

No. _____

**In the
Supreme Court of the United States**

EXXONMOBIL CORPORATION; EXXONMOBIL
CHEMICAL COMPANY; EXXONMOBIL REFINING &
SUPPLY COMPANY,
Petitioners,

V.

ENVIRONMENT TEXAS CITIZEN LOBBY, INCORPORATED;
SIERRA CLUB,
Respondents.

ON PETITION FOR A WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT

**PETITION APPENDIX
VOLUME I OF II (1a-326a)**

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[123 F.4th 309]

**UNITED STATES COURT OF APPEALS,
FOR THE FIFTH CIRCUIT**

United States
Court of Appeals
Fifth Circuit
FILED
December 11, 2024
Lyle W. Cayce
Clerk

No. 17-20545

ENVIRONMENT TEXAS CITIZEN LOBBY,
INCORPORATED; SIERRA CLUB,

Plaintiffs—Appellees,

versus

EXXONMOBIL CORPORATION; EXXONMOBIL CHEMICAL
COMPANY; EXXONMOBIL REFINING
& SUPPLY COMPANY,

Defendants—Appellants.

Appeal from the United States District Court
for the Southern District of Texas
USDC No. 4:10-CV-4969

Before ELROD, *Chief Judge*, and DAVIS, JONES,
SMITH, STEWART, RICHMAN, SOUTHWICK, HAYNES,
GRAVES, HIGGINSON, WILLETT, HO, DUNCAN,

ENGELHARDT, OLDHAM, WILSON, and DOUGLAS,
*Circuit Judges.**

Per Curiam:**

The en banc court heard oral argument in this matter in May 2023. That was more than eighteen months ago. Moreover, the parties in this case have already endured multiple appeals and remands back to the district court, over the course of nine years.¹

* JUDGE RAMIREZ joined the court after the case was submitted and did not participate in this decision.

** CHIEF JUDGE ELROD concurs separately in the *per curiam* order: I concur in the per curiam order because I believe that our experienced district court colleague Judge Hittner’s most recent opinion “got it right.” *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp. (Exxon III)*, 47 F.4th 408, 423 (5th Cir. 2022), *reh’g en banc granted, vacated*, 61 F.4th 1012 (5th Cir. 2023). So too did the panel majority opinion in *Exxon III*, which affirmed Judge Hittner. I would accordingly support reinstating the *Exxon III* panel majority opinion, which explains far more eloquently than I could why the district court was correct. *See, e.g., Jimenez v. Wood County*, 660 F.3d 841, 844 n.1 (5th Cir. 2011) (en banc) (“[W]e reinstate those portions of the panel opinion that decide these issues[.]”); *Soffar v. Cockrell*, 300 F.3d 588, 590 & n.1 (5th Cir. 2002) (en banc) (“We reinstate the rulings of the panel concerning the grant or denial of COA as to all issues raised by Soffar.”); *Equilease Corp. v. M/V Sampson*, 793 F.2d 598, 600 n.1 (5th Cir. 1986) (en banc) (“Although under the Fifth Circuit’s internal operating procedures the effect of the granting of a rehearing en banc is to vacate the panel opinion, the court today reinstates the panel’s ruling in Parts II, III, IV, and V of its opinion.” (citations omitted)).

¹ The first appeal in this matter was argued on February 2, 2016, and decided on May 27, 2016—over eight years ago. *See* 824 F.3d 507. After remand to the district court, this subsequent appeal was initiated in this court in August 2017. It was first argued on November 7, 2018, and decided on July 29, 2020. *See* 968 F.3d 357. After a limited remand to the district court, the

Another remand would mean that the appellate proceedings in this matter will have delayed resolution of this case by *over a decade*. Justice delayed is justice denied. Had we known that it would take a year and a half after en banc oral argument to issue an opinion, we would not have granted en banc rehearing. We accordingly AFFIRM the judgment of the district court, dated March 2, 2021.²

W. EUGENE DAVIS, *Circuit Judge*, concurring, joined by STEWART, SOUTHWICK, HAYNES, GRAVES, HIGGINSON, and DOUGLAS, *Circuit Judges*:

We concur in the per curiam opinion for the reasons it expresses. However, we would prefer to affirm the district court’s April 26, 2017 judgment for the reasons expressed in the opinion below.

* * *

Plaintiffs-Appellees Environment Texas Citizen Lobby, Inc. and Sierra Club, on behalf of their members, brought this Clean Air Act (“CAA”) citizen suit against ExxonMobil Corporation and its affiliates (“Exxon”) seeking civil penalties, payable to the U.S. Treasury, for thousands of unauthorized emissions from Exxon’s Baytown, Texas complex between October 2005 and September 2013. The principal issue before the en banc Court is whether Plaintiffs’

appeal returned to our court. It was argued on June 28, 2022, and decided on August 30, 2022. *See* 47 F.4th 408. We subsequently granted rehearing en banc on February 17, 2023—twenty-one months ago. *See* 61 F.4th 1012.

² We note that other courts have vacated their orders granting rehearing en banc as improvidently granted. *See, e.g., Aposhian v. Wilkinson*, 989 F.3d 890, 891 (10th Cir. 2021); *Gonzales v. McKune*, 279 F.3d 922, 924 (10th Cir. 2002); *United States v. Collins*, 462 F.2d 792, 802 (2d Cir. 1972).

members, who live, work, and recreate near Exxon’s facility, have a sufficient “personal stake”¹ in curtailing Exxon’s ongoing and future unlawful emissions of hazardous pollutants. We conclude that the district court correctly held that Plaintiffs established standing for each of their claims and did not abuse its discretion in awarding a penalty of \$19.95 million against Exxon to deter it from committing future violations. Accordingly, we would AFFIRM the district court’s 2017 judgment.²

I. BACKGROUND

This suit’s twelve-year factual history is recounted in greater detail in the district court’s³ and this Court’s prior opinions.⁴ Briefly stated, Exxon owns

¹ See *Duke Power Co. v. Carolina Env’t Study Grp., Inc.*, 438 U.S. 59, 72, 98 S.Ct. 2620, 57 L.Ed.2d 595 (1978) (“In essence the standing inquiry asks whether the parties seeking to invoke the court’s jurisdiction have ‘alleged such a personal stake in the outcome of the controversy as to assure that concrete adverseness which sharpens the presentation of issues upon which the court so largely depends’” (citing *Baker v. Carr*, 369 U.S. 186, 204, 82 S.Ct. 691, 7 L.Ed.2d 663 (1962))).

² *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.* (2017 D. Ct. Op.), No. 10-4969, 2017 WL 2331679 (S.D. Tex. Apr. 26, 2017).

³ *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.* (2014 D. Ct. Op.), 66 F. Supp. 3d 875 (S.D. Tex. 2014); 2017 D. Ct. Op., 2017 WL 2331679; and *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.* (2021 D. Ct. Op.), 524 F. Supp. 3d 547 (S.D. Tex. 2021).

⁴ *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.* (ETCL I), 824 F.3d 507 (5th Cir. 2016); *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.* (ETCL II), 968 F.3d 357 (5th Cir. 2020), *reh’g en banc granted*, vacated by 61 F.4th 1012 (5th Cir. 2023) (mem.) (per curiam); and *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil*

and operates a complex in the city of Baytown consisting of a refinery, olefins plant, and chemical plant (collectively the “Complex”). It is the largest petroleum and petrochemical complex in the United States and covers 3,400 acres, with a circumference of almost 13.6 miles. And, of relevance here, the Complex is located near several residential areas in Baytown, with some homes as close as 2,000 yards from its fence line.

The Complex is governed by emission permits issued under Title V of the CAA. The Texas Commission on Environmental Quality (“TCEQ”) and the United States Environmental Protection Agency (“EPA”) are jointly responsible for enforcing these permits and regulating Exxon’s emissions at the Complex. In order to monitor compliance, state regulations require Exxon to document and, in some instances, self-report incidents of noncompliance with its permits.⁵

On December 13, 2010, Plaintiffs Environment Texas Citizen Lobby, Inc. and Sierra Club, on behalf of their members, sued Exxon for its ongoing permit violations under the CAA’s citizen-suit provision, 42 U.S.C. § 7604(a)(1). Plaintiffs’ members include individuals who live, work, and recreate next to the massive Baytown Complex and have suffered physical, psychological, curtailment, and aesthetic injuries as a result of Exxon’s ongoing unlawful emissions. Plaintiffs requested relief in the form of

Corp. (ETCL III), 47 F.4th 408 (5th Cir. 2022), *reh’g en banc granted*, vacated by 61 F.4th 1012.

⁵ We discussed Exxon’s reporting obligations under state regulations in greater detail in *ETCL I*, 824 F.3d at 512–22, and *ETCL II*, 968 F.3d at 362–63.

civil penalties, payable to the U.S. Treasury, to deter Exxon from continuing to violate its permits in the future.⁶

It is undisputed that Exxon has a history of repeatedly violating its Title V permits. During the pendency of this suit, Exxon stipulated to spreadsheets documenting its thousands of permit violations between October 2005 and September 2013.⁷ Throughout this eight-year claims period, Exxon committed on average more than one permit violation per day, resulting in the unlawful emission of nearly ten million pounds of pollutants. Out of the ten million pounds unlawfully emitted from the Complex, nine million pounds were “criteria pollutants” which the EPA has determined “cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare.”⁸

In February 2014, following a thirteen-day bench trial in which twenty-five witnesses testified and 1,148 exhibits were admitted, the district court found that although Plaintiffs had Article III standing, only a few days of Exxon’s violations were “actionable” under the CAA.⁹ The court therefore declined to

⁶ In addition to civil penalties, Plaintiffs initially sought injunctive and declaratory relief, attorney’s fees and costs, and the appointment of a special master. The only form of relief at issue on appeal is civil penalties.

⁷ *ETCL I*, 824 F.3d at 514.

⁸ 42 U.S.C. § 7408(a)(1)(A).

⁹ *2014 D. Ct. Op.*, 66 F. Supp. 3d at 880 n.1, 895–904. A violation is “actionable” under the CAA only if it was repeated (*i.e.*, happened more than once) or is ongoing at the time of the complaint (*i.e.*, happened at least once before the complaint, and at least once afterwards). *ETCL I*, 824 F.3d at 518–19.

impose civil penalties. Plaintiffs appealed. A panel of this Court reversed and remanded, holding that the district court had analyzed “actionability” too narrowly.¹⁰

On remand, the district court again found that Plaintiffs had standing and held that Exxon was liable for 16,386 days of violations and imposed a \$19.95 million civil penalty.¹¹ This time, Exxon appealed, challenging the district court’s judgment on the issues of standing, affirmative defenses, and penalty factors.¹² A divided panel of this Court held that Plaintiffs had established the injury-in-fact and redressability prongs of Article III standing, but ordered a “limited remand” for additional analysis on which of Exxon’s violations satisfied the “fairly traceable” requirement of standing.¹³ The panel majority provided a “rubric” to guide the district court’s traceability analysis on remand.

On the second remand, the district court applied the panel’s “rubric” and held that Plaintiffs established traceability for 3,651 days of violations and reduced the penalty award to \$14.25 million.¹⁴ For the second time, Exxon appealed the district court’s standing and penalty holdings, and the same divided panel of this Court affirmed.¹⁵

In response, the full Court ordered rehearing en banc and vacated the second and third panel

¹⁰ *ETCL I*, 824 F.3d at 515–23, 533–34.

¹¹ *2017 D. Ct. Op.*, 2017 WL 2331679, at *9–11, 29, 32.

¹² *ETCL II*, 968 F.3d at 364.

¹³ *Id.* at 367–75.

¹⁴ *2021 D. Ct. Op.*, 524 F. Supp. 3d at 565, 577.

¹⁵ *ETCL III*, 47 F.4th at 413.

opinions.¹⁶ Now, before the en banc court, Exxon maintains that Plaintiffs lack standing because their members only “correlated” their injuries to five emissions events (representing only forty days of violations), and Exxon has already taken “corrective actions” as to those five events. Accordingly, Exxon contends we should vacate the district court’s judgment and dismiss the case. Plaintiffs argue that under established precedent they have standing and urge us to affirm the district court’s 2017 judgment.

II. LAW & DISCUSSION

A. CAA’s Citizen-Suit Provision

The CAA’s citizen-suit provision authorizes “any person” to bring a civil action against another “person . . . who is alleged to have violated (if there is evidence that the alleged violation has been repeated) or to be in violation . . . of an emission standard or limitation under [the Act].”¹⁷ The CAA in turn defines “emission standard” or “emission limitation” as “a requirement established by the State or the [EPA] Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis.”¹⁸ Congress enacted the citizen-suit provision to “encourage citizen participation in the enforcement of standards and regulations established under th[e Clean Air] Act . . . and intended the section to afford

¹⁶ *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 61 F.4th 1012 (5th Cir. 2023) (mem.) (per curiam).

¹⁷ 42 U.S.C. § 7604(a).

¹⁸ *Id.* § 7602(k).

citizens very broad opportunities to participate in the effort to prevent and abate air pollution.”¹⁹

If a defendant is found liable, the district court is authorized “to apply any appropriate civil penalties.”²⁰ If imposed, civil penalties are deposited into a “special fund” in the United States Treasury.²¹ In determining whether to assess a penalty and, if so, in what amount, district courts must consider seven enumerated factors, including: “the size of the business, the economic impact of the penalty on the business, the violator’s full compliance history and good faith efforts to comply, the duration of the violation . . . , payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation.”²² The court may also consider any unenumerated factors “as justice may require.”²³ If the court finds a penalty appropriate, the amount must be within the statutory cap in light of the Act’s language that penalties “may be assessed for each day of violation.”²⁴

B. Article III Standing

Although the CAA authorizes “any person” to bring suit, that person must still meet “the irreducible

¹⁹ *Pennsylvania v. Del. Valley Citizens’ Council for Clean Air*, 478 U.S. 546, 560, 106 S.Ct. 3088, 92 L.Ed.2d 439 (1986) (cleaned up) (internal quotation marks and citation omitted).

²⁰ 42 U.S.C. § 7604(a).

²¹ *Id.* § 7604(g).

²² *Id.* § 7413(e)(1).

²³ *Id.*

²⁴ *Id.* § 7413(e)(2); 40 C.F.R. § 19.4 (setting forth the maximum penalty for each day of violation).

constitutional minimum of standing” in order to file suit in federal court.²⁵ Standing is a legal question that we review *de novo*.²⁶ But we review findings of fact related to standing for clear error.²⁷

The requirement of Article III standing “ensures that the parties before us retain a ‘personal stake’ in the litigation.”²⁸ To establish such a “personal stake,” a plaintiff bears the burden of showing (1) an injury in fact, (2) fairly traceable to the defendant’s challenged conduct, (3) that is likely redressable by the requested relief.²⁹ Although “the proof required to establish standing increases as the suit proceeds, the standing inquiry remains focused on whether the party invoking jurisdiction had the requisite stake in the outcome when the suit was filed.”³⁰ In cases that

²⁵ *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560, 112 S.Ct. 2130, 119 L.Ed.2d 351 (1992).

²⁶ *Ctr. for Individual Freedom v. Carmouche*, 449 F.3d 655, 659 (5th Cir. 2006).

²⁷ *Pederson v. La. State Univ.*, 213 F.3d 858, 869 (5th Cir. 2000) (citation omitted).

²⁸ *Moore v. Harper*, 600 U.S. 1, 6, 143 S.Ct. 2065, 216 L.Ed.2d 729 (2023) (quoting *Baker*, 369 U.S. at 204, 82 S.Ct. 691).

²⁹ *Lujan*, 504 U.S. at 560–61, 112 S.Ct. 2130.

³⁰ *Davis v. FEC*, 554 U.S. 724, 734, 128 S.Ct. 2759, 171 L.Ed.2d 737 (2008) (citation omitted); *Friends of the Earth, Inc. v. Laidlaw Env’t Servs. (TOC), Inc.*, 528 U.S. 167, 180, 120 S.Ct. 693, 145 L.Ed.2d 610 (2000) (“[W]e have an obligation to assure ourselves that [plaintiffs] had Article III standing at the outset of the litigation.”).

proceed to trial, standing must be established by a preponderance of the evidence.³¹

In cases like this where Plaintiffs are organizations suing on behalf of their members, the organization must demonstrate that: “(a) its members would otherwise have standing to sue in their own right; (b) the interests it seeks to protect are germane to the organization’s purpose; and (c) neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.”³² The dispute here turns on whether Plaintiffs’ members, “any one of them,” would have standing to sue in their own right.³³

Finally, “standing is not dispensed in gross; rather, plaintiffs must demonstrate standing for each claim that they press and for each form of relief that they seek (for example, injunctive relief and damages).”³⁴ The application of this fundamental tenet of our standing jurisprudence is at the heart of this case. Specifically, the parties dispute: (1) whether the standing analysis for citizen suits seeking civil penalties is prospective or retrospective; and (2) how to define a “claim” under the CAA for purposes of standing. We address these two issues first given their broader impact on our standing

³¹ *E.T. v. Paxton*, 41 F.4th 709, 714 (5th Cir. 2022) (internal quotation marks and citation omitted).

³² *Hunt v. Wash. State Apple Advert. Comm’n*, 432 U.S. 333, 343, 97 S.Ct. 2434, 53 L.Ed.2d 383 (1977).

³³ *Id.* at 342–43, 97 S.Ct. 2434.

³⁴ *TransUnion LLC v. Ramirez*, 594 U.S. 413, 431, 141 S.Ct. 2190, 210 L.Ed.2d 568 (2021) (citations omitted).

analysis before turning to whether Plaintiffs have established the three prongs of standing in this case.

1. The Standing Analysis for Civil Penalties is Prospective.

The form of relief a plaintiff seeks impacts our standing analysis.³⁵ For example, when a plaintiff seeks compensatory damages in a tort suit, we consider standing through the lens of the plaintiff's *past* harm. On the other hand, when a plaintiff seeks prospective relief, we consider standing through the lens of the plaintiff's *continuing* or *future* harm. The question here is under which category civil penalties—which are not paid to individual plaintiffs but instead to the U.S. Treasury to deter future violations—fall. Exxon contends that civil penalties should be analyzed retrospectively as in cases seeking past damages, whereas Plaintiffs argue civil penalties are a form of prospective relief similar to an injunction. We find that Plaintiffs have the superior argument in light of Supreme Court precedent that has repeatedly characterized citizen-suit claims for civil penalties as seeking prospective forms of relief.

First, in *Middlesex County Sewerage Authority P. National Sea Clammers Association*,³⁶ the Supreme Court addressed whether the Clean Water Act's ("CWA")³⁷ citizen-suit provision authorizes an

³⁵ *Attala Cnty., Miss. Branch of NAACP v. Evans*, 37 F.4th 1038, 1042 (5th Cir. 2022) (citing *City of Los Angeles v. Lyons*, 461 U.S. 95, 103 (1983)).

³⁶ 453 U.S. 1 (1981).

³⁷ The parties agree that the CAA's and CWA's citizen-suit provisions are identical in all respects material to this case. We agree. Congress "modeled" the CWA's citizen-suit provision on the CAA's provision and therefore courts often consult cases

implied private cause of action for damages. The Court held it did not, noting that the CWA contemplates “only prospective relief” in citizen suits, either in the form of an injunction or the imposition of civil penalties.³⁸

Next, in *Gwaltney of Smithfield, Ltd. P. Chesapeake Bay Foundation, Inc.*, plaintiffs brought a citizen suit seeking declaratory and injunctive relief, civil penalties, and attorney’s fees under the CWA against a meat-packing plant.³⁹ The plaintiffs alleged Gwaltney repeatedly violated its permit conditions by exceeding its effluent limitations for five separate pollutants between 1981 and 1984.⁴⁰ But Gwaltney’s last recorded violation occurred several weeks before the plaintiffs filed suit, thus raising the question whether the CWA allows citizen suits for wholly past violations.⁴¹ The Court held the CWA does not provide jurisdiction over wholly past violations because “the harm sought to be addressed by the citizen suit lies in the present or the future, not in the past.”⁴²

interpreting CWA provisions when analyzing issues arising under the CAA. *Gwaltney of Smithfield, Ltd. P. Chesapeake Bay Found., Inc.*, 484 U.S. 49, 62 (1987) (internal quotation marks and citation omitted); *see also United States P. Anthony Dell’Aquila, Enters. & Subsidiaries*, 150 F.3d 329, 338 n.9 (3d Cir. 1998) (acknowledging that “courts often rely upon interpretations of the Clean Water Act to assist with an analysis under the Clean Air Act”).

³⁸ *Middlesex*, 453 U.S. at 6–7, 13–15 & n.25.

³⁹ 484 U.S. at 53–54.

⁴⁰ *Id.*

⁴¹ *Id.* at 54–55.

⁴² *Id.* at 59–61, 64.

Specifically, the *Gwaltney* Court noted that the citizen-suit provision “does not authorize civil penalties separately from injunctive relief; rather, the two forms of relief are referred to in the same subsection, even in the same sentence.”⁴³ It further observed that this “connection between injunctive relief and civil penalties” is absent from the provision authorizing the Administrator of the EPA to bring an action for civil penalties, in which it “is little questioned” that civil penalties may be recovered for wholly past violations.⁴⁴ The Court also took note of the fact that “[m]embers of Congress frequently characterized the citizen suit provisions as ‘abatement’ provisions or as injunctive measures.”⁴⁵

In *Steel Co. v. Citizens for a Better Environment*, the Court held that an environmental group seeking civil penalties for a steel manufacturer’s wholly past violations of the Emergency Planning and Community Right-To-Know Act failed to satisfy the redressability requirement for standing.⁴⁶ Specifically, the Court held because civil penalties are payable to the U.S.

Treasury, they cannot be considered “as a sort of compensation or redress to respondent.”⁴⁷

Finally, in *Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC) Inc.*, the Supreme Court considered a CWA citizen suit against Laidlaw, a hazardous waste incinerator, that repeatedly

⁴³ *Id.* at 58–59.

⁴⁴ *Id.*

⁴⁵ *Id.* at 61 (collecting citations).

⁴⁶ 523 U.S. 83, 86, 106–07 (1998).

⁴⁷ *Id.* at 106.

discharged various pollutants into the North Tyger River.⁴⁸ The district court found that Laidlaw exceeded its mercury discharge limits on 489 occasions between 1987 and 1995 and imposed a civil penalty of \$405,800.⁴⁹ On appeal, Laidlaw argued that members of the environmental organizations lacked standing because they were not suffering from a continued injury redressable by civil penalties given that Laidlaw had come into compliance after suit was filed.⁵⁰ The Court disagreed and held that plaintiffs had standing under Article III to pursue their suit for civil penalties. Specifically, the Court reaffirmed its holdings in *Gwaltney* and *Steel Co.*, but clarified that plaintiffs can seek civil penalties for violations ongoing or threatened at the time suit was filed.⁵¹

The *Laidlaw* Court's standing analysis focused on affidavits submitted by plaintiffs' members who lived⁵² or recreated downstream from Laidlaw's facility. The members averred that they terminated their recreational activities in or around the North Tyger River based on their concerns about the harmful effects to their health from Laidlaw's illegal discharges.⁵³ Some of the members used the river a couple of miles downstream from the facility, whereas others recreated up to forty miles downstream.⁵⁴ The

⁴⁸ 528 U.S. at 176.

⁴⁹ *Id.* at 176–79.

⁵⁰ *Id.* at 179–80.

⁵¹ *Id.* at 187–88.

⁵² The affiants lived as close as one-quarter mile and as far as twenty miles from *Laidlaw's* facility. *Id.* at 181–83.

⁵³ *Id.*

⁵⁴ *Id.*

Court found that these were cognizable injuries given “that environmental plaintiffs adequately allege injury in fact when they aver that they use the affected area and are persons ‘for whom the aesthetic and recreational values of the area will be lessened’ by the challenged activity.”⁵⁵ Laidlaw disputed that the plaintiffs established the injury-in-fact prong of standing given that the district court’s penalty analysis found Laidlaw’s permit violations did not result in “any health risk or environmental harm.”⁵⁶ The Court rejected this argument and clarified that “[t]he relevant showing for purposes of Article III standing . . . is not injury to the environment but injury to the plaintiff” and that to “insist upon the former rather than the latter . . . is to raise the standing hurdle higher than the necessary showing for success on the merits.”⁵⁷

Although the issue in *Laidlaw* was whether plaintiffs had standing to seek civil penalties, the Court relied on a case involving standing to seek an injunction when setting forth the appropriate inquiry. It observed that in the context of an injunction, a plaintiff has standing if he has a reasonable fear that it is likely that a recurrence of the unlawful conduct will occur.⁵⁸ The Court then closed the circle by stating that it was undisputed that Laidlaw’s unlawful conduct—discharging mercury in excess of its permit limits—was occurring at the time the

⁵⁵ *Id.* at 183 (quoting *Sierra Club v. Morton*, 405 U.S. 727, 735 (1972)).

⁵⁶ *Id.* at 181 (internal quotation marks omitted).

⁵⁷ *Id.* at 184–85.

⁵⁸ *Id.* (citing *Lyons*, 461 U.S. at 106–08 & nn.7–8).

complaint was filed and that there was “nothing ‘improbable’ about the proposition that a company’s continuous and pervasive illegal discharges of pollutants into a river would cause nearby residents to curtail their recreational use of that waterway and would subject them to other economic and esthetic harms.”⁵⁹

As to redressability, the Court explained that civil penalties redress the injuries of plaintiffs facing ongoing violations because they “encourage defendants to discontinue current violations and deter them from committing future ones.”⁶⁰ In underscoring the deterrent effect of penalties, the Court acknowledged that “penalties may serve, as an alternative to an injunction, to deter future violations and thereby redress the [plaintiffs’] injuries.”⁶¹

To summarize, the above cases make clear the following: (1) citizen-suit plaintiffs may only pursue prospective forms of relief; (2) civil penalties are a form of prospective relief because they deter future violations; and (3) the standing analysis for suits seeking injunctive relief applies equally to suits seeking civil penalties. In light of the above precedent, both this Court and our sister circuits have consistently applied *Laidlaw*’s prospective standing analysis to citizen-suit cases seeking injunctive relief and civil penalties alike.⁶² On the other hand, Exxon,

⁵⁹ See *id.* (explaining that “[u]nlike the dissent,” the majority saw plaintiffs’ members’ refusal to recreate near the river as entirely reasonable).

⁶⁰ *Id.* at 186.

⁶¹ *Id.* at 174.

⁶² See, e.g., *Chesapeake Bay Found., Inc. v. Gwaltney of Smithfield, Ltd.*, 890 F.2d 690, 695 (4th Cir. 1989) (“[Plaintiffs]

despite numerous opportunities, has not cited (and we have not found) any case law that has applied its proposed backwards-looking approach to standing focused on individual past violations to a citizen suit seeking civil penalties.

This is not to say that a defendant’s past violations are irrelevant. For example, plaintiffs’ injuries from past violations that remain ongoing can provide

must show actual or threatened injury traceable to the wrong and a particularized interest in deterring violations of the Act, but once they have done so, the imposition of civil penalties is causally connected to the injury.” (internal quotation marks and citation omitted)); *Benham v. Ozark Materials River Rock, LLC*, 885 F.3d 1267, 1272–73 (10th Cir. 2018) (upholding the district court’s finding of standing following trial and noting that “the injunctive relief and civil penalties sought by [the plaintiff] and ordered by the district court will restore the unlawfully filled wetlands and deter future violations”); *Texans United for a Safe Econ. Educ. Fund v. Crown Cent. Petroleum Corp.*, 207 F.3d 789, 792–94 (5th Cir. 2000) (applying the same prospective standing analysis to plaintiff’s claims for injunctive relief and civil penalties by relying on *Laidlaw* for the proposition that “citizen suitors have standing to seek civil ‘penalties for violations that are ongoing at the time of the complaint and that could continue into the future undeterred’” (quoting *Laidlaw*, 528 U.S. at 188)); *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 160–63 (4th Cir. 2000) (en banc) (concluding that CWA citizen-suit plaintiffs had standing based on the “increased risk to its member’s downstream uses” given that “threats or increased risk . . . constitutes cognizable harm” and plaintiffs sought relief in the form of an injunction and civil penalties “for continuing and threatened future violations”); *Ecological Rights Found. v. Pac. Lumber Co.*, 230 F.3d 1141, 1151–52 (9th Cir. 2000) (endorsing the view in *Gaston Copper* that “to require actual evidence of environmental harm, rather than an increased risk based on a violation of the statute, misunderstands the nature of environmental harm, and would undermine enforcement of the Clean Water Act” (citing *Gaston Copper*, 204 F.3d at 155–61)).

valuable insight into whether they face a “real and immediate threat of repeated injury.”⁶³ Additionally, as discussed below, courts must consider a defendant’s past violations in assessing an appropriate civil penalty. However, the fact that past violations play a role in calculating the amount of civil penalties or determining the imminence of future injuries does not undermine the forward-looking nature of civil penalties for purposes of standing. Therefore, consistent with controlling Supreme Court precedent, our own post-*Laidlaw* precedent, our sister circuits’ precedent, and the views of the EPA,⁶⁴ we conclude that civil penalties are a form of prospective relief and that the same standing analysis applies regardless of whether a citizen suit requests injunctive relief or the assessment of civil penalties.

* * *

Essentially ignoring the above Supreme Court caselaw, Exxon makes several erroneous arguments in favor of a retrospective approach to standing.⁶⁵ As

⁶³ *Lyons*, 461 U.S. at 102 (internal quotation marks and citation omitted).

⁶⁴ The Government submitted an amicus curiae brief in support of Plaintiffs, and we granted the Government’s motion to participate in oral argument so it could present the views of the EPA.

⁶⁵ Exxon concedes that, for purposes of analyzing redressability, civil penalties have “a forward-looking deterrent consequence[],” but that the “*traceability* analysis for penalties is retrospective.” However, as pointed out by the Government, both the traceability and redressability analyses refer to the same injury-in-fact. See *TransUnion*, 594 U.S. at 423 (noting that a plaintiff must “demonstrate a concrete and particularized injury caused by the defendant and redressable by the court”). This presents a problem for Exxon’s theory because an injury

a legal matter, Exxon asserts that because the CAA states that a “penalty may be assessed for each day of violation,”⁶⁶ the standing analysis is necessarily retrospective and analogous to a damages suit. There are two main problems with Exxon’s retrospective approach to standing. First, Exxon’s contention contravenes “[p]erhaps the most fundamental aspect of the standing doctrine” which is that standing is separate from the merits of the case.⁶⁷ This is because the *amount* of penalties assessed against a defendant pertains to the merits of the case rather than the question of standing.

As the Supreme Court in *Steel Co.* pointed out, standing is a threshold issue that is wholly separate from the merits inquiry given that “the Article III requirement of remediable injury in fact . . . has

“cannot both have occurred in the past and be preventable in the future.” In other words, if a forward-looking remedy redresses a citizen-suit plaintiff’s injuries then those injuries must be ongoing or future harms. Thus, it cannot be that the analysis for redressability asks whether civil penalties will deter future violations thereby redressing a plaintiff’s *ongoing or imminent* injury, whereas the analysis for traceability asks whether a plaintiff’s *prior* injury is traceable to a defendant’s past violation. The Court in *TransUnion* made this clear, noting that in suits seeking retrospective relief “the mere risk of future harm, standing alone, cannot qualify as a concrete harm.” *Id.* at 436. Accordingly, we reject Exxon’s assertion that for purposes of traceability our standing analysis is retrospective, but for purposes of redressability it is prospective.

⁶⁶ 42 U.S.C. § 7413(e)(2).

⁶⁷ *O’Hair v. White*, 675 F.2d 680, 685–86 (5th Cir. 1982); see also *Ariz. State Legislature v. Ariz. Indep. Redistricting Comm’n*, 576 U.S. 787, 800 (2015) (cautioning courts against “confus[ing] weakness on the merits with absence of Article III standing” (internal quotation marks and citation omitted)).

nothing to do with the text of the statute relied upon.”⁶⁸ It is only if standing is established that a court proceeds to the merits, which in environmental cases seeking civil penalties is the calculation of an appropriate penalty amount. The district court’s consideration of a defendant’s past violations for purposes of calculating the appropriate amount of penalties has no impact on the preliminary question of standing. We thus reject Exxon’s attempt to infuse our standing analysis with considerations that pertain to the merits of this case.

The second problem with Exxon’s retrospective argument is that even assuming *arguendo* that the CAA’s penalty assessment provisions are relevant to standing, these provisions are entirely consistent with the view that civil penalties are a prospective form of relief for purposes of standing. The basis for Exxon’s argument that the standing analysis in CAA citizen suits is retrospective is its assertion that “penalties are assessed for past violations” and that Plaintiffs here “seek” a penalty for each day a violation occurred. But in making this argument, Exxon mischaracterizes the role that past violations play in the overall penalty calculation analysis.

Under the CAA, courts cannot simply award penalties in isolation for each day a violation occurred. Indeed, as we have previously recognized, a “district court is not bound to impose the maximum penalty afforded under the statute” (*i.e.*, awarding the maximum penalty for each day of violation), and to the contrary, it “is required to consider a myriad of factors, some of which are mitigating in nature, when

⁶⁸ *Steel Co.*, 523 U.S. at 93, 97 n.2.

determining the appropriate civil penalty.”⁶⁹ In accordance with the text of the CAA and our precedent, the district court in this case did not assess a penalty for each day of violation. Instead, it landed on a \$19.95 million penalty after analyzing and balancing each of the statutory factors. Additionally, because the \$19.95 million penalty did not come close to reaching the per day of violation cap (\$573.51 million), the court did not expressly consider the number of days of violations and did not assess a penalty for each day a violation occurred.⁷⁰

Exxon next contends that the CAA’s seven penalty factors, which focus on past violations, further support its argument that standing must be evaluated retrospectively. But Exxon’s argument relies on the flawed premise that consideration of a defendant’s past unlawful conduct alters the forward-looking nature of civil penalties. As a general matter, courts often consider past behavior in suits for injunctive relief given that “past wrongs are evidence bearing on whether there is a real and immediate threat of repeated injury.”⁷¹

⁶⁹ *Env’t Conservation Org. v. City of Dallas*, 529 F.3d 519, 530–51 (5th Cir. 2008).

⁷⁰ In calculating civil penalties, the district court here applied a “bottom-up approach” in which it started with the economic benefit of Exxon’s noncompliance and adjusted upward based on the statutory criteria. *2017 D. Ct. Op.*, 2017 WL 2331679, at *30–31.

⁷¹ *O’Shea v. Littleton*, 414 U.S. 488, 496 (1974); see *Crawford v. Hinds Cnty. Bd. of Supervisors*, 1 F.4th 371, 376 (5th Cir. 2021) (holding that the plaintiff had standing to seek injunctive relief because he “has a substantial risk of being called for jury duty again” given that he “was called twice between 2012 and 2017” and those past incidents are “evidence

In the context of civil penalties, it makes sense that a defendant's history of noncompliance would be relevant to setting a penalty amount that is sufficient to deter its ongoing or future violations of a specific emissions limit. The CAA's seven enumerated factors reflect this focus on deterrence. For example, the economic benefit a defendant receives from noncompliance—arguably the most important factor⁷²—“is of key importance if the penalties are to successfully . . . deter violations.”⁷³ Similarly, factors such as the number, duration, and seriousness of the defendant's past violations are relevant given that more long-term violations of a serious nature may require a higher financial incentive in order to compel future compliance. We therefore find nothing in the text of the CAA's penalty factors undermines the prospective nature of civil penalties for purposes of standing.

bearing on whether there is a real and immediate threat of repeated injury” (internal quotations marks and citation omitted)).

⁷² See *ETCL I*, 824 F.3d at 527 (emphasizing that “the amount of economic benefit is central to the ability of a district court to assess the statutory factors and for an appellate court to review that assessment” (internal quotation marks and citation omitted)); Erin Belka & Sarah Kern, *Assessing Civil Penalties in Clean Water Act Citizen Suit Cases*, 10 HASTINGS W.-Nw. J. ENV'T L. & POL'Y 71, 76 (2003) (“The majority of courts use the bottom-up approach to calculate penalties: the economic benefit defendant gained by violating the CWA is the starting point, and the most heavily weighed factor, in the court's penalty calculation. Even in cases where the court chooses the top-down approach, or a hybrid approach, economic benefit is a substantial factor in a court's penalties analysis.”).

⁷³ *Atl. States Legal Found., Inc. v. Tyson Foods, Inc.*, 897 F.2d 1128, 1141 (11th Cir. 1990).

Exxon seeks to avoid this conclusion by arguing that the statutory factors are not focused on deterrence but instead are “particularly associated with the goal of retribution,” which is “inherently backward-looking.” Exxon cites to *Tull v. United States* for the proposition that civil penalties serve multiple purposes besides deterrence, given that the “legislative history of the [Clean Water] Act reveals that Congress wanted the district court to consider the need for retribution and deterrence, in addition to restitution, when it imposed civil penalties.”⁷⁴

However, as pointed out by the dissent in *Laidlaw*, *Tull* was a case involving civil “penalties pursued by the government, not by citizens.”⁷⁵ And the legislative history cited by the Court in *Tull* pertains to the EPA’s penalty authority and its policies in suits seeking civil penalties under the CWA and CAA.⁷⁶ This is a significant difference in terms of evaluating the various purposes of civil penalties because unlike citizen suits, the EPA may seek penalties for wholly past violations.⁷⁷ In sum, nothing in the text of the CAA’s penalty provisions undermines a forward-

⁷⁴ *Tull v. United States*, 481 U.S. 412, 422–23 (1987) (citation omitted). The Court in *Laidlaw* cited this passage from *Tull* for the proposition that “Congress has found that civil penalties in Clean Water Act cases do more than promote immediate compliance by limiting the defendant’s economic incentive to delay its attainment of permit limits; they also deter future violations.” *Laidlaw*, 528 U.S. at 185.

⁷⁵ *Laidlaw*, 528 U.S. at 207 (Scalia, J., dissenting).

⁷⁶ *Tull*, 481 U.S. at 422–23 (citing 123 Cong. Rec. 39191 (1977) (“remarks of Sen. Muskie citing Environmental Protection Agency (EPA) memorandum outlining enforcement policy”)).

⁷⁷ *Gwaltney*, 484 U.S. at 58.

looking approach to standing in a citizen suit and instead the statutory text is entirely consistent with *Laidlaw*'s view that penalties are meant to deter a defendant from continuing to violate its permits in the future.

In the alternative, Exxon argues that even if suits seeking civil penalties are analyzed under a forward-looking standing analysis, as a factual matter Plaintiffs have not established standing here because: (1) the district court previously denied their claim for injunctive relief, and (2) Plaintiffs waived their forward-looking theory of standing. We find both of Exxon's arguments unavailing.

The district court's denial of Plaintiffs' claim for injunctive relief *on the merits* (after finding Plaintiffs had standing to seek such relief) is immaterial to whether Plaintiffs have standing to seek another type of prospective relief. In fact, Exxon's argument to the contrary was rejected by the Court in *Laidlaw* which held that the "[d]enial of injunctive relief does not necessarily mean that the district court has concluded there is no prospect of future violations for civil penalties to deter."⁷⁸

Finally, the extensive trial record in this case refutes Exxon's assertion that the forward-looking nature of civil penalties "is not the theory on which this case was pleaded and tried." Starting with the case pled: Plaintiffs' complaint is focused on their ongoing injuries and their risk of increased harm in the future. Specifically, Plaintiffs pled that they "have members who are worried that in the future they will breathe illegal emissions from the Baytown

⁷⁸ *Laidlaw*, 528 U.S. at 192–93.

Complex, and that future illegal emissions will result in the formation of dangerous ozone, create serious health problems, and interfere with their ability to carry on ordinary activities.” They also alleged that “[a]bsent an appropriate order from this Court, Defendants will continue to violate the Act as described in Counts I through VII.” Furthermore, Plaintiffs did not seek damages for themselves. And even if they had, as noted above, there is no law allowing such retrospective relief under the citizen-suit statute.⁷⁹

As to the case tried, Plaintiffs’ counsel’s closing argument made clear that each form of relief requested was targeted at reducing Exxon’s violations in the future: “We are asking the Court to declare Exxon to be violating the Clean Air Act. The plaintiffs are asking for the Court to issue an injunction to halt the violations of the Clean Air Act. The plaintiffs are asking the Court to appoint a special master to be in the complex to assure compliance, and the plaintiffs are asking the Court to impose a large penalty that will deter Exxon.” And most tellingly, Plaintiffs’ proposed findings of fact and conclusions of law argued that “[r]equiring a plaintiff to prove specific injury from each alleged past violation would serve no legitimate purpose in the standing inquiry, because the focus of the citizen enforcement suit (unlike that of a tort suit for compensation) is ‘primarily forward-looking.’” Plaintiffs went on to clarify that they were “ask[ing] the Court to impose penalties and injunctive relief to reduce the likelihood that Exxon will violate the Clean Air Act at these facilities in the future.”

⁷⁹ See *Middlesex*, 453 U.S. at 6–7, 13–15 & n.25.

Finally, Plaintiffs maintained this forward-looking approach even after the district court denied their claim for injunctive⁸⁰ and declaratory relief. In Plaintiffs' opening brief in *ETCL II*, they lay out their interest in seeking to deter Exxon from continuing to violate its emissions limitations going forward. In the "injury-in-fact" analysis of their brief, Plaintiffs note that their members have "concern[s] about future adverse effects from pollution." In the "traceability" section of their brief, Plaintiffs focus on their members' testimony "that their injuries are ongoing," that they have fears about their future increased risk of cancer, and that such fears are "rationally related" to Exxon's emission of particular chemicals. Finally, in addressing "redressability," Plaintiffs argue that civil penalties "incentivize[] Exxon to be proactive about compliance in the future." We therefore find that Plaintiffs have not waived their forward-looking standing argument and have sought prospective relief for their continuing and threatened injuries at each stage of this litigation.

Because citizen-suit plaintiffs are limited to prospective relief, the same forward-looking standing analysis applies regardless of whether plaintiffs are seeking injunctive relief or civil penalties. This means that Plaintiffs here were required to prove the following to establish standing: an ongoing harm or the "real and immediate threat" of future harm, traceable to Exxon's unlawful emissions ongoing at

⁸⁰ Notably, the district court denied Plaintiffs' request for injunctive relief in part because it believed that the threat of penalties for future noncompliance provided Exxon with sufficient incentive to comply with its permits absent an injunction. *2017 D. Ct. Op.*, 2017 WL 2331679, at *32.

the time of suit, and redressable by the deterrent effect of civil penalties.⁸¹

2. Definition of a Claim in a CAA Citizen Suit.

Another foundational aspect of standing is that we consider it “on a claim-by-claim basis.”⁸² The parties dispute what constitutes a “claim” for purposes of standing in a citizen suit brought under the CAA.

Exxon contends that because the CAA permits courts to assess civil penalties for each day of violation, a “claim” for purposes of standing “refers to each day for which penalties are sought.” Under their definition, Exxon contends that to ensure standing is not dispensed in gross, Plaintiffs must prove “an injury-in-fact on each day of violation for which they seek a penalty” and “prove a causal connection between each day of violation for which they seek a penalty and an injury-in-fact.” Plaintiffs reject Exxon’s argument on the grounds that individual past violations are not separate claims under the CAA. Instead, they contend a claim is properly defined as consisting of repeated or ongoing violations of “an emission standard or limitation.”⁸³

⁸¹ *Lyons*, 461 U.S. at 105–06; *Laidlaw*, 528 U.S. at 185–86 (considering whether “a plaintiff who is injured or faced the threat of future injury due to illegal conduct ongoing at the time of suit” and requests “a sanction that effectively abates the conduct and prevents its recurrence” satisfied the three prongs of standing).

⁸² *Friends of St. Frances Xavier Cabrini Church v. FEMA*, 658 F.3d 460, 466 (5th Cir. 2011) (per curiam) (citation omitted).

⁸³ 42 U.S.C. § 7604(a)(1).

In *ETCL II*, a panel of this Court ultimately adopted Exxon’s violation-by-violation based approach to standing.⁸⁴ Despite appearing to accept Plaintiffs’ definition of a claim, the panel determined that standing must be analyzed for each violation because “Clean Air Act penalties are tied to violations, not the broader claims . . . (that is, [a] group of violations of a particular emission standard).”⁸⁵ In arriving at this conclusion, the panel members in the majority acknowledged that it gave them “some pause” that “no court appears to have found standing for some Clean Air Act violations but not others.”⁸⁶ The panel majority also acknowledged that “[n]umerous cases have instead recognized standing in environmental citizen suits without separate analyses for each violation.”⁸⁷ However, it found these cases distinguishable on the grounds that they did not “involve the number and variety of violations that this case does (24 different pollutants).”⁸⁸

After further consideration and briefing, we conclude that the panel in *ETCL II* erred in requiring Plaintiffs to establish standing for each violation. The Supreme Court instructs that “[a]lthough standing in no way depends on the merits of the plaintiff’s contention that particular conduct is illegal, it often turns on the nature and source of the claim

⁸⁴ The panel was unanimous on this point. *See ETCL II*, 968 F.3d at 375 (Oldham, J., concurring in part, dissenting in part, and concurring in the judgment).

⁸⁵ *Id.* at 365–66 (majority opinion).

⁸⁶ *Id.* at 366.

⁸⁷ *Id.*

⁸⁸ *Id.*

asserted.”⁸⁹ In this case, the statute Plaintiffs rely on, 42 U.S.C. § 7604, authorizes “any person” to “commence a civil action on his own behalf” “against any person . . . who is alleged to have violated (if there is evidence that the alleged violation has been repeated) or to be in violation of . . . *an emission standard or limitation*” set forth in a permit issued under the CAA. It is undisputed that a plaintiff may not file suit until a violation of an emission standard or limitation has been repeated in the past or occurred at least once before suit was filed and once after.⁹⁰ Therefore, under the language of the statute, a claim consists of at least *two* violations of “an emission standard or limitation.”

