expert's conclusions. Asker's assumption that runtime HANA provides analytical functionality is sufficiently plausible to constitute a competing version[ ] of the evidence.") (citation omitted and cleaned up); *United States v. Markovich*, 95 F.4th 1367, 1377 (11th Cir. 2024) ("The Markoviches' objections to the inadequacies of Clark's study attack the weight of the evidence, not its admissibility.") (citation omitted and cleaned up); *Acad. Bank, N.A. v. AmGuard Ins. Co.*, 116 F.4th 768, 791 (8th Cir. 2024), reh'g denied, No. 23-1375, 2024 WL 4499662 (8th Cir. Oct. 16, 2024) ("[A]ny failure to take account of windchill, pressure, and the amount of water merely provided material for cross-examination or opposing expert testimony.").

These cases further demonstrate that the First and Fourth circuits are not outliers – they are in good company when it comes to ensuring that Rule 702(b)'s "sufficient facts or data" requirement does not replace the adversary process. Thus, there is no "deep fissure," Petition at 30, or even a split among circuits regarding application of Rule 702, making this Court's intervention wholly unnecessary.

**CONCLUSION**

For the reasons given, the Petition should be denied.

Respectfully submitted,

ADAM J. GOMEZ  
KELLY L. TUCKER  
GRANT & EISENHOFER, P.A.  
123 Justison Street  
Wilmington, DE 19801  
(302) 622-7000

JOSH AUTRY  
*Counsel of Record*  
MORGAN & MORGAN, PA  
199 Water St  
Suite 1500  
New York, NY 10022  
(859) 899-8785  
jautry@forthepeople.com

STEPHEN EDWARDS  
MORGAN & MORGAN, PA  
2005 Market St  
Suite 600  
Philadelphia, PA 19103  
(215) 446-9793

*Counsel for Respondent*

April 6, 2026