We delved into what is meant by an “emission standard” under § 7604 in the first opinion issued by this Court.⁹¹ We held, consistent with the approach taken in CWA cases, that the focus should be on a particular pollutant and whether that pollutant has been discharged at higher rates than authorized by a permit.⁹² It therefore follows that a “claim” under the

⁸⁹ *Warth v. Seldin*, 422 U.S. 490, 500 (1975) (citation omitted).

⁹⁰ ETCL I, 824 F.3d at 518–20.

⁹¹ *Id.* at 519–20; *see also Gwaltney*, 890 F.2d at 698 (“The entire structure of the Clean Water Act and regulations involves identifying specific pollutants and setting a permit limit for each pollutant of concern.”).

⁹² On remand, the district court analyzed the different counts of the Plaintiffs’ complaint in light of this Court’s interpretation of an “emission standard” under the citizen-suit statute. The district court determined that under (1) Count I, relating to “upset emissions,” the refinery emitted twenty-four different pollutants in continuing or repeated violations; (2) Count II, relating to violations of the Maximum Allowable

CAA arises when a particular pollutant has been emitted repeatedly in violation of a permit limit. Accordingly, in order to avoid dispensing standing in gross, Plaintiffs must establish that their members suffer from ongoing or imminently threatened injuries as a result of Exxon's violations of each of its emission standards or limitations.

Exxon does not dispute that under the CAA a single violation cannot constitute a claim, but instead maintains that a violation-by-violation approach to standing is necessary to ensure that citizens do not "secure civil penalties for violations that did not cause them injuries-in-fact." This approach, which is a repackaging of Exxon's prior argument about the retrospective nature of civil penalties, misunderstands the purpose of citizen suits and is at odds with Supreme Court precedent.

Emission Rate Table ("MAERT") limits, (a) the refinery emitted twenty-four different pollutants in continuing or repeated violations; (b) the olefins plant emitted fourteen different pollutants in continuing or repeated violations; and (c) the chemical plant emitted different pollutants in continuing or repeated violations; (3) Count III, relating to emissions of highly reactive volatile organic compounds ("HRVOC"), the total equaled eighteen days of violations committed; (4) Count IV, relating to the prohibitions of visible emission from flares except for periods not to exceed five minutes in two consecutive hours, the total equaled forty-four days of violations; and (5) Count V, relating to the rule that requires flares to operate with a pilot flame present at all times, the total equaled thirty-two days of violations. *2017 D. Ct. Op.*, 2017 WL 2331679, at *13–21. All of this was presented to the district court: Plaintiffs' Exhibits 9–15 contain a chart for every count that shows the number of days of violations pre- and post-complaint broken out by each different pollutant.

Citizen-suit plaintiffs do not “secure” civil penalties as compensation for any injuries they may have suffered from past violations. The only benefit they receive from civil penalties is cleaner air in the future. This understanding of citizen suits is consistent with the above cited Supreme Court precedent that has characterized civil penalties, payable to the U.S. Treasury, as a forward-looking remedy imposed to deter a defendant from committing future violations. Moreover, it is the approach applied in *Laidlaw* where the Court did not conduct a separate standing analysis for each of the defendant’s 489 CWA violations. Instead, the Court concluded the district court “reasonably” assessed a \$405,800 penalty not because of the number of past days of violations plaintiffs suffered, but because such a penalty carried a “deterrent effect that made it likely, as opposed to merely speculative, that the penalties would redress [plaintiffs’] injuries by abating current violations and preventing future ones.”⁹³

Exxon recognizes that neither *Laidlaw* nor other circuit court CAA and CWA cases have applied a violation-by-violation approach to standing.⁹⁴

⁹³ *Laidlaw*, 528 U.S. at 187.

⁹⁴ See, e.g., *Inland Empire Waterkeeper v. Corona Clay Co.*, 17 F.4th 825, 831–32 (9th Cir. 2021) (“This [CWA citizen suit] case raises two types of claims: claims of discharge violations, which allege [the defendant] harms [plaintiff]’s members by releasing storm water with pollutant levels that violate its permit; and claims of ‘procedural’ violations, involving [defendant]’s failure to adhere to other permit requirements, the obligation to monitor and report We therefore analyze separately whether [plaintiff] established Article III

Instead, relying on the panel’s decision in *ETCL II*, Exxon contends its novel approach is necessary here because *Laidlaw* and other circuit court cases are distinguishable because they did “not involve the number and variety of violations that this case does (24 different pollutants).”⁹⁵ In response, Plaintiffs contend that the number and seriousness of Exxon’s violations have “no bearing on whether Plaintiffs have an interest in Exxon complying with each of its permit limits in the future.”

We see no reason why the unprecedented number and variety of violations at issue here require the application of a novel approach to standing focused on each past violation. Further, the number of violations and pollutants does nothing to change the fact that civil penalties are a prospective form of relief that requires a forward-looking approach to standing. And to adopt Exxon’s violation-by-violation approach would amount to making standing impossible to establish in cases involving sprawling industrial complexes that regularly emit an array of dangerous pollutants as compared to cases involving small facilities that commit few violations. Such an approach is inconsistent with Article III and would thwart the purpose of the citizen-suit provision.⁹⁶

organizational standing to pursue the discharge and procedural allegations.”).

⁹⁵ *ETCL II*, 968 F.3d at 366.

⁹⁶ *See Del. Valley Citizens’ Council for Clean Air*, 478 U.S. at 560 (explaining that Congress enacted the CAA’s citizen-suit provision to provide citizens with “very broad opportunities to participate in the effort to prevent and abate air pollution” (citation omitted)); *see also* *NRDC, Inc. v. Train*, 510 F.2d 692, 699–700 (D.C. Cir. 1974) (“The legislative history of the Clean Air Act Amendments reveals that the citizen suits provisions

Moreover, it would run afoul of *TransUnion*'s instruction that courts "afford due respect to Congress's decision to impose a statutory prohibition or obligation on a defendant, and to grant a plaintiff a cause of action to sue over the defendant's violation of that statutory prohibition or obligation."⁹⁷

Additionally, Exxon's concern about the large number of violations with varying levels of seriousness is readily accounted for without upending well-established standing jurisprudence. For example, the wide number of pollutants Exxon emitted is accounted for by the fact that Plaintiffs must establish standing for each specific pollutant limit they seek to enforce. Crucially, under 42 U.S.C. § 7413(e)(1), the district court is already required to consider both the seriousness and duration of the defendant's violations as part of its civil penalty analysis. Therefore "[i]f violations that are truly trivial become the targets of citizen suits, courts are fully capable of adjusting the penalties imposed for them to trivial levels."⁹⁸

Accordingly, we analyze standing on a claim-by-claim basis, which under the CAA is not each violation, but each emission standard or limitation Plaintiffs seek to enforce.

reflected a deliberate choice by Congress to widen citizen access to the courts, as a supplemental and effective assurance that the Act would be implemented and enforced." (citations omitted)).

⁹⁷ *TransUnion*, 594 U.S. at 425 (citation omitted).

⁹⁸ Robert V. Percival & Joanna B. Goger, *Escaping the Common Law's Shadow: Standing in the Light of Laidlaw*, 12 DUKE ENV'T L. & POL'Y F. 119, 147 (2001).

3. Injury-in-Fact.

Having established the fundamentals of what constitutes a claim and how civil penalties are assessed for purposes of standing, we proceed to examine whether Plaintiffs established the three elements of standing here.

The Supreme Court has described the injury-in-fact prong as the “[f]irst and foremost’ of standing’s three elements.”⁹⁹ In suits seeking prospective relief, “[a]n allegation of future injury may suffice if the threatened injury is certainly impending, or there is a substantial risk that the harm will occur.”¹⁰⁰ Past injuries, “though insufficient to confer standing, are still ‘evidence bearing on whether there is real and immediate threat of repeated injury.’”¹⁰¹ Past injuries accompanied by “continuing, present adverse effects” also can satisfy the injury-in-fact requirement.¹⁰²

Here, four of Plaintiffs’ members—Diane Aguirre Dominguez, Marilyn Kingman, Richard Shae Cottar, and Sharon Sprayberry—testified at trial about the impact that Exxon’s unlawful emissions have on their lives. At the time of suit, one member lived one-quarter mile from the Complex in a townhouse “right across the street from both the chemical and olefins plant,” and another member lived a half-mile away

⁹⁹ *Spokeo, Inc. v. Robins*, 578 U.S. 330, 338–39 (2016) (quoting *Steel Co.*, 523 U.S. at 103).

¹⁰⁰ *Susan B. Anthony List v. Driehaus*, 573 U.S. 149, 158 (2014) (internal quotation marks and citation omitted).

¹⁰¹ *Crawford*, 1 F.4th at 376 (quoting *Lyons*, 461 U.S. at 102).

¹⁰² *Lyons*, 461 U.S. at 102 (internal quotation marks and citation omitted).

from the Complex's fence line.¹⁰³ The other two members regularly visited the Baytown area and recreated near the Complex.¹⁰⁴

In terms of their injuries, Plaintiffs' members testified that they suffered from allergy and respiratory problems while living in or visiting Baytown and that the severity of their symptoms fluctuated based on their proximity to the Complex.¹⁰⁵ These members also testified that they

¹⁰³ Mr. Cottar has lived in Baytown for thirty-eight years and has remained a resident throughout the claims period and trial. From April 2010 through September 2012, he lived one-quarter mile from the Complex and in September of 2012 he moved two miles away from the Complex after an especially concerning emissions event in May of 2012. From 2004 through 2012, Ms. Sprayberry lived a half-mile from the edge of the Exxon Complex. Although Ms. Sprayberry moved to McGregor, Texas, in 2012 in order "to get to clean air," she testified that she would have retired in Baytown "if Exxon emitted fewer pollutants into the environment."

¹⁰⁴ Ms. Dominguez no longer lives in Baytown, but returns to the area to visit her parents who live one and a half miles away from the Complex and testified at trial that she plans to visit again in December of 2014. Ms. Kingman lives in the town next door to Baytown and drives to Baytown two or three times a week to do her shopping, watch basketball games, and attend church, all of which are at locations within a few miles of the Complex.

¹⁰⁵ Ms. Dominguez testified that she grew up in a house a mile and a half from the Complex and throughout her childhood suffered from a runny nose, watery eyes, and a constricted feeling in her chest. However, she stated that after moving away from Baytown, her symptoms improved and she no longer has to take allergy medication, but when she returns to Baytown to visit her parents her symptoms return. Mr. Cottar testified that he experienced "far more asthma issues on a consistent basis" after moving into his townhouse across the street from the Complex compared to his prior residence in Baytown.

regularly smelled unpleasant chemical odors,¹⁰⁶ and observed flares, smoke, and haze coming from the Complex.¹⁰⁷ This caused all four members to fear for

¹⁰⁶ Ms. Sprayberry testified that sometimes when she was outside in her yard or walking in her neighborhood she would notice “a chemical, sort of sulfur kind of smell.” Such a smell was common when the “the wind was blowing from Exxon toward” her. Ms. Dominguez similarly testified that she associates a “sulfur kind of smell and a gasoline smell” with the Complex. Finally, Mr. Cottar testified that in 2010 and 2011 he experienced a “very sweet” odor emanating from the Complex that was painful to inhale and would cause him an immediate headache. Mr. Cottar knew these odors were coming from the Complex for two reasons. First, he only smelled the odors when the wind was blowing from West to East and the Complex is located to the West of his house. Second, he would regularly check Exxon’s State of Texas Environmental Electronic Reporting System (“STEER”) reports, which are available to the public, and list the pollutants being released by the Complex and “correspond” his experiences with the reports.

¹⁰⁷ Ms. Kingman described seeing a gray or brown haze over the Complex, particularly on days without wind where “anything that’s been emitted just seems to hang.” Mr. Cottar testified that on average he would see flaring events at the Complex once a week and that such events were “audibly disruptive,” continued for more than an hour, and/or would result in black smoke coming from the flare. He also described “a number of times” in which he experienced “profound” flaring events which shook his bedroom windows that faced the Complex. Ms. Sprayberry testified that from her neighborhood she could see flares all along the North side of the refinery. She noted that at times flaring at the Complex was associated with a “very loud roaring” that “sounded like a freight train at the front door” and that the flares were so bright that they “lit up” the sky and prevented her from falling asleep.

their health¹⁰⁸ and safety.¹⁰⁹ Finally, two members testified that seeing flares, smoke, and haze, smelling chemical odors, and experiencing respiratory problems impacted their current and anticipated enjoyment of outdoor activities.¹¹⁰ Supported by the above testimony, the district court applied well-established precedent to hold that Plaintiffs' members suffered cognizable ongoing harms or

¹⁰⁸ Mr. Cottar testified that because his family suffers from asthma he was "really concerned and still [is]" about their exposure to Exxon's emissions. Ms. Dominguez testified that she knows the Complex is "emitting something into the air," specifically that it "emit[s] cancer-causing chemicals." Similarly, Ms. Sprayberry testified that when she smelled noxious odors coming from the Complex she knew she was "breathing in something that was toxic or harmful." Finally, Ms. Kingman expressed concern about health issues in general and specifically about allergies and cancer due to exposure to Exxon's emissions.

¹⁰⁹ As it pertains to flares, several members testified that seeing flares caused them to fear an explosion at the Complex. Mr. Cottar explained that when "flares go on for prolonged periods of time" the community is left with unanswered questions and "[n]obody knows if we should run for our lives or shelter in place or what." Ms. Kingman echoed this concern, testifying that when she sees "big flares" at the Complex she finds it scary because she is "afraid that the unit could explode."

¹¹⁰ For example, Ms. Dominguez testified that she no longer runs outside when she visits Baytown because she feels an "abrasive feeling" in her throat and lungs. Mr. Cottar testified that he cuts his family visits to the Baytown Nature Complex short when there are emissions events ongoing at the Complex. In fact, at trial, Mr. Cottar showed the court a picture he took a few weeks before trial at the Baytown Nature Center that showed an ongoing flaring event at the Complex.

showed a substantial risk that they will face similar injuries in the future.¹¹¹

a. *Laidlaw is Directly Applicable Here.*

Exxon does not dispute that the above injuries are cognizable under Article III. Instead, Exxon argues that “[w]hen a civil penalty is sought for a ‘day of violation,’ a concrete injury is established only if there is evidence that the injury was actually experienced on that day—*i.e.*, that an alleged violation that day ‘affect[ed] the plaintiff in a personal and individual way.’” Under this standard, Exxon concludes that Plaintiffs only offered evidence that their members suffered “concrete” injuries during five emissions events.

This approach to injury-in-fact suffers from the same defect as several of Exxon’s other standing arguments: it is inconsistent with the most on-point Supreme Court case. The Supreme Court in *Laidlaw* did not require plaintiffs’ members to show that they

¹¹¹ *Laidlaw*, 528 U.S. at 183–84; *see also* *Sierra Club v. Tenn. Valley Auth.*, 430 F.3d 1337, 1345 (11th Cir. 2005) (finding the injury-in-fact prong satisfied based on a member’s affidavit stating “that he regularly saw plumes of smoke from the [defendant’s] plant” and found it “frightening” to breathe polluted air); *O’Hair*, 675 F.2d at 687 (“[T]he Supreme Court has established that a person may have the requisite personal stake in the controversy as a result of injury to aesthetic, conservational, or recreational values.” (citations omitted)); *Texans United*, 207 F.3d at 792 (holding that “breathing and smelling polluted air is sufficient to demonstrate injury-in-fact and thus confer standing under the CAA” (citing *NRDC v. EPA*, 507 F.2d 905, 910 (9th Cir. 1974))); *Benham*, 885 F.3d at 1273 (acknowledging that “recreational impairments constitute injury in fact for a plaintiff filing a citizen suit under the CWA” (citation omitted)).

were near the river or suffered some specific injury on each day a past violation occurred. Rather, the Court found that plaintiffs' members' current and future curtailment of their recreational activities based on their "reasonable concern" about the defendant's upstream emissions was sufficient to establish an injury for all 489 violations.¹¹²

Exxon's insistence that Plaintiffs must submit proof that their members experienced an injury on each day a past violation occurred cannot be squared with *Laidlaw*'s holding that citizen-suit plaintiffs' ongoing or future injuries are cognizable for purposes of Article III standing.¹¹³ This is because under Exxon's erroneous approach to injury-in-fact, only past injuries, not ongoing or future ones, are cognizable. Take, for example, Plaintiffs' members' ongoing concerns about their future health and safety due to their continuing exposure to Exxon's unlawful emission of harmful pollutants. Or consider members' current and future decisions to refrain from outdoor activities, or to move away from the Complex, due to Exxon's violations. Such ongoing and future

¹¹² *Laidlaw*, 528 U.S. at 183–84.

¹¹³ *Id.*; see also *Cent. Delta Water Agency v. United States*, 306 F.3d 938, 949 (9th Cir. 2002) (characterizing the Court's finding of standing in *Laidlaw* as based on "the threatened future damage to plaintiffs' environmental interests"); Patrick Gallagher, *Environmental Law*, Clapper v. Amnesty International, USA, and the Vagaries of Injury-in-Fact: "Certainly Impending" Harm, "Reasonable Concern," and "Geographic Nexus," 32 UCLA J. ENV'T L. & POL'Y 1, 23 (2014) ("Following *Laidlaw*, 'reasonable concern' may be linked to either a present or imminent harm by prompting the plaintiff to curtail recreational or aesthetic enjoyment of a natural resource, now or in the future.").

injuries¹¹⁴ are based on Exxon's extensive history of past violations and the likelihood that it will commit similar violations in the future. These injuries cannot be tied to a specific day on which a past violation occurred and thus under Exxon's approach would not be cognizable injuries.¹¹⁵

We have no doubt that the above ongoing and future injuries are sufficiently concrete for purposes of standing. Indeed, the Court in *Laidlaw* found similar injuries satisfied the injury-in-fact requirement. And following *Laidlaw*, both this Court and our sister circuits have found similar ongoing and future injuries to be cognizable.¹¹⁶ Accordingly, we

¹¹⁴ Even in the context of some past injuries, Plaintiffs would be unable to show their members suffered an injury on the exact day Exxon committed the violation. This is because Exxon emits pollutants, such as sulfur dioxide and ozone, which can cause respiratory problems. However, according to Plaintiffs' expert, these pollutants have a "lingering effect," and therefore Plaintiffs' members may not have "obvious symptoms" immediately after exposure.

¹¹⁵ See *Lyons*, 461 U.S. 102–03 (holding that evidence of prior injuries can be probative of whether a future injury is likely to reoccur in the future).

¹¹⁶ See, e.g., *Inland Empire Waterkeeper*, 17 F.4th at 832 ("*Laidlaw* recognized that an increased risk of harm can itself be [an] injury in fact sufficient for standing." (internal quotation marks and citation omitted)); *Sierra Club, Lone Star Chapter v. Cedar Point Oil Co.*, 73 F.3d 546, 556 (5th Cir. 1996) ("That this injury is couched in terms of future impairment rather than past impairment is of no moment."); *Gaston Copper*, 204 F.3d at 160 ("Threats or increased risk thus constitutes cognizable harm" and a plaintiff "need not wait until his lake becomes barren and sterile or assumes an unpleasant color and smell before he can invoke the protections of the Clean Water Act.").

reject Exxon’s retrospective approach to injury-in-fact.

b. TransUnion *is Inapposite*.

Exxon’s focus on linking members’ past injuries to past violations can be attributed to its reliance on *TransUnion LLC v. Ramirez*, a class action tort case seeking damages for past injuries.¹¹⁷ In *TransUnion*, a class of consumers sued TransUnion, a credit reporting agency, under the Fair Credit Reporting Act.¹¹⁸ The plaintiffs alleged that TransUnion had failed to use reasonable procedures to ensure the accuracy of their credit files.¹¹⁹ Specifically, the class members asserted that TransUnion incorrectly included an alert in their files that their names matched those of individuals on the Treasury Department’s watch list for terrorists and other serious criminals.¹²⁰

The Supreme Court held that only the class members whose credit reports TransUnion had disseminated to third parties had standing because their reputations were harmed as a result of the disclosures.¹²¹ The other class members whose reports had not been disseminated lacked standing because they could not demonstrate that TransUnion’s inclusion of misleading information in their files constituted a concrete harm.¹²² In holding

¹¹⁷ 594 U.S. at 417–21.

¹¹⁸ *Id.* at 417.

¹¹⁹ *Id.*

¹²⁰ *Id.* at 419–21.

¹²¹ *Id.* at 432–33.

¹²² *Id.* at 432–39.

that many of the class members lacked standing because they failed to show they suffered an injury-in-fact, the Court reemphasized the principle that “Article III standing requires a concrete injury even in the context of a statutory violation.”¹²³

Exxon uses *TransUnion*’s holding that the class members whose credit reports were not disseminated to third parties lacked standing to further its argument that Plaintiffs here have not established that each of their members suffered a “concrete” injury on each day a violation occurred. We disagree given that this case is distinguishable from *TransUnion*.

Unlike in *TransUnion*, where each class member sought retrospective damages as compensation for their alleged past harms, Plaintiffs here seek a prospective remedy in the form of civil penalties, payable to the U.S. Treasury, to redress their members’ ongoing and future injuries. This results in two notable differences for purposes of standing. First, the relevant injury in a case seeking retrospective relief is different from the injury-in-fact analysis for suits, like this one, seeking prospective relief.¹²⁴ And second, unlike class action suits, as long as one of Plaintiffs’ members has standing, it is irrelevant whether any other members meet Article III’s standing requirement.¹²⁵

¹²³ *Id.* at 426 (quoting *Spokeo*, 578 U.S. at 341).

¹²⁴ *See id.* at 436 (acknowledging that unlike in cases seeking prospective relief, the “mere risk of future harm, standing alone, cannot qualify as a concrete harm” in a damages suit).

¹²⁵ *See Int’l Union, UAW v. Brock*, 477 U.S. 274, 289–90 (1986) (recognizing the differences in “suits by associations on

It is also worth noting the factual differences between this case and *TransUnion*. Unlike the class members in *TransUnion* who were unharmed aside from a statutory violation, Plaintiffs' members' injuries—interference with recreation, breathing and smelling polluted air, and allergy-like or respiratory problems—are the type of “physical, monetary, or cognizable intangible harm traditionally recognized as providing a basis for a lawsuit in American courts.”¹²⁶ Moreover, at the time Plaintiffs filed suit, their members suffered from the imminent threat of a future injury which was ultimately realized when Exxon continued to violate its permit limits after suit was filed. This is a sharp contrast to the Court's finding in *TransUnion* that even if class members had sought prospective relief, their asserted injury—the potential that TransUnion could in the future disseminate their credit reports to third parties—was not sufficiently imminent to establish standing.¹²⁷

TransUnion simply reaffirms several basic principles of standing and does not stand for the

behalf of their members from class actions” for purposes of standing); *see also TransUnion*, 594 U.S. at 431 (“Every class member must have Article III standing in order to recover individual damages.”); *Hunt*, 432 U.S. at 342–43 (as long as “any one of” an association's members have standing that is sufficient).

¹²⁶ *TransUnion*, 594 U.S. at 427; *see also id.* at 425 (emphasizing that in determining “whether a harm is sufficiently concrete to qualify as an injury in fact,” courts “must afford due respect to Congress's decision to impose a statutory prohibition or obligation on a defendant, and to grant a plaintiff a cause of action to sue over the defendant's violation of that statutory prohibition or obligation”).

¹²⁷ *Id.* at 438–39.

proposition that citizen-suit plaintiffs seeking civil penalties must tie separate injuries to each alleged violation. For the foregoing reasons, the district court correctly held that Plaintiffs have satisfied the injury-in-fact requirement for standing as to all of Exxon’s violations, not just those forty days correlated at trial.

4. Traceability.

The second prong of standing “asks whether the [plaintiff’s] injury is *fairly traceable* to the challenged action of the defendant, and not the result of the independent action of some third party not before the court.”¹²⁸ In other words, traceability ensures that the plaintiff has sued the right defendant.¹²⁹ The Supreme Court has generally found traceability lacking in cases where “the independent act of a third party was a necessary condition of the harm’s occurrence, and it was uncertain whether the third party would take the required step.”¹³⁰ On the other hand, the Court has been much more apt to find traceability when the plaintiff’s injury was “not dependent on speculation about the possible actions of third parties not before the court.”¹³¹

¹²⁸ *Steel Co.*, 523 U.S. at 106 n.7 (cleaned up) (emphasis added).

¹²⁹ See WRIGHT & MILLER, 13A FED. PRAC. & PROC. JURIS. § 3531.5 (3d ed. 2023 update) (“Causation may provide one of the useful means of addressing the question whether the plaintiff has sued the proper defendant.”).

¹³⁰ *Texas v. United States*, 809 F.3d 134, 160 (5th Cir. 2015), *as revised* (Nov. 25, 2015) (collecting cases).

¹³¹ *Vill. of Arlington Heights v. Metro. Hous. Dev. Corp.*, 429 U.S. 252, 264 (1977) (finding that plaintiff satisfied the constitutional requirements of standing in part because the plaintiff’s injury was “not dependent on speculation about the

The present case raises no concerns about chains of causation involving the actions of third parties. In particular, there is no allegation that pollution from a third party is the intervening cause of Plaintiffs' members' injuries.¹³² And it requires no attenuated chain of causation or speculation about the actions of third parties to conclude that one of the largest petrochemical plants in the United States that has undisputedly emitted millions of pounds of dangerous pollutants unlawfully into the air contributed to the physical, aesthetic, and recreational injuries of people who lived next door. Plaintiffs' case is therefore easily distinguishable from cases in which the Supreme Court has found a lack of traceability.

Although there is no third party interrupting the chain of causation here, Plaintiffs still must establish that their members' injuries are "fairly traceable" to

possible actions of third parties not before the court" (citations omitted)); *see also* Note, *Causation in Environmental Law: Lessons from Toxic Torts*, 128 HARV. L. REV. 2256, 2265 (2015) ("However, causation generally has been easier to establish when the alleged injury is perceived to be a direct result of the defendant's actions, while cases that claim a harm based on a defendant's failure to engage with a third party are more likely to fail on the causation prong.").

¹³² See *Gaston Copper*, 204 F.3d at 162 ("Where a plaintiff has pointed to a polluting source as the seed of his injury, and the owner of the polluting source has supplied no alternative culprit, the 'fairly traceable' requirement can be said to be fairly met."); *Sierra Club v. Franklin Cnty. Power of Ill., LLC*, 546 F.3d 918, 926–27 (7th Cir. 2008) (finding traceability because "the defendants point to no other polluting source that could be the cause of [plaintiff's] injury"); *Utah Physicians for a Healthy Env't v. Diesel Power Gear, LLC*, 21 F.4th 1229, 1244–46 (10th Cir. 2021) ("In this case, there is no speculation that Defendants' unlawful conduct would cause the emission into the atmosphere of harmful pollutants.").

Exxon’s unlawful conduct. Under Supreme Court precedent, this means that Plaintiffs must show that their members’ injuries were “*likely* caused by” Exxon,¹³³ or that their current or threatened injuries are “a consequence of [Exxon’s] ongoing unlawful conduct.”¹³⁴ This causation standard is notably less demanding than proving tort causation.¹³⁵

a. *The Cedar Point Framework.*

In *Sierra Club, Lone Star Chapter v. Cedar Point Oil Co.*, our Court adopted a three-prong test first articulated by the Third Circuit that permits citizen-suit plaintiffs to establish traceability through

¹³³ *TransUnion*, 594 U.S. at 423 (emphasis added); *see also* *Duke Power Co.*, 438 U.S. at 75 n.20 (requiring “no more than a showing that there is a ‘substantial likelihood’” to meet the second prong of standing).

¹³⁴ *Laidlaw*, 528 U.S. at 186.

¹³⁵ *Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 572 U.S. 118, 134 n.6 (2014) (“Proximate causation is not a requirement of Article III standing, which requires only that the plaintiff’s injury be fairly traceable to the defendant’s conduct.”); *Bennett v. Spear*, 520 U.S. 154, 168–69 (1997) (noting that plaintiffs need not prove that “the defendant’s actions are the very last step in the chain of causation”); *Khodara Env’t, Inc. v. Blakey*, 376 F.3d 187, 195 (3d Cir. 2004) (Alito, J.) (“Article III standing demands ‘a causal relationship,’ but neither the Supreme Court nor our Court has ever held that but-for causation is always needed.”); *Buchholz v. Meyer Njus Tanick, PA*, 946 F.3d 855, 866 (6th Cir. 2020) (“The standard for establishing traceability for standing purposes is *less demanding* than the standard for proving tort causation.” (citation omitted)); *Gaston Copper*, 204 F.3d at 161 (“[T]he ‘fairly traceable’ standard is not equivalent to a requirement of tort causation.” (internal quotation marks and citations omitted)); *Tazzi v. U.S. Dep’t of Health & Hum. Servs.*, 271 F.3d 301, 308 (D.C. Cir. 2001) (“[W]e have never applied a ‘tort’ standard of causation to the question of traceability.” (citation omitted)).

circumstantial evidence.¹³⁶ Several of our sister circuits have subsequently adopted this test.¹³⁷ To satisfy the *Cedar Point* test, a plaintiff is required to show that the defendant:

- (1) discharged some pollutant in concentrations greater than allowed by its permit
- (2) into a waterway¹³⁸ in which the plaintiffs have an interest that is or may be adversely affected by the pollutant and that
- (3) the pollutant causes or contributes to the kinds of injuries alleged by the plaintiffs.¹³⁹

As explained by the Third Circuit, this “test in no way replaces the three-prong test for standing under Article III,” and instead “merely enables a plaintiff to link an environmental injury to the defendant’s

¹³⁶ 73 F.3d at 557–58.

¹³⁷ Fourth Circuit: *Gaston Copper*, 204 F.3d at 159–62; Ninth Circuit: *NRDC v. Sw. Marine, Inc.*, 236 F.3d 985, 995 (9th Cir. 2000); Tenth Circuit: *Utah Physicians*, 21 F.4th at 1244–45; Third Circuit: *NRDC, Inc. v. Texaco Ref. & Mktg., Inc.*, 2 F.3d 493, 505 (3d Cir. 1993); Sixth Circuit: *Am. Canoe Ass’n, Inc. v. City of Louisa Water & Sewer Comm’n*, 389 F.3d 536, 542–43 (6th Cir. 2004); Seventh Circuit: *Tex. Indep. Producers & Royalty Owners Ass’n v. EPA*, 410 F.3d 964, 973–74 (7th Cir. 2005).

¹³⁸ We have since applied the *Cedar Point* test to cases alleging violations of the CAA. See *Texans United*, 207 F.3d at 790, 792–93. Other courts have as well. See, e.g., *Utah Physicians*, 21 F.4th at 1244–45; *Concerned Citizens Around Murphy v. Murphy Oil USA, Inc.*, 686 F. Supp. 2d 663, 669, 672–73 (E.D. La. 2010); *Ctr. for Biological Diversity v. Univ. of N.C. at Chapel Hill*, No. 19-1179, 2021 WL 3861388, at *6 (M.D.N.C. Aug. 30, 2021) (“Several other circuits and district courts have applied similar standards in environmental suits involving the Clean Air Act and Clean Water Act.”).

¹³⁹ *Cedar Point*, 73 F.3d at 557 (quoting *Powell Duffryn Terminals*, 913 F.2d at 72).

pollution when the plaintiff is unable to prove ‘to a scientific certainty’ that the defendant’s discharges (and not those of some other nearby polluter) caused the injury.”¹⁴⁰ Put differently, the *Cedar Point* test permits citizen-suit plaintiffs, like all other litigants, to rely on circumstantial evidence, such as “proximity to polluting sources” or “past pollution” to establish traceability.¹⁴¹

In applying the *Cedar Point* test, we have cautioned that a plaintiff’s injuries cannot be considered “fairly traceable” to a particular defendant’s actions if the plaintiff is too far removed from the point of discharge.¹⁴² In light of this concern, our post-*Cedar Point* caselaw has clarified that the three-part test is meant to account for geographic proximity.¹⁴³ In considering geographic proximity, we have distinguished between two types of plaintiffs: those who “sit[] squarely in the discharge zone of a

¹⁴⁰ *Pub. Interest Rsch. Grp. of N.J. Inc. v. Magnesium Elektron, Inc.*, 123 F.3d 111, 121–22 (3d Cir. 1997).

¹⁴¹ *See Gaston Copper*, 204 F.3d at 163 (“Litigants routinely rely on circumstantial evidence . . . [a]nd if a prosecutor may rely wholly on circumstantial evidence to prove that a criminal defendant is guilty beyond a reasonable doubt, there is no apparent reason—and certainly not a reason apparent from the Constitution . . .—to regard this type of proof as per se deficient for establishing standing in a Clean Water Act case.”).

¹⁴² *See Friends of the Earth, Inc. v. Crown Cent. Petroleum Corp.*, 95 F.3d 358, 361 (5th Cir. 1996) (“[S]ome ‘waterways’ covered by the CWA may be so large that plaintiffs should rightfully demonstrate a more specific geographic or other causative nexus in order to satisfy the ‘fairly traceable’ element of standing.” (quoting *Cedar Point*, 73 F.3d at 558 n.24)).

¹⁴³ *See, e.g., id.* at 361–63 (considering geographic proximity under the second prong of the *Cedar Point* test).

polluting facility,” and those who are “so far downstream that their injuries cannot fairly be traced to that defendant.”¹⁴⁴ Only the more distant type of plaintiff must produce additional evidence that the pollutants or their effects could have reached them.¹⁴⁵

b. Plaintiffs’ Evidence Satisfied the Cedar Point Factors.

Here, the district court, in a detailed opinion, applied *Cedar Point* and its progeny to find that Plaintiffs satisfied the fairly traceable element of standing.¹⁴⁶ At the outset of its traceability analysis, the district court cited our case, *Texans United for a Safe Economy Education Fund v. Crown Central Petroleum Corp.*,¹⁴⁷ for the proposition that “the plaintiffs[] injury does not have to be linked to exact dates that the defendant’s violations occurred, and

¹⁴⁴ *Gaston Copper*, 204 F.3d at 162 (citing *Crown Cent.*, 95 F.3d at 361–62).

¹⁴⁵ *See id.* at 159–60 (“Nor has any circuit required additional scientific proof where there was a direct nexus between the claimant and the area of environmental impact”); *Crown Cent.*, 95 F.3d at 362 (noting that “plaintiffs who use ‘waterways’ far downstream from the source of unlawful pollution may satisfy the ‘fairly traceable’ element by relying on alternative types of evidence,” such as water samples or expert testimony (citing *Cedar Point*, 73 F.3d at 558 n.24)); *Texans United*, 207 F.3d at 792–93 (holding that plaintiffs established traceability because their members “reside in the Pasadena area” and presented evidence that they “observed smoke from [the defendant]’s [Pasadena] plant in their neighborhood at the same time that they smelled sulfurous odors” and “expert evidence demonstrating that on certain days when [defendant] experienced process upsets, excess sulfur dioxide emissions were detectable in the neighborhood”).

¹⁴⁶ *2017 D. Ct. Op.*, 2017 WL 2331679, at *10.

¹⁴⁷ 207 F.3d at 793.

the plaintiff does not have to ‘show to a scientific certainty that defendant’s [emissions], and defendant’s [emissions] alone, caused the precise harm suffered by the plaintiffs.’”¹⁴⁸ The court then noted that “[e]ven though Plaintiffs’ members’ injuries do not have to be linked to exact dates that the Events and Deviations occurred, Plaintiffs’ members correlated some of the experiences described . . . to five Events or Deviations.”¹⁴⁹ It is from this language that Exxon roots its argument that Plaintiffs have established standing for only five emissions events (which resulted in forty days of violations).¹⁵⁰

We agree with the district court that Plaintiffs adduced sufficient circumstantial evidence via the *Cedar Point* framework to establish the “fairly traceable” prong of standing. As to the first *Cedar Point* factor (the emission of pollutants in excess of permit limits), Exxon stipulated to various spreadsheets outlining its thousands of permit violations. Based on this evidence, the district court

¹⁴⁸ 2017 D. Ct. Op., 2017 WL 2331679, at *10 (quoting *Texans United*, 207 F.3d at 793).

¹⁴⁹ *Id.*

¹⁵⁰ A review of Plaintiffs’ members’ testimony at trial reveals that these five events are hardly the only emissions events that members experienced. To the contrary, one member, Mr. Cottar, testified that on average he saw a “flaring event” at the Complex once a week. However, Mr. Cottar explained that he did not “create a written record of every incident” that occurred during the eight-year claims period and therefore was unable to recall the date of every incident he experienced based on his memory alone.

correctly found that Exxon discharged pollutants in greater concentrations than allowed by its permits.¹⁵¹

As to the second *Cedar Point* factor (emissions have the potential to adversely affect an area in geographic proximity to plaintiffs), the district court credited Plaintiffs' members' testimony that Exxon's emissions adversely affect or have the potential to adversely affect the area around the Complex where they live and visit. As noted above, at the time of suit, one member lived one-quarter mile from the Complex, and another lived a half-mile away. The district court relied on these members' testimony that from their homes they could see flares, smoke, and haze originating from the Complex.¹⁵² Additionally, they could smell chemical odors from their homes when the wind was blowing in from the Complex and noticed these odors became stronger closer to the Complex.¹⁵³ Finally, the court noted that members' physical symptoms improved when they moved away from the Complex.¹⁵⁴

Moreover, we note that the injuries members suffered within a mile or two of the Complex are likely so "squarely in the [emission] discharge zone" that no

¹⁵¹ 2017 D. Ct. Op., 2017 WL 2331679, at *16–21 (finding Exxon committed: (1) 10,583 days of actionable violations under Count I; (2) 4,038 days of actionable violations at the olefins plant and 1,671 days at the chemical plant under Count II; (3) eighteen days of actionable violations under Count III; (4) forty-four days of actionable violations under Count 4; and (5) thirty-two days of actionable violations under Count 5).

¹⁵² *Id.* at *10.

¹⁵³ *Id.*

¹⁵⁴ *Id.*

further geographic analysis is necessary.¹⁵⁵ Regardless, Plaintiffs did provide additional evidence of geographic proximity, including from Exxon's own air dispersion modeling of selected emissions events indicating that off-site pollutant levels exceeded safety standards on over 130 occasions. Additionally, Plaintiffs' expert, Dr. Edward Brooks, opined that it was "very likely that health effects occurred in exposed neighborhoods bordering the complex" from Exxon's emission of sulfur dioxide. He made similar conclusions for various other pollutants emitted by Exxon.¹⁵⁶ And Exxon's own expert testified that the pollutants emitted from the Complex "can travel significant distances beyond the fence line of the complex." Based on this evidence, the district court did not clearly err in finding that Plaintiffs

¹⁵⁵ *Gaston Copper*, 204 F.3d at 162. *Cf. Ctr. for Biological Diversity v. U.S. EPA*, 937 F.3d 533, 539 (5th Cir. 2019) ("A geographic area as big as the 'Western and Central portions of the Gulf' cannot support Article III standing." (citation omitted)); *Lujan*, 504 U.S. at 567 n.3 (noting that the "geographic remoteness of those members (here in the United States) from Sri Lanka and Aswan" absent any evidence "showing the impact upon animals in those distant places will in some fashion be reflected here" prevents a finding of standing).

¹⁵⁶ For example, Dr. Brooks opined that a March 29, 2012, upset event involving hydrochloric acid produced exposure levels "clearly high enough to be of concern to those living near the Baytown Complex." He also found that the "elevated levels of benzene in the ambient air near the Baytown Complex contributes to incremental increases in cancer risk" given that benzene has "no safe effects threshold." Dr. Brooks further opined that "significant health effects would be expected" from the Complex's emission of hydrogen sulfide between 2005 and 2011, particularly when coupled with exposure to co-pollutants.

established geographic proximity¹⁵⁷ and satisfied the second prong of the *Cedar Point* test.

As for the final *Cedar Point* factor (pollutants cause or contribute to alleged injuries), in addition to the aforementioned testimony from Plaintiffs' members, Plaintiffs also introduced expert testimony from Dr. Brooks about "the likelihood that particular emissions events at the Baytown Complex, in fact, created a[] risk of adverse health effects in the surrounding communities." Plaintiffs also relied on testimony from Exxon's own personnel and expert witnesses. Finally, they supplemented the above testimony with toxicological profiles and studies from various government agencies discussing the side effects of exposure to specific concentrations of the various pollutants Exxon emitted.

Below, divided by each Count (or each emission standard or limitation if more than one exists within a Count), is a summary of the evidence Plaintiffs introduced about the potential health effects of the pollutants Exxon emitted.

Count I and Count II encompass claims to enforce various pollutant-specific emission limits. Because each pollutant limit is a separate "emission standard or limitation," we look at each pollutant individually.

¹⁵⁷ See *Texas v. Nuclear Regul. Comm'n*, No. 21-60743, 2023 WL 5498874, *5 (5th Cir. Aug. 25, 2023) (holding that plaintiffs' members' had geographic proximity to radioactive materials given that members "own land within four miles of the facility, draw water from wells beneath the facility, drive within a mile of the facility, use rail lines the facility would use, and travel on highways within a few hundred feet of the rail lines that transport spent nuclear fuel to the facility" (citation omitted)).

Some pollutants contribute to several of the members' injuries and therefore may be listed twice.

Odor-causing pollutants:	Plaintiffs' members' injuries:
<p><i>Natural gas</i> has a "pungent odor." <i>Ammonia & ammonium compounds</i> have a "pungent cleaning-type smell." <i>Sulfur dioxide (SO₂ & SO_x)</i> is a colorless gas with a pungent odor that smells like rotten eggs. <i>Hydrogen sulfide</i> is a colorless gas with a smell of rotten eggs or fecal matter which is detectable even at very low concentrations. <i>Hydrochloric acid / hydrogen chloride</i> has a "strong irritating odor." <i>Carbonyl sulfide</i> has a typical sulfide odor. <i>Benzene</i> has a sweet odor. <i>Carbon disulfide</i> has a sweet smell, although impure carbon disulfide has an "unpleasant odor like that of rotting radishes." <i>Hydrogen cyanide</i> has a bitter, "almondlike" odor.</p>	<p>Members testified that they smelled "pungent" odors emanating from the Complex, such as sulfur, rotten egg, gasoline, sweet, and chemical odors.</p>

Pollutants that are hazardous to human health:	Plaintiffs' members' injuries:
<p><i>Carbon monoxide, nitrogen oxides (nitrogen dioxide and nitrogen oxide), sulfur dioxide (SO₂ & SO_x), and particulate matter</i> are defined by the EPA as "criteria pollutants" with "significant health effects." Chronic exposure to even "lower levels" of these pollutants can cause respiratory disease, cancer, and premature death. The EPA also has a list of 187 substances it categorizes as Hazardous Air Pollutants ("HAPs"). HAPs are "pollutants that cause or may cause cancer or other serious health effects, such as reproductive and neurological deficits and birth defects." 42 U.S.C. § 7412(b)(1). <i>Benzene, chlorine, volatile organic compounds (VOCs) (e.g., N-methyl-2-pyrrolidone, toluene, 1,3-butadiene), and crude oil</i></p>	<p>Members testified that they feared an increased risk of cancer due to Exxon's emission of cancer-causing chemicals. They also testified that the odors, flares, smoke, and haze coming from the Complex made them concerned for their health because they believe Exxon is emitting harmful chemicals. Several members cited specific concerns about allergies and cancer. One member testified that during two specific emissions events he smelled a "very sweet" odor that caused him an immediate headache.</p>

<p>are all HAPs. <i>Benzene</i>, in particular, has “no safe threshold exposure level.” The biggest risk from long-term exposure to benzene is cancer, but even brief exposure at low levels can cause headaches.</p>	
<p>Pollutants that cause respiratory problems and eye/skin irritation:</p>	<p>Plaintiffs’ members’ injuries:</p>
<p><i>Hydrochloric acid/hydrogen chloride</i> can cause irritation of the throat, eyes, and skin. Long-term exposure to low levels can cause respiratory problems. <i>Carbonyl sulfide</i> can cause eye and skin irritation. <i>Hydrogen cyanide</i> inhaled at low levels over a period of years can cause difficulties breathing, chest pain, vomiting, blood changes, headaches, and enlargement of the thyroid gland. <i>Hydrogen sulfide</i> at low levels of exposure can cause fatigue, insomnia, head-</p>	<p>One member testified that his family suffers from asthma and has “asthma-related reactions” to emissions events. Other members testified that they suffered from respiratory issues and allergies (such as runny nose, watery eyes, sneezing). And another member testified that she no longer runs outside in Baytown because she would feel “labored breathing” and an “abrasive feeling” in her throat and lungs.</p>

<p>aches, vomiting, irritation to the eyes, nose, or throat, and may cause difficulty breathing for some asthmatics. <i>Nitrogen oxides (nitrogen dioxide and nitrogen oxide)</i> even at low levels of exposure can cause eye, nose, throat, and lung irritation and can cause coughing and shortness of breath. <i>Sulfuric acid</i> can induce immediate respiratory symptoms resembling asthma.</p>	
<p>Pollutants that are flammable/contribute to smoke:</p>	<p>Plaintiffs' members' injuries:</p>
<p><i>Carbon disulfide</i> is a colorless liquid that easily explodes in the air and catches fire "very easily." <i>Hydrogen sulfide</i> is flammable. <i>Opacity/visible emissions</i> is an "indirect measurement from a flare for particulate matter." The higher the opacity, the more particulate matter is omitted. As described by</p>	<p>Several members testified that they are concerned about the risk of an explosion at the Complex, especially when they see big flares and dark smoke coming from the Complex "abrasive feeling" in her throat and lungs.</p>

Jeffrey Kovacs, an Exxon employee, opacity is determined by looking at smoke and determining “how much light transmits through it.” The thicker and blacker the smoke, the higher the opacity.	
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Count III is a claim to enforce a plant-wide limit on the emission of HRVOCs. HRVOCs are closely associated with the formation of ground-level ozone, which is associated with haze and difficulties breathing. Several members testified that they have respiratory problems, with one member testifying that she experiences a “twinge” in her breathing from the air quality in Baytown, and another member testifying that she has “labored breathing” when she runs outside in Baytown.

Count IV is a claim to enforce the limit on “smoking” flares at all three plants. The smoking flare rule prohibits visible emissions (*i.e.*, smoke) from flares except for periods not to exceed a total of five minutes during any two consecutive hours. Two members cited to their concerns about seeing black smoke emanating from the Complex.

Count V is a claim to enforce a plant-wide permit that requires flares to operate with a pilot flame at all times. As explained by Plaintiffs’ expert, Dr. Ranajit Sahu, if a pilot flame is out, the Complex’s flares will release higher concentrations of pollutants. Exxon’s release of higher quantities of the pollutants listed in Counts I and II into the atmosphere will cause Plaintiffs’ members to suffer the same injuries cited

above. The main difference is that violations of Count V may impact a larger segment of the Baytown community. Exxon's expert, David Cabe, testified that pollutants emitted from higher levels (*i.e.*, from a flare) can cause ground level concentrations of that pollutant to "occur at distances further away than the area closest to the emission point."

Based on this evidence,¹⁵⁸ the district court did not commit clear error in finding that Exxon's unlawful emission of particular pollutants causes or contributes to the kinds of injuries suffered by Plaintiffs' members. Or, in the language of *Laidlaw*, Plaintiffs established that their members have "reasonable concerns" about their health given Exxon's ongoing unlawful emissions of various pollutants that are harmful to human health.

Accordingly, we find no error in the district court's finding that Plaintiffs submitted sufficient evidence to satisfy the *Cedar Point* test and thus that there is a "substantial likelihood" that Exxon's illegal emissions have put Plaintiffs' members at an increased risk of injury.¹⁵⁹

c. Exxon's Challenges to Existing Precedent are Unpersuasive.

In response, Exxon attacks the applicability of the *Cedar Point* framework. In particular, it suggests we take this opportunity to clarify or overrule our existing precedent in two citizen-suit cases: *Cedar Point* and *Texans United*.¹⁶⁰ For the reasons given in

¹⁵⁸ 2017 D. Ct. Op., 2017 WL 2331679 at *10 & n.155.

¹⁵⁹ *Duke Power Co.*, 438 U.S. at 75 n.20.

¹⁶⁰ Exxon asserts that a "correct" reading of *Texans United* must focus on the fact that it was a summary judgment appeal

Part II.B.1-2 of this opinion, we decline Exxon's invitation.

Our opinions in *Cedar Point* and *Texans United* rejected Exxon's proposed retrospective violation-by-violation traceability test consistent with both *Laidlaw* and precedent from other courts of appeals in environmental cases.¹⁶¹ This is true regardless of Exxon's assertion that *Laidlaw* lacks precedential

and is therefore distinguishable from this case which proceeded to trial. In *Texans United*, our Court applied the summary judgment standard that asks "whether reasonable jurors could find by a preponderance of the evidence that the plaintiff [was] entitled to a verdict." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 252 (1986) (emphasis added) (citation omitted). This standard is entirely consistent with the sub-stantive evidentiary standard of proof that the district court applied in trying this case. And to the extent Exxon contends that summary-judgment standing cases are inapplicable here, we note that both *Laidlaw* as well as several circuit court cases cited herein found standing after trial. *See, e.g., Laidlaw*, 528 U.S. at 181–83; *Utah Physicians*, 21 F.4th at 1239, 1245–46; *Benham*, 885 F.3d at 1273.

¹⁶¹ *Gaston Copper*, 204 F.3d at 161 ("Rather than pinpointing the origins of particular molecules, a plaintiff must merely show that a defendant discharges a pollutant that causes or contributes to the kinds of injuries alleged in the specific geographic area of concern." (internal quotation marks and citation omitted)); *Sw. Marine, Inc.*, 236 F.3d at 994–95 (same); *Tex. Indep. Producers*, 410 F.3d at 973–74 (same); *Powell Duffryn Terminals*, 913 F.2d at 72 ("The 'fairly traceable' requirement . . . is not equivalent to a requirement of tort causation." (citing *Duke Power Co.*, 438 U.S. at 75 n.20)); *see also* Percival & Goger, *supra* note 98, at 145 ("In light of *Laidlaw* and *Gaston Copper*, standing requirements in environmental citizen suits now can be met through use of 'circumstantial evidence such as proximity to polluting sources, predictions of discharge influence, and past pollution,' which may be used to prove injury in fact and traceability." (internal citation omitted)).

value for purposes of traceability because it did not address that prong separately from injury-in-fact and redressability. Despite not using the words “fairly traceable,” the *Laidlaw* Court’s holding that there was “nothing improbable” about the fact that the defendant’s illegal discharges “would cause nearby residents to curtail their recreational use of the waterway” is a clear indication that the Court considered traceability and concluded that circumstantial evidence not tied to specific violations was sufficient to establish standing.¹⁶² Indeed, the Court could not have found standing without ensuring that the traceability prong was satisfied.

Exxon further contends that we should clarify that the *Cedar Point* framework is only applicable in cases involving “a small body of water, close proximity, well-understood water currents, and persistent discharges.” In support of this contention, Exxon asserts that in *Center for Biological Diversity v. United States EPA*,¹⁶³ a panel of this Court limited *Cedar Point* to cases involving the above circumstances.

In *Center for Biological Diversity*, environmental organizations brought suit against the EPA alleging it failed to satisfy certain procedural requirements in

¹⁶² See Note, *supra* note 131, at 2275 (noting that in *Laidlaw* “the Court’s injury analysis overlapped with the causation inquiry”); Gallagher, *supra* note 113, at 25 (suggesting that *Laidlaw*’s treatment of plaintiffs’ “reasonable concern” was “purely a traceability analysis” and held that “because the plaintiffs’ reasonable concern there was based on a geographic nexus to the environmental violations” they had established traceability).

¹⁶³ 937 F.3d at 545.

its approval of a general permit for various oil and gas operations located in the Gulf of Mexico.¹⁶⁴ A panel of this Court held that three of plaintiffs' members failed to prove they suffered an injury-in-fact because their planned future activities in a "geographic area as big as the 'Western and Central portions of the Gulf' cannot support Article III standing."¹⁶⁵ The panel noted that our decision in *Cedar Point* was not to the contrary because "the *Cedar Point* plaintiffs had better evidence of a geographic nexus."¹⁶⁶

After holding that the plaintiffs' members failed to prove they suffered an injury-in-fact, the *Center for Biological Diversity* panel in dicta noted that plaintiffs also did not establish that the EPA's issuance of the general permit was fairly traceable to their members' alleged injuries.¹⁶⁷ As part of its traceability discussion, the panel "distinguished *Cedar Point*" on the grounds that the "*Cedar Point* affiant used the specific area of the Bay in which unlawful discharges occurred, and that played an important role in our [*Cedar Point*] decision."¹⁶⁸ The panel then noted that "*Cedar Point* and *Crown*

¹⁶⁴ *Id.* at 535–36.

¹⁶⁵ *Id.* at 539 (citation omitted).

¹⁶⁶ *Id.* at 541.

¹⁶⁷ *See id.* at 542 ("Even if Petitioners could show injury, they could not meet another of Article III's standing requirements: traceability."). The only evidence in the record of traceability was one member's declaration that he "spend[s] time in the western Gulf of Mexico in the same areas that will be directly affected by wastewater discharges from offshore oil and gas activities." *Id.* at 545.

¹⁶⁸ *Id.* (internal quotation marks and citation omitted).

*Centra*¹⁶⁹ establish this lesson: Whether a court can infer a causal link between a source of pollution and at least some portion of a petitioner’s injury is a fact-specific inquiry that turns on many factors, including the size of the waterway, the proximity of the source and the injury, forces like water currents, and whether discharges will evaporate or become diluted.”¹⁷⁰

Although Exxon latches onto the above dicta as “limiting” the scope of *Cedar Point* to cases involving small bodies of water with understood water currents and persistent discharges, we instead read the panel’s *Cedar Point* discussion as simply differentiating the case before it from *Cedar Point* on the grounds of geographic proximity. And the chief concern animating the Court’s standing analysis in *Center for Biological Diversity*—a lack of geographic nexus—is not a concern here. Plaintiffs’ members live and recreate less than a mile from the Complex and supplied detailed testimony, credited by the district court, about the specific locations and ways in which they are impacted by Exxon’s unlawful emissions.

Finally, given that the applicability of the *Cedar Point* framework is fact-specific, we decline to impose

¹⁶⁹ In *Crown Central*, this Court held that an organization whose membership included individuals who used a body of water “located three tributaries and 18 miles ‘downstream’” from the source of the unlawful discharge failed to establish traceability. 95 F.3d at 361–62. In so concluding, we cautioned that “some ‘waterways’ covered by the CWA may be so large that plaintiffs should rightfully demonstrate a more specific geographic or other causative nexus in order to satisfy the ‘fairly traceable’ element of standing.” *Id.*

¹⁷⁰ *Ctr. for Biological Diversity*, 937 F.3d at 545 (citation omitted).

categorical rules for its applicability going forward or make any broader pronouncement about the framework beyond our finding that it is applicable to the present case.

d. *Exxon's Challenges to Plaintiffs' Traceability Evidence Lack Merit.*

Finally, Exxon takes aim at the evidence Plaintiffs relied on for traceability, suggesting that if Plaintiffs had offered “scientific evidence” or “more convincing evidence,” they may have established traceability for more than forty days of violations. But the record contradicts Exxon’s assertion. As recognized by the district court,¹⁷¹ Plaintiffs did rely on scientific evidence to establish traceability. Plaintiffs introduced evidence from expert witnesses and from published studies about the harmful effects of exposure to the pollutants emitted by Exxon. Additionally, Plaintiffs relied on Exxon’s own air dispersion modeling data to show that emissions from the Complex have reached areas where their members live and work in concentrations above regulatory thresholds.

In seeking to undermine Plaintiffs’ traceability evidence, Exxon repeatedly downplays the harm its ongoing violations have caused and will cause in the

¹⁷¹ See *2017 D. Ct. Op.*, 2017 WL 2331679, at *10 (“Additionally, Plaintiffs submitted evidence of the potential health effects caused by the types of pollutants emitted during the Events and Deviations, and some of these potential health effects match some of the experiences of Plaintiffs’ members.”); *id.* at *10 n.155 (“For example, hydrogen sulfide can smell badly and cause headaches, and one of Plaintiffs’ members smelled strong, pungent odors that, on occasion, caused him headaches.”).

future by focusing on its smaller violations, such as the short-circuited extension cord or the fire in a cigarette butt can. Exxon's focus on these few events misses the forest for the trees. As explained by Environment Texas Citizen Lobby's director at trial, if the issue here were a few violations like the fire in the cigarette butt can or the smoldering board, "then we wouldn't be suing over this; but [in this case there are] 287 pages of small . . . print that together adds up to . . . almost a million and quarter pounds of pollution. So together it adds up to a huge amount" and it "goes to show that Exxon's not running the facility very well" if it has "these emission events over and over again."

And although violations that involve small fires or ignition sources may seem like minor issues in a regular work environment, there is a reason state law requires Exxon to keep records of these types of violations. This is because the Complex stores, in the words of one Exxon employee, "millions and millions and millions of gallons of flammable liquids and gasses." In order to prevent the ignition of these flammable liquids and gasses, ignition sources, such as smoldering boards, are not permitted in process areas of the Complex. Such preventative measures are needed because, as explained by Plaintiffs' expert, a "fire [at the Complex] is extremely uncontrollable and unpredictable" and even "a small fire that starts small [can] . . . very rapidly grow to a very large conflagration . . . in a matter of seconds."

At trial, several members testified that they are concerned about an explosion at the Complex. Such concerns are entirely reasonable in light of these repeated fire and ignition source violations, Exxon's

emission of flammable gases, and the 353 emission events at the Complex that involved fires. That is all Plaintiffs have to show to establish traceability—Exxon’s violations cause or contribute to Plaintiffs’ members’ injuries. The court considers the seriousness and duration of these violations at the penalty stage.¹⁷²

Thus, the district court did not err in concluding that for each of Plaintiffs’ claims, they presented sufficient circumstantial evidence that their members’ injuries are “fairly traceable” to Exxon’s violations.

5. Redressability.

Plaintiffs here seek civil penalties for Exxon’s continuing and threatened future violations. As with the other elements of standing, *Laidlaw* is the definitive authority on redressability in citizen-suit environmental cases. In *Laidlaw*, the Court recognized that civil penalties “promote immediate compliance” and “deter future violations,”¹⁷³ and therefore “afford redress to citizen plaintiffs who are injured or threatened with injury as a consequence of ongoing unlawful conduct.”¹⁷⁴ Redressability in environmental citizen suits thus requires that the defendant’s violations be “ongoing at the time of the complaint and . . . could continue into the future if undeterred.”¹⁷⁵

¹⁷² See 42 U.S.C. § 7413(e)(1) (requiring the district court to consider, among other things, the “seriousness of the violation” and “the duration of the violation”).

¹⁷³ *Laidlaw*, 528 U.S. at 185.

¹⁷⁴ *Id.* at 186.

¹⁷⁵ *Id.* at 188.

Thus, the relevant inquiry is whether Exxon was committing violations at the time Plaintiffs filed suit in December of 2010 and thereafter. The answer is clear: Exxon committed violations after the complaint was filed, and indeed right up to the time of trial. The parties stipulated to spreadsheets listing Exxon's violations between October 2005 and September 2013.¹⁷⁶ Based on these spreadsheets, Plaintiffs introduced exhibits tallying the number of days of pre-complaint and post-complaint violations for each count.¹⁷⁷ The district court adopted Plaintiffs' tallies for Counts I-V and Exxon does not challenge that finding on appeal.¹⁷⁸ Accordingly, the district court's finding that Exxon committed nearly three years of post-suit violations is not clearly erroneous.

In sum, because Exxon was continuing to violate the CAA from the time the complaint was filed and thereafter, civil penalties would redress any ongoing or future harm to Plaintiffs' members as a result of Exxon's ongoing unlawful conduct.¹⁷⁹

* * *

After applying well-established Article III standing jurisprudence, we conclude the district court

¹⁷⁶ *2017 D. Ct. Op.*, 2017 WL 2331679, at *12; ETCL I, 824 F.3d at 514–15.

¹⁷⁷ *2017 D. Ct. Op.*, 2017 WL 2331679, at *12.

¹⁷⁸ *Id.* at *13–21.

¹⁷⁹ See *Laidlaw*, 528 U.S. at 176–77 (finding redressability because plaintiffs sued in 1992 for 489 violations that began in 1987 and continued through 1995); *Gaston Copper*, 204 F.3d at 163 (finding redressability for injunctive relief and civil penalties because the defendant committed hundreds of discharge and monitoring violations after the complaint was filed).

correctly held that Plaintiffs established all three prongs of standing. Specifically, Plaintiffs have demonstrated that their members suffer from ongoing harms and the likelihood of future harms, traceable to Exxon’s ongoing violations, and redressable by civil penalties. In so concluding, we find it striking that so many of the arguments advanced by Exxon are directly incompatible with Supreme Court precedent. And the positions Exxon takes that have not been addressed by the Supreme Court nonetheless stand out as outliers from decisions of every other circuit, including our own, that has passed on these questions.¹⁸⁰

Accordingly, we hold that the district court’s 2017 judgment correctly found that Plaintiffs have standing to assert their claims encompassing all the actionable violations at issue in this case.

6. Separation-of-Powers Concerns.

Both Exxon’s and Industry Amici’s briefs emphasize that an unprincipled approach to standing would allow Plaintiffs “to transform this citizen suit into a quasi-regulatory proceeding without any limits,” and in the process infringe on the Executive Branch’s enforcement of the law. There are three main reasons why this case does not raise Article II separation-of-powers concerns.

First, the CAA places limits on citizen suits and thus ensures that such cases “supplement rather than . . . supplant governmental action.”¹⁸¹ For example, at least sixty days before filing a citizen suit, a plaintiff must give “notice of the violation (i) to the

¹⁸⁰ See *supra* notes 62, 116, 137, & 161.

¹⁸¹ *Gwaltney*, 484 U.S. at 60.

Administrator, (ii) to the State in which the violation occurs, and (iii) to any alleged violator of the standard, limitation, or order” allegedly violated.¹⁸² “The requirement that notice be given to the responsible officials highlights their primary role in enforcing the Act compared to the supplementary position of the citizen.”¹⁸³ There is also a diligent prosecution bar, which provides that a citizen suit may not be commenced “if the Administrator or State has commenced and is diligently prosecuting a civil action in a court of the United States or a State to require compliance with the standard, limitation, or order.”¹⁸⁴ Thus, the CAA sets clear limits on citizen suits to ensure that they do not overstep their role.

Second, the Government supports Plaintiffs’ suit. In response to Justice Scalia’s dissent raising separation-of-powers concerns, the majority in *Laidlaw* observed that “the Federal Executive Branch does not share the dissent’s view that such suits dissipate its authority to enforce the law. In fact, the Department of Justice has endorsed this citizen suit from the outset, submitting *amicus* briefs in support of [plaintiffs] in the District Court, the Court of Appeals, and this Court.”¹⁸⁵ Similarly, the Department of Justice in this case submitted *amicus* briefs supporting Plaintiffs. And in cases where the Executive Branch opposes a citizen suit, the *Laidlaw*

¹⁸² 42 U.S.C. § 7604(b)(1)(A).

¹⁸³ *Hamker v. Diamond Shamrock Chem. Co.*, 756 F.2d 392, 395–96 (5th Cir. 1985) (discussing the notice requirement in the Clean Water Act which is identical to the notice requirement in the Clean Air Act).

¹⁸⁴ 42 U.S.C. § 7604(b)(1)(B).

¹⁸⁵ *Laidlaw*, 528 U.S. at 188 n.4.

majority correctly noted that the EPA Administrator can intervene as a matter of right.¹⁸⁶

Third, respect for the separation of powers counsels against adoption of Exxon's overly strict and unprecedented interpretation of standing in citizen suits. Courts must avoid infringing "the idea of separation of powers . . . either by reaching beyond jurisdictional limitations to decide abstract questions or by refusing to decide concrete cases that Congress wants adjudicated."¹⁸⁷ Exxon's exclusive focus on the first concern leads it to advocate for a theory of standing that conflicts with the latter.

Congress enacted the CAA's citizen-suit provision "to encourage citizen participation" in the enforcement of the CAA and saw such suits as necessary given that the Government's "initiative in seeking enforcement under the Clean Air Act has been restrained."¹⁸⁸ Similarly, Congress intended citizen suits use publicly available information about an alleged violator's compliance (or non-compliance) with the Act.¹⁸⁹ The fact that Exxon disagrees with

¹⁸⁶ *Id.*; 42 U.S.C. § 7604(c)(2).

¹⁸⁷ *Gaston Copper*, 204 F.3d at 164.

¹⁸⁸ *Del. Valley Citizens' Council for Clean Air*, 478 U.S. at 560 (internal quotation marks and citation omitted); *see also Friends of the Earth v. Carey*, 535 F.2d 165, 172 (2d Cir. 1976) (reviewing the legislative history and concluding that "the citizen suits provision reflected a deliberate choice by Congress to widen citizen access to the courts, as a supplemental and effective assurance that the Act would be implemented and enforced" and therefore "citizen groups are not to be treated as nuisances or troublemakers but rather as welcomed participants in the vindication of environmental interests").

¹⁸⁹ *See* Hon. Henry A. Waxman, *An Overview of the Clean Air Act Amendments of 1990*, 21 ENV'T'L L. 1721, 1747–48, 1809

these legislative choices given its concern about “runaway citizen suits”¹⁹⁰ does not give this Court license to raise the standing hurdle higher than is required by Article III. This is of course because “Article III requires [among other things] a cognizable injury; it does not speak to the wisdom of the legislature’s actions in providing redress for that injury.”¹⁹¹ Accordingly, we reject Exxon’s policy arguments about the wisdom of citizen suits and its attempt to impose unprecedented standing requirements for such cases.

(1991) (detailing the provisions in the 1990 Amendments to the CAA requiring “sources to report regularly on their compliance status” which “will provide readily accessible information that citizens can use to determine the compliance status of sources”); David T. Buente, *Citizen Suits and the Clean Air Act Amendments of 1990: Closing the Enforcement Loop*, 21 *Env’tl L.* 2233, 2240 (1991) (“The 1990 Amendments make a number of changes to the CAA which may substantially facilitate a citizen’s ability to easily marshal[] evidence to prove violations.”).

¹⁹⁰ Exxon’s argument that citizen-suit plaintiffs must establish standing for each violation—an approach no other court has taken—to avoid “runaway” citizen suits based on publicly available information is not supported by the status quo. As pointed out by one amicus brief, between 2019 and 2022, “citizens annually brought an average of only four suits alleging Clean Air Act violations by polluters.” Moreover, most citizen suits are filed against the federal government involving “challenges to major policies or programs.” Between 2001 and 2016, only “18 percent of cases involve[d] enforcement actions against private entities.” David E. Adelman & Jori Reilly-Diakun, *Environmental Citizen Suits and the Inequities of Races to the Top*, 92 *U. COLO. L. REV.* 377, 381–82 (2021).

¹⁹¹ *Me. People’s All. & NRDC v. Mallinckrodt, Inc.*, 471 F.3d 277, 286 (1st Cir. 2006); *see also Gaston Copper*, 204 F.3d at 163 (“Courts are not at liberty to write their own rules of evidence for environmental standing . . .”).

C. Civil Penalty

The CAA provides that in a citizen suit, “[a] penalty may be assessed for each day of violation.”¹⁹² The imposition of penalties is not mandatory, and we review the district court’s determination of the penalty amount “under the highly deferential abuse-of-discretion standard.”¹⁹³ We review underlying factual findings for clear error.¹⁹⁴

As stated above, the district court in this case assessed a \$19.95 million civil penalty, just 3.5 percent of the statutory maximum cap (\$573.51 million), after considering the factors enumerated by the CAA.¹⁹⁵ Exxon challenges the amount awarded, but its arguments are based on its erroneous standing arguments. Specifically, Exxon asserts that the district court’s calculation of the economic benefit Exxon received from its noncompliance with the CAA (one of the enumerated factors),¹⁹⁶ was erroneous because Plaintiffs did not introduce “evidence of any economic benefit from delayed capital expenditures that were necessary to correct the 40 days of violations they correlated to their injuries-in-fact.” In light of our holding above that Plaintiffs established standing to pursue civil penalties for all of their claims (not just 40 days of violations), Exxon’s argument is unavailing.

¹⁹² 42 U.S.C. § 7413(e)(2).

¹⁹³ *ETCL I*, 824 F.3d at 525 (internal quotation marks and citations omitted).

¹⁹⁴ *Id.* (citations omitted).

¹⁹⁵ *2017 D. Ct. Op.*, 2017 WL 2331679, at *30–31.

¹⁹⁶ 42 U.S.C. § 7413(e)(1) (listing seven factors).

Exxon further contends that the district court's calculation of the economic benefit of noncompliance was distorted by "well-meaning but mistaken dictum" in *ETCL I*. Specifically, Exxon argues that footnote nineteen from *ETCL I* is legally incorrect and should be disavowed or overruled. In that footnote, we stated that "in a case such as this where the violations are extensive and varied," the district court's "inquiry [regarding the economic benefit of noncompliance] should center on whether the projects will ameliorate the kinds of general problems that have resulted in at least some of the permit violations upon which Plaintiffs have sued."¹⁹⁷ Our statement was correct. As Plaintiffs assert, the CAA itself does *not* require a violation-by-violation determination of economic benefit. It says a court must consider the "economic benefit of noncompliance."¹⁹⁸ Notably, unlike the seriousness and duration factors which use the word "violation," the economic benefit factor uses the word "noncompliance."¹⁹⁹

As we noted in *ETCL I*, the economic benefit of noncompliance "factor directs courts to consider the financial benefit to the offender of delaying capital expenditures and maintenance costs on pollution-control equipment."²⁰⁰ The district court valued Exxon's benefit of noncompliance at more than fourteen million dollars (\$11,746,234 at the time of the expert's report plus \$61,066 per month after that)

¹⁹⁷ *ETCL I*, 824 F.3d at 530 n.19.

¹⁹⁸ 42 U.S.C. § 7413(e)(1).

¹⁹⁹ *Id.*

²⁰⁰ *ETCL I*, 824 F.3d at 527 (internal quotation marks and citation omitted).

because Exxon delayed implementation of four emission-reducing projects mandated by a 2012 agreement between Exxon and state regulators.²⁰¹ The court determined that Plaintiffs demonstrated that the four improvement projects were “necessary to correct the violations at issue in this suit.”²⁰² Those projects included: (1) a plant automation venture intended to help identify potential events, allowing proactive response; (2) a flare system monitoring/minimization project intended to more effectively monitor and troubleshoot refinery flares; (3) a simulators project intended to improve operator training and competency, to reduce frequency and severity of emissions events; and (4) enhanced fugitive emissions monitoring using infrared technology to locate leaks.²⁰³

The district court’s conclusion that the projects would have reduced the frequency of the violations at issue was not clear error. The projects represent “an effort to reduce emissions and unauthorized emissions events” at the Baytown Complex.²⁰⁴ Such unauthorized emissions are the heart of the violations alleged in this suit.²⁰⁵

²⁰¹ *2017 D. Ct. Op.*, 2017 WL 2331679, at *28.

²⁰² *Id.* at *28 (internal quotation marks omitted).

²⁰³ *ETCL I*, 824 F.3d at 528 n.15.

²⁰⁴ *2017 D. Ct. Op.*, 2017 WL 2331679, at *28 (internal citation and quotation marks omitted).

²⁰⁵ The district court walked through how the four improvement projects would reduce the types of violations included in Counts I-V. For example, “the Fuels North Flare System Monitoring/Minimization Project” is intended to reduce flaring at the Baytown refinery and the “Enhanced Fugitive

Exxon additionally argues that the four emission-reducing projects, whether characterized as “voluntary” or implemented because of a government enforcement order, should not be considered in economic benefit determinations. We expressly rejected this argument in *ETCL I*.

Specifically, the fact that Exxon must pay to bring its Complex into compliance does not excuse its history of noncompliance.²⁰⁶

After weighing the other statutory factors, the district court applied a fifty percent multiplier to the economic benefit calculation, and then subtracted the amount of penalties Exxon had already paid to the State of Texas for some of the violations. Applying the highly deferential abuse-of-discretion standard, we would AFFIRM the district court’s civil penalty assessment of \$19.95 million against Exxon in this case.

III. CONCLUSION

For the foregoing reasons, we would AFFIRM the district court’s judgment based on its 2017 revised findings of fact and conclusions of law.

Emissions Monitoring Project” is intended to help locate and repair VOC and HRVOC leaks. *See id.*

²⁰⁶ *ETCL I*, 824 F.3d at 529 n.18 (noting that Exxon’s “argument about compliance efforts ‘negating’ economic benefit is precisely the argument that various courts have rejected under the economic benefit factor”).

JAMES C. HO, *Circuit Judge*, in support of dismissing rehearing en banc as improvidently granted:

Had I been a member of the three-judge panel in this case, I would have voted to vacate and remand. But because no one on the en banc court has been able to garner a majority in support of their views, I would dismiss the order granting rehearing en banc as improvidently granted, and reinstate the prior decisions of the three-judge panel. I explain each of these conclusions below. *Cf. Moyle v. United States*, 603 U.S. _ (2024) (per curiam order dismissing certiorari as improvidently granted, followed by 47 pages of separate opinions from various Justices).

I.

In *Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc.*, 528 U.S. 167 (2000), the Supreme Court held that citizens may have Article III standing to bring suit seeking civil penalties under the Clean Air Act, even though any civil penalties won by the plaintiffs aren't actually paid to the plaintiffs—they're paid to the United States Treasury.

Laidlaw justified this curious conclusion by analogizing civil penalties to injunctions. *Id.* at 174. Like injunctions, the Court theorized, civil penalties “deter future violations and thereby redress the injuries that prompted a citizen suitor to commence litigation.” *Id.* The Court then concluded that citizen suits satisfy the redressability prong of standing

because the injury being remedied is prospective, not retrospective, in nature. *See id.* at 174, 185–87.¹

Justice Scalia has powerfully written that *Laidlaw* is wrong. As his dissent explained, “a plaintiff’s desire to benefit from the deterrent effect of a public penalty for past conduct can never suffice to

¹ And of course, the Court has long treated the traceability and redressability prongs of Article III standing as “two facets of a single causation requirement”—after all, “the former examines the causal connection between the assertedly unlawful conduct and the alleged injury, whereas the latter examines the causal connection between the alleged injury and the judicial relief requested.” *Allen v. Wright*, 468 U.S. 737, 753 n.19 (1984) (quotations omitted). *See also FDA v. All. for Hippocratic Med.*, 602 U.S. 367, 380 (2024) (“The second and third standing requirements—causation and redressability—are often ‘flip sides of the same coin.’”) (quoting *Sprint Commc’ns Co. v. APCC Servs., Inc.*, 554 U.S. 269, 288 (2008)). Not surprisingly, then, the Court has repeatedly instructed us to look at the same “injury” when examining the traceability and redressability elements of Article III standing. *See, e.g., id.* at 381 (“If a defendant’s action causes an injury, enjoining the action or awarding damages for the action will typically redress that injury.”); *TransUnion LLC v. Ramirez*, 594 U.S. 413, 423 (2021) (“[A] plaintiff must show (i) that he suffered an injury in fact that is concrete, particularized, and actual or imminent; (ii) that the injury was likely caused by the defendant; and (iii) that the injury would likely be redressed by judicial relief.”); *Uzuegbunam v. Preczewski*, 592 U.S. 279, 282 (2021) (“To demonstrate standing, the plaintiff must not only establish an injury that is fairly traceable to the challenged conduct but must also seek a remedy that redresses that injury.”). *See also Duke Power Co. v. Carolina Env’t Study Grp., Inc.*, 438 U.S. 59, 74 (1978) (“The more difficult step in the standing inquiry is establishing that these injuries ‘fairly can be traced to the challenged action of the defendant,’ or put otherwise, that the exercise of the Court’s remedial powers would redress the claimed injuries.”) (citation omitted).

establish a case or controversy of the sort known to our law.” *Id.* at 205 (Scalia, J., dissenting).

I agree with Justice Scalia. And I’m far from alone. Many circuit judges have criticized *Laidlaw*—while acknowledging our duty to follow it. Judge Luttig bemoaned the “significant change in environmental standing doctrine worked by . . . *Laidlaw*,” and said that it would be a “fiction” to claim that *Laidlaw* is consistent with “the fabric of standing jurisprudence.” *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 164– 65 (4th Cir. 2000) (Luttig, J., concurring in the judgment). Judge Niemeyer noted that “*Laidlaw* represents a sea change in constitutional standing principles”—and he plainly didn’t mean it as a compliment. *Id.* at 164 (Niemeyer, J., concurring in the judgment). Judge Hamilton wrote that *Laidlaw* “unnecessarily opened the standing floodgates, rendering our standing inquiry ‘a sham.’” *Id.* at 165 (Hamilton, J., concurring in the judgment) (quoting 528 U.S. at 201 (Scalia, J., dissenting)).

But we’re bound by Supreme Court precedents, not dissents. Just as we’re not truly committing ourselves to the text unless we follow it even when it hurts, we aren’t truly faithful to Supreme Court precedent unless we follow it even when it hurts. *See, e.g., Lefebure v. D’Aquila*, 15 F.4th 650, 663 (5th Cir. 2021). It does not matter what kind of case it is, or who the parties are. And it certainly does not vary based on whether or not we agree with that precedent. *See, e.g., United States v. Rahimi*, 117 F.4th 331, 334 (5th Cir. 2024) (Ho, J., concurring). Nothing is more fundamental to our work as judges than putting aside our personal views, applying neutral principles to

every case in an even-handed manner, and letting the chips fall as they may.

So we're duty-bound to follow *Laidlaw*—whether we agree with it or not. But even under *Laidlaw*, I would vacate and remand to ensure that Defendants have full and fair opportunity to rebut the presumption of traceability established by our court in *Sierra Club, Lone Star Chapter v. Cedar Point Oil Co.*, 73 F.3d 546 (5th Cir. 1996).

It's well established that Article III standing does not require a plaintiff to trace his injury to the defendant's conduct with scientific certainty. Plaintiffs may establish that connection by reasonable inference. *See, e.g., TransUnion*, 594 U.S. at 437 (“[F]or [libel and slander *per se*], publication is generally presumed to cause a harm, albeit not a readily quantifiable harm. As *Spokeo* noted, ‘the law has long permitted recovery by certain tort victims *even if their harms may be difficult to prove or measure.*’”) (quoting *Spokeo, Inc. v. Robins*, 578 U.S. 330, 341 (2016)).

Imagine, for example, that two hunters negligently fire their weapons within the geographic proximity of an innocent bystander. Only one shot actually strikes the bystander. But the plaintiff can't identify which hunter fired that shot. So the plaintiff can show that it must have been fired by one of the two hunters. But he can't prove which one fired the shot. This lack of evidentiary certainty doesn't prevent the plaintiff from establishing liability. *See, e.g., Summers P. Tice*, 199 P.2d 1, 4 (Cal. 1948) (holding that “the burden of proof” should be “shifted to defendants” and noting that “[o]rordinarily defendants are in a far better position to offer

evidence to determine which one caused the injury”). *See also* RESTATEMENT (SECOND) OF TORTS § 433B(3) (1965) (“Where the conduct of two or more actors is tortious, and it is proved that harm has been caused to the plaintiff by only one of them, but there is uncertainty as to which one has caused it, the burden is upon each such actor to prove that he has not caused the harm.”); RESTATEMENT (THIRD) OF TORTS: PHYS. & EMOT. HARM § 28(b) (2010) (“When the plaintiff sues all of multiple actors and proves that each engaged in tortious conduct that exposed the plaintiff to a risk of harm and that the tortious conduct of one or more of them caused the plaintiff’s harm but the plaintiff cannot reasonably be expected to prove which actor or actors caused the harm, the burden of proof, including both production and persuasion, on factual causation is shifted to the defendants.”).

Similar causation principles animate Article III standing. *See, e.g., TransUnion*, 594 U.S. at 424 (“[H]istory and tradition offer a meaningful guide to the types of cases that Article III empowers federal courts to consider.”) (quotations omitted); *All. for Hippocratic Med.*, 602 U.S. at 384 (analogizing “causation in standing law” to “causation in tort law”).

As then-Judge Alito observed, “Article III standing demands ‘a causal relationship,’ but neither the Supreme Court nor our Court has ever held that but-for causation is always needed. . . . A classic example in tort law is the hypothetical case in which a person is simultaneously hit with two lethal gun shots fired at the same time by two hunters. But-for causation leads to the absurd conclusion that neither shot was

the cause of the victim’s demise.” *Khodara Env’t, Inc. v. Blakey*, 376 F.3d 187, 195 (3rd Cir. 2004).

Along similar lines, *Cedar Point* permits plaintiffs to establish a presumption of traceability by showing that (1) the defendant discharged a pollutant in excess of its permit limits; (2) the discharge occurred in the geographic proximity of the plaintiff; and (3) the pollutant causes or contributes to the kinds of injuries alleged by the plaintiffs. 73 F.3d at 557.

That said, it’s *only* a presumption. A defendant is entitled to present any and all evidence rebutting the presumption. *See, e.g., Utah Physicians for a Healthy Env’t v. Diesel Power Gear, LLC*, 21 F.4th 1229, 1249 (10th Cir. 2021) (noting that an inference based on geographic nexus is “subject, of course, to rebuttal by contrary evidence”). Based on my review of this case, I am concerned that Defendants have not been afforded the opportunity here.²

² Judge Jones claims that “[n]o case has ever before flipped the burden of jurisdictional proof onto the defendant.” This hyperbole badly misunderstands how legal presumptions operate. To begin with, it should go without saying that plaintiffs always have the burden to prove why they are entitled to a particular legal presumption—like our court’s *Cedar Point* presumption—in the first instance. Moreover, the Supreme Court has welcomed the use of legal presumptions in determining Article III standing. “[H]istory and tradition offer a meaningful guide to the types of cases that Article III empowers federal courts to consider.” *TransUnion*, 594 U.S. at 424 (quoting *Sprint*, 554 U.S. at 274). That includes, for example, the legal presumptions that establish injury and standing in various tort contexts. *See, e.g., id.* at 437 (for libel and slander *per se*, “publication is generally presumed to cause a harm”). We’ve also applied rebuttable presumptions in civil rights cases. *See, e.g., McDonnell Douglas Corp. v. Green*, 411 U.S. 792, 802 (1973) (“The complainant in a Title VII trial must carry the initial

II.

Accordingly, had I been a member of the three-judge panel in this case, I would have voted to vacate and remand. I recognize, however, that I have been unable to garner an en banc majority for my views. Nor has any other member of the court, as today’s splintered vote amply demonstrates.

Splintered decisions disserve the public, because they offer no guidance as to the law of our circuit. Accordingly, I would dismiss the order granting rehearing en banc as improvidently granted. *See, e.g., Helix Energy Sols. Grp., Inc. v. Hewitt*, 598 U.S. 39, 62 (2023) (Gorsuch, J., dissenting) (dissenting from the judgment of affirmance on the ground that Justice Gorsuch would’ve dismissed the case as improvidently granted instead).

burden under the statute of establishing a prima facie case of racial discrimination. . . . The burden then must shift to the employer to articulate some legitimate, nondiscriminatory reason for the employee’s rejection.”). And in securities fraud cases, too. *See, e.g., Goldman Sachs Grp., Inc. v. Ark. Tchr. Ret. Sys.*, 594 U.S. 113, 118–19 (2021) (discussing the *Basic* presumption, which allows securities fraud plaintiffs to “invoke a rebuttable presumption of reliance based on the fraud-on-the-market theory,” but may be rebutted if defendants can show that their alleged misrepresentations “did not actually affect the market price of the stock”) (quotations omitted). If all of these rebuttable presumptions are valid—and they surely are, under decades of Supreme Court precedent—I don’t see why the *Cedar Point* presumption is somehow invalid.

Tellingly, neither Defendants nor the dissenters call for *Cedar Point* to be overturned. Nor do they engage with Judge Alito’s discussion of standing and the classic two hunters hypothetical in *Khodara*, 376 F.3d at 195, that I discussed above.

I recognize that the result of my position is that the en banc court today will affirm without issuing a precedential ruling on standing.³

My hope is that our inability to issue a precedential decision today will turn out to be a blessing, rather than a curse. The issues presented in—but left unresolved by—this en banc proceeding can be addressed *de novo* in a future proceeding before a three-judge panel. *See, e.g., Hardin v. ATF*, 65 F.4th 895 (6th Cir. 2023) (deciding issue left unresolved in *Gun Owners of Am., Inc. v. P. Garland*, 19 F.4th 890 (6th Cir. 2021) (en banc)).

Alternatively, the Supreme Court can grant certiorari. Indeed, only the Court can definitively resolve these issues by revisiting and reconsidering *Laidlaw* in light of Justice Scalia’s persuasive dissent.

* * *

In response, Judge Oldham’s dissent opens by invoking Roman, ecclesiastical, and other historical practices, in a quixotic effort to prove that dismissal of rehearing en banc as improvidently granted somehow offends “millennia of legal tradition.”

I like history too, but nothing in his historical gesturing remotely demonstrates how justice or

³ Judge Oldham points out that, by dismissing as improvidently granted, I am “reach[ing] a very different judgment” from the per curiam, which affirms. It’s not clear to me why he thinks that helps his cause. When eight judges would affirm, eight judges oppose affirmance, and one would dismiss as improvidently granted, then our court lacks a sufficient majority to do anything other than affirm—as Judge Richman’s dissent appears to acknowledge.

tradition requires appeal before seventeen judges rather than three.

Tellingly, Judge Richman declines to join Judge Oldham, and instead authors her own separate dissent. She also declines to join section I of Judge Jones's dissent. And her dissent makes clear why.

Judge Richman acknowledges that courts of appeals can and do dismiss rehearing en banc as improvidently granted. As she puts it: "Could a majority of the en banc court have decided that we should not have granted en banc review in this case? I think the answer to that question is 'yes.' . . . It must reinstate the opinion and judgment of the panel, which we have done on at least two occasions and which the en banc court has the authority to do under our rules."

I appreciate Judge Richman's candor. But don't miss the irony here: Rather than engage my sincere concern that splintered decisions disserve the public and warrant dismissal as improvidently granted, the dissenters respond by issuing a series of—splintered dissents.

Judge Richman is, of course, correct about dismissal as improvidently granted. To begin with, the Supreme Court regularly dismisses certiorari as improvidently granted, despite the absence of any rule authorizing such practice. And if it's proper to dismiss certiorari as improvidently granted, it should likewise be proper to dismiss rehearing en banc as improvidently granted. No rule of appellate procedure prohibits such dismissals. To the contrary, "a court of appeals may—to expedite its decision or for other good cause—suspend any provision of these rules in a particular case." FED. R. APP. PROC. 2(a).

As then-Judge Scalia and others have observed, rehearing en banc, like certiorari, is an entirely discretionary exercise of “second-level appellate review.” See *Church of Scientology of Cal. v. IRS*, 792 F.2d 153, 155 n.1 (D.C. Cir. 1986) (en banc) (analogizing en banc rehearing to certiorari, noting that both situations constitute a “second-level appellate review,” as the court “has before it the full text of a proposed panel opinion”); see also, e.g., *Irving v. United States*, 162 F.3d 154, 161 n.7 (1st Cir. 1998) (“rehearing en banc is the functional equivalent of . . . certiorari by the Supreme Court”); *Young v. Borders*, 850 F.3d 1274, 1287 (11th Cir. 2017) (Hull, J., concurring in the denial of rehearing en banc) (“en banc rehearing is similar to . . . certiorari”) (quoting *Riley v. Camp*, 130 F.3d 958, 983 n.7 (11th Cir. 1997) (Birch, J., concurring in the denial of rehearing en banc)).

Our sister circuits have thus had no trouble following Supreme Court practice in this regard. See, e.g., *Aposhian v. Wilkinson*, 989 F.3d 890, 891 (10th Cir. 2021) (vacating order granting rehearing en banc as improvidently granted); *Gonzales v. McKune*, 279 F.3d 922, 924 (10th Cir. 2002) (same); *United States v. Collins*, 462 F.2d 792, 802 (2nd Cir. 1972) (same).

Likewise, our court has repeatedly granted rehearing en banc, only to later reinstate portions of the panel opinion. See, e.g., *Jimenez v. Wood County*, 660 F.3d 841, 844 n.1 (5th Cir. 2011) (en banc) (reinstating portions of panel opinion after vacating them on grant of rehearing en banc); *Soffar v. Cockrell*, 300 F.3d 588, 590, 590 n.1 (5th Cir. 2002) (en banc) (same); *Equilease Corp. v. M/V Sampson*,

793 F.2d 598, 600 n.1 (5th Cir. 1986) (en banc) (same).⁴

Judge Oldham is unable to cite any actual case law or authority in response. What he offers instead is an extended discourse on the “ancient writ” of certiorari.

But he ultimately admits that it does “nothing” for his argument: “What does any of this have to do with courts of appeals and en banc rehearing? . . . The answer is: Nothing.”

Readers might be surprised by this admission. But it’s true: All that history does “nothing” to rebut then-Judge Scalia and countless other circuit judges who embrace the common sense notion that rehearing en banc is obviously the “functional equivalent” to the “second-level appellate review” provided by certiorari.

Finally, Judge Oldham accuses me of favoring “different and inconsistent judgments,” complete with chart. But that’s always true whenever a member of this court disagrees with a panel decision, but sees no need to take the case en banc. I’m sure that occurs every day on the courts of appeals. Every member of this court has at one time or another disagreed with a panel in a particular case, but declined to seek rehearing en banc.

So there’s no need for a fainting couch. The dissenters only feign incredulity—they don’t really mean it. Even Judge Jones is only able to say that she is “at best unclear” as to the propriety of dismissing rehearing en banc as improvidently granted.

⁴ So it’s a bit odd when Judge Oldham claims that I “cannot cite a single example of anything other than a writ of *certiorari* being dismissed as improvidently granted.” I cite a number of examples above. So does Judge Richman’s dissent.

III.

This is not the first time that members of the court have disagreed about what issues should or should not be decided by our en banc court. *See, e.g., United States v. Abbott*, 110 F.4th 700 (5th Cir. 2024). It's time for a fulsome response. So I state here some of my governing principles regarding which cases and which issues should be decided en banc, and which should be left to a three-judge panel.

A.

Rehearing en banc is expressly disfavored under our rules. *See* FED. R. APP. PROC. 40(a); 5TH CIR. R. 40.2.1. It's reserved for matters of "exceptional importance," or resolving conflicts in our law. *See* FED. R. APP. PROC. 40(b)(2).

So what's exceptionally important? Different judges will naturally have different views on the importance of different issues. I respect the right of my colleagues to come to different conclusions—as they all most certainly do—as to which issues warrant en banc review.

But as for my own views, I'd focus our limited en banc resources on advancing the rule of law where we need it the most—protecting our national borders and protecting our constitutional rights, to name two premier examples. *But see, e.g., Young Conservatives of Tex. Found. v. Smatresk*, 78 F.4th 159 (5th Cir. 2023) (declining to decide whether federal law permits 90% tuition discounts for illegal aliens); *Abbott*, 110 F.4th 700 (declining to decide whether federal courts have jurisdiction to enjoin states from defending themselves against invasion); *Gonzalez v. Trevino*, 60 F.4th 906 (5th Cir. 2023) (declining to decide whether government officials can weaponize

the criminal justice system against citizens who hold disfavored political views); *Mayfield v. Butler Snow*, 78 F.4th 796 (5th Cir. 2023) (same).⁵

I get that members of this court disagree over which matters warrant en banc attention. What I would have trouble understanding is how a judge could dismiss all of the constitutional cases I identified above as unworthy of en banc—yet treat en banc as indisputably required here. It seems entirely backwards to demand en banc to decide only the amount of one judgment affecting one company—while refusing en banc when the constitutional interests of every citizen in our circuit is at stake. *Cf. MCR Oil Tools, L.L.C. v. U.S. Dep’t of Transp.*, 102 F.4th 326, 326 (5th Cir. 2024) (Ho, J., concurring) (we should not favor cases that only implicate “the commercial interests of a single Texas business” over those affecting “the innocence of every child in Texas”); MATTHEW 23:24. After all, without a majority opinion announcing the law of the circuit, all we’re left with here is a parochial disagreement over how much one company must pay in civil penalties. That’s no doubt important to the parties in the case. But *every*

⁵ See also, e.g., *Zimmerman v. City of Austin*, 888 F.3d 163 (5th Cir. 2018) (declining to decide whether citizens have the right to spend more than \$350 in political advocacy in local elections); *Landor v. La. Dep’t of Corrs. and Pub. Safety*, 93 F.4th 259 (5th Cir. 2024) (declining to decide what remedies courts may issue in religious liberty cases); *McRaney v. N. Am. Mission Bd. of So. Baptist Convention*, 980 F.3d 1066 (5th Cir. 2020) (declining to decide whether courts may interfere with internal disputes about church leadership); *Book People, Inc. v. Wong*, 98 F.4th 657 (5th Cir. 2024) (declining to decide whether states may take certain measures to protect the innocence of children from sexually explicit materials in public school libraries).

case is important to the parties in the case. And the parties here have already received not one but multiple rounds of appeals.

B.

The amount in controversy here is substantial. But that's never been enough by itself to justify en banc. Otherwise, we would've granted en banc in cases like *BMC Software, Inc. P. IBM Corp.*, No. 22-20463 (5th Cir. Sep. 17, 2024) (unanimously denying rehearing en banc in a case involving a judgment of over \$1.6 billion). *See also, e.g., United States ex rel. Harman P. Trinity Industries Inc.*, No. 15-41172 (5th Cir. Nov. 14, 2017) (unanimously denying rehearing en banc in a case involving a judgment of over half a billion dollars).

In the cases identified above (and countless others, no doubt), the corporate defendant prevailed before the three-judge panel, and it was the plaintiff who sought en banc review. Whereas here, by contrast, it's the business defendant who lost and seeks rehearing en banc.

But that shouldn't make any difference to our analysis. The hallmark of our judiciary is that it's supposed to be available to everyone on equal terms. "Nothing is more corrosive to public confidence in our [legal] system than the perception that there are two different legal standards—one for the powerful, the popular, and the well-connected, and another for everyone else." *United States P. Taffaro*, 919 F.3d 947, 949 (5th Cir. 2019) (Ho, J., concurring in the judgment).

We must not treat business interests more favorably than other litigants. There should be no "major corporations" doctrine in our judiciary. *See*,

e.g., ANTONIN SCALIA & BRYAN A. GARNER, *READING LAW: THE INTERPRETATION OF LEGAL TEXTS* 352–53 (2012) (“Is it good for business?” . . . Questions like these are appropriately asked by those who write the laws, but not by those who apply them.”). *But compare Sambrano P. United Airlines, Inc.*, 45 F.4th 877, 882 (5th Cir. 2022) (Ho, J., concurring in denial of rehearing en banc) (“[W]hen corporations violate the law, courts should hold them accountable, no less and no more than individuals.”); *Hewitt v. Helix Energy Sols. Grp.*, 15 F.4th 289, 303–4 (5th Cir. 2021) (Ho, J., concurring); *with id.* at 323 (Wiener, J., dissenting) (expressing concern that “a vital industry in our region and one which provides more than 400,000 direct jobs, will suffer needlessly and excessively” if certain labor regulations are enforced); *Sambrano v. United Airlines, Inc.*, 2022 WL 486610, *10 (5th Cir. Feb. 17, 2022) (Smith, J., dissenting) (criticizing majority’s “alacrity to play CEO of a multinational corporation” by insisting on enforcing its reading of Title VII of the Civil Rights Act).

The dissenters deny that they’re favoring corporate litigants over ordinary citizens. But they find it “strange” that we would not grant en banc review just to protect “one company” from paying civil penalties. What I find “strange” is the notion that our legal system should never penalize a corporation. *See, e.g.*, Press Release, *Attorney General Ken Paxton Secures Over \$100 Million in Environmental Penalties From Company Responsible for 2019 Chemical Manufacturing Plant Explosion*, Nov. 22, 2024 (“In Texas, we believe in ensuring all industries operate safely and being responsible stewards of our environment These penalties send a clear message: operate responsibly to protect the health

and safety of your fellow Texans, or face the consequences.”).

The dissenters also contend that they’re just standing up for “any company beleaguered by over-regulation.” I’ve long voiced my own concerns about over-regulation.⁶

But this en banc proceeding is about Article III standing. And standing is supposed to be “orthogonal to merits”—not wielded in service of anyone’s particular substantive legal agenda. *Jackson Mun. Airport Auth. v. Harkins*, 98 F.4th 144, 148 (5th Cir. 2024) (Ho, J., concurring).

Justice Alito reminds us that “Article III standing is . . . cheapened when the rules are not evenhandedly applied.” *Murthy v. Missouri*, 603 U.S. 43, 98 (2024) (Alito, J., dissenting). And Justice Thomas warns us not to distort standing doctrines to favor certain litigants. *See, e.g., TransUnion*, 594 U.S. at 459 n.9 (Thomas, J., dissenting) (businesses may be worse off if courts construe standing too restrictively); *see also*,

⁶ *See, e.g., Zimmerman*, 888 F.3d at 170 (Ho, J., dissenting from denial of rehearing en banc) (“When government grows larger, when regulators pick more and more economic winners and losers, participation in the political process ceases to be merely a citizen’s prerogative—it becomes a human necessity. This is the inevitable result of a government that would be unrecognizable to our Founders.”); *Consumers’ Research v. Consumer Product Safety Comm’n*, 98 F.4th 646, 650 (5th Cir. 2024) (Ho, J., dissenting from denial of rehearing en banc) (“There is no accountability to the people when so much of our government is so deeply insulated from those we elect. Restoring our democracy requires regaining control of the bureaucracy. The right to vote means nothing if we allow the real work of lawmaking to be exercised by agency bureaucrats.”) (cleaned up).

e.g., Heather Elliott, *Standing Lessons: What We Can Learn When Conservative Plaintiffs Lose Under Article III Standing Doctrine*, 87 IND. L.J. 551, 557 (2012) (“restrictive standing requirements” were historically used to “preserv[e] and enshrin[e] the liberal New Deal administrative state”) (citing scholars). (Recall that *Chevron* was once believed to be a powerful tool against over-regulation, too. See, e.g., Antonin Scalia, *Regulatory Reform: The Game Has Changed*, REGULATION 13, 14 (Jan./Feb. 1981).)

Moreover, even if we were to take the dissenters’ corporate battle cry at face value: Why no such outcry on behalf of ordinary citizens beleaguered by illegal immigration? Or by a weaponized criminal justice system? Or by threats to religious liberty? See *supra* (citing, *inter alia*, *Young Conservatives*, 78 F.4th 159; *Abbott*, 110 F.4th 700; *Gonzalez*, 60 F.4th 906; *Mayfield*, 78 F.4th 796; *Landor*, 93 F.4th 259).

I am unwilling to sacrifice one area of the law in favor of another just to avoid criticism—whether from outside or inside the judiciary. See, e.g., *Moyle*, 603 U.S. at _ (Alito, J., dissenting) (it’s “regrettable” that the Court will not address certain “emotional and highly politicized question[s]”).

C.

Nor should the presence of a jurisdictional issue be enough to compel en banc.

We have repeatedly observed, of course, that “[j]urisdiction is always first.” *Pool v. City of Houston*, 87 F.4th 733, 733 (5th Cir. 2023) (quoting *Carswell v. Camp*, 54 F.4th 307, 310 (5th Cir. 2022)). But surely no one would argue that “jurisdiction is always first” means that we have to go en banc every time a defendant asserts a jurisdictional defect.

Again, consider how our en banc court approached the jurisdictional question in *Abbott*. It's hard to imagine a more compelling issue than the one our en banc court avoided addressing in that case.

The United States sued to stop Texas from taking certain actions to combat illegal immigration. So Texas invoked its constitutional right to self-defense under Article I, section 10. And it argued that its constitutional defense has jurisdictional implications—namely, that it presents a political question that prevents the district court (and thus our court) from exercising jurisdiction over the case. “The district court lacks jurisdiction to second guess Texas’s invocation of the Self-Defense Clause.” Tex. Letter Br. at 1, *United States v. Abbott*, No. 23-50632 (May 22, 2024). These are “political questions implicat[ing] Article III jurisdictional limits that courts may not ignore.” Tex. Letter Br. at 2 n.1 (May 24, 2024). *See also* Oral Argument at 3:30–4:00 (“the district court has no jurisdiction, so this matter would be dismissed,” and because the issue is “jurisdictional,” courts “have to consider it”); *id.* at 5:00–5:15 (jurisdictional defect means “the end of the case”); *id.* at 5:30–5:40 (jurisdictional defect should be “dispositive”); *id.* at 36:59–37:49.

So I urged the court to address the issue. *See Abbott*, 110 F.4th at 725 (Ho, J., concurring in the judgment in part and dissenting in part). After all, that particular jurisdictional issue presented profoundly important questions of national security and federalism of indisputably great interest to the citizens of our circuit and indeed our entire country. *See, e.g.*, Robert G. Natelson & Andrew T. Hyman, *The Constitution, Invasion, Immigration, and the War*

Powers of States, 13 BRIT. J. AM. LEGAL STUD. 1 (2024); *United States v. Abbott*, 92 F.4th 570, 578–81 (5th Cir. 2024) (Ho, J., dissenting).

But rather than immediately end the case as Texas urged (and as I would have, *see Abbott*, 110 F.4th at 725), the en banc court instead remanded the case for trial, without deciding the jurisdictional issue one way or another.

My point is not to relitigate *Abbott*. My point is simply this: If the en banc court found it unnecessary to address jurisdiction in *Abbott*, then it's surely not necessary for the en banc court to address jurisdiction here.

If an appeal before three judges is good enough for citizens concerned about their country and their Constitution, then appeal before three judges ought to be good enough for large companies concerned about their bottom line. Our job is to apply legal principles even-handedly—not to favor cases cheered by corporate interests over cases jeered by cultural elites.

* * *

If I had been a member of the three-judge panel in this case, I would have voted to vacate and remand. But I wasn't. And because no one on the en banc court has been able to garner a majority in support of their views, I would dismiss the order granting rehearing en banc as improvidently granted, and reinstate the prior decisions of the three-judge panel.⁷

⁷ Because I would dismiss as improvidently granted, I see no need to address any remedial issues in this appeal. But there are other reasons we need not address such issues. To begin with, no one can credibly claim that the remedial issues demand en banc, when our court has already denied en banc on that very issue in this very case—unanimously. See *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, No. 15-20030 (5th Cir. Aug. 16, 2016).

What's more, we granted this en banc proceeding based on a petition that declined to identify any remedial issues as justifying en banc review. See, e.g., Petition for Rehearing En Banc at 1, *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, No. 17-20545 (5th Cir. Oct. 13, 2022) (listing only traceability issues as those "warranting en banc reconsideration").

Nor is there any requirement that the en banc court decide every issue presented in an appeal. I've already mentioned the en banc court's decision not to address the compelling jurisdictional issues presented in *Abbott*. If it's okay for the en banc court not to address the jurisdictional issues in *Abbott*, surely it's okay for the en banc court not to address the remedial issues presented here—especially given that jurisdiction is supposed to come first, and given that our en banc court has previously declined to address those very remedial questions in this very case.

EDITH H. JONES, *Circuit Judge*, joined by SMITH, RICHMAN*, WILLETT, DUNCAN, ENGELHARDT, OLDHAM, and WILSON, *Circuit Judges*, dissenting:

We dissent. By a one-vote margin, the en banc court affirms a multimillion-dollar judgment against Exxon in a Clean Air Act citizen suit for civil penalties. So did the panel whose opinion was vacated for en banc rehearing. *Env't Tex. Cit. Lobby, Inc. v. ExxonMobil Corp.*, 47 F.4th 408 (5th Cir. 2022) (*Exxon III*). But only one judge on this 17-member en banc court defends the vacated opinion's reasoning. We are split on different rationales that would have led to dramatically different outcomes on two critical issues. Eight of us dissent and would hold that plaintiffs failed to support Article III standing with proof that their injuries were fairly traceable to Exxon's permit violations; and we would disavow prior circuit precedent that inaccurately interpreted the "economic benefit" component of the penalty statute. 42 U.S.C. 7413(e)(1). Seven judges would have approved a much higher judgment but "compromised" on what the district court decided. Two judges chart independent paths to affirm the district court.

This is no way for an en banc court to function. This dissent explains why the "majority" result is procedurally wrong and substantively disastrous for future litigants. And, as shown by what the competing merits opinions might have been, the issues before us epitomized the kinds of disputes that en banc courts ought to resolve with reasoned decisions.

* Judge Richman concurs in all but Part I and fn. 23 of Part II of this opinion.

I. THE EN BANC PROCEDURE

First, the “majority” judgment does not square with our en banc practice. This court’s Local Rule 41.3 states plainly that, “[u]nless otherwise expressly provided, the granting of a rehearing en banc vacates the panel opinion and judgment of the court and stays the mandate.” Fifth Cir. Local R. 41.3. (The Rule’s single exception comes into play where the court lacks a quorum after voting to rehear a case en banc. *Id.*) When en banc rehearing is granted, the panel opinion “is of no precedential value.” *United States v. Pineda-Ortuno*, 952 F.2d 98, 102 (5th Cir. 1992)(citing Rule 41.3). *See also Thompson v. Connick*, 578 F.3d 293 (5th Cir. 2009), *rev’d*, *Connick v. Thompson*, 563 U.S. 51, 131 S. Ct. 1350 (2011). Moreover, “[b]ecause the panel’s decision has been vacated, the court is now back in the position it was in before the panel rendered its decision: it has an absolute duty to hear and decide the appeal.” *Comer v. Murphy Oil USA*, 607 F.3d 1049, 1061 (5th Cir. 2010) (Dennis, J., dissenting). And that means we are *not* constrained by the issues raised in a petition for rehearing. *United States v. Pineda*, 415 F.3d 211, 217 (1st Cir. 2005)(“To be sure, the en banc court has discretion to review all the issues presented by an appeal, even though the order convening the en banc court indicates a more isthmian focus.”); *Brown v. Stites Concrete, Inc.*, 994 F.2d 553, 557 (8th Cir. 1993)(same).

But here, nine judges perfunctorily reinstate the district court judgment with no opinion to justify it. In so doing, they rely on a Tenth Circuit case that “vacate[d]” an en banc rehearing decision “as improvidently granted.” *Aposhian v. Wilkinson*, 989 F.3d 890, 891 (10th Cir. 2021). Even if we can “vacate

[a panel opinion for rehearing] as improvidently granted,” which is at best unclear, it follows that because the original panel opinion and judgment were *vacated* under Rule 41.3, the logical consequence of a “VIG” would *reinstate both* the panel opinion and the judgment.¹ In fact, that is exactly what the *Aposhian* court did. *Id.* Here, the “majority” (except for Chief Judge Elrod) maintains the judgment while declining to reinstate the panel opinion. The judgment stands as a naked diktat. Applying our en banc rule in this way is a dereliction of our Article III duty to decide cases according to the law.

Second, there should be no mistake: the majority’s decision necessarily renders nugatory the earlier Fifth Circuit decisions in this case, because “[a] ruling by a panel . . . does not in most courts establish the law of the case if a later appeal is heard by the court en banc.” 18B CHARLES ALAN WRIGHT, ARTHUR R. MILLER & EDWARD H. COOPER, FEDERAL PRACTICE AND PROCEDURE 4478.2 (2d ed, 2002). *See also Cottier v. City of Martin*, 604 F.3d 553, 556-57 (8th Cir. 2010) (en banc) (collecting cases) (“[A]n en banc court may overrule an erroneous panel opinion filed at an earlier stage of the same case”); *Irving v. United States*, 162 F.3d 154, 161 (1st Cir. 1998) (en banc) (“The authority to overrule the decision of a prior panel in the same case flows logically from the error-correcting function of the full court”). To the extent that the vacated panel

¹ What the “majority” has done is emphatically not the same as our en banc cases that, in some instances, either reinstated portions of a vacated panel opinion or may even have reinstated the entire opinion and judgment. Those decisions patently decided and transparently adopted the prior panel’s reasoning. Eight members of the “majority” disavow the panel reasoning here.

decision, *Exxon III*, followed the law articulated in *Env't Tex. Cit. Lobby, Inc. v. ExxonMobil Corp.*, 824 F.3d 507 (5th Cir. 2016) (*Exxon I*) and *Env't Tex. Cit. Lobby, Inc. v. ExxonMobil Corp.*, 968 F.3d 357 (5th Cir. 2016) (*Exxon II*), with remands and new judgments issued on both occasions, all three decisions are equally undermined. Parties may not rely on the three previous appellate opinions in this case. This outcome leaves future litigants in the Fifth Circuit without circuit court guidance on the important issues before us.

Third, because seven members of this court subscribe to reasoning that would have led to the reinstatement of a nearly \$20 million civil penalty against Exxon, the “compromise” with two judges to affirm a smaller penalty certainly warrants an explanation to the parties and the public. This substantive result is essentially “give the plaintiffs some money, plus attorney’s fees.” Judicial compromises should have to reach reasoned results, yet this one doesn’t even try.

Finally, to the extent the majority complain about the length of time this case has been pending, their protest is hollow—and bordering on disingenuous. Hard cases often take years to reach final judgment. By the plaintiffs’ choice, this case was novel from the start. “Justice delayed is justice denied” is meaningless here, where the U.S. Treasury will receive the penalties and Sierra Club a windfall in attorneys’ fees. In fact, to eight of us, justice is denied to Exxon by holding it liable where plaintiffs mostly lacked Article III standing to sue.² We should have

² Judge Ho has described this case as a disagreement about how much one company must pay in civil penalties. To any

reached a majority ruling on the standard for Article III traceability in a promiscuously broad claim about Clean Air Act (CAA) permit violations,³ and we should have expounded the plain meaning of the economic benefits test for penalties.⁴ Both of these issues will remain “up in the air” until the next promiscuously broad CAA claim appears in this court.

company beleaguered by over-regulation, this is strange language. But we note that other courts have considered questions of Article III standing to seek civil penalties worthy of en banc review. See, e.g., *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149 (4th Cir. 2000)(en banc).

³ Judge Ho’s concurrence explains briefly a novel theory of Article III standing, and he states he would have remanded to allow Exxon to *disprove* traceability. No case has ever before flipped the burden of jurisdictional proof onto the defendant. But even more oddly, rather than adhere to his principle that “jurisdiction is always first,” quoting *Carswell v. Camp*, 54 F.4th 307, 310 (5th Cir. 2022), Judge Ho agrees to affirm a large money judgment where we will never know how much of plaintiffs’ injuries were actually traceable under Article III to Exxon’s CAA violations.

⁴ As discussed in more detail *infra*, this court’s interpretation of the economic benefits component of civil penalties (in *Exxon I*) is the engine that drove Exxon’s liability into the millions. The court’s vote split 8-8 with one judge declining to vote. But the issue was briefed, preserved and argued before this court in this and prior appeals. Sixteen judges have taken a position. And judges must fulfill “[our] absolute duty...to hear and decide cases within [our] jurisdiction.” *United States v. Will*, 449 U.S. 200, 215, 101 S.Ct. 471, 480 (1980).

II. THE MERITS

Judge Davis’s opinion (for seven judges) effectively condones “standing in gross” in environmental cases.⁵ Further, under that opinion (for seven judges plus Chief Judge Elrod), penalties will be imposed on companies *because* they have undertaken emissions control upgrades. The first holding is unconstitutional; the second is contrary to the statute and common sense.

The plaintiffs pressed a uniquely broad Clean Air Act citizen suit against ExxonMobil for every single CAA emission violation that occurred at Exxon’s Baytown industrial complex from October 2005 to September 2013. *See* 42 U.S.C. § 7604(a)(1). After a 13-day trial, two appeals, and two remand proceedings, the judgments varied from no penalty assessment to over \$19 million and finally to \$14.25 million. Following this en banc rehearing, the \$14.25 million judgment is “affirmed” without a majority ruling. The procedural quagmire alone dispels any attempt to show that this case is just a business-as-usual citizen suit.

The first decisive question before us is how the traceability criterion for Article III standing is worked out in Clean Air Act citizen suits. More precisely, the question is whether Plaintiffs bore their burden at trial to prove Article III standing to sue for civil penalties. Plaintiffs staked their trial strategy on the contention that they need not trace any violations at

⁵ Chief Judge Elrod’s footnoted view purports to adopt the vacated panel opinion’s complex formula for ascertaining Article III standing. Because this is now the opinion of a single judge, we critique the panel opinion only insofar as it hinged on the *Cedar Point* decision, *infra*.

issue to their members' distinct injuries. This is wrong. The constitutional minima of Article III standing are not reduced in Clean Air Act suits, and Clean Air Act suits do not map simplistically onto case law concerning the Clean Water Act. Plaintiffs were required to demonstrate by a preponderance of the evidence that each violation for which they seek a civil penalty was a cause-in-fact of their injuries. The evidence offered at trial, however, supports standing for only a handful of violations.

Judge Davis's (non-majority) truncated view of standing is dangerous because it authorized Plaintiffs to seek civil penalties for every single emission exceedance reported by ExxonMobil, no matter how small, no matter whether it could have or did affect a plaintiff, and no matter how inconsequential in proportion to the complex's legally permitted emissions. This position effectively usurps federal, state, and local environmental enforcement decisions. Citizen suits were intended by Congress to be an adjunct to governmental enforcement priorities, not to supplant them. *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found. Inc.*, 484 U.S. 49, 60, 108 S. Ct. 376, 383 (1987). Authorizing standing on the meager facts shown at trial exceeds the proper limits of federal courts' jurisdiction.

The second decisive question is how to interpret one of the factors Congress identified as relevant to calculating penalties in citizen suits. The CAA directs courts to take into account, *inter alia*, "the economic benefit of noncompliance" when calculating penalties. 42 U.S.C. § 7413(e)(1). In applying this factor, courts generally "consider the financial benefit to the offender of delaying capital expenditures and

maintenance costs on pollution-control equipment,” particularly equipment “necessary to correct” the violations at issue. *United States v. CITGO Petroleum Corp.*, 723 F.3d 547, 552 (5th Cir. 2013) (citation omitted). Judge Davis’s opinion (for seven judges plus Chief Judge Elrod) adopts dicta from the first appeal in this case, which stated that

compliance expenditures or projects need not be tied specifically to prevention of each violation in order to establish that they are “necessary to correct” the violations overall Rather, we believe the inquiry should center on whether the projects will ameliorate the kinds of general problems that have resulted in at least some of the permit violations

Exxon I, 824 F.3d at 531 n.19. The incompatibility of the footnote with the text of the statute speaks for itself. The footnote contradicts previous authorities and simply makes no sense. Congress was not so short-sighted as to authorize a company to be penalized for making improvements to its pollution control equipment that have little or nothing to do with the violations claimed in a citizen suit. The contrary view disincentivizes such investments.

Because this case is far more complex than any that has been decided in the Supreme Court or this court, we must explain in some detail the facts shown at trial.

A. BACKGROUND

We are unaware of any other case in which plaintiffs have attempted to sue a major refining or manufacturing facility for thousands of undifferentiated Clean Air Act violations, many of

which were as small as a cigarette burning in a trash can. Further complicating the assessment of standing, the Baytown complex operated under CAA permits that allowed it to emit thousands of pounds of pollutants each day. It is important to describe the facility and its environmental permits in light of Plaintiffs' evidence. This description demonstrates that Judge Davis's mantra reciting "ten million pounds of pollutants" unlawfully emitted over eight years is a shibboleth that obscures Article III analysis.

1. The Exxon Complex & Title V of the CAA

The Exxon facility in Baytown, Texas, is one of the largest and most elaborate industrial complexes in the United States. Its refinery, olefins plant, and chemical plant occupy approximately 3,400 acres of land with roughly a 13.6-mile circumference and 4.3-mile diameter. *Env't Tex. Cit. Lobby, Inc. v. ExxonMobil Corp.*, 2017 WL 2331679, *2 (S.D. Tex. Apr. 26, 2017) (*District Opinion II*), *rev'd and remanded by Exxon II*, *vacated by* 61 F.4th 1012 (5th Cir. 2023) (granting rehearing en banc). In this complex that can refine over 550,000 barrels of crude oil per day and produce 13 billion pounds of petrochemical products per year, there are roughly 10,000 miles of pipe, 1 million valves, 2,500 pumps, 146 compressors, and 26 flare stacks. *Id.*

The complex is governed by multiple federal operating permits issued by the Texas Commission on Environmental Quality (TCEQ) pursuant to Title V of the CAA. *Exxon I*, 824 F.3d at 512. These permits incorporate numerous federal and state regulations, which set hourly and yearly emissions limits (expressed, respectively, in pounds and tons) on

particular pollutants from specific sources and control operations like flaring smokestacks. *Exxon I*, 824 F.3d at 512. “Taking all permit conditions together, the Complex is regulated by over 120,000 permit conditions related to air quality.” *District Opinion II*, 2017 WL 2331679 at *2.

This case involves the emission of 24 different pollutants.⁶ But it is important to understand that the case involves more than 24 different standards. That is because different permits, and thus different standards, regulate separate portions of the complex. The emission of ammonia at the refinery, for example, is governed by a different standard from the emission of ammonia at the olefins plant. The permits governing each plant also vary by type. The refinery and olefins plants are governed by “flexible” permits, which set plant-wide limits on the aggregate emissions from all sources of a specific pollutant. *See* 30 Tex. Admin. Code § 116.716; *District Order II*, 2017 WL 2331679 at *18–19. Permit 18287, for instance, allowed the refinery to emit 91.88 pounds of benzene per hour. Whether Exxon violated that standard thus required it to track its total benzene emissions from all points within the refinery on an hourly basis. The chemical plant, in contrast, operates under multiple permits respecting emissions from specific sources or groups of sources. *District Order II*, 2017 WL 2331679 at *19. For example, Furnace F9A was permitted to release a

⁶ Ammonia, benzene, carbon disulfide, carbon monoxide, carbonyl sulfide, chlorine, crude oil, dimethylformamide, hydrogen chloride, hydrogen cyanide, hydrogen sulfide, nitrous oxides, n-methyl-2pyrrolidone, opacity, particulate matter, sulfur compounds, sulfur dioxide, and volatile organic compounds (toluene, 1,3-butadiene, xylene, naphthalene, isoprene, methylbenzene, and ethylene).

different amount of nitric oxide than flare stacks 9, 23, and 24.

Each permit's maximum allowable emission rate table (MAERT) set forth the permissible emission rate of particular pollutants from particular sources. The flexible refinery permit allowed Exxon to emit 3,736.48 pounds of carbon monoxide per hour and 10,219.7 tons per year. In contrast, the olefins plant's flexible permit allowed the emission of 6,627.58 pounds of carbon monoxide per hour, but only 2,381.15 tons per year. And the various permits regulating the chemical plant set smaller emissions limits for particular facilities: Flare 28 was permitted to emit 16.30 pounds of carbon monoxide per hour and 17.03 tons per year; flare stacks 9, 23, and 24 were regulated together and permitted to emit a total of 840.59 pounds of carbon monoxide per hour and 167.49 tons per year; and furnace F9A was permitted to emit 4.36 pounds of carbon monoxide per hour and 1.31 tons per year.

"Special conditions" in the permits limited each permit's coverage to the pollutants and sources listed therein; unlisted pollutants and emissions from unlisted sources were forbidden. *See District Order II*, 2017 WL 2331679 at *18–19. And special conditions 38 and 39 in the refinery permit forbade "upset emissions," defined as an "unplanned and unavoidable breakdown or excursion of a process or operation that results in unauthorized emissions." 30 Tex. Admin. Code § 101.1(110); *Exxon I*, 824 F.3d at 512. Thus, even where an emission of, for example, hydrogen chloride fell "within the flexible permit emission cap or an individual emission limit," it still

violated the permit if it constituted an upset emission. *See Exxon I*, 824 F.3d at 512.

The TCEQ enforces these permit standards in conjunction with the United States Environmental Protection Agency and Harris County, Texas. *Id.* at 512; *District Opinion II*, 2017 WL 2331679 at *3. To facilitate this oversight, permit-holders such as Exxon must document noncompliance and indications of noncompliance. *District Opinion II*, 2017 WL 2331679 at *3. Such documentation varies depending on the type of the noncompliance. Relevant here, Exxon must directly report to the TCEQ via the State of Texas Environmental Electronic Reporting System (STEERS) emissions events that release certain threshold quantities of pollutants (hereinafter “reportable events”). 30 Tex. Admin. Code § 101.201(a). But where emissions events release less than those threshold quantities, Exxon must only maintain on-site records (hereinafter “recordable events”). *Id.* § 101.201(b).

“The distinction the TCEQ makes between reportable emissions events and recordable emissions events demonstrates the agency’s belief that emissions from recordable emissions events are less serious and less potentially harmful to human health than emissions from reportable emissions events.” *District Opinion II*, 2017 WL 2331679 at *4. Indeed, recordable events include nominal emissions such as a “fire” in a cigarette-butt can that lasted less than one minute as well as smoke from a power receptacle that lasted less than six minutes. *Id.* Each event emitted a total of 0.02 pounds of emissions. *Id.* Yet the TCEQ reviews Exxon’s recordable events to determine whether they “reflect an inappropriate

trend” that necessitates an enforcement action. *Id.* at *3. The TCEQ also investigates each reportable event to ascertain whether the event was “excessive” or whether it satisfied a statutory affirmative defense. *Id.*; see also 30 Tex. Admin. Code § 101.222 (listing criteria by which the TCEQ determines whether an emission event is “excessive” and setting out affirmative defenses).

Exxon ultimately paid over \$1.4 million in penalties assessed by the TCEQ and Harris County during the period covered by this suit. *District Opinion II*, 2017 WL 2331679 at *3. It also entered into an agreed enforcement order with the TCEQ in February 2012. *Id.* at *5. That order “(1) resolved enforcement for certain past reportable emissions events; (2) established stipulated penalties for future reportable emissions events, while precluding Exxon from asserting the applicable affirmative defense; (3) required specified emissions reductions; and (4) mandated implementation of 4 environmental improvement projects.” *Id.*

Throughout the eight-year period covered by this lawsuit, Exxon conscientiously implemented CAA-compliance measures. It conducted an internal investigation of every emissions event in an effort to identify and fix root causes. *Id.* at *3. It spent over \$5.2 billion in maintenance and maintenance-related capital projects. *Id.* at *5. And it invested over \$1 billion on regulatory compliance and environmental improvement projects. *Id.* As the district court found, Exxon’s “maintenance policies and procedures conform[ed to] or exceed[ed] industry standards and codes.” *Id.* at *6.

Those efforts paid dividends. The complex's total emissions generally declined year-to-year. *Id.* “[T]he amount of unauthorized emissions of criteria pollutants at the Complex decreased by 95% from 2006 to 2013.”⁷ *Id.* The number of reportable events fell by 81% from 2005 to 2013. *Id.* Flaring was reduced by 73% since 2000. *Id.* Moreover, Exxon's total yearly emissions were well below its authorized amounts: The complex emitted an average of 13,303.8 tons of criteria pollutants per year, which represents less than 40% of the average 33,988 tons of criteria pollutants it was authorized to emit annually. Of those emissions, an average of 673.7 tons were unauthorized—merely 5% of Exxon's *actual* annual emissions and less than 2% of its *authorized* annual emissions limit. In fact, these emissions represented less than 1% of its authorized annual emissions limit each year from 2010 through 2012.

2. The Claims and Evidence

According to the plaintiffs, at issue are 241 reportable events and 3,735 recordable events that occurred between October 14, 2005, and September 3, 2013.⁸ Plaintiffs categorized these different violations in five “counts.” In toto, Plaintiffs sought the maximum civil penalty for each “day” of violation, and their claims span every single “upset” and reportable

⁷ “Criteria pollutants” include sulfur dioxide, particulate matter, carbon monoxide, ozone, oxides of nitrogen/nitrogen dioxide, and lead. 40 C.F.R. §§ 50.4–17.

⁸ Plaintiffs alleged other claims, including for an injunction, which the district court rejected, and which Plaintiffs have not pursued on appeal. District Opinion II, 2017 WL 2331679 at *4, *21.

and recordable violation in Exxon's records during the period at issue.

Count I alleged 10,583 "violation days"⁹ of "upset emissions" prohibited by special conditions 38 and 39 in the refinery's flexible permit number 18287. *District Opinion II*, 2017 WL 2331679 at *15–16, *29 n.257. This count involved the emission of twenty-four different pollutants. *Id.* at *16. "[T]o the extent multiple violations by the same pollutant occur[red] on the same calendar day," each separate emission constituted a separate violation.¹⁰ *Id.*

Count II involved various exceedances of MAERT limits and other unauthorized emissions totaling 5,709 violation days. *Id.* at *29 n.257. As to the refinery, Plaintiffs alleged violations of permit 18287's conditions 8 and 15, which require compliance with the permit's MAERT limits, as well as that permit's special condition 1, which precludes emissions from unlisted sources. *Id.* at *18. These violations involved 24 different pollutants. *Id.* As to the olefins plant, Plaintiffs alleged violations of permit 3452's condition 8, which requires compliance with the permit's MAERT limits, as well as special

⁹ The district court defined a *violation day* "as a twenty-four-hour period." *District Opinion II*, 2017 WL 2331679 at *16. "If an emissions event released multiple pollutants, each with its own emissions standard, Plaintiffs counted each standard violated as a separate day of violation. A violation lasting less than a day could thus count as multiple days of violations. The district court adopted this calculation method, and Exxon does not dispute it." *Exxon II*, 968 F.3d at 363 n.1.

¹⁰ For example, if two upset events that leaked hydrogen chloride began on Tuesday, the first lasting 23 hours and the second lasting 25 hours, the first would count as one violation day and the second would count as two violation days.

condition 1, which precludes emissions from unlisted sources. *Id.* at *19. These violations involved fourteen different pollutants. *Id.* As to the chemical plant, Plaintiffs alleged violations of condition 8 of permits 4600, 5259, 36476, and 20211, which require compliance with the permits' MAERT limits, as well as a violation of the special condition in each permit that precludes emissions from unlisted sources. *Id.* at *19–20.

Count III alleged that the complex's three plants violated the Highly Reactive Volatile Organic Chemical (HRVOC) Rule¹¹ 13 times, totaling 18 violation days. *Id.* at *20, *29 n.257; *see also* 30 Tex. Admin. Code § 115.722(c)(1). Count IV alleged violations of the Smoking Flares Rule¹² throughout the complex 42 times, totaling 44 violation days. *District Opinion II*, 2017 WL 2331679 at *20, *29 n.257. And Count V alleged violations of the Pilot Flame Rule¹³, totaling 32 violation days among the three plants. *Id.*

The district court conducted a thirteen-day bench trial in February 2014. Plaintiffs called Sierra Club members to testify. Diane Aguirre Dominguez, also a member of Environment Texas, grew up in Baytown but lived in Houston from 2006 until 2013. *Id.* at *7.

¹¹ The "HRVOC Rule" limits facility-wide emissions of HRVOCs to 1,200 pounds per hour. *Exxon I*, 824 F.3d at 512. HRVOCs include 1,3-butadiene, all isomers of butene, ethylene, and propylene. 30 Tex. Admin Code § 115.10(21)(A).

¹² The "Smoking Flares Rule" "prohibits visible emission from flares except for periods not to exceed five minutes in two consecutive hours." *District Opinion II*, 2017 WL 2331679 at *20.

¹³ The "Pilot Flame Rule" requires "flares to operate with a pilot flame present at all times." *Id.* at *21.

She regularly visited her parents' home located approximately 1.5 miles from the Baytown complex. *Id.* When in Baytown, she often smelled odors and suffered allergy-like symptoms. *Id.* Her allergy-like symptoms improved when she moved away from Baytown. *Id.* Dominguez also testified to seeing flares, smoke, and haze over the complex; she believed they indicated the release of chemicals or signaled an impending explosion. *Id.* Dominguez testified that she enjoys running but forgoes the activity when visiting Baytown because she experiences labored breathing and an abrasive feeling in her throat. *Id.* Dominguez could not "correlate any of these symptoms to specific Events or Deviations at issue in this case." *Id.*

Marilyn Kingman lives in Mont Belvieu but visits nearby Baytown several times a week. *Id.* While in Baytown, she sometimes smelled a chemical odor, saw flares, and observed a haze over the complex. *Id.* The odors and haze caused her to be concerned for her health, and she forgoes taking her grandchildren to an unspecified bayou if she sees emissions or smells odors. *See id.* The flares also cause her concern for her safety. *Id.* Kingman "was not able to correlate any of her experiences or concerns to specific Events or Deviations at issue in this case." *Id.*

Richard Shae Cottar lived a quarter mile from the Baytown complex from April 2010 through August 2012, but then moved about two miles away due to concerns for his health and safety. *Id.* at *8. He generally testified to having seen or heard flaring and smelling strong odors. *Id.* He did not smell the odors when the wind was blowing away from his house toward the complex, but he smelled them when the wind was reversed. *Id.* He saw three or four flaring

“events” per month, which he defined as flares that were “audibly disruptive” or involved “black” smoke that continued for “an hour or more.” He also testified to seeing smoke every two or three months. Additionally, Cottar testified that his asthma worsened when he lived near the complex, in particular when he smelled pungent odors. *Id.* And he testified that he will leave the nature preserve located next to the complex if he observes emissions. *Id.*

Cottar testified in more detail as to seven specific instances in which he observed odors, flaring, or both. After such events, he filed complaints with the TCEQ and looked at STEERS reports. He claimed to have matched his experience to STEERS reports about a half dozen times. But at trial, he credibly correlated only three flaring events to STEERS report numbers 157283, 159900, and 168810. *Id.*

Sharon Sprayberry lived about a mile from the complex from 2004 until June 2012. *Id.* She generally testified to seeing flares, smoke, and haze from the complex. *Id.* She also smelled a chemical odor when the wind was blowing from the complex toward her or when she saw flares, both of which caused her concern for her health. *Id.* Additionally, she testified to experiencing asthmatic symptoms when living in Baytown, as she had when

living in Corpus Christi, Texas (near another industrial center). These symptoms have subsided since she moved to McGregor, Texas, in June 2012. *Id.* She would like to return to Baytown, but she experienced respiratory problems when she last visited in March 2013. *Id.*

Sprayberry testified in detail about two instances in which she observed unlawful emissions. On April

19, 2009, she observed a flaring event during which she feared the complex would explode. She filed a complaint with Exxon and was ultimately able to correlate the event with STEERS report 122984. She observed another flaring event on February 2, 2011. She contacted the EPA via email, and the EPA correlated her experience to STEERS report number 150177.¹⁴ Sprayberry called Exxon several other times about flaring incidents, but she could not correlate her experiences to any of those events or to any other events.

Plaintiffs also presented testimony from several experts concerning flaring, pollutant health effects, engineering issues, and the economic benefit Exxon received from its alleged violations of the CAA. Plaintiffs rested exclusively on Exxon's documentation of recordable and reportable violations. *Exxon I*, 824 F.3d at 514. They presented no air dispersion models of their own and instead relied on Exxon's air dispersion modeling of 144 selected events. *Env't Tex. Cit. Lobby v. ExxonMobil Corp.*, 524 F. Supp. 3d 547, 561, 564 (S.D. Tex. 2021) (*District Opinion III*).

For its part, Exxon presented three Baytown residents who lived very close to the complex and attested that they did not experience problems or concerns about the complex. *District Opinion II*, 2017 WL 2331679 at *8–9.

¹⁴ The EPA also included STEERS event number 150173, which occurred simultaneously with number 150177. The district court, however, only credited event number 150177. *District Opinion II*, 2017 WL 2331679 at *8. Plaintiffs do not challenge this finding.

It also presented a number of experts, including David Cabe, who conducted Exxon's air dispersion modeling analyses, and Dr. Lucy Fraiser, a toxicologist who testified regarding the health effects of Exxon's emissions. *District Opinion III*, 524 F. Supp. 3d at 561, 564.

3. Trial and Post-Trial Decisions

The district court entered its findings of fact and conclusions of law in December 2014. *Env't Tex. Cit. Lobby v. ExxonMobil Corp.*, 66 F. Supp. 3d 875 (S.D. Tex. 2014) (*District Opinion I*). In this first go-round, the court found 94 "actionable" violations, *id.* at 893–903, a fraction of the 16,386 violation days reflected on Exxon's stipulated reports. The court declined to issue a declaratory judgment, penalty, or injunctive relief. Plaintiffs appealed. This court vacated and remanded. *See Exxon I*, 824 F.3d 507.

On remand, attempting to comply with this court's directives, the district court found 16,386 actionable violation days. *District Opinion II*, 2017 WL 2331679 at *29. It again rejected Plaintiffs' requests for a declaratory judgment and injunction, *id.* at *24, *32, but it assessed \$19.95 million in civil penalties. *Id.* at *31. In calculating this penalty, the district court determined it was bound by a footnote in the *Exxon I* opinion. *Id.* at *27. The panel there stated, without legal support, that the four projects from the 2012 agreed enforcement order (the "TCEQ projects") could serve as the basis for estimating the "economic benefit" Exxon received from its violations if those projects would "ameliorate the kinds of general problems that have resulted in at least some of the permit violations upon which Plaintiffs have sued." *Exxon I*, 824 F.3d at 530; 42 U.S.C. § 7413(e)(1). The

district court held that, at this “high level of generality,” each of the four projects was “necessary to correct” the types of violations at issue. *District Opinion II*, 2017 WL 2331679 at *28. It thus concluded that Exxon received more than \$14 million in economic benefit from the actionable violations. *Id.* at *29.

Exxon appealed, contending in relevant part that plaintiffs lacked standing to sue and that the district court incorrectly applied the “economic benefit” factor in its civil penalty analysis. Based on Supreme Court precedent, this court held that “Clean Air Act plaintiffs must prove standing for *each violation* in support of their claims.” *Exxon II*, 968 F.3d at 367 (emphasis added). The court then determined that Plaintiffs “easily demonstrated that their members were injured,” *id.* at 367, and their injuries were redressable because “Exxon’s violations are susceptible to a reduction in frequency or magnitude,” *id.* at 372. However, it issued a limited remand so that the district court could “assess traceability as to each violation” and reassess the civil penalty, if necessary. *Id.* at 369, 374.

In doing so, this court acknowledged the difficulty of the traceability analysis in such an expansive lawsuit. *Id.* at 368. To circumscribe the plaintiffs’ all-inclusive claims for 16,386 days of violations, the majority purported to adapt to the CAA context the test articulated in the Clean Water Act (CWA) case, *Sierra Club, Lone Star Chapter v. Cedar Point Oil Co.*, 73 F.3d 546 (5th Cir. 1996).¹⁵ *Exxon II*, 968 F.3d at

¹⁵ In *Cedar Point*, this court permitted a plaintiff to establish traceability by showing “that a defendant has (1) discharged some pollutant in concentrations greater than

369–71. Because Judge Davis’s opinion does not accept the *Exxon II* tests, we need not recite them. But it is important to note that Judge Oldham concurred and dissented, expressing grave doubt that the *Cedar Point* line of decisions, even if applicable to CAA cases, could be squared with Article III standing principles. *Id.* at 377–78.

On the second remand, the district court dutifully applied the panel’s test. It now held that Plaintiffs proved traceability for only 3,651 violation days, and it reduced the total civil penalty from \$19.95 million to \$14.25 million. The findings favoring traceability were made irrespective of whether any plaintiff had (or even *could have*) witnessed, or smelled, or breathed the actual emissions resulting from any particular violation. However, the quantity of traceability findings was reduced in two ways. The court determined that plaintiffs failed to prove that certain violations could result in the types of harm alleged. The court also found that many other violations involving odoriferous, respiratory, and HRVOC pollutants could not satisfy the “geographic nexus” test because those emissions did not go “over the fence” of the Baytown complex and into the surrounding environment. Finally, traceability was established for every “violation [that] could cause or contribute to flaring [or] smoke,” but the court found

allowed by its permit (2) into a waterway in which the plaintiffs have an interest that is or may be adversely affected by the pollutant and that (3) the pollutant causes or contributes to the kinds of injuries alleged by the plaintiffs.” 73 F.3d at 557 (quoting *Pub. Int. Rsch. Grp. of N.J. v. Powell Duffryn Terminals, Inc.*, 913 F.2d 64, 71–72 (3d Cir. 1990)).

no basis for haze-based injuries. *District Opinion III*, 524 F. Supp. 3d at 556, 559.

Ultimately, of the 3,651 violation days that the district court held were traceable to Plaintiffs' injuries, well over 2,000 violation days stemmed from flaring or smoke. *See id.* at 558. The remaining 1,262 violation days comprised odoriferous or "respiratory" emissions.¹⁶

Exxon again appealed. *Env't Tex. Cit. Lobby, Inc. v. ExxonMobil Corp.*, 47 F.4th 408 (5th Cir. 2022) (same panel as *Exxon II*). It argued that the Supreme Court's intervening decision in *TransUnion LLC v. Ramirez*, 594 U.S. 413, 141 S. Ct. 2190 (2021), undermined the panel's traceability analysis. Affirming the judgment, the majority took a narrow view of *TransUnion*. *Exxon III*, 47 F.4th at 415–16. The majority dismissed Judge Oldham's critique that its decision dispensed "standing in gross" and created "*per se* rules for when the district court must irrebuttably presume that the generic injury is traceable to a specific violation." *Id.* at 427 (Oldham, J., dissenting).¹⁷

Further, the majority rejected Exxon's assertion that the district court's penalty analysis erred in

¹⁶ Broken down by count, the court ascribed 2,120 violation days to refinery "upsets," Count I; 1,462 violation days to permit exceedances, Count II; 18 violation days to HRVOC Rule infractions, Count III; 44 violation days to Smoking Flares Rule infractions, Count IV; and 7 violation days to Pilot Flame Rule infractions, Count V. *District Opinion III*, 524 F. Supp. 3d at 565.

¹⁷ Judge Oldham would have limited damages to the approximately forty days of violations that resulted from the five emissions events to which Plaintiffs' members correlated their injuries. 47 F.4th at 427.

premising the “economic benefit” of Exxon’s violations on the cost of the four improvement projects in the TCEQ agreed enforcement order. Instead, the majority opined that had Exxon’s expenditures on environmental remediation not been delayed, they would have “ameliorate[d] *the kinds of general problems* that have resulted in at least some of the permit violations upon which Plaintiffs have sued.” *Id.* at 420 (quoting *Exxon I*, 824 F.3d at 530 n.19) (emphasis added).

B. DISCUSSION

We address not only Plaintiffs’ standing to sue but also the critical error in our prior opinions and Judge Davis’s opinion concerning the assessment of “economic benefit” as a gauge for civil penalties.

1. Standing

Standing has been defined three different ways in this appeal. First, Exxon contends that Plaintiffs did not succeed in establishing standing to pursue civil penalties for any of the violations that occurred during the period of the lawsuit. Second, Plaintiffs defend their standing to sue for every single violation recorded by Exxon during the period, including those excised by the district court’s factfinding. Third, Judge Davis’s opinion adopts a novel theory espoused by the United States as amicus, which advocates a dichotomy between “retrospective standing” and “prospective standing,” the latter type supposedly based on the “purpose” served by civil penalties payable to the U.S. Treasury. As far as we can figure, the real justification of the dichotomy is to ignore traceability in Article III standing analysis.

We return to first principles of constitutional standing, place them in the context of citizen suit

claims under the Clean Air Act, explain why the arguments for unlimited standing are erroneous, and identify violations for which standing was proven in light of the record.

a. Standing in General

“Article III confines the federal judicial power to the resolution of ‘Cases’ and ‘Controversies.’” *TransUnion*, 594 U.S. at 423, 141 S. Ct. at 2203. “No principle is more fundamental to the judiciary’s proper role in our system of government than” this constitutional limitation. *Clapper P. Amnesty Int’l USA*, 568 U.S. 407, 408, 133 S. Ct. 1138, 1146 (2013) (internal quotation marks and citation omitted) (alteration omitted). “One element of the case-or-controversy requirement is that plaintiffs must establish that they have standing to sue.” *Id.* (internal quotation marks and citation omitted). This doctrine “is built on separation-of-powers principles” and “serves to prevent the judicial process from being used to usurp the powers of the political branches.” *Id.*

The “irreducible constitutional minimum of standing contains three elements.” *Lujan P. Defenders of Wildlife*, 504 U.S. 555, 560–61, 112 S. Ct. 2130, 2136 (1992). First, the plaintiff must have suffered an actual, concrete, non-speculative injury in fact. *Id.* at 560. “Second, there must be a causal connection between the injury and the conduct complained of”; in other words, the injury must be “fairly traceable” to the defendant’s action, not the result of action by a third party not before the court. *Id.* (internal quotation omitted). Third, it must be likely that the injury may be redressed by a favorable court decision. *Id.* at 561.

Critically, because this case was litigated to judgment after trial, the plaintiffs bore “the burden of establishing [those] elements” of standing. *Id.* Each element had to be supported “in the same way as any other matter on which the plaintiffs bore the burden of proof . . . at the successive stages of the litigation.” *Id.* At trial, the “specific facts” relevant to standing, where controverted, had to be “supported adequately by the evidence adduced . . .” *Id.*, 112 S. Ct. at 2137 (internal quotation omitted); *see also TransUnion*, 594 U.S. at 431, 141 S. Ct. at 2208.

Some elements of standing are not in dispute here. The Sierra Club and Environment Texas could prosecute this suit on behalf of their members, and the individual members suffered injuries that may be cognizable for standing in environmental cases.

Redressability, the third element of Article III standing, is satisfied by the availability of CAA civil penalties to enforce emission standards or limitations. 42 U.S.C. § 7604(a); *Laidlaw Environ. Servs.*, 528 U.S. at 185–87, 120 S. Ct. at 706–07. A court may impose a civil penalty for “each day” of a violation, 42 U.S.C. § 7413(e)(2), and penalties are remitted to the U.S. Treasury, 42 U.S.C. § 7604(g), rather than to citizens. As *Laidlaw* observed, “all civil penalties have some deterrent effect.” 528 U.S. at 185, 120 S. Ct. at 706 (quoting *Hudson v. United States*, 522 U.S. 93, 102, 118 S. Ct. 488, 494 (1997)). But the Court also noted the policies of promoting immediate compliance, retribution and restitution as additional congressional objectives of penalties. *Id.* at 186, 120 S. Ct. at 706. Therefore, civil penalties satisfy standing’s redressability element where it is “likely, as opposed to merely speculative, that the penalties

would redress [plaintiffs'] injuries by abating current violations and preventing future ones . . .” *Id.* at 187, 120 S. Ct. at 705. “[A]s an alternative to an injunction,” civil penalties may “deter future violations *and thereby redress the injuries that prompted a citizen suitor to commence litigation.*” *Id.* at 174, 120 S. Ct. at 700 (emphasis added).

Traceability, the second prong of Article III standing, is the crux of this case: whether Plaintiffs adequately demonstrated that their injuries are traceable to every single one of Exxon’s permit violations over eight years. As this discussion will illuminate, a plaintiff must trace injuries to each violation for which he or she seeks civil penalties, and traceability principles are applicable in this case. The U.S. government’s theory of “prospective standing,” adopted by the plaintiffs and Judge Davis, essentially eliminates traceability. The *Cedar Point* formulation of traceability is inapplicable in CAA actions. Finally, Plaintiffs’ trial proof was insufficient to establish traceability by a preponderance of the evidence.

b. Traceability in General

Proving traceability, for purposes of Article III standing, is not the same as proving causation in tort law. Instead, traceability means, at minimum, *causation in fact*. See, e.g., *Dep’t of Com. v. New York*, 588 U.S. 752, 768, 139 S. Ct. 2551, 2566 (2019) (“Because Article III ‘requires no more than *de facto* causality,’ traceability is satisfied here.” (quoting *Block v. Meese*, 793 F.2d 1303, 1309 (D.C. Cir. 1986) (Scalia, J.)); *California v. Texas*, 593 U.S. 659, 675, 141 S. Ct. 2104, 2117 (“[T]he States also have failed to show how this injury is *directly traceable* to any actual or possible unlawful Government conduct . . .

.” (emphasis added)); *TransUnion*, 594 U.S. at 423, 141 S. Ct. at 2203 (“[T]he injury was *likely caused by* the defendant.” (emphasis added)). There must be a demonstrated causal connection between Exxon’s misconduct and individual plaintiffs’ injuries.

A corollary to causation in fact is that it is not enough to show that allegedly unlawful conduct “injure[d] *someone*” other than the plaintiff. *See Blum v. Yaretsky*, 457 U.S. 991, 999, 102 S. Ct. 2777, 2783 (1982) (emphasis in original). The plaintiff may only pursue litigation to remedy his or her personal injury. Assuming that a plaintiff has suffered injury from a defendant’s conduct, the plaintiff’s standing to pursue *some* unlawful conduct does not authorize standing to pursue *all* unlawful conduct. *Lewis v. Casey*, 518 U.S. 343, 358 n.6, 11 S. Ct. 2174, 2183 n.6 (1996). This is what the Supreme Court means by repeatedly admonishing that “standing is not dispensed in gross.” *Id.*; *see also, e.g., Town of Chester v. Laroe Est’s Inc.*, 581 U.S. 433, 439, 137 S. Ct. 1645, 1650 (2017) (same); *Davis v Fed. Election Comm.*, 554 U.S. 724, 734, 128 S. Ct. 2759, 2769 (2008) (same). Chief Justice Roberts elaborated on this principle, holding that the existence of a common nucleus of operative fact does not enable plaintiffs with standing on one claim to assert a different claim for which they have no standing. *Daimler Chrysler v. Cuno*, 547 U.S. 332, 352, 126 S. Ct. 1854, 1867 (2006). Article III limits would “quickly erode” otherwise. *Id.* at 353. In sum, “a plaintiff must assert standing for each claim he seeks to press and for each form of relief that is sought.” *Davis*, 554 U.S. at 734, 128 S. Ct. at 2769 (internal quotation marks omitted).

A second corollary follows for cases predicated on claims created by federal statute. The Supreme Court has explained, “[f]or standing purposes, therefore, an important difference exists between (i) a plaintiff’s statutory cause of action to sue a defendant over the defendant’s violation of federal law, and (ii) a plaintiff’s suffering concrete harm *because of* the defendant’s violation of federal law.” *TransUnion*, 594 U.S. at 426–27, 141 S. Ct. at 2205. “[U]nder Article III, an injury in law is not an injury in fact.” *Id.* “As then-Judge Barrett succinctly summarized, ‘Article III grants federal courts the power to redress harms *that defendants cause* plaintiffs, not a freewheeling power to hold defendants accountable for legal infractions.’” *Id.* (internal citation omitted) (emphasis added).¹⁸

c. Traceability in this Case

These principles underlay the panel’s threshold traceability analysis in *Exxon II*. Judge Costa’s discussion began with the “interaction between Clean Air Act claims, violations and penalties” and explained why standing for one CAA claim does not entitle a plaintiff to standing for all potential violations. It then noted the absence of controlling case law bearing on the facts here. The opinion concluded that “because of the great variety of the challenged emissions—both in terms of type and scale—we cannot say that Plaintiffs’ proving standing for some violations necessarily means they prove

¹⁸ See also *Legacy Community Health Services, Inc. v. Smith*, 881 F.3d 358, 366–70 (5th Cir. 2018) (holding that health center injured by certain reimbursement policies had standing to challenge those policies but not a separate payment requirement that had not harmed the health center).

standing for the rest.” *Exxon II*, 968 F.3d 365–67. We substantially agree with that reasoning.

To begin, the CAA authorizes a private party’s civil action against “any person” who is “alleged to have violated (if there is evidence that the alleged violation has been repeated) or to be in violation of” “an emission standard or limitation under this chapter.” 42 U.S.C. § 7604(a) (emphasis added). This means that a claim is established for a minimum of two repeated violations, but “[o]nce that threshold is met, . . . there is no ceiling on how many violations of that emission standard a plaintiff may pack into that claim.” *Exxon II*, 968 F.3d at 365. Importantly, the term “emission standard or limitation” statutorily means “any permit term or condition.” 42 U.S.C. § 7604(f)(4). And a penalty may be assessed for each day of violation. 42 U.S.C. § 7413(e)(2). The law does not authorize aggregating permit terms or conditions to make up a “violation.” Nothing in this language confers on plaintiffs a cause of action for violations that did not affect them individually. Indeed, any such language would have violated Article III principles as well as *Lujan* and *Laidlaw*.

Here, hundreds, if not thousands, of permit terms and conditions governed twenty-four separately regulated pollutants throughout Exxon’s massive Baytown complex. The plaintiffs asserted four general types of injury, individualized as to each: physical or respiratory ailments; deterrence from recreational activities; exposure to smoke, flares and noxious odors; or fears for their health and safety. No plaintiff suffered all types of injury, nor did any plaintiff reside near the complex for the entire period covered by the lawsuit. Yet Plaintiffs asserted that

they could pursue a civil action for every single reportable or recordable violation of a permit term or condition during the entire period. And Judge Davis's opinion posits standing simply because of the total volume of past emissions, from whatever source at whatever time, due to violations of any permit terms or conditions.¹⁹ If these global assertions are not tantamount to "standing in gross," it is hard to imagine what might be.

Put more graphically, a plaintiff who experienced asthma or labored breathing due to malodorous sulfur dioxide emissions on a couple of occasions could not "trace" her injury to odorless carbon monoxide releases, much less to seeing flares. Likewise, a plaintiff who refused to exercise outdoors because of fumes from the complex could not "trace" an injury due to the flame from plugging an extension cord into an electric socket or the cigarette butt in a trash can.²⁰ Even plaintiffs who experienced fear when they saw flares or smoke could not "trace" injuries to such violations that occurred when they were not present in Baytown.²¹ Plaintiffs could not "trace" purely aesthetic injuries to allergy-causing emissions. In all, the plaintiffs substantially refused to "trace" their

¹⁹ See Judge Davis Opinion's repeated reference to millions of pounds of unauthorized emissions.

²⁰ The *Exxon II* panel notes that for similarly tiny violations like these in Plaintiffs' Counts I and II, there were no permissible emissions, and "violations" consisted of 0.0 hours' discharge of as little as .01 pound of pollutants. *Exxon II*, 968 F.3d at 366–67. But each of these would constitute a "day" of violation for penalty purposes if plaintiffs have Article III standing.

²¹ This is Judge Oldham's "Bob" hypothetical from his dissent in *Exxon III*. 47 F.4th at 426–27.

individual injuries to repeated violations of any specific permit term or condition or groups of relevant permit terms or conditions.

The *Exxon II* opinion expresses the traceability problem with a simple illustration of “why it must generally be true that a plaintiff needs standing for each violation for which [he] seeks a penalty.” *Exxon II*, 968 F.3d at 365. If a citizen moved from Florida to a Baytown neighborhood near the Exxon complex in 2005, that person could not sue for violations from 2004. *Id.* “So Clean Air Act plaintiffs cannot seek penalties for a particular violation if they would lack standing to sue for that violation in a separate suit” *Id.* (citing *Lewis P. Casey*, 518 U.S. at 358 n.6, 116 S. Ct. at 2174 n. 6 (“[S]tanding is not dispensed in gross.”)).²²

If a plaintiff is *not* required to demonstrate standing for each past violation included in his claim, any individual injured by a *single* violation (*i.e.*, two separate previous permit violations, 42 U.S.C. § 7604(a)) can sue for *every* past pollutant violation within the five-year limitations period. 28 U.S.C. § 2462. Article III, however, “grants federal courts the power to redress *harms that defendants cause plaintiffs*, not a freewheeling power to hold defendants accountable for legal infractions.” *TransUnion*, 594 U.S. at 427, 141 S. Ct. at 2205

²² Judge Davis’s opinion, in contrast, essentially abrogates traceability by agreeing with the plaintiffs, who contend, “[i]ndeed, the deterrent impact of a penalty on Exxon would need to be no smaller even if a plaintiff in this suit moved to Baytown a month before suit was filed. Since penalties are not damages recovered by a plaintiff, a plaintiff does not need to show he or she was around for all of Exxon’s violations.”

(emphasis added) (citing *Casillas v. Madison Ave. Assocs.*, 926 F.3d 329, 332 (7th Cir. 2019) (Barrett, J.)).

It was far from impossible for Plaintiffs to satisfy their burden of proving traceability at trial for some violations. Exxon had turned over spreadsheets identifying all of the Baytown complex's reportable and recordable violations. A few of those released thousands of pounds of pollutants over many hours or several days. It is easily conceivable that some violations of particular permit terms or conditions for each pollutant were sufficiently repetitive that Plaintiffs could have "traced" their injuries to the violations. In fact, Plaintiffs Sprayberry and Cottar did "trace" smoke and flare violations that they witnessed fearfully to five Exxon STEERS reports. Otherwise, the plaintiffs here simply refused to engage in proving traceability.

We would not hold that traceability in CAA cases requires an exact, contemporaneous correlation between Plaintiffs' injuries and specific violations of specific permit terms or conditions. What it does require is proof of a "traceable" connection between Plaintiffs' specific injuries at specific periods of time and repeated, ongoing violations of permit terms or conditions for each pollutant that is relevant to the injuries.²³ But traceability here must exclude

²³ For example, if smoke or flare violations emit on two separate occasions, the first from coal and the second from petroleum, those are two separate "violations" if they are covered by different permit terms. But they are not "ongoing" violations of a single permit term or condition. Each is not actionable unless the emissions are repeated. Another example: repeated unauthorized emissions of sulfur dioxide could be actionable IF they were significant enough within a limited period or periods

thousands of individual exceedances that the district court found were too small to have wafted “over the fence” and outside the many acres of the industrial complex, or those that could not cause injuries that plaintiffs alleged. *See District Opinion III*, 524 F. Supp. 3d at 560–62.

d. Traceability in Other Cases

Previous citizen suits support this standard of traceability, though few have had occasion to consider traceability systematically. In the Supreme Court, *Laidlaw* found plaintiffs’ proof of aesthetic, recreational, and economic injury sufficient to show standing, and traceability was inferred (though not discussed by the Court) from repeated, years-long illegal discharges of mercury into a river that plaintiffs had frequently visited. 528 U.S. at 176, 181–83, 120 S. Ct. at 701–02, 704–05. In this court, *Texans United* concerned caustic smoke that blew regularly into a residential area for six years from hydrogen sulfide and sulfur dioxide permit violations. 207 F.3d at 790–91. In *Laidlaw* and *Texans United*, there was no doubt that the plaintiffs had “repeatedly suffered the same injuries resulting from a series of similar discharges.” *Exxon II*, 958 F.3d at 366. These cases, along with cases from other circuits, reflect substance-by-substance traceability analysis in practice. *See, e.g., Pub. Int. Rsch. Grp. of N.J. v. Powell Duffryn Terminals, Inc.*, 913 F.2d 64, 69, 71 (3d Cir. 1990) (discharge of polluted runoff water into tidal strait that injured plaintiffs throughout claims period); *Piney Run Pres. Ass’n v. Cnty. Commis of Carroll Cnty.*, 268 F.3d 255, 263–64 (3d Cir. 2001)

to have gone “over the fence” of the complex and roughly coincided with a plaintiff’s exposure.

(discharge of heat into stream that injured plaintiff throughout claims period); *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 152–53, 156 (4th Cir. 2000) (discharge of eight pollutants into lake that injured plaintiffs throughout claims period); *Nat. Res. Def. Council v. Sw. Marine, Inc.*, 236 F.3d 985, 991, 994 (9th Cir. 2000) (discharge of three pollutants into bay that injured plaintiffs throughout claims period); *see also Am. Canoe Ass’n v. City of Louis Water & Swer Comm’n*, 389 F.3d 536, 543 (6th Cir. 2004) (discharge of three pollutants into river that injured plaintiffs throughout claims period); *Sierra Club v. Tenn. Valley Auth.*, 430 F.3d 1337, 1343, 1345 (11th Cir. 2005) (violations of opacity limit injured plaintiffs throughout claims period).

Judge Davis cites some other cases, but in none of them were the violations intermittent like those at the Exxon complex, where the discharges ranged from minuscule to huge, occurred at different locations, by different means, and involved two dozen different substances that cause different injuries. *See Benham v. Ozark Materials River Rock, LLC*, 885 F.3d 1267, 1271–72 (10th Cir. 2018); *Inland Empire Waterkeeper v. Corona Clay Co.*, 17 F.4th 825, 831–32 (9th Cir. 2021); *Central Delta Water Agency v. United States*, 306 F.3d 938, 949 (9th Cir. 2002).²⁴ Thus, the

²⁴ Judge Davis’s reliance on two cases is inapt. At issue in *Interfaith Community Organization v. Honeywell International, Inc.*, 399 F.3d 248, 252 (3d Cir. 2005), was cleanup liability for the polluted site of a former chromium plant; traceability was obvious. And *Sierra Club v. Franklin County Power of Illinois, LLC*, 546 F.3d 918, 923 (7th Cir. 2008), was a challenge under Section 7604(a)(3) of the CAA to the proposed construction of a power plant.

principle of traceability is the same throughout, but its application to the facts before us is unique.

Also contrary to Plaintiffs' argument, this court's decision in *Texans Unite*²⁵ does not detract from the requirement to prove traceability of Plaintiffs' injuries to the defendant's CAA permit violations. In *Texans United*, this court reversed summary judgment for the defendant where plaintiffs had created a fact issue based on circumstantial evidence: affidavits from plaintiffs' members who saw smoke from the defendant's plant "at the same time that they smelled sulfurous odors"; expert evidence from air dispersion modeling that found detectable odors in the neighborhood on days when certain "process upsets" occurred; and proof of frequent sulfur dioxide and hydrogen sulfide emission violations at the plant. 207 F.3d at 792–93. This evidence was sufficient to deny summary judgment. But, as *Lujan* holds, at trial the evidence of standing, including traceability, must meet a higher standard. 504 U.S. at 561, 112 S. Ct. at 2137 ("[T]he nature and extent of facts [necessary]. . . to establish standing" must be "proven" at "the trial stage."); see also *Texans United*, 207 F.3d at 793 ("Texans United must ultimately establish causation if they are to prevail on the merits. . .").

²⁵ The statement in *Texans United* that, to avert summary judgment, plaintiffs need not connect the exact time of their injuries with the exact time of an alleged violation, 207 F.3d at 793, applies only to proof of standing at the summary judgment stage. Though the evidence adduced there was held sufficient to imply standing for summary judgment purposes, reading the language too broadly would contradict the Supreme Court's prohibition on dispensing standing in gross. See *Nat. Res. Def. Council v. Texaco Ref. & Mktg., Inc.*, 2 F.3d 493, 505 n.10 (3d Cir. 1993). *Contra TransUnion*, 594 U.S. at 431, 141 S. Ct. at 2208.

e. The Prospective Theory of Standing

At the eleventh hour, the U.S. government as amicus offered a novel theory of standing in CAA actions. The government contended that because civil penalties are a forward-looking remedy to “deter future violations,” *Laidlaw*, 528 U.S. at 185, 120 S. Ct. at 706, the *Exxon II* panel incorrectly held that Plaintiffs had to establish standing for each past violation. Plaintiffs, it argued, need only prove they suffer an ongoing or imminent future injury. And because the injury is “ongoing,” the traceability analysis must likewise be prospective. That is, a CAA plaintiff need only show that his *prospective* injuries are traceable to the defendant’s likely *future* conduct. Exxon’s past CAA violations, in the government’s view, simply established a threat of ongoing violations. On the basis of this theory, plaintiffs may proceed with a CAA civil penalties claim, and the admittedly retrospective focus of statutory penalties becomes only a merits question.

Judge Davis’s opinion purports to fully embrace this approach. It seems to agree that because the plaintiffs can trace their members’ prospective injuries to Exxon’s future conduct, they have standing to pursue a civil penalty for *every* past violation regardless whether those violations injured them. Accordingly, Judge Davis would reinstate the district court’s previous \$19.95 million award, encompassing all 16,386 claimed violation days.

We reject this novel argument for a number of reasons. First, no case law supports this novel theory. We are aware of none. *Laidlaw* does not endorse “prospective” tracing. The Court there discussed only the injury and redressability prongs of Article III

standing. Traceability was presumed once plaintiffs' longstanding recreational, aesthetic, and economic injuries were held to be legally cognizable and redressable by civil penalties paid to the federal government. Instead, the *Laidlaw* Court repeated that standing must be found for *each* remedy sought by plaintiffs. And it observed that civil penalties provide redress not only because they "promote immediate compliance" with the law and "deter future violations," but also because they effectuate "retribution" and "restitution." *Laidlaw*, 528 U.S. at 185, 120 S. Ct. at 706.

Second, the "prospective" theory of standing ignores the statutory authorization for CAA citizen suits, which depends on alleging repeated or ongoing violations of terms and conditions of pollutant discharge permits. See 42 U.S.C. § 7604(a)(1). A necessary, though not sufficient, basis for Article III standing is that a citizen must establish standing to sue for a violation of the CAA as defined by Congress.²⁶ Thus, traceability by definition statutorily runs from the plaintiffs' claimed injuries in the past to repeated or ongoing violations of specific permit terms and conditions. By necessary implication, the statute requires traceability to the polluter's past illegal discharges. Further, because penalties are assessed largely on retrospective

²⁶ See *Spokeo, Inc. v. Robbins*, 578 U.S. 330, 341, 136 S. Ct. 1540, 1549 (2016) (rejecting the proposition that "a plaintiff automatically satisfies the injury-in-fact requirement whenever a statute grants a person a statutory right and purports to authorize that person to sue to vindicate that right"). The precise nature of the federal claim, however, details elements relevant to Article III standing.

factors, 42 U.S.C. § 7413(e)(1),²⁷ and may be awarded for “*each day of violation*,” *id.* § 7413(e)(2) (emphasis added), Plaintiffs’ remedies tie back to the violations that underlie their claims.²⁸ The Supreme Court wrote in *DaimlerChrysler Corp.* that “[a] plaintiff must allege personal injury fairly traceable to the defendant’s allegedly unlawful conduct and *likely to be redressed by the requested relief*.” 547 U.S. at 342, 126 S. Ct. at 1861 (emphasis added). Here, such “relief” is measured by the nature and quantity of past violations. Put more concretely, if none of the benzene emission violations was substantial enough to go over the fence of the Baytown complex, then Plaintiffs could not trace their odor or other injuries to those violations. Period. The “prospective standing” theory, however, essentially jettisons Article III traceability for Plaintiffs’ past injuries and is contrary to the statute’s requirements to prove past violations and penalties based on past violations.

Third, analogizing the “prospective tracing” theory of civil penalties to the basis for seeking prospective injunctive relief, as Judge Davis does, is frankly

²⁷ As this court has held, the penalty provision’s “economic benefit of noncompliance” factor “serves as the starting point for calculating the civil penalty,” and seeks “to recoup any benefit gained by the polluter in failing to comply with the law.” *CITGO*, 723 F.3d at 551, 552. Other retrospective statutory factors that a court “shall” consider in assessing CAA penalties include “the duration of *the violation*,” “payment by the violator of penalties previously assessed for *the same violation*,” and “the seriousness of the violation.” 42 U.S.C. 7413(e)(1) (emphasis added).

²⁸ The fact that the amount of penalties is assessed in conjunction with the merits of the case does not detract from the need for plaintiffs to trace Exxon’s violations to their injuries pursuant to Article III.

baffling. The CAA affords alternative remedies, *see Laidlaw*, 528 U.S. at 174, 120 S. Ct. at 700, but that does not mean they are parallel in respect of standing. *Laidlaw* instead reaffirmed—while expressly differentiating injunctive relief from civil penalties—that standing must be demonstrated separately for “each form of relief sought.” 528 U.S. at 185, 120 S. Ct. at 706. To be sure, an injunction may be ordered where plaintiffs’ claimed injury is ongoing or imminently threatened. *See Clapper*, 568 U.S. at 409, 133 S. Ct. at 1147; *City of Los Angeles v. Lyons*, 461 U.S. 95, 105, 103 S. Ct. 1660, 1667 (1983); *see also TransUnion*, 594 U.S. at 435-36, 141 S. Ct. at 2210 (recognizing a difference for standing purposes between injunctive relief and damages).²⁹ But as Exxon points out, these decisions describe the standard for *injury* in *injunction* cases, not *traceability* in *civil penalty* cases. Even if the future-oriented goals of civil penalties and injunctive relief overlap, the district court here denied an injunction, and Plaintiffs *did not* appeal. Again, Judge Davis’s rhetorical creativity lacks any indication of precedential or statutory support.

Fourth, this court’s precedents have required plaintiffs to trace their injuries to defendants’ past and future conduct. Accordingly, in *Friends of the Earth, Inc. v. Crown Central Petroleum Corp.*, 95 F.3d 358 (5th Cir. 1996) (*Crown Central*) (CWA), the plaintiff lacked standing because it had not created a genuine dispute of material fact that it suffered a *past*

²⁹ Whether Plaintiffs even preserved this theory in district court is far from certain, as the court pointed out that Plaintiffs “do not claim a continuing likelihood of recurrence” as their basis for suit.

injury fairly traceable to the defendant's 344 illegal discharges. *Id.* at 359, 361. In contrast, the plaintiffs in *Texans United* sufficiently traced evidence of past, recurrent "exposure to sulfurous odors" from the defendant's refinery so as to "severely diminish[]" plaintiffs' "enjoyment of their surroundings." 207 F.3d at 792, 793. There was no hint that only prospective injury need be proven.

Our sister circuits have also premised traceability in civil penalty cases on ongoing injuries tied to a defendant's past as well as future conduct.³⁰ *See, e.g., Powell Duffryn*, 913 F.2d at 71–73 (CWA) (traceability premised on plaintiffs' injuries due to the water's "oily or greasy sheen" resulting from defendant's past and continuing violations of oil and grease discharge limits)³¹; *Gaston Copper Recycling Corp.*, 204 F.3d at 152–53, 156, 161 (CWA) (traceability premised on plaintiff's ongoing reasonable fear that defendant's past and ongoing discharges would deteriorate quality of lake); *Am. Canoe Ass'n*, 389 F.3d at 543 (CWA) (traceability

³⁰ Cases addressing CAA citizen suits under Section 7604(a)(2) and the first portion of Section 7604(a)(3) are inapposite, as those provisions do not require the plaintiff to allege a past violation. *See, e.g., Franklin Cnty.*, 546 F.3d at 923 (CAA suit under Section 7604(a)(3) seeking to prevent the construction of a power plant).

³¹ *See also Piney Run*, 268 F.3d at 263–64 (tracing defendant's past and ongoing discharge of warm water into a stream to algae that interfered with property owner's use and enjoyment of water); *Texaco*, 2 F.3d at 505 (tracing past and continuing aesthetic and recreational injuries to past and ongoing violations); *Interfaith Cmty.*, 399 F.3d at 255–56 (Resource Conservation and Recovery Act) (tracing plaintiffs' past and continuing fear of exposure to waste to the defendant's contamination).

premised on plaintiffs' ongoing aesthetic and recreational injuries caused by defendant's past and ongoing violations); *Sw. Marine*, 236 F.3d at 994 (CWA) (traceability premised on plaintiffs' allegation that their recreational use of a waterway "has been curtailed because of their concerns about pollution, contaminated fish, and the like" from defendant's ongoing pollution); *Sierra Club v. Tenn. Valley Auth.*, 430 F.3d at 1345 (CAA) (addressing standing *sua sponte*; traceability premised on recreational, aesthetic, and fear-related injuries caused by defendant's past and ongoing violations).

Fifth, the theory of prospective standing would transform the citizen suit from one seeking to address concrete harm traceable to a defendant's ongoing conduct into an action "seeking to ensure a defendant's compliance with regulatory law." *TransUnion*, 594 U.S. at 427, 141 S. Ct. at 2206 (internal quotation marks and citation omitted). As Plaintiffs candidly acknowledge, under the prospective standing theory, any individual who moves near a polluter has immediate standing to sue that polluter for civil penalties premised on *every* violation that occurred *anytime* within the limitations period so long as the plaintiff can demonstrate that he faces certainly impending harm from an imminent future violation. In other words, a plaintiff who is allowed to trace his *future* injuries to the defendant's *future* conduct may leverage that interest to pursue penalties for *all* past violations that absolutely never affected him. That is a paradigmatic example of dispensing standing in gross. *See Blum*, 457 U.S. at 999, 102 S. Ct. at 2783. Judge Davis's opinion essentially adopts this position. But to repeat the conclusion in *Exxon II*, it is "obvious" that such a

plaintiff lacks standing to pursue such a claim.³² *Exxon II*, 968 F.3d at 365–66.

Finally, even if “prospective standing” were within the purview of Article III, the theory would run up against the plaintiffs’ trial concessions and the district court’s factfindings. Plaintiffs *conceded* no traceability for emissions of less than one pound of illegal substances, and such emissions account for several thousand on Exxon’s itemized list. *District Opinion III*, 524 F. Supp. 3d at 555. And the district court found no traceability for many illegal emissions that, the evidence showed, did not escape over the fence from the vast Baytown refinery complex into the areas where plaintiffs resided, engaged in recreation, or travelled.³³ If such *de minimis* past emissions would *not* figure against “prospective standing,” then allowing “prospective” standing at least facially conflicts with the Supreme Court’s holding that citizens may not sue for violations that have abated

³² The government’s eagerness to unleash citizen CAA suits untethered to traditional Article III standing is ironic in light of their potential to usurp the Executive Branch’s principal prosecutorial responsibility under Article II of the Constitution. In this connection, the Supreme Court emphasizes that the “choice of how to prioritize and how aggressively to pursue legal actions against defendants who violate the law falls within the discretion of the Executive Branch, not within the purview of private plaintiffs (and their attorneys).” *TransUnion*, 594 U.S. at 429, 141 S. Ct. at 2207. It is true that the statute authorizes citizen suits only with the consent of governing authorities, which consent was impliedly given here. But regulated parties should not be placed in the position of bowing to both government and private masters, the latter of whom are under no democratic restraints and indeed whose attorneys reap significant benefits from prevailing.

³³ *District Opinion III*, 524 F. Supp. 3d at 564–65.

by the time of suit. *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found. Inc.*, 484 U.S. 49, 59, 108 S. Ct. 376, 382 (1987); *Lujan*, 528 U.S. at 187–88, 120 S. Ct. at 707–08.

There is no basis to adopt the prospective theory of standing.

f. Cedar Point’s Inapplicability to CAA Actions

Judge Davis’s opinion, and Chief Judge Elrod’s footnoted concurrence, would adopt the *Cedar Point* framework for CAA cases. It is essential to reject this proposed standard. *Cedar Point*, a case brought under the Clean Water Act, reflects a constitutionally dubious framework and has thus been rigidly confined by this court. It is a poor factual fit for CAA cases. And adherence to it produced irrational results when applied by the *Exxon II* and *III* decisions. To repeat, the “majority” disposition of this case renders *Exxon II* and *Exxon III* no longer precedential.

The Third Circuit first articulated the *Cedar Point* framework in 1990, before *Lujan* definitively articulated the criteria for Article III standing. See *Powell Duffryn*, 913 F.2d at 72. The *Powell Duffryn* court held that a CWA plaintiff can establish a “substantial likelihood that defendant’s conduct caused [his] harm” by demonstrating that the defendant

[(1)] discharged some pollutant in concentrations greater than allowed by its permit [(2)] into a waterway in which the plaintiffs have an interest that is or may be adversely affected by the pollutant and that [(3)] this pollutant causes or contributes to the kinds of injuries alleged by the plaintiffs.

Id. at 72. As Judge Oldham observed in *Exxon II*, it is unclear how the Third Circuit devised this standard, as it cited nothing in support. *Exxon II*, 968 F.3d at 375 (Oldham, J., concurring in part, dissenting in part, and concurring in judgment). In particular, the third prong of the test permits a court to find traceability without a plaintiff's demonstrating that the pollutant at issue was a cause-in-fact of an injury he suffered. See *TransUnion*, 594 U.S. at 423, 141 S. Ct. at 2203; *Laidlaw*, 528 U.S. at 169, 120 S. Ct. at 698. That reduced burden arguably eliminates traceability altogether. *Exxon II*, 968 F.3d at 375 (Oldham, J.).

When this court adopted *Powell Duffryn*'s ipse dixit in *Cedar Point*, 72 F.3d at 557, we warned that "a literal reading of *Powell Duffryn* may produce results incongruous with our usual understanding of the Article III standing requirements," and "it may not be an appropriate standard in other CWA cases," *id.* at 558 n.24. Subsequent CWA cases in this court have applied *Cedar Point* cautiously. The standard has been invoked only where a case involved discrete bodies of water, a limited variety of discharges, and uniform injuries. Compare *id.* at 557–58 (plaintiff had standing where defendant discharged produced water via single pipe into the area of Galveston Bay used by affiant), with *Crown Cent.*, 95 F.3d at 361 (no standing where defendant discharged storm-water runoff into creek 18 miles upstream of area in which plaintiff's members had an interest). Specifically, *Cedar Point* has been limited to cases "involving a small body of water, close proximity, well-understood water currents, and persistent discharges." *Ctr. for Bio. Diversity*, 937 F.3d at 545.

This history reveals at least two reasons not to apply *Cedar Point* in CAA cases. First, although we need not decide whether *Cedar Point*, as limited to the Clean Water Act, may be justified under current Supreme Court traceability doctrine, it should not extend to new contexts. Second, CAA cases are factually quite different from the aquatic discharges that characterize cases utilizing *Cedar Point*'s framework. See *Ctr. for Bio. Diversity*, 937 F.3d at 545. Unlike the predictable currents of rivers and lakes, numerous variants like daily wind direction, weather conditions, and seasonal changes can affect the dispersal of airborne pollutants. Some airborne pollutants remain close to the ground, while others rise up. And unlike the small or bounded bodies of water contemplated by *Cedar Point*, the atmosphere is not bounded and defined. Perhaps for these reasons this court, when given the opportunity, declined to employ *Cedar Point*'s test in a CAA decision. See *Texans United*, 207 F.3d at 792–93 (citing *Cedar Point* but not applying its three part test).

This court's conscientious attempt to adapt *Cedar Point* in the CAA context in *Exxon II* produced irrational and constitutionally infirm results, which highlight *Cedar Point*'s inapplicability. Attempting to harmonize that case with Article III jurisprudence, the majority created presumptions concerning three categories of emissions: those that exceeded "zero emission" standards; those that exceeded "nonzero emissions" standards or "had to be reported under Texas regulations"; and smoke, flares, and haze. *Exxon II*, 968 F.3d at 370–71. So long as an emission violation fell within one of the latter two categories and *could have* caused or contributed to smoke, flaring, haze, chemical odors, allergy-like symptoms,

or respiratory irritation, the court presumed it was traceable. *Id.* at 371. Only where an emission violated a zero-emission standard and did not exceed a reportable quantity was Plaintiffs' evidence put to the test. *Id.*

The panel majority justified these presumptions on the ground that "it is an easier inference that the pollutants [of non-zero and reportable quantity violations] escaped the Baytown complex" and affected plaintiffs. *Id.* at 370–71. But these inferences were not justified on the facts proved at trial. The facts show how difficult it is to generalize about plaintiffs' being injured by CAA violations when multiple permitted pollutants are involved, and the violations occur (a) sporadically, (b) throughout an industrial complex, (c) from different permit standards for each pollutant, and (d) in areas exposed or not exposed to the outside. Of course, these facts say nothing about the additional complication that, unlike water currents, varying wind and weather conditions disperse pollutants in all directions and all altitudes.

Some examples of the presumptions' irrationality must be noted from this record.³⁴ Benzene, for

³⁴ Neither Plaintiffs nor Exxon referenced these examples. Research for this dissent uncovered some of the anomalies in the district court's third opinion, where larger emissions of pollutants were not traceable but very small emissions of the same pollutant *were* traceable according to the *Exxon II* presumptions. Plaintiffs could not have challenged the district court's results to the extent they had agreed that Exxon's spreadsheets segregated recordable (smaller) emissions events from reportable (usually larger) events. See *District Opinion III*, 524 F.3d at 556 & n.15. This dissent's goal is to demonstrate the irrationality of the *Cedar Point* framework for CAA cases.

instance, is a carcinogen and emits an unpleasant odor. Injuries can only occur if a plaintiff actually smelled the emission at issue. The record shows that emissions of 21 pounds of benzene between 1 am and 5:30 am (*i.e.*, 4.67 pounds per hour) in December 2007 and 20.13 pounds of benzene over a 48-hour period (*i.e.*, 0.42 pounds per hour) in July 2011 violated permit terms. The district court accordingly concluded these violations were traceable to Plaintiffs' injuries under the *Exxon II* presumptions. But the record is silent as to whether these relatively small emissions *could have* reached beyond the complex's fences in quantities that any plaintiff *could have* smelled. Incongruously, however, an excess emission of 9.1 pounds of benzene over the course of a single hour remained below the "reportable" threshold, yet under the *Exxon II* presumptions it was not traceable because it could not reach outside the complex in a quantity sufficient to cause odor-related injuries.

Consider emissions of three other pollutants. Emissions of just 1.23 and 4.84 pounds of carbonyl sulfide in July 2009 and September 2012, respectively, were held traceable because they violated the 0.04-pound nonzero limit. However, the emission of 13.5 pounds of carbonyl sulfide in August 2007, which did not violate a nonzero limit, was not traceable because it was not large enough to reach outside the complex in a quantity sufficient to cause respiratory problems. Similarly, the emission of 0.29 pounds of hydrogen cyanide violated the 0.10-pound nonzero limit, and the emission of 17.59 pounds of hydrogen sulfide violated the 0.70-pound nonzero limit and were thus traceable according to the *Exxon II* presumptions. But emissions of 9.2 pounds of

hydrogen cyanide, and 62 pounds of hydrogen sulfide, *were not* traceable because they concededly were not large enough to escape the complex and cause any injury. The same is true of two ammonia emissions, one of which released 0.29 pounds and exceeded a 0.07 nonzero limit, the other of which released 68.30 pounds and exceeded a limit, the first was traceable, the second was not because under the *Exxon II* presumptions, it was too minimal to cause harm.

Application of the *Exxon II* presumptions, grounded on *Cedar Point*, that flares and smoke³⁵ violations were all traceable to Plaintiffs' injuries led to similarly illogical results. Such violations must actually be seen by Plaintiffs to cause the injuries they describe. But it strains credulity to believe that *all* 1,801 instances of flaring and *all* 588 instances of smoke that occurred over an eight-year period were seen by at least one of Plaintiffs' members. For example, a wooden lawn structure caught fire at 3:17 AM on June 15, 2006. The record is silent as to whether one of the plaintiffs was awake or even could have seen the resulting 18 minutes of smoke. Or in April 2012, two flare stacks released intermittent excess smoke over the course of eight minutes. There is no evidence that any plaintiff happened to see this smoke. Many flares considered presumptively traceable likewise occurred for relatively short

³⁵ Alleged violations that could only cause haze are irrelevant, as the district court found that Plaintiffs' evidence was insufficient to show pollutants that "contribute to ground-level ozone" caused the "haze" described by Plaintiffs' members. *District Opinion III*, 524 F. Supp. 3d at 558–59. Because Plaintiffs failed to show that any violation caused haze, they cannot trace their haze-related injuries to any such violation.

periods of time at random hours.³⁶ Take, for instance, flaring that occurred at two flare stacks for approximately 6 minutes in February 2006. Or consider a flare that occurred for less than a minute in 2009. Whether a plaintiff fearfully witnessed any such excess flaring would be a matter of sheer happenstance. Regardless, the *Exxon II* panel presumed traceability of Plaintiffs' "injuries" to each of these events.

In a CAA case like this, presumptions based on *Cedar Point* are further undermined by the fact that many of Exxon's emissions were *legal* under its permitted terms and conditions. Where both lawful and unlawful conduct could result in an identical injury, the Supreme Court has emphasized the need for a plaintiff to demonstrate that the *unlawful* conduct was a cause-in-fact of his injuries. See *California v. Texas*, 593 U.S. at 674, 141 S. Ct. at 2116 (plaintiffs' injury must be "fairly traceable to the defendant's allegedly *unlawful* conduct" (quoting *Cuno*, 547 U.S. at 342, 126 S. Ct. at 1861)). Without such distinctions, a defendant might be punished for otherwise lawful conduct. Such potential confusion is readily apparent in applying the *Cedar Point* standards here. One of the challenged pollutants that the complex could legally emit is sulfur dioxide gas, which smells like rotten eggs. Were the odors that troubled the plaintiffs the result of lawful or unlawful emissions of this gas? Because the plaintiffs failed to

³⁶ The district court also held that Plaintiffs proved that violations "could have caused or contributed to flaring" only "where the cause describes flaring or the failure of a compressor and the emissions point occurred at a flare stack[.]" *District Opinion III*, 524 F. Supp. 3d at 557.

develop the record, we can only speculate as to what percentage of their odoriferous injuries resulted from unlawful emissions. *See District Opinion II*, 2017 WL 233167 at *29 n.256. Yet the application of *Cedar Point* permitted Plaintiffs to leverage their *lack* of evidence into standing to pursue *every* odor-causing violation that exceeded a nonzero limit. The same is true of emissions that caused flaring, respiratory problems, and allergy-like symptoms. *Id.*

Perhaps most revealing is that on remand from the *Exxon II* panel's adoption of *Cedar Point*, the district court held that Plaintiffs did not establish traceability for *any* violations that did not fall within one of the two categories that this court had held to be per se traceable. Specifically, it found that Plaintiffs did not present evidence showing that those illegal releases of "the pollutants would have been sufficient to cause" chemical odors, respiratory problems, or allergy-like symptoms "over the fence" from the Baytown complex. *District Opinion III*, 524 F. Supp. 3d at 562, 565.

In fact, in an earlier opinion, the district court found that Plaintiffs did not present any "credible evidence that any of the specific Events and Deviations were of a duration and concentration to[] even potentially-adversely affect human health." *District Opinion II*, 2017 WL 233167 at *29 n.256. Such findings are at odds with traceability under Article III. Judge Davis's opinion ignores the district court's findings. Plaintiffs who have not suffered injury from the defendant's unlawful conduct may not ask federal courts to exceed the limits of actual cases or controversies, offer advisory opinions or judgments,

and acquiesce in quintessentially Article II roving enforcement of statutes.

With similarly troubling results, only one other circuit court has employed the *Cedar Point* framework in a CAA case. See *Utah Physicians*, 21 F.4th at 1245. There, the plaintiff brought a CAA citizens action on behalf of its members against two automotive companies that sold and installed auto parts that allegedly defeated federal emissions control systems. *Id.* at 1239. The plaintiff asserted its members’ health and recreational injuries “from elevated air pollution in the Wasatch Front or exposure to diesel exhaust.” *Id.* at 1241 (internal quotation marks and citation omitted) (alteration in original). Applying *Cedar Point* and *Exxon II*, the court held that the plaintiff had established traceability because the violations could contribute to “the unhealthy air in” the “Salt Lake City area.” *Id.* at 1246. It explained that *any* resident “in that area c[ould] fairly trace injuries they suffer from the polluted air to *any* contributor of prohibited emissions in the area.” That result would be unthinkable without *Cedar Point*’s traceability presumption. *Id.* (emphasis added).

To conclude that applying *Cedar Point* in CAA cases violates the requirements of Article III is an understatement. Certainly as applied to CAA cases, *Cedar Point* abrogated the requirements that a plaintiff prove that the *defendant’s* conduct, not some third party’s conduct, *Lujan*, 504 U.S. at 560, 112 S. Ct. at 2136, injured *him*, not the environment generally, *Laidlaw*, 528 U.S. at 181, 120 S. Ct. at 704, or someone else, *Blum*, 457 U.S. at 999, 102 S. Ct. at 278. *Cedar Point* cannot be extended to CAA cases.

Yet Judge Davis's opinion would not only extend *Cedar Point*, but eliminate the small barriers that *Exxon II* attempted to raise against wholesale conflict with Article III's traceability limits.

g. Inadequacy of Plaintiffs' Proof

Plaintiffs deliberately chose to predicate their claims and standing on the widest possible basis. Having combed through Exxon's public filings, they claimed that more than 16,000 violation days might have some relation to the congeries of injuries their members claimed to suffer over an eight-year period. "This programmatic approach has obvious practical advantages, but also obvious difficulties insofar as proof of causation or redressability is concerned." *Lujan*, 504 U.S. at 568, 112 S. Ct. at 2140. And those difficulties involving causation reared their heads.

Each member testified in broad strokes regarding injuries suffered at various intervals throughout the claims period. For instance, Kingman testified that when she drives into Baytown, she can "sometimes" smell the plant. Such testimony provides no information as to whether those odors were the result of permissible emissions or impermissible emissions—after all, the refinery alone was permitted to release, for example, over 3,242 pounds of sulfur dioxide *per hour*. Even if Kingman happened to smell emissions resulting from a violation, her testimony provides no information about the specific violation or violations that caused the odor. Plaintiffs could have asked Kingman to testify as to what days she was in Baytown and what she smelled on those days. They could have correlated illegal emissions on such days to air dispersion models. But they chose not to do so.

Similarly, Dominguez testified that she generally experienced allergy-like symptoms “[a]t least a couple times a week” when she visits Baytown. But that does not assist the court in determining whether any particular violation was a cause-in-fact of her symptoms, especially considering the significant quantity of legal emissions that could have caused her symptoms. *See District Opinion II*, 2017 WL 233167 at *29 n.256. For instance, the district court found that carbon monoxide can cause allergy-like symptoms or respiratory problems. *District Opinion III*, 524 F. Supp. 3d at 562. And the refinery alone was permitted to emit over 3,736 pounds of carbon monoxide *per hour*. Plaintiffs’ counsel could have asked Dominguez to provide the particular dates she was home. They then could have offered air dispersion analysis to show how certain illegal emissions on each of those days escaped the Baytown complex in quantities that could have caused or exacerbated her allergy-like symptoms. But they relied instead on general testimony and the mere fact of the violations’ occurrence—they provided no evidence that Dominguez was actually affected by any particular violation or that any particular violations could even have reached her.

Only Cottar and Sprayberry testified in a manner sufficient to demonstrate that their injuries were caused by certain smoke and flare violations. And even their testimony was impermissibly general apart from the five instances in which they identified specific violations they observed. These violations amount to 44 violation days, which is all Plaintiffs should have standing to pursue. *See District Opinion II*, 2017 WL 233167 at *29 n.256.

To be sure, the plaintiffs *could have* demonstrated standing to pursue more violations had they developed the record. That would have required more digging during discovery, and more attorney legwork to find adversely affected members, and the process would likely have resulted in a smaller universe of justiciable violations. Though this might be hard work, that is what Article III demands in this unique CAA context. That Plaintiffs gambled on the broadest possible scheme for recovery—irresponsibly and unconstitutionally—should not give cause for concern.

Nor does the plaintiffs' failure to show traceability on their own impermissibly broad terms create an untenable distinction between firms that emit large quantities of substances *legally* and other smaller firms.³⁷ Cases cited above demonstrate that repeated and ongoing illegal discharges tied to particular substances may readily cause injuries for which plaintiffs can seek civil penalties. *See, e.g., Laidlaw*, 528 U.S. at 185, 120 S. Ct. at 706; *Sierra Club P. Tenn. Valley Auth.*, 430 F.3d at 1344-45 (standing existed to challenge excessive smoke). What CAA plaintiffs cannot do is aggregate disparate physical,

³⁷ It is precisely because Exxon's Baytown facility is a "sprawling industrial complex" that traceability is of the utmost importance in this context. *See Davis Op.* at 27. The vast majority of Exxon's emissions are legally authorized and in compliance with requisite permits. Further, given the size of the complex and the small scale of many of the violations, establishing whether the violations were at all detectable over the facility's fence line is critical. The mere fact that establishing traceability is practically more challenging for Plaintiffs in this case than it would be in a suit against a smaller facility is not an argument in favor of watering down Article III requirements.

aesthetic and recreational injuries and claim a causal connection with disparate, diffuse, often minimal violations of permit terms and conditions.

To sum up, Judge Davis's theory of "prospective standing" is a meaningless mischaracterization of *Lujan* and other Article III decisions of the Supreme Court; it is unsupported by the facts at trial; it is unsupported by a raft of prior decisions from this and other courts. If adopted, it would create a pothole that will sink future environmental litigation in uncertainty and inefficiency.

2. Penalty Calculation

The district court found Exxon's "economic benefit of noncompliance" to be \$14,249,940. Taking economic benefit as its starting point, the court then assessed a penalty of \$14,251,302 against the company. *District Opinion III*, 524 F. Supp. 3d at 573, 577. This penalty calculation was based on an erroneous interpretation of Section 7413(e)(1)'s economic benefit factor propounded by the *Exxon I* panel in dicta. 824 F.3d at 530, n.19. This court should have disavowed the mischievous dicta, but we are split 8-8 with one judge "abstaining."

Not only does Judge Davis's opinion lack a majority for its contrary position, but it also erroneously relies on "circuit precedent," *i.e.* *Exxon I*. But that opinion has been superseded twice by this court, including on the calculation of penalties, and we then voted for en banc reconsideration and received briefing on the economic benefit point. Part I of this opinion explained that earlier court decisions in this case are no longer precedential.

For the future, then, we must explain why Judge Davis's statutory interpretation is in error.

The CAA provides that in a citizen suit, “[a] penalty may be assessed for each day of violation.” 42 U.S.C. § 7413(e)(2). Although the decision to impose penalties is within the discretion of the district court, *Exxon I*, 824 F.3d at 524, the statute directs courts “to take into consideration” seven factors when “determining the amount to be assessed”:

- (1) the size of the business,
- (2) the economic impact of the penalty on the business,
- (3) the violator’s full compliance history and good faith efforts to comply,
- (4) the duration of the violation as established by any credible evidence (including evidence other than the applicable test method),
- (5) payment by the violator of penalties previously assessed for the same violation,
- (6) the economic benefit of noncompliance,
- (7) and the seriousness of the violation.

42 U.S.C. § 7413(e)(1).

On rehearing en banc, only the sixth factor, the economic benefit of noncompliance, was briefed and argued.³⁸ The economic benefit factor “serves as the

³⁸ The economic benefit factor ultimately was decisive in the district court’s penalty calculation. But importantly, the court also found Exxon’s “full compliance history and good faith efforts to comply” weighed in favor of Exxon because of (i) the company’s conscientious efforts to investigate every emission exceedance, no matter how small; (ii) testimony that it has been an industry leader in “maintenance and operation practices”;

starting point for calculating the civil penalty” because it seeks “to recoup any benefit gained by the polluter in failing to comply with the law.” *CITGO*, 723 F.3d at 551, 552. This includes “the financial benefit to the offender of delaying capital expenditures and maintenance costs on pollution-control equipment.” *Id.* at 552. Courts typically use one of two benchmarks to calculate such a benefit: “(1) the cost of capital, i.e., what it would cost the polluter to obtain the funds necessary to install the equipment necessary to correct the violation; and (2) the actual return on capital, i.e., what the polluter earned on the capital that it declined to divert for installation of the equipment.” *Id.* (quoting *United States v. Allegheny Ludlum Corp.*, 366 F.3d 164, 169 (3d Cir. 2004)). Regardless of the method employed, the assessment must ultimately be “a reasonable approximation of economic benefit.” *Id.* at 552 (internal quotation marks omitted) (quoting *Cedar Point*, 73 F.3d at 576). Either of these methods marks a reasonable attempt to apply the statutory language.

In its first decision, the district court found that Exxon received no economic benefit from noncompliance and declined to assess a penalty for the 94 actionable violations that the court determined the company committed. *District Opinion I*, 66 F. Supp. 3d at 908, 911–12. In *Exxon I*, this court held that the district court erred by failing to consider whether Exxon received an economic benefit from delaying implementation of the four environmental improvement projects contained in the 2012 agreement between Exxon and the TCEQ. 824 F.3d at

and (iii) its candid and straightforward relationship with the TCEQ. *District Opinion III*, 524 F. Supp. 3d at 570.

529–30. The panel also stated its belief, in a footnote, that “compliance expenditures or projects need not be tied specifically to prevention of each violation in order to establish that they are ‘necessary to correct’ the violations overall.” *Id.* at 530 n.19. The panel advised the district court to ascertain whether the TCEQ projects would “ameliorate the *kinds of general problems* that have resulted in *at least some* of the permit violations upon which Plaintiffs have sued.” *Id.* (emphases added).

On remand, the district court found that, at the “high level of generality” demanded by the *Exxon I* panel, the TCEQ projects were “necessary to correct” the “types of violations in the complaint.” *District Opinion II*, 2017 WL 2331679 at *28. It then determined that Exxon received an economic benefit of \$14,249,940 from delaying implementation of the four projects, *id.* at *29, and assessed a penalty of \$19,951,278 against the company for 16,386 actionable violations, *id.* at *31. Vacating and remanding a second time, this court instructed the district court to recalculate penalties after reconsidering the number of violations for which Plaintiffs have standing. *Exxon II*, 968 F.3d at 374. On the second remand, the district court found the number of actionable violations to be 3,651 and reduced the penalty to \$14.25 million, but did not change its prior economic benefit analysis. *District Opinion III*, 524 F. Supp. 3d at 567–77.

This court should reject the overbroad economic benefit standard articulated in *Exxon I*. The text of the CAA requires the economic benefit analysis to be made on a violation-by-violation basis. That is, the only “noncompliance” to which the “economic benefit”

factor can be referring is “the violation” for which the penalty is being assessed. 42 U.S.C. § 7413(e)(1). Judge Davis’s opinion suggests that the CAA does not require a violation-by-violation determination because the economic benefit factor uses the word “noncompliance” while other factors use the word “violation.” This is a false distinction. In the statutory context, repetition of the singular term “violation” in the other penalty factors naturally forms the baseline for defining “the benefit of noncompliance” that the violator achieved.

Courts also have long recognized the need to connect the alleged economic benefit to particular violations under the CWA, *see, e.g., CITGO*, 723 F.3d at 552; *Allegheny Ludlum Corp.*, 366 F.3d at 169, 183–84, and despite slightly different statutory language, the logic of those cases applies equally to the CAA. *Cf. Utah Physicians*, 21 F.4th at 1254–55, 1259 (assessing penalties on a violation-by-violation basis, grouping them per violation type). Under the CAA as properly applied, the district court would first determine the extent to which any of the four TCEQ projects was “necessary to correct” any or all of the forty days of violations for which plaintiffs have standing to seek civil penalties. *CITGO*, 723 F.3d at 552. The court would next find the approximate portion of each project’s expenditures that should have been allocated to remedy the relevant violations. Only in this way could the district court reasonably approximate the economic benefit of *noncompliance* as opposed to punishing Exxon for making voluntary

improvements elsewhere in its facility.³⁹ See 42 U.S.C. § 7413(e)(1); see also *CITGO*, 723 F.3d at 551.

The Supreme Court, in fact, has cautioned that punishing civil suit defendants for voluntary undertakings made in coordination with enforcement agencies will discourage companies from entering such agreements. *Gwaltney*, 484 U.S. at 60–61, 108 S. Ct. at 383. Creating such a disincentive, the Court warned, would considerably curtail regulators’ discretion and “would change the nature of the citizens’ role from interstitial to potentially intrusive.”⁴⁰ *Id.* By rejecting an economic benefit calculation proportionate to the particular violations in the case, the *Exxon I* panel both misconstrued the CAA and lost sight of the complex interrelationship between private and public enforcement of

³⁹ *The Exxon III* majority compared Exxon’s complex to a leaky faucet, suggesting the “repair cost would be the same regardless whether you called the plumber after the first few drops or waited for multiple buckets to fill.” 47 F.4th at 421. That is true. But if the plumber’s quote includes both repairs to the faucet and installation of an environmentally friendly water heater, the homeowner would not be obliged to pay the full quote in order to fix the faucet. So too here. Perhaps a portion of one or all of the projects’ expenditures would have gone toward preventing the violations that plaintiffs have standing to pursue. But the vast bulk of the expenditures were made to reduce emissions that Plaintiffs do not have standing to pursue. *District Opinion II*, 2017 WL 2331679 at *5.

⁴⁰ It is undisputed that “Exxon could not have been required to undertake the TCEQ projects under existing laws and regulations.” *District Opinion II*, 2017 WL 2331679 at *5. Those projects instead served as a bargaining chip that resulted in a comprehensive agreement between Exxon and the TCEQ. Exxon might not have been so keen on entering such an agreement had it known that the *entire* cost of the TCEQ projects could serve as the basis for civil penalties.

environmental regulations. The disincentive created by the *Exxon I* dicta is even worse, because it means that companies that invested aggressively in emissions control equipment could be penalized even more than those offenders that forbore making such expenditures. *See* fn. 36 *supra*.

It is most unfortunate that because of one judge's refusal to vote, this court has taken no position on this issue. A "majority," after all, could well have remanded for the district court to reconsider its penalty calculation tying the violations it had found more directly to Exxon's emissions improvement projects. Our court's default is particularly blameworthy given the vital role played by the economic benefit calculation in future CAA and CWA litigation. The economic benefit of noncompliance presents a straightforward legal issue. Left undecided by this court, the issue must fester. There is no appellate "efficiency" in our failing to resolve this issue.

III. CONCLUSION

"[I]n a case like this that proceeds to trial, the specific facts set forth by the plaintiff to support standing 'must be supported adequately by the evidence adduced at trial.'" *TransUnion*, 594 U.S. at 431, 141 S. Ct. at 2208 (quoting *Lujan*, 504 U.S. at 561, 112 S. Ct. at 2137). The plaintiffs proved a connection between their specific injuries and violations of the Baytown complex's discharge permits for only about forty days of CAA violations. They chose instead to claim civil penalties for every technical permit violation for eight years, no matter how inconsequential, with no other demonstrated connections between violations and their injuries. In

doing so, they flouted the traceability requirement of Article III standing. Plaintiffs tried their case based impermissibly on standing in gross.

Our court compounds error by affirming a judgment without any rationale. We dissent.

PRISCILLA RICHMAN, *Circuit Judge*, dissenting:

I would reverse the district court’s judgment and remand, once again. I would reverse because decisions from panels of our court¹ compelled the district court to err in its 2017² and 2021³ judgments. The district court’s original disposition of this case in 2014⁴ was essentially correct.

As to the per curiam opinion issued today,⁵ I submit that affirming the district court’s 2021 judgment on the basis that “[j]ustice delayed is justice denied”⁶ is not a cognizable legal principle under the circumstances of this case. What should have occurred is to recognize that the en banc court did thoroughly consider the issues presented by ExxonMobil on appeal, and a majority of the seventeen-member en banc court could not agree upon the judgment that should be entered. Application of well-recognized principles of appellate

¹ *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.* (*ExxonMobil I*), 824 F.3d 507 (5th Cir. 2016); *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.* (*ExxonMobil II*), 968 F.3d 357 (5th Cir. 2020), *reh’g en banc granted, opinion vacated*, 61 F.4th 1012 (5th Cir. 2023) (per curiam).

² *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, No. CV H-10-4969, 2017 WL 2331679 (S.D. Tex. Apr. 26, 2017), *vacated and remanded*, 968 F.3d 357 (5th Cir. 2020).

³ *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 524 F. Supp. 3d 547 (S.D. Tex. 2021), *aff’d*, 47 F.4th 408 (5th Cir. 2022) (*ExxonMobil III*), *reh’g en banc granted, opinion vacated*, 61 F.4th 1012 (5th Cir. 2023) (per curiam).

⁴ *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 66 F. Supp. 3d 875, 890 (S.D. Tex. 2014), *vacated and remanded*, 824 F.3d 507 (5th Cir. 2016).

⁵ *See ante* at 2.

⁶ *See ante* at 2.

law would dictate that the district court's 2021 judgment must be affirmed because a majority of the court did not agree to reverse or modify that judgment. This can be determined from JUDGE DAVIS's concurring opinion, JUDGE HO's separate opinion, and the three dissenting opinions (*see* Part II of this opinion, *infra*).

I

As to the merits of the issues presented in this appeal, including standing issues, I join Part II of JUDGE JONES's cogent, compelling opinion, with the exception of footnote 21. My understanding of the Supreme Court's decision in *Laidlaw*⁷ is that a plaintiff is not required to establish actual exposure to a harmful emission or to personally witness a discharge or emission that violates a permit or standard in order to have standing to seek civil penalties.⁸ Plaintiffs living in an area actually reached by pollutants released in violation of permits or standards, and plaintiffs who would otherwise frequent such an area somewhat regularly but who curtailed their activities there, may have a reasonable fear that will establish injury in fact traceable to the polluter. However, the plaintiffs have not made such a showing in this case apart from the two plaintiffs who "credibly correlate[d]" smelling odors or hearing

⁷ *Friends of the Earth, Inc. v. Laidlaw Env't Servs. (TOC), Inc.*, 528 U.S. 167 (2000).

⁸ *Id.* at 184-85.

noise to five emission events that violated a permit or standard.⁹

At least one part of JUDGE JONES's opinion appears to foreclose standing based on a reasonable fear, though another part of that opinion cites cases that recognize reasonable fear as a basis for standing.¹⁰ Specifically, footnote 21 in subpart II(B)(1) of JUDGE JONES's opinion says, "[R]epeated unauthorized emissions of sulfur dioxide could be actionable IF they were significant enough within a limited period or periods to have gone 'over the fence' of the complex and *roughly coincided with a plaintiff's exposure*."¹¹ I take issue with the italicized part of this statement.

Of course, as JUDGE Jones's dissenting opinion forcefully points out, there is no evidence in the case before us that discharges or emissions in violation of ExxonMobil's permits or applicable standards have found their way beyond the plant's premises. Accordingly, the plaintiffs' subjective fears and apprehensions that "at some indefinite future time,"¹² emissions or discharges in violation of ExxonMobil's permits or applicable standards *might* find their way outside the plant in sufficient quantities and with sufficient frequency to cause them injury do not establish injury in fact traceable to ExxonMobil as to

⁹ *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 66 F. Supp. 3d 875, 890 (S.D. Tex. 2014), *vacated and remanded*, 824 F.3d 507 (5th Cir. 2016).

¹⁰ *Ante* at 34-36.

¹¹ *Ante* at 28 n.21 (emphasis added).

¹² *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 565 n.2 (1992).

past violations or those ongoing when the suit was filed and pending.

In *Laidlaw*, there were continuous discharges of mercury into a river in violation of a permit.¹³ The Supreme Court explained, “[T]he affidavits and testimony presented by [a plaintiff] in this case assert that Laidlaw’s discharges, and the affiant members’ reasonable concerns about the effects of those discharges, directly affected those affiants’ recreational, aesthetic, and economic interests.”¹⁴ The Court held these fears were sufficient to establish injury in fact.¹⁵

The Supreme Court distinguished the facts in *Laidlaw* from those before it in *Lyons*,¹⁶ noting it had said in *Lyons* that “[t]he reasonableness of Lyons’ fear is dependent upon the likelihood of a recurrence of the allegedly unlawful conduct,’ and that his ‘subjective apprehensions’ that such a recurrence would even *take place* were not enough to support standing.”¹⁷ By contrast, in *Laidlaw*, it was “undisputed that Laidlaw’s unlawful conduct discharging pollutants in excess of permit limits [into the river]—was occurring at the time the complaint was filed.”¹⁸ The Court reasoned, “Under *Lyons*, then, the only ‘subjective’ issue here is ‘[t]he reasonableness of [the] fear’ that led the affiants to respond to that

¹³ *Laidlaw*, 528 U.S. at 176.

¹⁴ *Id.* at 183-84.

¹⁵ *Id.* at 184-85.

¹⁶ *City of Los Angeles v. Lyons*, 461 U.S. 95 (1983).

¹⁷ *Laidlaw*, 528 U.S. at 184 (quoting *Lyons*, 461 U.S. at 107 n.8).

¹⁸ *Id.*

concededly ongoing conduct by refraining from use of the North Tyger River and surrounding areas.”¹⁹ The Supreme Court concluded, “[W]e see nothing ‘improbable’ about the proposition that a company’s continuous and pervasive illegal discharges of pollutants into a river would cause nearby residents to curtail their recreational use of that waterway and would subject them to other economic and aesthetic harms.”²⁰ Though this discussion occurred in the context of whether the plaintiffs had standing to seek injunctive relief, the Court found the plaintiffs had standing to seek civil penalties without further considering whether they had sustained an injury in fact.²¹

In the present case, there is no evidence that pollutants in excess of ExxonMobil’s permits or in violation of the law have escaped the boundaries of the plant. Excess pollutants have not spread into the atmosphere outside the plant. The fear that they might do so in the future is too attenuated and is not reasonable based on the facts presented at trial. Based on the facts found by the district court, the plaintiffs’ fears are too speculative to support injury in fact and traceability for standing purposes.²²

It is important to bear in mind that the district court meticulously considered all of the evidence after the extensive bench trial in this case and, entirely

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.* at 185-186.

²² See *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 66 F. Supp. 3d 875, 880-91 (S.D. Tex. 2014), *vacated and remanded*, 824 F.3d 507 (5th Cir. 2016).

correctly in my view, concluded in its initial opinion that no penalty was warranted by the evidence, holding: “An assessment of no amount of penalty is the only amount of penalty that is consistent with a balancing of all the factors and the totality of the credible evidence supporting the factors. Accordingly, Exxon is not assessed a penalty.”²³ Panels of our court have since remanded the case, twice, to the district court, and the district court dutifully imposed substantial penalties in accordance with directives from those panels. But in its latest (third) decision, the district court once again reiterated its core *factual* findings in this case, which are supported by the great weight of the evidence. Those findings are worth setting forth fully because they go to the heart of whether the plaintiffs established standing at trial as to any discharges or emissions other than the five not at issue in this appeal:

The Court maintains its findings from its initial findings of fact and conclusions of law that most [of the violations were not serious from a public health and environmental perspective. As is necessary for parts of the Court’s initial judgment left undisturbed by the Fifth Circuit’s opinion, which relied on those findings, the Court reiterates here paragraphs 47 and 48 from the *Findings of Fact and Conclusions of Law*, Document No. 225:

47. Plaintiffs claim the Events and Deviations were serious because they adversely affected public health. To

²³ *Id.* at 911-12 (internal footnote omitted).

support this claim, Plaintiffs submitted evidence of the potential health effects caused by the types of pollutants emitted during the Events and Deviations. For example, hydrogen sulfide, which smells like rotten eggs or feces, can cause sore throat, cough, fatigue, headaches, nausea, and poor memory at low concentrations. Factors affecting potential risk of harm from pollutants include duration of exposure and concentration of pollutants. As discussed supra, the Events and Deviations differ tremendously in terms of duration and amount. Plaintiffs' aforementioned evidence of the potential health effects caused by the types of pollutants emitted does not include credible evidence that any of the specific Events and Deviations were of a duration and concentration to—even potentially—adversely affect human health or the environment. Although Plaintiffs' evidence of potential health effects provides some support of a potential risk of harm to human health, this evidence in this case is too tenuous and general to rise above mere speculation.

48. Plaintiffs also claim the Events and Deviations were serious because they created “nuisance-type impacts” to the community that interfered with daily life. Four Plaintiffs' members experienced impacts to their life while living or visiting near the Complex,

including pungent odors, allergies, respiratory problems, disruptive noise from flaring, concerns for their health after seeing haze believed to be harmful, and fears of explosion after seeing flares. However, these impacts could have been caused by Exxon's authorized emissions or other companies' emissions, because certain emissions and flares are authorized by permit and the nearby area in which the Complex operates is populated with numerous other refineries, petrochemical plants, and industrial facilities. Indeed, unauthorized emissions were a very small percentage of total emissions at the Complex for each year at issue. Plaintiffs' members were only able to correlate some of the impacts, such as odor and noise, to five Events or Deviations at issue in this case. Moreover, Plaintiffs' members' testimonies regarding impacts were controverted by persuasive testimony from three other residents of the community who have lived very close to the Complex for many years. These residents testified the Complex has not impacted their lives, including that they have had no health problems they attribute to the Complex and that they have not experienced any problems with flaring, odors, noises, or emissions coming from the Complex. For all these reasons, the proposition that the Events

or Deviations were serious because they created nuisance-type impacts on the surrounding community is not supported by the preponderance of the credible evidence.²⁴

I agree with JUDGE JONES's opinion that only two of the plaintiffs, Cottar and Sprayberry, established standing, and they established standing as to only five incidents. I would remand for consideration of whether to impose penalties based on these incidents and, if so, the amount of the penalties.

Finally, I emphasize that most of the multimillion-dollar penalty assessed by the district court stems from four capital improvements that ExxonMobil undertook as part of an agreed TCEQ order. It is undisputed that no regulator could have required ExxonMobil to undertake these improvements. I am in complete agreement with the analysis in JUDGE JONES's opinion regarding the penalties assessed largely based on these four projects.

II

Our en banc court is clearly splintered. But with great respect to my colleagues who have joined the per curiam opinion, affirming the district court's 2021 judgment of \$14,251,302 based on the rationale that "[j]ustice delayed is justice denied,"²⁵ is not a permissible disposition in circumstances like the present. The en banc court should have issued a simple per curiam opinion that recognizes where the votes lie, based on the divisions among us, and that

²⁴ *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 524 F. Supp. 3d 547, 575 n.121 (S.D. Tex. 2021).

²⁵ *Ante* at 2.

announces the judgment of the en banc court, which is affirmation by operation of law because a majority was lacking after the en banc court considered the issues.

I know of no authority that permits a district court, or a court of appeals, even a court of appeals sitting en banc, to render a judgment in an Article III case or controversy on the basis that the case has been pending so long that no decision on the issues presented on appeal will be rendered when the issues presented remain live. The point is best illustrated by considering a district court proceeding. Suppose a case were filed and the district court deferred a decision for one, two, or five years, but did not reach a decision, either because the questions presented were difficult or because the district court was simply too concerned with other cases to resolve what it considered relatively unimportant issues. Could that court dismiss the case or render a judgment for or against the plaintiff on the basis that justice delayed is justice denied? As long as the case had not been mooted by the passage of time, the answer clearly is “no,” a district court cannot do that. That would be an illegitimate basis on which to decide a case.

What about a panel of a court of appeals? Could a three-judge panel wrestle with, or conversely ignore, issues on appeal and ultimately affirm the district court on the basis that due to the passage of time, the panel would simply move along? Again, the answer is “no.” That would not be reasoned decision-making and would amount to the denial of the right to appeal. The same is true when a court of appeals sits en banc.

The per curiam opinion agreed to by a majority of the en banc court today mentions improvidently

granting en banc consideration, but the per curiam opinion does not withdraw the grant of rehearing as improvidently granted. The sole basis for affirming the district court's judgment is that "[j]ustice delayed is justice denied."²⁶ Had a majority of the court withdrawn the grant of en banc consideration, I submit that it would have been obliged to reinstate the *ExxonMobil III* panel opinion that the en banc court vacated.²⁷ Otherwise, the district court's 2021 judgment would have received no appellate review at all. ExxonMobil's right to appeal would have been rendered a nullity.

So where are we? In reality, the nine members of the en banc court joining the per curiam opinion²⁸ had no option other than to recognize that the district court's judgment would be affirmed by operation of law. That is because it would take nine votes to render a judgment other than one affirming the district court's 2021 judgment, and there were not nine votes to render a different judgment. Seven judges (JUDGE DAVIS and those joining his concurring opinion) would have affirmed the district court's 2017 judgment had they reached the merits. CHIEF JUDGE ELROD would affirm the 2021 district court judgment, not the 2017 judgment. Had JUDGE HO considered the merits, he

²⁶ See *ante* at 2.

²⁷ See *Env't Texas Citizen Lobby, Inc. v. ExxonMobil Corp.*, 61 F.4th 1012 (5th Cir. 2023) (per curiam).

²⁸ Though neither the per curiam opinion nor JUDGE HO's separate opinion expressly says so, JUDGE HO has agreed to join the per curiam opinion. This is apparent on the face of the per curiam opinion, since without the joinder of a majority of the en banc court (nine members), it could not be a per curiam opinion, that is, an opinion of the court.

would have reversed the district court's 2021 judgment and remanded for further proceedings regarding standing. So, there were insufficient votes to reverse, remand, or modify the district court's 2021 judgment.

While there are not nine votes to render a judgment other than one affirming the district court's 2021 judgment, we can discern where a majority of the court is on some of the issues. Let's begin with jurisdiction. JUDGE DAVIS and those joining his concurring opinion (seven in all) conclude that all plaintiffs had standing to pursue all claims on which the district court based not only its 2021 judgment in the amount of \$14,251,302, but also the district court's 2017 judgment in the amount of \$19,951,278. CHIEF JUDGE ELROD necessarily has concluded that the plaintiffs had standing to pursue at least the claims for which the district court awarded them \$14,251,302 in its 2021 judgment, otherwise the district court would not have had jurisdiction to render the judgment it did. CHIEF JUDGE ELROD²⁹ has expressly indicated that she would reinstate the panel's decision in *ExxonMobil III*, which held that all plaintiffs had established standing as to all claims on which the district court's 2021 judgment was based.³⁰ Though JUDGE HO has expressly indicated that *were he on a panel*, he would reverse and remand on standing issues, he says that as member of the en banc court, he would withdraw rehearing en banc as improvidently granted and reinstate the panels'

²⁹ See *ante* at 2.

³⁰ *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 47 F.4th 408 (*ExxonMobil III*) (5th Cir. 2022), *reh'g en banc granted, opinion vacated*, 61 F.4th 1012 (5th Cir. 2023) (mem.).

opinions in *ExxonMobil II* and *ExxonMobil III*. JUDGE HO nevertheless joins the per curiam opinion affirming the district court's 2021 judgment, which means the district must have had jurisdiction to render the judgment it did.

But issues other than standing were raised on appeal by ExxonMobil, and these issues question the propriety of more than \$12 million of the district court's 2021 judgment that is being affirmed. Eight members of the en banc court would find no basis for reversing the district court as to those issues (the judges joining JUDGE DAVIS's concurring opinion and CHIEF JUDGE ELROD). JUDGE HO does not view those issues as worthy of en banc consideration and would not resolve them. Accordingly, there are not nine votes to do anything other than affirm the district court's 2021 judgment as to those issues.

To say that I am disappointed in the process that has been employed in our en banc proceedings in this case would be an understatement. Because we do not ordinarily discuss the process by which we decide cases, I will not go into all that is behind what is being issued today.

Could a majority of the en banc court have decided that we should not have granted en banc review in this case? I think the answer to that question is "yes." But if a majority of the en banc court decides to withdraw en banc review, I submit that it must return the case to the posture in which it came to the en banc court. It must reinstate the opinion and judgment of the panel, which we have done on at least two

occasions³¹ and which the en banc court has the authority to do under our rules.³² The en banc court cannot simply say, “this case has taken too long, we are moving on to the next one.” That is not reasoned decision-making, and it results in the denial of appellate review. But, for reasons that remain a mystery to me, that is what a majority of the court has done.

* * *

In sum, I would reverse the district court’s 2021 judgment and remand for proceedings consistent with Part II of JUDGE JONES’s opinion, other than footnote 21 in that opinion.

³¹ See *Spiess v. C. Itoh & Co. (Am.), Inc.*, 664 F.2d 480, 481 (5th Cir. Unit A Dec. 1981) (vacating en banc order and reinstating the panel decision in light of the grant of *certiorari* by the Supreme Court in two other cases); *United States v. Clark*, 622 F.2d 917, 917 (5th Cir. 1980) (per curiam) (“The order granting a rehearing en banc [] is vacated as having been improvidently granted on the record before us, and the panel opinion [] is reinstated.”).

³² See 5TH CIR. R. 41.3.

ANDREW S. OLDHAM, *Circuit Judge*, joined by JONES, SMITH, WILLETT, DUNCAN, ENGELHARDT, and WILSON, *Circuit Judges*, dissenting:

In sports and war, defeat comes to the first side to give up. In law, apparently, that is not true.

This is an important case that impacts not only Exxon but also standing doctrine and environmental law more generally. Three-judge panels of our court have heard it three times. We granted en banc rehearing presumably because a majority of active judges recognized the inadequacy of the panels' decisions. *See Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 61 F.4th 1012, 1012–13 (5th Cir. 2023) (mem.).

After two years of en banc deliberations, here is how everything shakes out. Eight members of the en banc court support JUDGE JONES's rule to vacate. *See ante*, at 83 (Jones, J., dissenting). Seven support JUDGE DAVIS's rule to affirm. *See ante*, at 4 (Davis, J., concurring). CHIEF JUDGE ELROD supports the district court's rule and thus would also affirm. *See ante*, at 2 n.** (per curiam). JUDGE HO—the ninth vote for today's judgment—supports none of this. But rather than completing the task and choosing a legal rule (any legal rule), today's en banc majority throws up its hands and announces a *non sequitur*: “We have taken too long trying to make up our minds, so, oh well—affirmed.”¹

¹ JUDGE HO supplies the ninth vote for the per curiam opinion. Then he says he did not join the per curiam? *See ante*, at 71 n.3 (opinion of Ho, J.). And he styles his opinion “JAMES C. HO, *Circuit Judge*, in support of dismissing rehearing en banc as improvidently granted.” *Ante*, at 66 (opinion of Ho, J.). This is confusing. So I simply refer to it as “opinion of Ho, J.”

Twenty-first century jurists write opinions to explain judgments. And those opinions carry enormous significance. Here, an opinion should have told parties throughout our circuit what to expect from citizen suits under the Clean Air Act. One of the virtues of a legal opinion is that it lets lawyers, jurists, and the public grade our work. But what is the world supposed to make of today's rationale? What is the magic number that appears on the majority's shot clock, such that a case pending for *X* days warrants we-giveup affirmance? In which penumbra or emanation should we look to find the legal authority for that shot clock? And perhaps most importantly, why is it *Exxon's* fault that nine members of this court could not agree by the hidden deadline?

All we know is that today's judgment rests on frustration with the process of drafting a majority opinion. The majority says its inability to write an *opinion* necessitates its *judgment*. Not only does that tail-wagging-the-dog approach undermine confidence in the judgment. It also gives primacy to the opinion—in contravention of millennia of legal tradition.

I A

Since at least the time of Roman rule, the essential task of courts has been to render judgments. From the second century BC to the third century AD, Roman jurists typically rendered oral judgments without providing any reasons for them. See Ernest Metzger, *Roman Judges, Case Law, and Principles of Procedure*, 22 L. & HIST. REV. 243, 250–51 (2004); Richard H. Helmholz, *The Ratio Decidendi in England: Evidence from the Civilian Tradition*, in 1 RATIO DECIDENDI: GUIDING PRINCIPLES OF JUDICIAL

DECISIONS 73, 75 (W. Hamilton Bryson & Serge Dauchy eds., 2006). Even when some decisions included language that “grammatically could seem to refer to reasoning,” this “often refer[red] only to the factual circumstances of the case.” Laurens Winkel, *Ratio Decidendi—Legal Reasoning in Roman Law*, in *RATIO DECIDENDI*, *supra*, at 9, 9–10.

The primacy of judgments is also apparent throughout English legal history. From the medieval period into the nineteenth century, the ecclesiastical courts rendered decisions without explaining their reasoning. *See* Helmholz, *supra*, at 77–78, 80–81. For at least part of the thirteenth century, even the common law courts omitted the “reasons for judgments.” JOHN BAKER, *AN INTRODUCTION TO ENGLISH LEGAL HISTORY* 188 (2019). As time wore on, the common law courts began to provide oral reasoning for some, though not all, of their decisions. *See* Paul Brand, *Reasoned Judgments in the English Medieval Common Law, 1270 to 1307*, in *RATIO DECIDENDI*, *supra*, at 55, 57.

Around the same time, private reporters started to write down—literally, report—the judges’ oral reasoning in certain cases. *See ibid.*; BAKER, *supra*, at 189. This practice continued well into the nineteenth century. *See* John H. Langbein, *Chancellor Kent and the History of Legal Literature*, 93 COLUM. L. REV. 547, 576–78 (1993). The reporters, not the courts, “selected the cases, stated the facts, summarized the views of counsel, summarized the views of those judges who gave oral opinions, and supplied annotations of [their] own.” *Id.* at 578. Moreover, the oral opinions these reporters summarized were not opinions of the court but were seriatim—each judge

explained his own view of the case. See Kevin M. Stack, *The Practice of Dissent in the Supreme Court*, 105 YALE L.J. 2235, 2238 (1996). Obviously, the judges did not need to agree on an opinion to render judgments.

The focus on judgments rather than opinions carried over to America. During the colonial period, “the reporting of any decision was unusual.” Langbein, *supra*, at 572–73 (quotation omitted); see also William Baude & Jud Campbell, *Early American Constitutional History: A Source Guide* (Mar. 11, 2023) (unpublished manuscript at 17), <https://perma.cc/A63D-KBZN> (“Published reports of American judicial decisions were unknown at the founding and somewhat rare in the early republic.”). After the Constitution was adopted, reporting in state courts remained sparse. For example, Chancellor James Kent, a prominent New York judge, explained in a letter that “[t]he opinions from the bench were delivered *ore tenus*,” and “there [were] no reports or State precedents” when he “came to the bench” in 1798. Letter from James Kent to Thomas Washington (Oct. 6, 1828), in 3 VA. L. REG. 563, 568 (1897). Decisions of the lower federal courts “were reported even later and more erratically than were those of the states.” William A. Fletcher, *The General Common Law and Section 34 of the Judiciary Act of 1789: The Example of Marine Insurance*, 97 HARV. L. REV. 1513, 1556 n.204 (1984). Indeed, “no reports of the decisions” of William Cushing or William Paterson while sitting on the circuit courts “were ever published,” nor were decisions of William Johnson or Samuel Chase on certain circuits. *Ibid.* And others had their opinions “published late and incompletely.” *Ibid.*

That is why the Supreme Court has unflinchingly insisted that the judicial power vested by Article III is “the power of a court to decide and pronounce a judgment and carry it into effect.” *Muskra v. United States*, 219 U.S. 346, 356 (1911) (quotation omitted); see also *Plaut v. Spendthrift Farm, Inc.*, 514 U.S. 211, 219 (1995) (judicial power is the power “to render dispositive judgments” (quotation omitted)). Rendering a judgment is thus both necessary and sufficient to exercise the judicial power. See Edward A. Hartnett, *A Matter of Judgment, Not a Matter of Opinion*, 74 N.Y.U. L. REV. 123, 145 (1999). Issuing an opinion is neither. An opinion “merely explain[s] the grounds” for a judgment. William Baude, *The Judgment Power*, 96 GEO. L.J. 1807, 1844 (2008).

Early American practices underscored this distinction. For most of the Supreme Court’s first decade, it delivered opinions seriatim only. See John Harrison, *Judicial Interpretive Finality and the Constitutional Text*, 23 CONST. COMMENT. 33, 36 (2006). Initially, the Court also issued only oral judgments and opinions, relying on private, unappointed reporters. See *id.* at 44. Critically, “[n]either the Constitution nor the Judiciary Act of 1789 provided for the delivery of written opinions, let alone their public distribution.” John Harrison, *The Power of Congress to Limit the Jurisdiction of Federal Courts and the Text of Article III*, 64 U. CHI. L. REV. 203, 230 (1997). The Judiciary Act of 1789, however, “required the clerks of federal courts, including the Supreme Court, to maintain accurate records of the orders, decrees, judgments, and proceedings of the courts.” Hartnett, *A Matter of Judgment*, *supra*, at 128. And the first Congress “provided for the preservation and distribution of its statutes” as well

as treaties. See Harrison, *Judicial Interpretive Finality*, *supra*, at 44. Thus, while Congress wanted to preserve statutes, treaties, and judgments, it apparently cared not at all about opinions.

An examination of the early Supreme Court reporters confirms the judicial focus on resolving disputes rather than on issuing opinions. The work of the Court's first reporter, Alexander J. Dallas, was characterized by "[d]elay, expense, omission and inaccuracy." Craig Joyce, *The Rise of the Supreme Court Reporter: An Institutional Perspective on Marshall Court Ascendancy*, 83 MICH. L. REV. 1291, 1305 (1985). At least in part, this was because the Court did not provide any written materials to Dallas. See *id.* at 1298. By the time William Cranch became the Court's second reporter, the Court had started a new practice "of reducing [its] opinion to writing, in all cases of difficulty or importance." See 5 U.S. (1 Cranch) iii, iv–v (1804). But these writings were merely "the Justices' notes, sometimes polished and sometimes not, of opinions delivered orally." See Joyce, *supra*, at 1310 n.110. Like Dallas before him, Cranch also struggled with delay, expense, omission, and inaccuracy. See *id.* at 1312. In 1816, Henry Wheaton replaced Cranch, and the following year he was named by Congress as the Court's first official reporter of decisions. See Hartnett, *A Matter of Judgment*, *supra*, at 129 & n.33. Although Wheaton was much timelier and more accurate than his predecessors, Wheaton still exercised considerable discretion in omitting cases he deemed unimportant. See Joyce, *supra*, at 1329. In addition, "Wheaton's volumes did not enjoy wide circulation." Hartnett, *A Matter of Judgment*, *supra*, at 130. Founding-era

practices thus indicate that opinions, while valuable, remained secondary to judgments.

Judgment primacy is reflected not only in judicial practices stretching from the Roman to the American Republic, but also in two of the oldest doctrines of federal jurisdiction. In 1792, it was firmly established that federal courts act judicially only when they render a final judgment that binds the parties to the case. *See Hayburn's Case*, 2 U.S. (2 Dall.) 409 (1792). The Supreme Court recognized the flip side of that principle just one year later when it told the President that federal courts cannot answer legal questions *without* rendering a judgment. *See Correspondence of the Justices*, in RICHARD H. FALLON, JR. ET AL., HART AND WECHSLER'S THE FEDERAL COURT'S AND THE FEDERAL SYSTEM 50–52 (7th ed. 2015) [hereinafter HART & WECHSLER]. Both doctrines have been repeatedly maintained throughout our Nation's history. *See, e.g., United States v. Ferreira*, 54 U.S. 40 (1851); *Gordon v. United States*, 69 U.S. 561 (1864); *Muskrat*, 219 U.S. 346 (1911); *Plaut*, 514 U.S. 211 (1995). Although opinions play an important role in federal courts, they must always take a back seat to judgments. *Cf. Texas v. Hopwood*, 518 U.S. 1033, 1033 (1996) (Ginsburg, J., respecting the denial of *certiorari*) (“This Court . . . reviews judgments, not opinions.” (quotation omitted)).

B

None of this is to say that opinions are irrelevant. If the Legal Process School taught us anything, it taught us there is virtue in *reasoned* decision-making. Reasoned opinions explain to the parties (and the vanishingly small number of other people who read what judges say) that a particular judgment rests on

legal principle rather than arbitrary “fiat” or “*ad hoc*” caprice. See Herbert Wechsler, *Toward Neutral Principles of Constitutional Law*, 73 HARV. L. REV. 1, 11, 15 (1959). Opinion writing thus promotes “genuinely principled” judging, whereby a judgment is reached “on analysis and reasons quite transcending the immediate result that is achieved.” *Id.* at 15. Without a reasoned opinion, “[t]he parties will have no idea of the basis of [] decision; and the losing party, being left in the dark, may be harder to convince that the decision is just.” HENRY M. HART, JR. & ALBERT M. SACKS, *THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW* 381 (1958). And maybe “even more important, other private persons will have no aid in planning future conduct.” *Ibid.*

Today’s majority, however, gets it wrong coming and going. It could have just said “affirmed” without opinion. Sure, without reasoned explanation, some might doubt the principle in that judgment. But at least it would rest on centuries of legal tradition. Alternatively, the majority could have written a reasoned opinion to explain why it is resolving this important case in plaintiffs’ favor.

Today’s majority chooses neither route. It says that the *opinion* is the only thing that matters. So much so that when the opinion-writing process takes too long, it is best just to affirm to get rid of the case. The majority thus allows the lack of an opinion to dictate its judgment. Yet, of course, the takes-too-long rationale could just as easily support vacatur, reversal, a coin flip, or any other arbitrary decision. “Justice delayed is justice denied”? *Ante*, at 2 (per curiam). Perhaps. But justice is no better served by a

per curiam judgment that rests only on frustration. The rule of law demands more than picking a judgment based on the expediency of getting the case off our docket.

II

The majority's per curiam opinion is bad. But JUDGE DAVIS's concurrence is worse. I join in full the powerful dissent by JUDGE JONES, which explains many of the legal errors in the concurrence. Three of those errors merit emphasis here: (A) it confuses the relevant judgments, (B) it would exacerbate the constitutional tension in the Clean Air Act's citizen-suit provision, and (C) it misconstrues *Laidlaw*.

A

JUDGE DAVIS's concurrence purports to explain why some members of the en banc majority voted to affirm. In addition to the myriad problems identified by JUDGE JONES, a fundamental one screams out: The opinion would affirm an *altogether different judgment* than the one affirmed by the per curiam opinion.

JUDGE DAVIS's concurrence would affirm the district court's 2017 judgment imposing \$19.95 million in civil penalties. *See ante*, at 4 & n.2 (Davis, J., concurring) (urging affirmance of *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 2017 WL 2331679, at *31 (S.D. Tex. Apr. 26, 2017)). The per curiam, however, affirms a 2021 judgment imposing \$14.25 million in civil penalties. *See ante*, at 2 (per curiam) (affirming *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 524 F. Supp. 3d 547, 577 (S.D. Tex. 2021)). So seven of the nine judges who form today's per curiam majority have voted to affirm two altogether different and inconsistent civil-penalty judgments. And no one explains how or why it is an

acceptable compromise to go from affirming one judgment to another.

It is an odd “concurrence” that reaches a result different from the majority it purports to support. This further underscores that today’s decision pays little attention to the judgment power.

B

Next, JUDGE DAVIS’s concurrence would exacerbate the constitutional tension in citizen suits. The Clean Air Act’s citizen-suit provision already “push[es] against the limits of Article III.” HART & WECHSLER, *supra*, at 805. So you might expect a court to approach that provision with some modesty. But JUDGE DAVIS’s concurrence does the opposite. It proposes a standard that is wildly unworkable. It would transmogrify standing doctrine into an unrecognizable mess. And it would conflate past versus present versus future injuries, past versus future traceability, retrospective versus prospective relief, *and* private versus public redressability—all in one en banc case. JUDGE DAVIS’s concurrence interprets the citizen-suit provision to allow (1) someone who was injured in the past to seek (2) civil penalties that are (3) somehow tied to *past* injuries yet somehow “traced” to *future* violations (whatever that means), and that (4) must be deposited not in the injured plaintiff’s pocket but instead in the Treasury, without (5) any proof that any of it is necessary to stop an ongoing harm or to deter a future one. None of this makes sense or is consistent with Article III.

C

Nor is any of this supported, much less required, by *Friends of the Earth, Inc. v. Laidlaw Env’t Servs.*

(*TOC*), *Inc.*, 528 U.S. 167 (2000). In that case, the Court said civil penalties can redress certain kinds of environmental harms, but *only* “[t]o the extent that they encourage defendants to discontinue current violations and deter them from committing future ones.” *Id.* at 186; *see also id.* at 187 (holding “that citizen suitors lack standing to seek civil penalties for violations that have abated by the time of suit”). But what are the environmental harms that JUDGE DAVIS’s concurrence wants to stop or deter? *Laidlaw* requires some showing that *this* penalty will deter *that* harm. *See id.* at 187. But the concurrence does nothing to apply that redressability rule.

More fundamentally, *Laidlaw* provides no help to today’s majority because it did not address traceability *at all*. The *Laidlaw* Court presumably saw no need to discuss traceability because all the plaintiffs’ injuries were easily traceable to one ongoing wrongful act—the discharge of mercury into the North Tyger River. *Id.* at 181–83. That was the one ongoing wrongful act a civil penalty would stop and then deter. By contrast, the concurrence claims that plaintiffs’ injuries are somehow traceable to *thousands* of idiosyncratic violations that bear no relationship to asthma, cancer, or headaches—like a “fire” lasting less than one minute in a cigarette butt can, ROA.13214, 51213, 50482, and a non-fire lasting zero minutes from an extension cord, ROA.13214, 18333–35. Not only are those violations not traceable to plaintiffs’ past injuries, but they also cannot be traced to ongoing future harms. Does Exxon have a systematic, ongoing problem with cigarette butts and extension cords? If there is some other ongoing or future conduct that might cause plaintiffs’ injuries,

what is it? *Laidlaw* does nothing to help plaintiffs out of this traceability problem.

If we do not know what ongoing or future conduct should be actionable, why would any judge on our court prefer to affirm a \$19.95 million penalty calculation to fix it?² Given that JUDGE DAVIS's concurrence would hold Exxon liable for every single one of the 16,386 violation days, why not hold Exxon liable for every single dollar of the statutory maximum (\$573.51 million) to provide even better deterrence? *Laidlaw* supplies no answer to any of these questions.³

² Or \$14.25 million for that matter. Again, today's majority is agnostic about what the civil penalty should be, as evidenced by the fact that seven of its nine members voted to affirm two different judgments.

³ The constitutional tension is further amplified by contrasting this case to *Vermont Agency of Natural Resources v. United States ex rel. Stevens*, 529 U.S. 765 (2000), decided the same Term as *Laidlaw*. *Stevens* held that a *qui tam* relator has Article III standing to seek civil penalties payable to the Treasury. The *Stevens* Court based its holding on three things that are not true of Clean Air Act citizen suits: (1) the long history of *qui tam* actions, (2) that a *qui tam* relator is a partial assignee of a claim belonging to the Government, and (3) that the *qui tam* relator himself recovers a "bounty." *Id.* at 771–78. Even with all three of those qualifiers, *Stevens* raises numerous questions about actions like these. See HART & WECHSLER, *supra*, at 156 (asking some); cf. *United States ex rel. Polansky v. Exec. Health Res., Inc.*, 143 S. Ct. 1720, 1741 (2023) (Thomas, J., dissenting) (noting that the False Claims Act's "*qui tam* provisions have long inhabited something of a constitutional twilight zone" and that "[t]here are substantial arguments that the *qui tam* device is inconsistent with Article II"). True, the *Stevens* Court focused primarily on the injury prong. But its

III

Next, a few words on JUDGE HO's opinion. That opinion says we should dismiss the grant of rehearing en banc as improvidently granted ("DIG") and reinstate the prior decisions of the three-judge panel. *See ante*, at 66 (opinion of Ho, J.). It argues that this is permissible because of the Supreme Court's longstanding practice of dismissing the writ of *certiorari* as improvidently granted. The DIG of a writ of *certiorari* makes sense because of the history and nature of that writ in that Court. Of course, *our* court does not have *certiorari* jurisdiction. And the entire comparison of our jurisdiction to the Supreme Court's is fallacious.

I first (A) describe the history of the writ of *certiorari*, the effect of the writ on lower court judgments, and why it makes no sense to "DIG" an en banc case in the court of appeals. I then (B) explain why it is no better to DIG and reinstate the panel opinion ("DIG+reinstate"). Then I (C) discuss JUDGE HO's understanding of standing and *Laidlaw*. Finally, I (D) detail the inconsistent judgments offered by JUDGE HO.

cautious, historically sensitive approach in the unusual situation where an individual seeks civil penalties payable to the Government should give us pause here. JUDGE DAVIS's concurrence, by contrast, would extend civil-penalty standing with much less support, none of which is grounded in history or tradition.

Certiorari is an ancient writ. The “precise origins” of the writ “are uncertain.” Jerome J. Hanus, *Certiorari and Policy-Making in English History*, 12 AM. J. LEGAL HIST. 63, 73 (1968). But its earliest known use occurred in 1260, and within two decades, the “writ was in common use.” S.A. de Smith, *The Prerogative Writs*, 11 CAMBRIDGE L.J. 40, 45–46 (1951).

Over time, the writ’s nature solidified. “The key words” used in the writ were “*certiorari volumus*”: “we wish to be certainly informed.” BAKER, *supra*, at 159 n.100. And indeed, the writ of *certiorari* began as simply “the King’s personal command for information.” de Smith, *supra*, at 55. But three distinct functions soon emerged. First, the writ was used “to order the transfer of *records* to a superior court.” Benjamin B. Johnson, *The Origins of Supreme Court Question Selection*, 122 COLUM. L. REV. 793, 813 (2022) (emphasis added). Second, the writ was used “to remove a [criminal] *case* when the accused could not get a fair trial in the lower court.” *Ibid.* (emphasis added). Here, the writ necessarily brought the case up to a higher court before a judgment was rendered below. And third, *certiorari* was used to bring up a *case* to review a lower court judgment “in the nature of a writ of error.” *Ibid.* (quotation omitted). Thus, *certiorari* “effected the removal of a judicial record or cause (often an indictment) from a lower court for trial or other disposition in King’s Bench.” James E. Pfander, *Jurisdiction-Stripping and the Supreme Court’s Power to Supervise Inferior Tribunals*, 78 TEX. L. REV. 1433, 1444 (2000).

Importantly, *certiorari* was a prerogative writ. 3 WILLIAM BLACK-STONE, COMMENTARIES ON THE LAWS OF ENGLAND *132 (1768). That meant, among other things, *certiorari* would not issue “as of mere course” or as of right. *Ibid.* In other words, it was not mandatorily issued by the King’s Bench when sought by a litigant (though the writ issued as of course when the King requested it in a criminal case). See Edward Jenks, *The Prerogative Writs in English Law*, 32 YALE L.J. 523, 529 (1923); de Smith, *supra*, at 42–44. The King’s Bench thus had discretion whether to issue *certiorari*. See de Smith, *supra*, at 42–44.

State courts in eighteenth-century America regularly issued writs of *certiorari* in accordance with principles laid down by English practice. See, e.g., *Steiner v. Fell*, 1 U.S. (1 Dall.) 22, 22–23 (Pa. 1776); *In re Oyster’s & Emigh’s Rd.*, 1 Yeates 3, 3 (Pa. 1791); *Jewell v. Arwine*, 1 N.J.L. 38, 38 (N.J. Sup. Ct. 1790); *Waller v. Broddie*, 2 N.C. (1 Hayw.) 28, 28 (N.C. Super. Ct. L. & Eq. 1794); *Durham v. Hall*, 3 H. & McH. 352, 352 (Md. Gen. Ct. 1795); *Hinson v. Short*, 1 Del. Cas. 95, 96 (1796); *Beck v. Knabb*, 1 Tenn. (1 Overt.) 55, 56–60 (Tenn. Super. Ct. L. & Eq. 1799); *Lawton v. Commis of Highways of Cambridge*, 2 Cai. 179, 181–83 (N.Y. Sup. Ct. 1804); *Massachusetts v. Inhabitants of New Milford*, 4 Mass. 446, 447 (1808).

So too did the United States Supreme Court. The Judiciary Act of 1789 included the All Writs Act, see Pub. L. No. 1-20, § 14, 1 Stat. 73, 81–82, which empowered the Supreme Court to issue writs of *certiorari* throughout the first century of the Republic. See Johnson, *supra*, at 815. But the Court used the writ only to bring up the record—not the case. *Ibid.*; see also, e.g., *Ex parte Burford*, 7 U.S. (3

Cranch) 448, 449 (1806); *United States v. Young*, 94 U.S. 258, 259–60 (1876); *Ex parte McCardle*, 73 U.S. 318, 324 (1867). This was true even though the Court recognized the other two uses of the writ at common law. See Johnson, *supra*, at 815; see also *Fowler v. Lindsey*, 3 U.S. (3 Dall.) 411, 412–14 (1799) (opinion of Washington, J.); *Harris v. Barber*, 129 U.S. 366, 369 (1889); *Hartranft v. M'ulloony*, 247 U.S. 295, 299 (1918).

Why did the early Court not use *certiorari* to take up cases? Because the early Congresses made the Court's appellate jurisdiction mandatory—not discretionary—so the role of *certiorari* was more limited. See HART & WECHSLER, *supra*, at 24–25, 30, 461; Johnson, *supra*, at 815–16. Congress explicitly provided for two methods of reviewing lower court judgments: the appeal and the writ of error. The two differed in that the writ of error was an appellate proceeding at law, while the appeal was its “equitable analogue.” Johnson, *supra*, at 808–09. But critically, both were mandatory. STEPHEN M. SHAPIRO ET AL., SUPREME COURT PRACTICE § 4.1 (11th ed. 2019) [hereinafter STERN & GRESSMAN]. If an appellant filed an appeal, the Supreme Court had no discretion to refuse to hear the case.

When Congress eventually permitted the Court to take up cases via *certiorari*, the writ retained its historic nature. In 1891, Congress for the first time provided that the Supreme Court could bring up a certain class of cases by *certiorari*, “as if it had been carried by appeal or writ of error.” Judiciary Act of 1891, Pub. L. No. 51-517, § 6, 26 Stat. 826, 828. Congress did so to give the Court some discretion over its otherwise mandatory (and thus backlogged)

docket. *See* 21 CONG. REC. 10222 (1890) (statement of Sen. William M. Evarts) (explaining that introducing *certiorari* “does firmly and peremptorily make a final[i]ty on such subjects as we think in their nature admit of finality, and at the same time leaves flexibility, elasticity, and openness for supervision by the Supreme Court”); Edward A. Hartnett, *Questioning Certiorari: Some Reflections Seventy-Five Years After the Judges’ Bill*, 100 COLUM. L. REV. 1643, 1650–52 (2000).

Congress made several changes to the Supreme Court’s *certiorari* jurisdiction throughout the twentieth century. *See* HART & WECHSLER, *supra*, at 30. But it did not change the writ’s character. *See* Johnson, *supra*, at 837. Rather, Congress only increased the number of cases the Court could take by *certiorari*. *Ibid.* And it did so precisely because *certiorari* had always been discretionary, allowing the Court to reduce backlog and to focus on matters of national importance. *See id.* at 850–51 (discussing the expansion of *certiorari* to reduce backlog); H.R. REP. NO. 100-660, at 14 (1988), *as reprinted in* 1988 U.S.C.C.A.N. 766, 779 (explaining that *certiorari* helped the Court focus on matters of “wide public importance or governmental interest” and maintain “uniformity and consistency in the law”).

2

Today, virtually all of the Supreme Court’s cases are heard by way of discretionary, *certiorari*-based jurisdiction. Except for a small category of mandatory appeals from three-judge district courts, the Court’s ability to hear cases is premised on its discretionary choice to grant the writ of *certiorari*. *See* STERN & GRESSMAN, *supra*, at § 2.1; 28 U.S.C. §§ 1253, 1254,

1257; S. CT. R. 10 (“Review on a writ of certiorari is not a matter of right, but of judicial discretion.”).

The Supreme Court’s action in denying a writ of *certiorari* has no effect on the judgment below. It has been “evident” for over a hundred years that refusing to grant *certiorari* “is in no case equivalent to an affirmance of the decree that is sought to be reviewed.” *Hamilton-Brown Shoe Co. v. Wolf*, 240 U.S. 251, 258 (1916). Its denial “imports no expression of opinion upon the merits of the case.” *United States v. Carver*, 260 U.S. 482, 490 (1923). It simply means the Supreme Court “has refused to take the case.” *Darr v. Burford*, 339 U.S. 200, 226 (1950) (Frankfurter, J., dissenting). The judgment below is untouched by denial of the writ.

Granting the writ likewise does not affect the lower court’s judgment. Granting *certiorari* allows the Court to review that judgment *in the future*. It does not mean the Court has reversed or vacated that judgment or done anything to it at all. *Cf.* 2 TRACY BATEMAN ET AL., FEDERAL PROCEDURE § 3.6 (Laws. ed.). Practice makes this clear. After granting *certiorari*, the Court often reverses or vacates a lower court judgment, which would be wholly unnecessary if granting *certiorari* already did so.

All of this makes complete sense. For centuries, *certiorari* was a device used to call up the records of a lower court for review by a higher court. Merely calling up those records—or, contrariwise, refusing to do so—does nothing to the lower court’s judgment. Nor does it, even implicitly, approve of or cast doubt upon the lower court’s judgment or reasoning.

When the Supreme Court does decide to grant the writ of *certiorari*, it may likewise exercise its

discretion to dismiss it. The practice of dismissing a writ of *certiorari* as improvidently granted has a long pedigree in American law. State courts have dismissed writs of *certiorari* as improvidently granted since the earliest days of the Republic. *See, e.g., State P. New Brunswick*, 1 N.J.L. 393, 393 (N.J. Sup. Ct. 1795) (per curiam) (explaining that if it issues the writ of *certiorari* “improvidently,” the court can later dismiss the writ); *Inhabitants of New Milford*, 4 Mass. at 447 (quashing the “certiorari [that] issued improvidently”); *State P. Woodward*, 9 N.J.L. 21, 25 (N.J. Sup. Ct. 1827) (same); *Haines P. Champion*, 18 N.J.L. 49, 50–51 (N.J. Sup. Ct. 1840) (same); *State P. Ten Eyck*, 18 N.J.L. 373, 374 (N.J. Sup. Ct. 1841) (dismissing the writ of *certiorari* as improvidently granted); *Van Vorst P. Kingsland*, 23 N.J.L. 85, 89 (N.J. Sup. Ct. 1851) (same); *Malone P. Water Commis*, 30 N.J.L. 247, 250 (N.J. Sup. Ct. 1863) (same).

The Supreme Court of the United States, shortly after Congress gave it the power to issue writs of *certiorari* to take up cases, began to dismiss writs of *certiorari* as improvidently granted, explicitly relying on state court precedent in doing so. *See Furness, Withy & Co. P. Yang-Tsze Ins. Ass’n*, 242 U.S. 430, 431 (1917) (citing *Malone*, 30 N.J.L. 247). By 1955, there were several dozen instances where the Court dismissed a writ of *certiorari* as improvidently granted. *See Rice P. Sioux City Mem’l Park Cemetery*, 349 U.S. 70, 78 n.2 (1955) (citing “more than sixty such cases,” *id.* at 78). The practice has continued uninterrupted through today. *See, e.g., United States P. Texas*, 595 U.S. 74, 75 (2021) (per curiam); *Moyle P. United States*, 144 S. Ct. 2015 (2024) (per curiam); *Facebook, Inc. v. Amalgamated Bank*, 604 U.S. — (2024) (per curiam).

When the Supreme Court dismisses a writ of *certiorari* as improvidently granted, it does not act on the lower court's judgment. A DIG is essentially "equivalent to that of a denial of *certiorari*" in the first place. Richard L. Revesz & Pamela S. Karlan, *Nonmajority Rules and the Supreme Court*, 136 U. PA. L. REV. 1067, 1982 n.59 (1988). It is thus not a decision "upon the merits of the case." *United States v. Rimer*, 220 U.S. 547, 548 (1911); *see also, e.g., Layne & Bowler Corp. v. W. Well Works*, 261 U.S. 387, 393 (1923); *Mishkin v. New York*, 383 U.S. 502, 512 (1966). Nor does it imply that the Court is "approving or disapproving the view of the" court below. *Hodges v. United States*, 368 U.S. 139, 140 (1961). So, critically, a DIG "leav[es] the judgment of the court below unaffected." *Tyrrell v. District of Columbia*, 243 U.S. 1, 6 (1917); *see also* Scott H. Bice, *The Limited Grant of Certiorari and the Justification of Judicial Review*, 1975 WIS. L. REV. 343, 388. The issuing of the writ brings up the records to be reviewed, and the dismissal of the writ sends those records back. Both actions are permissible only because *certiorari* is entirely discretionary—on the front and the back end. *See* STERN & GRESSMAN, *supra*, at §§ 5.5, 5.15.

3

You might be wondering: What does any of this have to do with courts of appeals and en banc rehearing? I asked the same question when I read the first invocation of "DIG" in this case. The answer is: Nothing.

An inferior court like ours has no power to hear cases on *certiorari*. Instead, we review final judgments of inferior courts through mandatory appeals. *See, e.g.,* ERWIN CHEMERINSKY, *FEDERAL*

JURISDICTION 26 (8th ed. 2021) (“The courts of appeals have obligatory jurisdiction to hear appeals from all final decisions of the district courts of the United States.”); *see also* 28 U.S.C. § 1291. When a litigant appeals a district court’s final judgment, the relevant court of appeals must hear and decide the case.

True, like the decision to issue a writ of *certiorari*, the decision to grant rehearing en banc is discretionary. But unlike when the Court grants *certiorari*, our decision to grant en banc rehearing acts on the panel’s judgment and opinion by vacating both. *See* 5TH CIR. R. 41.3 (“Unless otherwise expressly provided, the granting of a rehearing en banc vacates the panel opinion and judgment of the court and stays the mandate.”). The underlying judgment and its accompanying opinion become nullities—they cease to exist as a matter of law. *See United States v. Pineda-Ortuno*, 952 F.2d 98, 102 (5th Cir. 1992); *Selvage v. Lynaugh*, 842 F.2d 89, 91 (5th Cir. 1988). That is why “when an en banc court never reaches an issue decided by the panel in the same case, the issue remains an open one.” *Hooten v. Jenne*, 786 F.2d 692, 695 (5th Cir. 1986) (per curiam) (citing *Longoria v. Wilson*, 730 F.2d 300, 304 (5th Cir. 1984)). So if the en banc court dismisses the grant of the petition for rehearing en banc, it does not merely leave an issue undecided; it leaves the entire appeal undecided. This we cannot do.

Thus, it is true that “[t]he Supreme Court regularly dismisses *certiorari* as improvidently granted, despite the absence of any rule authorizing such practice.” *Ante*, at 73 (opinion of Ho, J.). It is also irrelevant because we are not the Supreme Court, and our jurisdiction is not discretionary. DIGs are part

and parcel of a discretionary, writ-based jurisdiction that forms no part of our docket. That is why JUDGE HO's opinion cannot cite a single example of anything other than a writ of *certiorari* being dismissed as improvidently granted.

B

JUDGE HO's opinion attempts to avoid this problem by claiming that the en banc court could DIG and then reinstate the panel opinion and judgment. This second option—DIG+reinstatement—fares no better than the DIG itself.

When the Supreme Court DIGs a case, it does not need to reinstate anything. That is because the act of granting a writ of *certiorari* did nothing to disturb the judgment below in the first place. The lower court judgment remains in place unless and until the Supreme Court affirms, vacates, reverses, &c. So the act of DIGing simply removes any doubt that the Supreme Court will leave the judgment undisturbed.

But were our en banc court to dismiss its rehearing as improvidently granted as JUDGE HO suggests, it would lose power to enter any judgment at all. The en banc court would lose its jurisdiction over the case as soon as the dismissal was entered. Just as a court cannot order the case dismissed and then proceed to the merits, *see Ex parte McCardle*, 74 U.S. 506, 514 (1869), neither can the en banc court DIG the case and then proceed to the merits.

Perhaps what JUDGE HO meant to say is that the en banc court could *vacate* our en banc rehearing order? *See Env't Tex. Citizen Lobby*, 61 F.4th at 1012–13. That rehearing order in turn vacated two Fifth Circuit panel decisions (one dated July 29, 2020, and the other dated August 30, 2022). *See id.* at 1013. So

perhaps my esteemed colleague envisions an en banc decision vacating the rehearing order as improvidently granted (“VIG”)—which might have the effect of revivifying our panel decisions from 2020 and 2022? *Cf. Hotze v. Hudspeth*, 16 F.4th 1121, 1126 (5th Cir. 2021) (Oldham, J., dissenting) (“Vacated authority, of course, is no authority at all.”).

Here too, however, there are problems all the way down. First, a VIG has none of the historical pedigree of its DIG cousin. Second, a VIG and DIG are different judgments, and JUDGE HO endorses only the latter. And third, a VIG reinstating the 2020 and 2022 panel decisions cannot be reconciled with the per curiam decision. (More on that later. *See* Part III.D, *infra*.) JUDGE HO offers no rationale for why any of these results should obtain much less for how these different judgments are somehow so interchangeable that they can be swapped around at will.

C

Piling confusion on confusion, JUDGE HO then explains his view of standing anyway: He states that he would have voted to vacate under his view of *Laidlaw*. *See ante*, at 68 (opinion of Ho, J.). There are three principal problems with this.

First, while joining the majority’s decision, JUDGE HO writes a separate opinion that reaches a very different judgment. The majority would affirm. JUDGE HO would vacate. *See ante*, at 68 (opinion of Ho, J.) (arguing we should vacate the district court’s judgment and remand to give Exxon the “opportunity to rebut the presumption of traceability”). Once again, another opinion that reaches a result different from the majority opinion it joins.

Second, JUDGE HO’s application of *Laidlaw* is fallacious. It goes like this: *Laidlaw* is binding precedent; under *Laidlaw*, a civil penalty *can* theoretically deter future injury; therefore, \$14.25 million *will* deter plaintiffs’ future injuries. The premises are obviously correct. But that does nothing to compel the conclusion. Rather, there must be a connection between the specific penalty authorized and the particular harms suffered. And neither JUDGE HO’s opinion nor JUDGE DAVIS’s concurrence can offer one word to explain how the specific sum of \$14.25 million will do anything to redress plaintiffs’ injuries.

Third, it is no answer to say plaintiffs satisfied traceability and hence satisfied redressability. *See ante*, at 66 & n.1, 68–70 (opinion of Ho, J.). True, “traceability and redressability are *often* flip sides of the same coin,” but “that is not *always* the case.” *Murthy P. Missouri*, 144 S. Ct. 1972, 1996 n.11 (2024) (quotation omitted) (emphasis in original). That is why we say that assessing standing under *Lujan* is a tripartite inquiry, not a bipartite one. In short, traceability and redressability can, and do, diverge. *See FDA v. All. for Hippocratic Med.*, 144 S. Ct. 1540, 1555 n1. (2024); *Murthy*, 144 S. Ct. at 1995– 96 & n.11; *United States v. Texas*, 599 U.S. 670, 676 (2023); *California v. Texas*, 593 U.S. 659, 672 (2021). So under *Laidlaw*, and an unbroken line of other Supreme Court cases, plaintiffs invoking our jurisdiction must point to injuries they have now; must trace those injuries to the defendant’s conduct; and must explain how a monetary remedy will stop ongoing conduct or deter future conduct that is causing or will cause those injuries. JUDGE HO’s opinion—and JUDGE DAVIS’s concurrence, for that

matter—identify *nothing* that is ongoing or likely to recur absent civil penalties.

D

Finally, let's parse the four different votes cast by my esteemed colleague in this case. *First*, JUDGE HO votes to *affirm* the district court's 2021 judgment in the per curiam. *Second*, JUDGE HO says he would *vacate* the district court's 2021 judgment. *Third*, JUDGE HO's opinion votes to DIG our en banc court's grant of rehearing. *Fourth* and finally, JUDGE HO would DIG+reinstate the panel's 2020 and 2022 decisions, presumably on the theory that that is the same as affirming the district court.

Vote	Result
(1) Affirm	Exxon must pay \$14.25 million because the hidden shot clock expired.
(2) Vacate	Judge Jones authors plurality; case returns to district court
(3) DIG	Appeal remains undecided.
(4) DIG+reinstatement	N/A because it's impossible; but if a VIG is intended and possible, CA5 panel decisions from 2020 and 2022 revived.

Those are different and inconsistent judgments. Not much need be said about the difference between vacating the district court judgment (2) and affirming it (1): those obviously reach different results. But

what about affirming the district court (1) and one of the DIG variants (3)–(4)? Are (1), (3), and (4) all different ways of saying the same thing?

No. Again, the reason why lies in the judgment power. The per curiam opinion affirms the district court’s 2021 judgment (1). But even assuming a DIG+reinstatement (4) is possible, it would revivify two different Fifth Circuit panel decisions—one from 2020 and another from 2022. Those are very different judgments.

Take for example the 2020 Fifth Circuit panel decision. As JUDGE HO concedes, that decision was wrong because it created rigid, *per se*, and *irrebuttable* inferences of traceability. Yet DIG+reinstatement (4) brings that decision back to life—even while JUDGE HO’s opinion says it is wrong. JUDGE HO would substitute a burden-shifting framework that has been applied by no court anywhere in the Nation. *See ante*, at 68–70 (opinion of Ho, J.). And JUDGE HO’s opinion offers no way to reconcile that burden-shifting approach with the 2020 panel decision that DIG+reinstatement (4) would reimpose. Meanwhile, simply affirming the district court (1) means that the 2020 panel decision remains vacated.

Or take the 2022 Fifth Circuit panel decision. DIG+reinstatement (4) would bring that decision back to life, thus requiring future Clean Air Act panels to follow it. But that is not the same as the per curiam affirming the district court’s 2021 judgment on a shot-clock theory (1). DIG+reinstatement (4) has obvious implications for our rule of orderliness that a shot-clock affirmance (1) does not.

* * *

None of this can be dismissed as “feign[ed] incredulity” or the stuff of “fainting couch[es].” *Ante*, at 74 (opinion of Ho, J.). If jurisdiction is so important that it must be addressed even as an alternative ground to vacate an injunction, *see ante*, at 80–81 (opinion of Ho, J.), it’s quite something to duck the jurisdictional problems and vote to affirm on the merits because this is “just” a business case that took too long.

It is obviously true that “[w]e must not treat business interests more favorably than other litigants.” *Ante*, at 77 (opinion of Ho, J.). But it is also true that we should not *disfavor* a party simply because it takes the corporate form. Or because we think its appeal was too difficult.

Today’s decision purports to settle nothing about the Clean Air Act. It decides nothing about standing. And it does nothing to assist future parties to important environmental law cases in our circuit.

Instead, it announces a new shot clock for disenbancing a case. And it has all the theoretical rigor of the Roman crowds signaling *pollice verso*. I respectfully but emphatically dissent.

201a

[524 F. Supp. 3d 547]

UNITED STATES DISTRICT COURT,
S.D. TEXAS, HOUSTON DIVISION

Civil Action No. H-10-4969

ENVIRONMENT TEXAS CITIZEN LOBBY, INC.
AND SIERRA CLUB,

Plaintiffs,

v.

EXXONMOBIL CORPORATION, EXXONMOBIL CHEMICAL
COMPANY, AND EXXONMOBIL REFINING
AND SUPPLY COMPANY,

Defendants.

Signed 03/02/2021

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Harlan Hilder, Hilder & Associates, P.C., Houston,
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Citizen Lobby, Inc.

Heather A. Govern, Bracha Y. Etengoff, Joshua R.
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Seattle, WA, David A. Nicholas, Attorney at Law,
Newton, MA, for Plaintiff Sierra Club.

Jefferson Gregory Copeland, Kathleen E. Weir, Tynan Buthod, Baker Botts LLP, Bryon A. Rice, Hicks Davis Wynn PC, Fields Alexander, Russell Stanley Post, Jeffrey M. Golub, William Bradley Coffey, Beck Redden LLP, Rebecca Rentz, Winstead PC, Houston, TX, Albert R. Axe, Jr., McGinnis Lochridge LLP, Eric J.R. Nichols, Butler Snow LLP, Keith A. Courtney, Winstead PC, Austin, TX, for Defendant ExxonMobil Corporation.

Jefferson Gregory Copeland, Kathleen E. Weir, Tynan Buthod, Baker Botts LLP, Bryon A. Rice, Hicks Davis Wynn PC, Fields Alexander, Russell Stanley Post, Jeffrey M. Golub, William Bradley Coffey, Beck Redden LLP, Houston, TX, Eric J.R. Nichols, Butler Snow LLP, Austin, TX, for Defendants ExxonMobil Chemical Company, ExxonMobil Refining and Supply Company.

SECOND REVISED FINDINGS OF
FACT & CONCLUSIONS OF LAW¹

DAVID HITNER, United States District Judge

On February 10, 2014, this Court commenced a non-jury trial in the above-entitled matter. During the course of the thirteen-day proceeding, the Court

¹ As explained further below, the Fifth Circuit vacated the Court's prior judgment as expressed in the Revised Findings of Fact and Conclusions of Law. However, in vacating the Court's prior judgment, the Fifth Circuit remanded the case for the limited purpose of allowing the district court to make additional findings as to the traceability element of standing and the Act of God defense. *See Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 968 F.3d 357, 375 (5th Cir. 2020). Because the Court's prior judgment was vacated in whole and not in part, where the Court's prior findings were undisturbed or upheld by the Fifth Circuit, the Court reincorporates the prior findings into these Second Revised Findings of Fact and Conclusions of Law.

received evidence and heard sworn testimony.² On December 17, 2014, having considered the evidence, testimony, and oral arguments presented during the trial, along with post-trial submissions³ and the applicable law, the Court entered its initial findings of fact and conclusions of law pursuant to Federal Rule of Civil Procedure 52(a). The judgment was appealed. The Fifth Circuit vacated the Court's judgment and remanded the case for the determination of a new judgment as consistent with the Circuit's opinion. On April 26, 2017, the Court issued revised findings of fact and conclusions of law, along with a revised judgment. The revised judgment was appealed. The Fifth Circuit vacated the Court's revised judgment and remanded the case for determination of a new judgment based on limited additional findings in compliance with the Circuit's opinion. Accordingly, the Court issues the following second revised findings of fact and conclusions of law, as consistent with the instructions on remand from the Fifth Circuit following the vacatur of the Court's revised judgment. Any finding of fact that should be construed as a conclusion of law is hereby adopted as such. Any conclusion of law that should be construed as a finding of fact is hereby adopted as such.

² The parties submitted 1,148 exhibits that span thousands of pages, and 25 witnesses testified.

³ The post-trial submissions considered by the Court in issuing its initial findings of fact and conclusions of law included the plaintiffs' and the defendants' original proposed findings of fact and conclusions of law, which are 455 pages and 361 pages in length, respectively.

I. BACKGROUND

On December 13, 2010, Plaintiffs Environment Texas Citizen Lobby, Inc. (“Environment Texas”) and Sierra Club (“Sierra Club”) (collectively, “Plaintiffs”) brought suit under the citizen suit provision of the federal Clean Air Act (the “CAA”), 42 U.S.C. § 7604, against Defendants ExxonMobil Corporation, ExxonMobil Chemical Company, and ExxonMobil Refining and Supply Company (collectively, “Exxon”). The case concerns Exxon’s operation of a refinery, olefins plant, and chemical plant located in Baytown, Texas (the “Complex”), which is a suburb of Houston and within Harris County. Plaintiffs seek a declaratory judgment, penalties,⁴ injunctive relief, and appointment of a special master for events at the Complex involving unauthorized air emissions or deviations from one of the Complex’s air permits, during a period spanning from October 14, 2005, to September 3, 2013.

On December 17, 2014, the Court issued its initial findings of fact and conclusions of law.⁵ Plaintiffs appealed the decision to the Fifth Circuit. On May 27, 2016, the Fifth Circuit issued an opinion vacating the Court’s judgment and remanding for assessment of

⁴ Plaintiffs originally requested \$1,023,845,000 in penalties, but later reduced their request to \$642,697,500 to account for overlapping violations alleged in the various counts of the complaint. On the first remand to this Court, Plaintiffs sought \$40,815,618 in penalties. Plaintiffs now seek \$19,951,278 in penalties, based on the Court’s penalty assessment from the revised judgment.

⁵ *Findings of Fact & Conclusions of Law*, Document No. 225.

penalties based on the violations actionable as consistent with its opinion.⁶

On April 26, 2017, the Court issued revised findings of fact and conclusions of law and a revised judgment.⁷ Exxon appealed the decision to the Fifth Circuit. On July 29, 2020, the Fifth Circuit vacated the Court's revised judgment and remanded for the limited purpose of allowing the Court to make additional findings as to: (1) traceability; (2) Exxon's Act of God affirmative defense; and (3) penalties.⁸

On August 5, 2020, the Court ordered the parties to submit second revised proposed finding of facts and conclusions of law consistent with limited remand from the Fifth Circuit. On October 19, 2020, the parties submitted their proposals. Having considered the Fifth Circuit's opinion, the parties' second revised proposals,⁹ the Court amends its revised conclusions of law, as follows, as to traceability, the Act of God defense, and its judgment on the amount of penalties to be assessed.¹⁰

⁶ *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 824 F.3d 507 (5th Cir. 2016).

⁷ *Revised Findings of Fact and Conclusions of Law*, Document No. 257; *Final Judgment*, Document No. 258.

⁸ *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 968 F.3d 357, 374–75 (5th Cir. 2020) (“*ETCL II*”).

⁹ On limited remand, the Court considered the parties' second revised proposed findings of fact and conclusions of law and, where relevant, the parties initial proposed findings of fact and conclusions of law and submissions from the first remand to this Court.

¹⁰ To the extent the below revised findings do not replace or amend the Court's Revised Findings of Fact and Conclusions of Law entered on April 26, 2017, the Court's prior findings

II. CONCLUSIONS OF LAW

A. Standing

1. “Congress granted ‘any person’ the right to sue under the Clean Air Act.” *ETCL II*, 968 F.3d at 364 (quoting 42 U.S.C. § 7604(a)). The term “person” includes organizations, such as corporations and partnerships. 42 U.S.C. § 7602(e). An organization “has standing to bring suit on behalf of its members when: (1) its members would otherwise have standing to sue in their own right; (2) the interests it seeks to protect are germane to the organization’s purpose; and (3) neither the claim asserted nor the relief requested requires the participation of individual members.” *Texans United for a Safe Econ. Educ. Fund v. Crown Cent. Petroleum Corp.*, 207 F.3d 789, 792 (5th Cir. 2000). Exxon does not contest the second and third requirements, and the Court finds these requirements are met. At issue is the first requirement.

2. In order for a member to have standing to sue in his or her own right, (1) he or she must have suffered an actual or threatened injury, (2) that is fairly traceable to the defendant’s action, and (3) the injury must likely be redressed if the plaintiff prevails in the lawsuit. *Id.* Furthermore, “a plaintiff needs standing for each violation for which it seeks a penalty.” *ETCL II*, 968 F.3d at 366. The plaintiff bears the burden to prove the requirements for standing by a preponderance of the evidence if the case is tried. *Id.*

and conclusions remain fully in effect. Specifically, the Court reincorporates by reference all the Findings of Fact from the Court’s Revised Findings of Fact and Conclusions of Law entered on April 26, 2017. *Revised Findings of Fact and Conclusions of Law*, Document No. 257, ¶¶.II.1–II.25.

at 367; *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 561, 112 S.Ct. 2130, 119 L.Ed.2d 351 (1992). When determining whether the plaintiff has met its burden, the “factfinder may rely on circumstantial evidence and draw reasonable inferences from the evidence.” *ETCL II*, 968 F.3d at 367 (citing *Friends of the Earth v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 163 (4th Cir. 2000)). The Fifth Circuit determined the Court correctly found Plaintiffs established injury-in-fact and redressability. Therefore, the Court reincorporates its prior conclusions of law as to injury-in-fact and redressability.¹¹ The Court revises its conclusions of law to address traceability for each violation.

a. Injury-in-Fact¹²

b. Traceability

5. On limited remand, Plaintiffs contend they have established traceability as to 9,803 days of violations. In tabulating this number, Plaintiffs voluntarily exclude any violations involving the release of one pound or less of a pollutant.¹³ Exxon contends Plaintiffs have only produced evidence to establish

¹¹ *Revised Findings of Fact and Conclusions of Law*, Document No. 257 at 30–31, 34–35.

¹² Because the Court reincorporates by reference its previous conclusions of law as to injury-in-fact, ¶¶ III.3–III.4 from the Court’s Revised Findings of Fact and Conclusions of Law is omitted in the foregoing analysis.

¹³ *Plaintiffs’ Notice of Filing Proposed Findings of Fact and Conclusions of Law on Limited Remand*, Document No. 298, Attachment 1 at 21 (*Plaintiffs’ Proposed Findings of Fact and Conclusions of Law on Limited Remand*) [hereinafter *Plaintiffs’ Proposed FFCL on Limited Remand*].

traceability as to five events resulting in forty days of violations.¹⁴

6. So long as there is a fairly traceable connection between a plaintiff's injury and the defendant's violation, the traceability requirement of standing is satisfied. *Comer v. Murphy Oil USA*, 585 F.3d 855, 864 (5th Cir. 2009). To confer standing, the plaintiff's injury does not have to be linked to exact dates that the defendant's violations occurred, and the plaintiff does not have to "show to a scientific certainty that defendant's [emissions], and defendant's [emissions] alone, caused the precise harm suffered by the plaintiffs." *Texans United*, 207 F.3d at 793; *Save Our Cmty.*, 971 F.2d at 1161 (internal quotation marks omitted); see *Tex. Campaign for the Env't v. Lower Colo. River Auth.*, No. H-11-791, 2012 WL 1067211, at *4–5 (S.D. Tex. Mar. 28, 2012) (Miller, J.). Rather, to establish traceability, plaintiffs must show: (1) "that each violation in support of their claims causes or contributes to the kinds of injuries they allege[.]" and (2) "the existence of a specific geographic or other causative nexus such that the violation could have affected their members." *ETCL II*, 968 F.3d at 369-70 (internal quotations marks and citations omitted).

6a. A violation will satisfy the first prong for traceability if the violation (1) "could cause or

¹⁴ The Court's previous definition of a "violation" and "days of violations" was undisturbed by the Circuit on remand. Accordingly, the Court uses a pollutant-by-pollutant approach for each violation, based on a 24-hour day, as discussed in the Court's Revised Findings of Facts and Conclusions of Law. See *Revised Findings of Fact and Conclusions of Law*, Document No. 257, ¶¶ III.25–III.26.

contribute to flaring, smoke, or haze”; “(2) released pollutants with chemical odors; or (3) released pollutants that cause respiratory or allergy-like symptoms.” *Id.* at 370–71. For the second prong, the geographic nexus inquiry, the plaintiff must show each violation resulted in emissions of pollutants that could have reached beyond the Complex to affect Plaintiffs’ members. *Id.* This showing is “satisfied if the emission (i) violated a nonzero emissions standard, (ii) had to be reported under Texas regulations, or (iii) is otherwise proven to be of sufficient magnitude to reach Baytown neighborhoods outside the Exxon complex in quantities sufficient to cause chemical odors, allergy-like symptoms, or respiratory symptoms.”¹⁵ *Id.* However, the Fifth Circuit made it clear, “the geographic nexus inquiry is unnecessary for any violation that could have caused or contributed to flaring, smoke, or haze, even if the emission was of a small magnitude.” *Id.* at 371. As such, traceability is established for any violation

¹⁵ Events that must be reported under Texas regulations include “[a]ny emissions event that in any 24-hour period, results in an unauthorized emission from any emissions point equal to or in excess of the reportable quantity.” 30 Tex. Admin. Code § 101.1(88); *see* 30 Tex. Admin. Code § 101.201 (a); *Revised Findings of Fact and Conclusions of Law*, Document No. 257, ¶ II.5. At trial, Plaintiffs did not assert that any recordable emission events were improperly characterized and should have been treated as reportable emissions events. Further, it was undisputed that Exxon complied with the reporting and recording requirements, as shown in the stipulated spreadsheets showing the Events and Deviations. *See Revised Findings of Fact and Conclusions of Law*, Document No. 257, ¶ II.5. Therefore, the Court considers only violations listed as Reportable Events when determining whether the geographic nexus inquiry is satisfied based on required reporting under Texas regulations.

the Plaintiffs demonstrate could have caused or contributed to flaring, smoke, or haze. *See id.*

6b. Because demonstrating a violation could cause or contribute to flaring, smoke, or haze is enough to establish traceability, the Court first addresses violations within that category. The Court then turns to the remaining violations to identify any that Plaintiffs show resulted in emissions of pollutants that could cause or contribute to chemical odors or allergy-like or respiratory symptoms, and conducts the applicable geographic nexus inquiry for those violations.¹⁶

i. Flaring, Smoke, and Haze Violations

6c. The evidentiary support cited by Plaintiffs to establish traceability as to violations that could cause or contribute to flaring, smoke, and haze includes: (1) Plaintiffs' Exhibits 1A through 7E and Exhibits 587 through 594; and (2) testimony of various witnesses presented at trial. On the limited remand, Plaintiffs also submitted resorted versions of Plaintiffs' Exhibits 587, 588, and 591 through 594 (the "Traceability Spreadsheets").¹⁷

¹⁶ The Court notes, when calculating its totals, it accounted for violations where traceability could be established in multiple ways (for example, if the Court found the violation caused or contributed to flaring, it did not then consider whether the same violation also caused or contributed to smoke or a chemical odor). The Court also excluded any violation that involved a pound or less of emitted pollutants based on Plaintiffs' voluntary exclusion on limited remand.

¹⁷ *Plaintiffs' Notice of Filing Proposed Findings of Fact and Conclusions of Law on Limited Remand*, Document No. 297, Exhibit 1 (*Description of Revised Versions of Plaintiffs' Exhibits 587–88 & 591–94*) [hereinafter *Description of the Traceability Spreadsheets*], Exhibits 2–7 (*Revised Plaintiffs' Exhibits 587–88*,

6d. As to flaring violations, Plaintiffs contend traceability is established for any violation that the emission point occurred at a flare. Plaintiffs elicited testimony at trial to show flaring occurs when gasses combust or burn at a flare stack, resulting in flame

591–94) [hereinafter *Traceability Spreadsheets*]. Plaintiffs do not submit resorted versions of 589 and 590, as they pertain to Count II violations, which are duplicative of violations listed for the refinery in the resorted versions of Exhibits 587 and 588. *Plaintiffs’ Proposed FFCL on Limited Remand*, *supra* note 13, at 6 n.1. The Traceability Spreadsheets show how repeated violations of specific emissions were identified and calculated and includes an additional column with traceability codes for each violation for which Plaintiffs contend they have established traceability. The spreadsheets were submitted to the Court in native format. Exxon objects to the Traceability Spreadsheets on the bases they: (1) provide new evidence not previously submitted at trial; (2) are not admissible as summaries; (3) are unreliable; and (4) do not comport with opinion evidence under Federal Rules of Evidence 701 and 702. Plaintiffs contend the Traceability Spreadsheets are only to be considered as demonstrative aids and do not provide any new evidence. The Court may consider pedagogical aids used only for demonstrative purposes to clarify or amplify a party’s argument based on evidence already admitted into the record. *See United States v. Buck*, 324 F.3d 786, 790 (5th Cir. 2003). Having carefully reviewed the Traceability Spreadsheets and applicable law, the Court finds the Traceability Spreadsheets are only being used by Plaintiffs to demonstrate their contention as to those violations for which the evidence presented at trial establishes traceability. Accordingly, The ExxonMobil Defendants’ Objections to Plaintiffs’ Revised Exhibits Field With Proposed Findings of Fact and Conclusions of Law (Document No. 300) are overruled. The Court will consider the Traceability Spreadsheets only as a demonstrative aid and not evidence. As such, any information presented in the Traceability Spreadsheets that is not supported by evidence presented at trial will be disregarded.

coming out of the tip of the flare stack.¹⁸ Plaintiffs do not provide any testimony or other support to show that every violation where the emission point was a flare could have caused or contributed to flaring. For example, Plaintiffs assert traceability is established as a flaring violation when two pilot outages occurred on flare stack 14 resulting in the release of two pounds of hydrogen sulfide from flare stack 14.¹⁹ Plaintiffs' expert, Dr. Ranajit Sahu ("Dr. Sahu"), testified that if the pilot flames are not lit, there can be no combustion in the flare.²⁰ Therefore, while such violations may have occurred at a flare stack or involved a flare stack, it does not show that the violation caused or contributed to flaring.

6e. At trial, Plaintiffs' witness, Kevin Bowers, testified that when a compressor on a process unit at a refinery or chemical plant trips or shuts down, it leads to flaring.²¹ Thus, the Court finds traceability has been established for any violation where the cause describes flaring or the failure of a compressor and the emissions point occurred at a flare stack, as the violation could have caused or contributed to flaring. Having reviewed the Events and Deviations for said violations, the Court finds the evidence supports a finding of traceability as to the following

¹⁸ *Trial Transcript* at 3-26:2-12.

¹⁹ *Plaintiffs' Notice of Filing Proposed Findings of Fact and Conclusions of Law on Limited Remand*, Document No. 297, Exhibit 3 at 10, line 252 (*PX 587 – Count I – Refinery Steers Events – Sorted by Pollutant – Totals Added – Traceability Codes Added*).

²⁰ *Trial Transcript* at 5-104:10-12.

²¹ *Trial Transcript* at 4-136:15-21.

violations that could have caused or contributed to flaring:

	Category	Violations	Days of violations
Count I	Refinery STEERS	55	99
	Refinery Recordable	909	1,017
Count II	Olefins STEERS	165	248
	Olefins Recordable	99	115
	Chemical Plant STEERS	76	93
	Chemical Plant Recordable	189	214
Count III	Olefins & Chemical Plant STEERS	10	15
	Totals	1503	1801

6f. As to smoke violations, Plaintiffs assert they have established traceability for any violation that involves opacity or the emission of particulate matter. At trial, Jeffrey Kovacs (“Kovacs”), an Exxon employee working in the Security, Safety, Health, and Environmental Department,²² testified “Opacity is

²² *Trial Transcript* at 2-194:13–19.

basically smoke ... from a fire.”²³ Kovacs further explained, “[o]pacity is an indirect measurement from a flare for particulate matter”²⁴ and the higher the opacity, the greater the particulate matter released.²⁵

6g. Considering the testimony presented by Kovacs and the descriptions provided in Plaintiffs’ exhibits, the Court finds that traceability has been established for any violation where the cause describes smoke, opacity, or smoldering, or indicates an opacity percentage or emission of particulate matter. Having reviewed the Events and Deviations for said violations, the Court finds Plaintiffs have established traceability as to the following violations that could have caused or contributed to smoke:

	Category	Violations	Days of violations
Count I	Refinery STEERS	40	134
	Refinery Recordable	57	191
Count II	Olefins STEERS	16	42
	Olefins Recordable	108	166
	Chemical Plant STEERS	3	3

²³ *Trial Transcript* at 3-16:2.

²⁴ *Trial Transcript* at 3-16:4–5.

²⁵ *Trial Transcript* at 3-17:12–14.

	Chemical Plant Recordable	7	8
Count III	Refinery, Olefins & Chemical Plant	42	44
	Totals	273	588

6h. As to haze violations, Plaintiffs contend traceability is established for any pollutant that could contribute to ground-level ozone, or smog, because ozone is the same as visible haze.²⁶ Plaintiffs cite to case law from outside the Fifth Circuit to support this proposition, as well as evidence in the record that shows various pollutants, such as nitrogen oxides and volatile organic compounds (“VOCs”), contribute to the creation of ground-level ozone.

6i. With respect to the case law provided by Plaintiffs, findings from another court about facts in an unrelated matter does not constitute evidence from which this Court can determine traceability as to violations at the Complex. Plaintiffs’ expert, Dr. Edward Brooks (“Dr. Brooks”), testified that “[o]zone is formed from sunlight, oxides and nitrogen, certain organic compounds, and ... probably formaldehyde

²⁶ While the Fifth Circuit did not specifically define what constitutes “haze,” testimony and other uses of the term suggest haze is a visibility impairment produced by a variety of pollutants. *See e.g., Trial Transcript* at 1-202:2–15 (describing how haze coming from the Complex could be seen from the bridge going over the Houston Ship Channel); *Sierra Club v. EPA*, 939 F.3d 649, 653 n.3 (5th Cir. 2019) (discussing regional haze as a visibility impairment caused by multiple sources and activities that are located across a broad geographical area).

and nitrous acid. It's a very complicated air quality chemistry that goes on.... [Ozone] is not a primary pollutant. It's a secondary that requires these inputs.... [T]he predominate predictor of ozone formation in Houston was from these highly reactive volatile organic compounds produced in refineries and other - point source emissions.”²⁷ Dr. Brooks further testified ozone is a component of urban smog.²⁸ However, Dr. Brooks did not testify what amount of emissions of these pollutants and what combination of these pollutants could contribute to ground-level ozone that would become visible. Dr. Brooks also did not testify that smog or ozone equate to haze.

6j. Plaintiffs further cite to evidence containing information from the EPA and the Agency for Toxic Substances & Disease Registry as to various pollutants, such as nitrogen oxides (“NOx”), volatile organic compounds (“VOCs”) and carbon monoxide (“CO”).²⁹ Like Dr. Brook’s testimony, these exhibits link these pollutants to the formation of ground-level ozone and do not reference haze. Thus, the Court finds Plaintiffs fail to establish traceability as to any violations that could have caused or contributed to haze based on the evidence presented about ozone.³⁰

²⁷ *Trial Transcript* at 7-143:16–25 to 7-144:1.

²⁸ *Trial Transcript* at 7-147:19–21.

²⁹ *Plaintiffs’ Exhibits* 520–22, 527.

³⁰ The Court notes that Kingman, Aguirre, and Sprayberry all testified as to seeing haze coming from the Complex. See *Revised Findings of Fact and Conclusions of Law*, Document No. 257, ¶¶ II. 19–11.20, II.22. Plaintiffs also questioned Kovacs about a March 2011 incident where a caller complained about haze over the Complex. *Trial Transcript* at 3 12:22-25; 3-13:1-8. It is undisputed that such testimony, when linked to violations

ii. Violations Involving Chemical Odors

6k. Plaintiffs contend they produced sufficient evidence to establish traceability as to 1,826 days of violations resulting from pollutants that cause or contribute to chemical odors and meet the geographic nexus inquiry.³¹ Exxon contends Plaintiffs have not established any violation can be traced outside the Complex in sufficient quantities to affect Plaintiffs' members.

6m. At trial, Plaintiffs produced evidence to show the following pollutants cause or contribute to chemical odors: (1) ammonia;³² (2) benzene;³³ (3) carbon disulfide;³⁴ (4) ethylbenzene;³⁵

in the stipulated spreadsheets, is sufficient to establish traceability for those violations. However, only the testimony of Sprayberry was linked to specific violations. *Revised Findings of Fact and Conclusions of Law*, Document No. 257, ¶ II.22. The Court does not include those violations in its traceability analysis as to violations that cause or contribute to haze, because the two violations Sprayberry testified to also caused or contributed to flaring. Thus, traceability has already been established and the two violations have already been included in the calculated days of violations for flaring.

³¹ This number is the sum of Plaintiffs' calculations of violations that cause or contributed to chemical odors based on: 11 days of violations for nonzero emissions standard, 1,706 days of violations that involved a reportable quantity of pollutant, and 109 days of violations that were of a sufficient magnitude to reach beyond the Complex. *Plaintiffs' Proposed FFCL on Limited Remand*, *supra* note 13, at 16-20. The Court notes this calculation does not take into consideration prior days of violations that overlap with other traceability categories.

³² *Trial Transcript* at 11-60:21–21 to 11-62:4.

³³ *Plaintiffs' Exhibits* 541–43.

³⁴ *Plaintiffs' Exhibit* 533.

³⁵ *Plaintiffs' Exhibits* 544, 546.

(5) hydrogen chloride;³⁶ (6) hydrogen sulfide;³⁷ (7) sulfur dioxide;³⁸ (8) toluene;³⁹ and (9) xylene⁴⁰ (collectively, the “Odor Pollutants”). Considering this evidence, the Court finds any violation where one of the Odor Pollutants was emitted caused or contributed to a chemical odor. The Court therefore turns to whether the violations where the Odor Pollutants were emitted satisfy the geographic nexus test by having exceeded a nonzero emissions limit, was required to be reported under Texas regulations, or was proven to be of a sufficient magnitude reach Baytown neighborhoods outside the Complex in quantities that would cause chemical odors. *See ETCL II*, 968 F.3d at 370–71.

6n. Each of Plaintiffs’ Exhibits 591 through 594 and the corresponding Traceability Spreadsheets include is a column that indicates the reported emissions limit or permit limit for each pollutant.⁴¹ When these columns provide a number that is greater than zero, this is what is called a nonzero emissions standard. For any violation where one of the Odor Pollutants was emitted in an amount greater than the indicated nonzero emissions limit, the Court finds traceability has been established. Having reviewed

³⁶ *Plaintiffs’ Exhibit 535*.

³⁷ *Plaintiffs’ Exhibit 544*.

³⁸ *Plaintiffs’ Exhibit 526; Trial Transcript at 7-76:18–22*.

³⁹ *Plaintiffs’ Exhibit 548–50*.

⁴⁰ *Plaintiffs’ Exhibit 552*.

⁴¹ The Court has reviewed the Traceability Spreadsheets in comparison to Plaintiffs’ stipulated spreadsheets from trial and those resorted and produced from the first remand and the Court determines the columns and amounts indicating the emissions limits are the same.

the Events and Deviations for said violations, the Court finds Plaintiffs have established standing as to eleven violations, totaling eleven days of violations.⁴²

6p. Plaintiffs' exhibits also provide a column that indicates the amount of the pollutant that was emitted in pounds per hour. Texas law provides the following "reportable quantities" for each of the Odor Pollutants:

- Ammonia – 100 lbs.;
- Benzene – 10 lbs.;
- Carbon disulfide – 100 lbs.;
- Ethylbenzene – 100 lbs.;
- Hydrogen Chloride – 5,000 lbs.;
- Hydrogen Sulfide – 100 lbs.;
- Sulfur Dioxide – 500 lbs.;
- Toluene – 100 lbs.; and
- Xylene – 100 lbs.

See 30 Tex. Admin. Code § 101.1(89)(A)(i), (ii); 40 C.F.R. Part 302, Table 302.4; 40 C.F.R. Part 355, App. A. If the violation includes a mixture of air pollutants where the relative amount of each individual pollutant is unknown, the reportable quantity is any amount of the mixture that equals or exceeds the reportable quantity for any single pollutant that is present in the mixture. 30 Tex. Admin. Code § 101.1(89)(B)(ii).⁴³ When a violation

⁴² See *Plaintiffs' Exhibits* 592, 594; *Traceability Spreadsheets*, *supra* note 17, Exhibits 5, 7.

⁴³ The Court notes that this part of the statute becomes relevant for certain violations that show several different pollutants, but do not provide specific emissions in pounds

shows the emitted amount of one of the Odor Pollutants exceeds the reportable quantity for that pollutant and was reported,⁴⁴ the Court finds traceability has been established. Having reviewed the Events and Deviations for said violations, the Court finds Plaintiffs have established standing as to 76 violations, totaling 354 days of violations.⁴⁵

6q. Lastly, Plaintiffs contend traceability is established as to 109 violations that were of a sufficient magnitude to reach Baytown neighborhoods outside the Complex in sufficient quantities to cause chemical odors.⁴⁶ Exxon contends that Plaintiffs have not shown any of the pollutants from the violations exceeded industry standards or were sufficient in magnitude to affect Plaintiffs' members outside the Complex.

for each pollutant. For example, in Plaintiffs' Exhibit 587 and Traceability Spreadsheet Exhibit 2, STEERS event 110887 shows a release of 5,357 pounds of various pollutants, including ethylbenzene, toluene, and xylene. Though the specific emissions as to each of these Odor Pollutants is not provided, under Texas law, the reportable quantity would be equal to any single pollutant present. Thus, for this violation the reportable quantity is 100 pounds.

⁴⁴ See *supra* ¶ III.6 n.15.

⁴⁵ The breakdown for each section at the Complex is as follows: (1) 66 violations, totaling 320 days of violations from refinery Reportable Events; (2) six violations, totaling 28 days of violations from the olefins plant Reportable Events; and (3) four violations, totaling six days of violations from the chemical plant Reportable Events. See *Plaintiffs' Exhibits* 587, 591, 593; *Traceability Spreadsheets*, *supra* note 17, Exhibits 2, 4, 6.

⁴⁶ Plaintiffs note that several of the 109 violations may overlap with violations that traceability has already been established for in other categories. See *Plaintiffs' Proposed FFCL on Limited Remand*, *supra* note 13, at 20–21.

6r. Plaintiffs point to the testimony of Mr. Cabe and Dr. Fraiser about air dispersion analyses that show in at least 144 instances, the events caused an offsite pollutant concentration in excess of air comparison values (“ACVs”).⁴⁷ ACVs include the National Ambient Air Quality Standards (“NAAQS”), which are federal standards set by the EPA, effects screening levels (“ESLs”) set by Texas Commission on Environmental Quality, air monitoring comparison values, and a reference evaluation value.⁴⁸ Mr. Cabe testified none of the NAAQS were exceeded for the violations which he conducted air dispersion modeling and that exceeding an air comparison value in a model requires additional analysis by a toxicologist to determine if public health or safety was in danger.⁴⁹ Furthermore, Dr. Fraiser, a toxicologist, discussed in depth several of the violations that had been modeled and found that even in situations where the offsite pollutant exceeded ACVs, it would not have contributed to harmful pollution.⁵⁰ Plaintiffs do not point the Court to any evidence in the record to rebut this testimony or to show that, at these quantities offsite, the pollutants would have been sufficient to cause chemical odors. Based on the credible evidence presented at trial, the Court finds that Plaintiffs fail to establish traceability as to any violations where the Odor Pollutants were of a sufficient magnitude to

⁴⁷ *Trial Transcript* at 8-152:9–13, 8-155:2-12, 8-192:22 to 8-193:1.

⁴⁸ *Trial Transcript* at 8-125:21-25 to 8-126:2, 8-128:3-12.

⁴⁹ *Trial Transcript* at 8-127:5–14, 8-152:14–24.

⁵⁰ *See, e.g., Trial Transcript* at 9-119:10–21.

reach outside the Complex in quantities sufficient to cause chemical odors.

iii. Violations Involving Allergy-Like or Respiratory Symptoms

6s. Plaintiffs contend they produced sufficient evidence to establish traceability as to 3,997 days of violations resulting from pollutants that cause or contribute to respiratory or allergy-like symptoms and meet the geographic nexus inquiry.⁵¹ Exxon contends Plaintiffs have not established any violation can be traced outside the Complex in sufficient quantities to affect Plaintiffs' members.

6t. At trial, Plaintiffs produced evidence to show the following pollutants cause or contribute to respiratory or allergy-like symptoms: (1) carbonyl sulfide;⁵² (2) carbon monoxide;⁵³ (3) hydrogen cyanide;⁵⁴ and (4) nitrogen oxides ⁵⁵ (collectively, the "Respiratory Pollutants").⁵⁶ Considering this evidence,

⁵¹ This number is the sum of Plaintiffs' calculations of violations that cause or contributed to respiratory or allergy-like symptoms based on: 70 days of violations for nonzero emissions standard, 3, 814 days of violations that involved a reportable quantity of pollutant, and 113 days of violations that were of a sufficient magnitude to reach beyond the Complex. *Plaintiffs' Proposed FFCL on Limited Remand, supra* note 13, at 16–20. The Court notes this calculation does not take into consideration prior days of violations that overlap with other traceability categories.

⁵² *Trial Transcript* at 11-60:21–21 to 11-62:4.

⁵³ *Plaintiffs' Exhibits* 544, 546.

⁵⁴ *Plaintiffs' Exhibit* 533.

⁵⁵ *Plaintiffs' Exhibits* 544, 546.

⁵⁶ Plaintiffs also produced evidence that benzene, ethylbenzene, hydrogen chloride, hydrogen sulfide, sulfur

the Court finds any violation where one of the Respiratory Pollutants was emitted caused or contributed to respiratory or allergy-like symptoms.

6u. In addition to the Respiratory Pollutants, Plaintiffs contend the pollutants that the evidence shows contribute to ground-level ozone formation also contribute to respiratory or allergy-like symptoms, because ground-level ozone causes or contributes to respiratory or allergy-like symptoms. Evidence presented at trial shows it is undisputed that highly reactive volatile organic compounds (“HRVOCs”)⁵⁷ contribute to the formation of ground-level ozone.⁵⁸ Dr. Brooks testified that ground-level

dioxide, toluene, and xylene cause or contribute to respiratory or allergy-like symptoms. *Plaintiffs’ Exhibits* 476, 524–26, 535–40, 542–46, 548–52. However, as violations involving these pollutants were already analyzed as part of the Odor Pollutants, consideration of these pollutants as part of the Respiratory Pollutants would likely result in duplicate violations and days of violations. Accordingly, the Court does not reassess violations involving these overlapping pollutants as part of the Respiratory Pollutants.

⁵⁷ For Harris County, HRVOCs include: “one or more of the following volatile organic compounds (VOC): 1,3-butadiene; all isomers of butene (e.g., isobutene (2-methylpropene or isobutylene), alpha-butylene (ethylethylene), and beta-butylene (dimethylethylene, including both cis- and trans-isomers)); ethylene; and propylene.” 30 Tex. Admin. Code § 115.10(21)(A).

⁵⁸ *Plaintiffs’ Exhibits* 476 at 25; *Trial Transcript* at 7-143:17 to 7-144:1 (testimony of Dr. Brooks); 8-180:25 to 8-181:1; 8-205:6–19 (testimony of David Cabe). The Court notes Plaintiffs point to evidence that acetaldehyde, ethyltoluene, formaldehyde, nitrogen oxides, pentene, toluene, trimethylbenzene, volatile organic compounds, and xylene also cause or contribute to ground-level ozone formation. *Plaintiffs’ Proposed FFCL on Limited Remand, supra* note 13, at 14. The Court does not include these pollutants, as they have already been included in

ozone causes or contributes to respiratory or allergy-like symptoms.⁵⁹ Both Dr. Brooks and David Cabe, Exxon's environmental engineer and air pollution consultant,⁶⁰ testified that ground-level ozone requires certain pollutants and conditions, like sunlight, for formation to occur.⁶¹ Dr. Brooks further testified that studies have shown ozone precursors, like HRVOCs, can form ozone downwind of the emission point of the precursor and at a later time than that of the emission.⁶² Therefore, there is no certainty that HRVOCs emitted by the Complex actually contributed to ozone formation that would then cause or contribute to respiratory or allergy-like symptoms. However, traceability does not require "scientific certainty." *See ETCL II*, 968 F.3d at 370 (quoting *Save Our Cmty. v. EPA*, 971 F.2d 1155, 1161 (5th Cir. 1992)). The test is whether the pollutant *could* cause or contribute to respiratory or allergy-like symptoms. *Id.* at 371 (emphasis added). Thus, the Court finds Plaintiffs have shown that violations involving the emission of HRVOCs could cause or contribute to respiratory or allergy-like symptoms. The Court therefore turns to whether the violations where the Respiratory Pollutants or HRVOCs were emitted satisfy the geographic nexus test by having

an analysis of other traceability categories or the Court finds there was insufficient evidence presented by Plaintiffs to show that the pollutant caused or contributed to ozone formation.

⁵⁹ *Trial Transcript* at 7-36:25 to 7-37:2; 7-148:9–19.

⁶⁰ *Trial Transcript* at 8-109:6–20.

⁶¹ *Trial Transcript* at 7-143:17–22, 7-189:15–16, 8-186:12–14, 8-204:8–14.

⁶² *Plaintiffs' Exhibits* 476, 484; *Trial Transcript* at 7-144:14 to 7-146:5.

exceeded a nonzero emissions limit, was required to be reported under Texas regulations, or was proven to be of a sufficient magnitude to reach Baytown neighborhoods outside the Complex in quantities that would cause chemical odors. *See id.* at 370–71.

6v. Considering the same exhibits and columns discussed above,⁶³ the Court finds traceability has been established for any violation where one of the Respiratory Pollutants or HRVOCs was emitted in an amount greater than the indicated nonzero emissions limit. Having reviewed the Events and Deviations for said violations, the Court finds Plaintiffs have established traceability as to 24 violations, totaling 471 days of violations.⁶⁴

6w. Texas law provides the following “reportable quantities” for each of the Respiratory Pollutants and HRVOCs:

- Carbonyl Sulfide – 100 lbs.;
- Carbon monoxide – 5000 lbs.;
- Hydrogen Cyanide – 10 lbs.;
- Nitrogen Oxides – 200 lbs.;
- Ethylene—100 lbs.;
- 1,3 Butadiene – 10 lbs.;
- Butenes – 100 lbs.; and
- Propylene – 100 lbs.

30 Tex. Admin. Code §§ 101.1(89), 115.10(21)(A); 40 C.F.R. Part 302, Table 302.4; 40 C.F.R. Part 355, App. A. If the violation includes a mixture of air

⁶³ *See supra* ¶ III.6n.

⁶⁴ *See Plaintiffs’ Exhibits* 592–94; *Traceability Spreadsheets*, *supra* note 17, at Exhibits 5-7.

pollutants where the relative amount of each individual pollutant is unknown, the reportable quantity is any amount of the mixture that equals or exceeds the reportable quantity for any single pollutant that is present in the mixture. 30 Tex. Admin. Code § 101.1 (89)(B)(ii).⁶⁵ When a violation shows the emitted amount of one of the Respiratory Pollutants or HRVOCs exceeds the reportable quantity for that pollutant and was reported,⁶⁶ the Court finds traceability has been established. Having reviewed the Events and Deviations for said violations, the Court finds Plaintiffs have established standing as to 114 violations, totaling 419 days of violations.⁶⁷

⁶⁵ The Court notes that this part of the statute becomes relevant for certain violations that show several different pollutants, but do not provide specific emissions in pounds for each pollutant. For example, in Plaintiffs' Exhibit 589 and Traceability Spreadsheet Exhibit 4, STEERS event 110886 shows a release of 3,650.46 pounds of various pollutants, including 1,3 butadiene, cis-2-butene, ethylene, and propylene. Though the specific emissions as to each of these HRVOCs is not provided, under Texas law, the reportable quantity would be equal to any single pollutant present. Here, that could be 10 lbs. or 100 lbs. In light of the Circuit's instructions on remand, the Court considered the higher amount when more than one reportable quantity could be used.

⁶⁶ *See supra* ¶ III.6 n.15.

⁶⁷ The breakdown for each section at the Complex is as follows: (1) 80 violations, totaling 359 days of violations from refinery Reportable Events; (2) 21 violations, totaling 47 days of violations from the olefins plant Reportable Events; (3) 10 violations, totaling 10 days of violations from the chemical plant Reportable Events; and (4) 3 violations, totaling 3 days of violations under Count III (specifically, the three STEERS event from the chemical plant).

6x. Lastly, Plaintiffs contend traceability is established as to 113 violations that were of a sufficient magnitude to reach Baytown neighborhoods outside the Complex in sufficient quantities to cause respiratory or allergy-like symptoms.⁶⁸ Exxon contends that Plaintiffs have not shown any of the pollutants from the violations exceeded industry standards or were sufficient in magnitude to affect Plaintiffs' members outside the Complex.

6y. Plaintiffs point to the testimony of Mr. Cabe and Dr. Fraiser about air dispersion analyses that show in at least 144 instances, the events caused an offsite pollutant concentration in excess of air comparison values ("ACVs").⁶⁹ ACVs include the National Ambient Air Quality Standards ("NAAQS"), which are federal standards set by the EPA, effects screening levels ("ESLs") set by Texas Commission on Environmental Quality, air monitoring comparison values, and a reference evaluation value.⁷⁰ Mr. Cabe testified none of the National Ambient Air Quality Standards ("NAAQS") were exceeded for the violations which he conducted air dispersion modeling and that exceeding an air comparison value in a model requires additional analysis by a toxicologist to determine if public health or safety was in danger.⁷¹ Furthermore, Dr. Fraiser, a toxicologist, discussed in

⁶⁸ Plaintiffs note that several of the 113 violations may overlap with violations that traceability has already been established for in other categories. *See Plaintiffs' Proposed FFCL on Limited Remand*, *supra* note 13, at 20–21.

⁶⁹ *Trial Transcript* at 8-152:9–13, 8-155:2-12, 8-192:22 to 8-193:1.

⁷⁰ *Trial Transcript* at 8-125:21-25 to 8-126:2, 8-128:3–12.

⁷¹ *Trial Transcript* at 8-127:5–14, 8-152:14–24.

depth several of the violations that had been modeled and found that even in situations where the offsite pollutant exceeded ACVs, it would not have contributed to pollution. Plaintiffs do not point the Court to evidence in the record to rebut this testimony or to show that, at these quantities offsite, the pollutants would have been sufficient to cause respiratory or allergy-like symptoms. Based on the credible evidence presented at trial, the Court finds that Plaintiffs fail to establish traceability as to any violations where the Respiratory Pollutants or HRVOCs were of a sufficient magnitude to reach outside the Complex in quantities sufficient to cause respiratory or allergy-like symptoms.

iv. Total Violations by Count ⁷²

6z. The following table provides the total violations for which Plaintiffs have established traceability organized by each count in their complaint:

⁷² Because the Fifth Circuit did not address the Court's findings as to violations under Count VI and on the first appeal, the Circuit affirmed the Court's findings that Count VII violations are not actionable, the Court need not address traceability as to Counts VI or VII.

Count	Violations	Days of violations
Count I	1,207	2,120
Count II ⁷³	739	1,462
Count III	13	18
Count IV	42	44
Count V	7	7
Totals	2,008	3,651

c. Redressability ⁷⁴

B. Actionability ⁷⁵

C. Affirmative Defenses

49. The Court addresses the applicability of Exxon's asserted affirmative defenses prior to addressing the relief sought by Plaintiffs, because if an affirmative defense is proven applicable to a violation, the Court in its assessment of the penalty factors will not consider that violation. In its revised

⁷³ As previously discussed, some of the Count II violations overlap with Count I violations. The Court has accounted for the overlap in its traceability analysis and does not double count any violations provided in the totals above.

⁷⁴ Because the Court reincorporates by reference its previous conclusions of law as to redressability, ¶¶ III.7–III.8 from the Court's Revised Findings of Fact and Conclusions of Law is omitted in the foregoing analysis.

⁷⁵ The Fifth Circuit did not address the Court's findings as to actionability of the violations under each of the counts on the limited remand. As such, the Court's revised findings of fact and conclusions of law as to actionability of each count and violation remains in effect. The Court therefore reincorporates by reference *Revised Findings of Fact and Conclusions of Law*, Document No. 257, Part III.B. The findings are amended only to the extent necessary to adjust for those violations for which Plaintiffs have failed to show traceability.

findings of fact and conclusions of law, the Court found the Act of God defense was inapplicable as a matter of law and that Exxon did not meet its burden to show the applicability of 30 Texas Administrative Code § 101.222 affirmative defenses as to the relevant STEERS events.⁷⁶ The Fifth Circuit vacated the Court's judgment and remanded for additional findings as to, *inter alia*, the Act of God affirmative defense.⁷⁷ As instructed on remand, the Court amends its findings on Exxon's affirmative defenses only as to Exxon's Act of God defense.

1. Hurricane Ike Defenses

50. Exxon contends Hurricane Ike's landfall was an act of God that precludes liability for ten reportable events resulting in violations. On the first remand, Plaintiffs asserted the CAA does not contain an Act of God defense, and therefore, the defense is not available because Exxon had not met its burden to show any such provision was incorporated in Texas's State Implementation Plan ("SIP").⁷⁸ In remanding for findings on the Act of God defense, the Fifth Circuit held that, contrary to Plaintiffs' contention, Texas's SIP does incorporate an Act of

⁷⁶ *Revised Findings of Fact and Conclusions of Law*, Document No. 257 at 69–74.

⁷⁷ Because the Fifth Circuit did not address the Court's findings as to Exxon's entitlement to affirmative defenses under 30 Texas Administrative Code Chapter 101.222, those findings remain in effect.

⁷⁸ Exxon contends Plaintiffs did not previously raise the argument that § 7.251 of the Texas Water Code is not included in the Texas SIP. That is incorrect. *See Plaintiff's Revised Proposed Findings of Fact and Conclusions of Law*, Document No. 218, ¶ 42.

God defense. *See ETCL II*, 968 F.3d at 373 (“The Texas SIP—the governing federal law under the Clean Air Act—thus incorporates an Act of God defense.”). Plaintiffs now contend Exxon has not met its burden to establish the Act of God defense.

51. Section 7.261 of the Texas Water Code—the Texas SIP’s current statutory home—states:

If a person can establish that an event that would otherwise be a violation of a statute within the commission’s jurisdiction or a rule adopted or an order or a permit issued under such a statute was caused solely by an act of God ... or other catastrophe, the event is not a violation of that statute, rule, order, or permit.

Tex. Water Code § 7.251. “[A]n act of God is defined as any accident, due directly and exclusively to natural causes without human intervention, which by no amount of foresight, pains, or care, reasonably to have been expected, could have been prevented.” *HRD Crop v. Lux Int’l Corp.*, Civ. Action No. H-06-0730, 2007 WL 2050366, at *11 (S.D. Tex. July 17, 2007) (Rosenthal, C.J.) (citing *Union Pac. R. Co. v. Heartland Barge Mgmt., L.L.C.*, 2006 WL 2850064, at *13 (S.D. Tex. 2006) (Rainey, J.)). Not all hurricanes are considered legal acts of God. *See Nat’l Liab. & Fire Ins. Co. v. R&R Marine*, Civ. Action H-07 3169, 2009 WL 10695626, at *4 (S.D. Tex. Oct. 20, 2009) (Hughes, J.).

51a. Prior to Hurricane Ike’s landfall, the Governor of Texas issued a declaration of a state of disaster including the following proclamation: “As provided in Section 418.016, all rules and regulations that may inhibit or prevent prompt response to [the

threat of the hurricane] are suspended for the duration of the state of disaster.”⁷⁹ The proclamation applied from September 7, 2008 through November 6, 2008.⁸⁰ On September 15, 2008, the TCEQ issued guidance regarding the proclamation, stating that no prior approval was needed for any exceedance of an emissions limit that was directly related to hurricane response.⁸¹ Prior to hurricane landfall, the Complex was shut down.⁸² After the hurricane passed, the Complex resumed operations.⁸³

51b. Exxon presented evidence at trial establishing that precautionary measures were undertaken at the Complex in anticipation of the impending arrival of Hurricane Ike. Kovacs testified that the Complex initiated a shutdown in the advent of Hurricane Ike that resulted in emissions events.⁸⁴ Kovacs testified that shutting down the plant “was the safest thing to do from a safety and environmental perspective in advance of the hurricane.”⁸⁵ Because Hurricane Ike’s arrival was imminent, Kovacs testified that the complex had to be shut down “promptly.”⁸⁶ Kovacs also testified that shutting down

⁷⁹ *Defendants’ Exhibit 225; Trial Transcript 3-2:2–21.*

⁸⁰ *Trial Transcript at 3-209:6–14.*

⁸¹ *Plaintiffs’ Exhibit 587 at 3; Trial Transcript at 4-24:7 to 4-26:2.*

⁸² *Trial Transcript at 3-206:4–7, 3-209:3–51.*

⁸³ *Trial Transcript at 3-209:16.*

⁸⁴ *Trial Transcript at 3-206:4–7.*

⁸⁵ *Trial Transcript at 3-207:6–8*

⁸⁶ *Trial Transcript at 3-209:3–5.*

the plant was required because the eye of Hurricane Ike eventually passed directly over the Complex.⁸⁷

51c. Nevertheless, at trial, Exxon failed to present evidence that Hurricane Ike could not have been anticipated. The evidence presented points to the contrary, as Exxon was able to take steps to shut down the Complex. Further, Exxon did not present any evidence the violations in question occurred solely as a result of Hurricane Ike. In fact, the Reported Events cite the cause of the emissions as a scheduled shutdown due to approach of Hurricane Ike.⁸⁸ Therefore, the violations are not accidents, but rather the result of Exxon's precautions in preparation for Hurricane Ike. Therefore, based on the evidence presented, the Court finds Exxon fails to put forth sufficient evidence to establish Hurricane Ike was an "act of God." Thus, the Court finds Exxon is not entitled to defense from liability for the ten reportable events resulting in violations under the Texas SIP.

*2. 30 Texas Administrative Code § 101.222
Affirmative Defenses*⁸⁹

⁸⁷ *Trial Transcript* at 3-207:12.

⁸⁸ *See, e.g., Plaintiffs' Exhibit 587* (discussing STEERS event 113887).

⁸⁹ The Court notes it does not include its analysis as to Exxon's affirmative defenses under 30 Texas Administrative Code § 101.222 or as to Exxon's request for a declaratory judgment. However, the Court reincorporates by reference those prior findings, as they remain undisturbed on limited remand. *See Revised Findings of Fact and Conclusions of Law*, Document No. 257, ¶¶ III.50 – III.55.

D. Penalties

56. Having found on limited remand that over 3000 violations are actionable under the CAA's citizen suit provision, the Court will exercise its discretion to conduct a penalty assessment for those events.

57. "In determining the amount of any penalty to be assessed under" the CAA in a citizen suit, the Court "shall take into consideration (in addition to such other factors as justice may require)" the following penalty assessment factors:

- the size of the business,
- the economic impact of the penalty on the business,
- the violator's full compliance history and good faith efforts to comply,
- the duration of the violation as established by any credible evidence ...,
- payment by the violator of penalties previously assessed for the same violation,
- the economic benefit of noncompliance, and
- the seriousness of the violation. 42 U.S.C. § 7413(e)(1).

58. The Court is not required to assess a penalty for violations. 42 U.S.C. § 7413(e)(2) ("A penalty *may* be assessed for each day of violation." (emphasis added)); *Luminant Generation Co. LLC v. U.S. E.P.A.*, 714 F.3d 841, 852 (5th 2013) ("[T]he penalty assessment criteria ... are considered by the courts ... in determining *whether or not* to assess a civil penalty for violations and, if so, the amount." (emphasis added)); *see also* 42 U.S.C. § 7413(e)(1)

(“In determining the amount of *any* penalty to be assessed” (emphasis added)); *Envtl. Conservation Org. v. City of Dallas*, 529 F.3d 519, 530 (“[E]ven in the event of a successful citizen suit, the district court is not bound to impose the maximum penalty afforded under the statute.”).⁹⁰ Rather, the amount of any penalty, the analysis of the factors, and the process of weighing the factors are “‘highly discretionary’ with the trial court.” *Sierra Club, Lone Star Chapter v. Cedar Point Oil Co.*, 73 F.3d 546, 576 (5th Cir. 1996) (quoting *Tull v. United States*, 481 U.S. 412, 427, 107 S.Ct. 1831, 95 L.Ed.2d 365 (1987)); *United States ex rel. Adm’r of EPA v. CITGO Petroleum Corp.*, 723 F.3d 547, 551 (5th Cir. 2013). Each of the penalty assessment factors are considered in turn.

a. Size of the Business and Economic Impact of the Penalty on the Business

59. Plaintiffs contend the large size and profitability of Exxon weigh towards imposing a penalty. Specifically, Plaintiffs contend Exxon will only be impacted by a large penalty and has the ability to pay the alleged maximum penalty. Exxon does not dispute these contentions, and the Court agrees given the facts found in the Revised Findings of Fact and Conclusions of Law, paragraph II.1. Accordingly, both the size and economic impact factors weigh towards assessing a penalty.

⁹⁰ Because the penalty provisions in the CAA are similar to the penalty provisions in the CWA, “CWA cases are instructive in analyzing[penalty] issues arising under the CAA.” *Pound v. Airosol Co.*, 498 F.3d 1089, 1094 n.2(10th Cir. 2007) (citing *United States v. Anthony Dell’Aquila, Enters. & Subsidiaries*, 150 F.3d 329, 338 n.9 (3d Cir. 1998)).

b. Violator's Full Compliance History and Good Faith Efforts to Comply

60. Quantitatively, the number of Events and Deviations at issue in this case is high: 241 Reportable Events, 3,735 Recordable Events, and 901 Title V Deviations.⁹¹ Thus, based on the total number of Events and Deviations alone, Exxon's compliance history appears to be arguably inadequate. However, the Complex is one of the largest and most complex industrial sites in the United States.⁹² Therefore, there are numerous opportunities for noncompliance, and the number of Events and Deviations alone is not the best evidence of compliance history.⁹³ In other words, the number of Events and Deviations must be considered with respect to the size of the Complex. For example, in 2012 the refinery averaged one pin hole leak for every 167 linear miles of pipe.⁹⁴

61. Moreover, the number of Events and Deviations does not alone mean Exxon did not make a good faith effort to comply. Despite good practices, it is not possible to operate any facility—especially one as complex as the Complex—in a manner that

⁹¹ *Revised Findings of Fact and Conclusions of Law*, Document No. 257, ¶ II.5. Though several thousand violations are no longer actionable due to lack of traceability or voluntarily exclusion by Plaintiffs, the “overall number of violations at the Baytown complex remains relevant as part of ‘the violator’s full compliance history’ that [the Court] considers in assessing the amount of each penalty within the statutory range.” *ETCL II*, 968 F.3d at 374.

⁹² *Revised Findings of Fact and Conclusions of Law*, Document No. 257, ¶ II.2.

⁹³ *See Trial Transcript* at 10-220:14 to 10-223:16.

⁹⁴ *Trial Transcript* at 10-221:24 to 10-222:10.

eliminates all Events and Deviations.⁹⁵ Based on the facts expounded paragraphs II.12–14 of the Court’s Revised Findings of Fact and Conclusions of Law, the Court finds Exxon made substantial efforts to improve environmental performance and compliance, including implementing four environmental improvement projects to reduce emissions and employing a vast array of emissions-reduction and emissions-detection equipment. Likely due to Exxon’s substantial efforts, the Complex achieved significant reduction in the number of Reportable Events, the amount of unauthorized emissions of criteria pollutants, and the total amount of emissions over the years at issue in this case.⁹⁶ For reasons explained *infra* in footnote 98, the Court is not persuaded by Keith Bowers’s opinion that certain capital improvements or additional spending on maintenance would have prevented the Emissions and Deviations. In addition, the Court does not accept Plaintiffs’ view that the number of events involving a certain type of equipment, a certain unit, or a certain type of issue is alone adequate to support a conclusion that any of the

⁹⁵ *Revised Findings of Fact and Conclusions of Law*, Document No. 257, ¶ II.15. The Court understands impossibility is not a defense to penalties, except as it might apply to the applicable affirmative defense criteria. The Court does not consider the fact that it is not possible to operate the Complex in a manner that eliminates all Events and Deviations as a reason to not impose penalties. Rather, the Court notes this fact only to explain that the number of Events and Deviations does not alone mean Exxon did not make a good faith effort to comply.

⁹⁶ *Revised Findings of Fact and Conclusion of Law*, Document No. 257, ¶ II.16.

Events or Deviations were preventable.⁹⁷ Rather, a root cause analysis is necessary to determine whether the Events and Deviations resulted from a recurring pattern and to determine whether improvements could have been made to prevent recurrence. Plaintiffs did not put forth any credible evidence that any of the Events or Deviations resulted from the same root cause.⁹⁸ Therefore, there is no credible evidence that any of the Events or Deviations resulted from a recurring pattern or that improvements could have been made to prevent recurrence. For each of the Reportable Events, Exxon conducted an extensive internal investigation, evaluated the root cause of the event, and implemented appropriate corrective actions to try to prevent recurrence.⁹⁹ Similarly, for the Recordable Events and Deviations, Exxon analyzed the records for trends and ways to improve, identified root causes, and implemented corrective

⁹⁷ *Revised Findings of Fact and Conclusion of Law*, Document No. 257, ¶ II.7.

⁹⁸ In particular, the Court finds Bowers's testimony regarding the Events and Deviations having "common causes" is neither credible nor persuasive. For example, the Events and Deviations that Bowers categorizes as having the same common cause of "power supply failures" include the following: moisture got into the connections of improperly installed lightening arresters, causing them to short out; a squirrel bypassed animal traps, causing some electrical equipment to short circuit; and a hawk dropped a snake on top of Substation One, causing an electrical power disruption. *Defendants' Exhibits* 1020C, 10201–O; *Trial Transcript* at 10-244:17 to 10-253:17. Categorizing such varied events together does not prove the events had a common cause, resulted from a recurring pattern, or were preventable.

⁹⁹ *Revised Findings of Fact and Conclusion of Law*, Document No. 257, ¶¶ II.7–II.9.

actions.¹⁰⁰ Additionally, Exxon’s maintenance policies and procedures conform or exceed industry standards and codes.¹⁰¹ The Court finds the opinion of Dr. Christopher S. Buehler, a chemical engineer, that the Complex ranks at or near the top of petrochemical facility “leaders in maintenance and operation practices” is persuasive and credible.¹⁰² Lastly, the Court finds the opinions of John Sadlier, the former Deputy Director of the Office of Compliance and Enforcement at the TCEQ who dealt with Exxon for 20 years while working at the TCEQ, persuasive and credible when he opined that he “always felt and continue[s] to feel today that Exxon had always made a concerted effort to comply [,] that their dealings with [the TCEQ] were straightforward frank discussions,” that Exxon is “[a]bsolutely not” a “bad actor,” and that he has no reason to not believe Exxon “will earnestly try to achieve the goals” in the Agreed Order of reducing emissions.¹⁰³ After evaluating all the evidence, the Court finds the preponderance of the credible evidence shows Exxon made good faith efforts to comply with the CAA.¹⁰⁴

¹⁰⁰ *Revised Findings of Fact and Conclusion of Law*, Document No. 257, ¶ II.7.

¹⁰¹ *Revised Findings of Fact and Conclusion of Law*, Document No. 257, ¶ II.14.

¹⁰² *Trial Transcript* at 12-16:10–20.

¹⁰³ *Defendants’ Exhibit* 546 at 14-15, ¶¶ 40–44.

¹⁰⁴ In addition to the aforementioned issues, Plaintiffs contend Exxon’s policy of always asserting the affirmative defense to penalties to the TCEQ is, in itself, bad faith. Based on the greater weight of the credible evidence, the Court disagrees such policy is in bad faith. Although Exxon initially asserts the affirmative defense when reporting an event to the TCEQ, the

Accordingly, Exxon's full compliance history and good faith efforts to comply weigh against assessing a penalty.

c. Duration of the Violation

62. On the first appeal, the Fifth Circuit's opinion held the Court abused its discretion by viewing violations of a longer duration as offset by violations of a shorter duration. The Circuit's opinion also indicated the Court should revisit its approach as to, whether in calculating the duration of a violation, a court should look to the duration of each individual violation or the period of time over which the violations occurred. *See Env't Tex.*, 824 F.3d at 531. The Court was instructed on the first remand, if it continued to consider durations of the violations individually, to determine whether any violation standing alone was sufficient to justify imposing a penalty.¹⁰⁵

63. The Court first turns to the proper standard for determining whether this factor requires examining the length of an individual violation or the period of time over which the violations occurred. Exxon does not address the case law cited by Plaintiffs, and referred to by the Fifth Circuit, that indicates the Court should consider the period of time over which the violations occurred on this factor. *See United States v. Vista Paint Corp.*, No. EDCV 94-0127 RT, 1996 WL 477053, at *15 (C.D. Cal. Apr. 16, 1996); *United States v. B & W Inv. Props., Inc.*, No. 91 C

TCEQ, after investigation, determines whether the affirmative defense actually does apply.

¹⁰⁵ Exxon contends the Court should continue to look to duration of the violations standing alone in analyzing this factor. However, Exxon cites no case law to support this proposition.

5886, 1994 WL 53781, at *4 (N.D. Ill. Feb. 18, 1994); *United States v. Midwest Suspension & Brake*, 824 F. Supp. 713, 736–37 (E.D. Mich. 1993); *United States v. A.A. Mactal Constr. Co. Inc.*, Civ. A. No. 89 2372-V, 1992 WL 245690, at *3 (D. Kan. Apr. 10, 1992). Nor does Exxon argue that the plain meaning of the phrase “duration of the violation” requires examining each individual violation as opposed to the period of time over which the violations occurred. The Court, in light of the Fifth Circuit’s notation of the authority supporting the position, adopts the interpretation of this factor that examines the period of time over which the credible evidence establishes the violations occurred.

64. The Court next turns to, whether looking to the period of time over which the violations occurred, the duration factor supports imposing a penalty. The credible evidence establishes the violations at issue occurred over an eight-year period. During that eight-year time period, Exxon averaged more than one violation per day. Accordingly, the Court finds the duration factor weighs in favor of assessing a penalty.

d. Payment by the Violator of Penalties Previously Assessed for the Same Violation

65. Exxon has paid \$1,423,632 in monetary penalties for the Events and Deviations at issue in this case to either the TCEQ or Harris County.¹⁰⁶ Plaintiffs accede this amount should be deducted from the total penalty determined by the Court, and

¹⁰⁶ *Revised Findings of Fact and Conclusion*

the Court agrees. Accordingly, \$1,423,632 will be deducted from any penalty otherwise warranted.¹⁰⁷

e. Economic Benefit of Noncompliance

66. Generally, economic benefit of noncompliance is the financial benefit obtained by “**delaying** capital expenditures and maintenance costs on pollution-control equipment.” *CITGO Petroleum Corp.*, 723 F.3d at 552 (emphasis added). “[T]here are two general approaches to calculate economic benefit: (1) the cost of capital, i.e., what it would cost the polluter to obtain the funds necessary to install the equipment necessary to correct the violation; and (2) the actual return on capital, i.e., what the polluter earned on the capital that it declined to divert for installation of the equipment.” *Id.* (internal quotation marks omitted). A district court must make a reasonable estimate of economic benefit of noncompliance. *Id.* at 552–53.

67. On the first appeal, the Fifth Circuit held this Court erred in failing to enter findings as to whether Exxon received an economic benefit in delaying implementation of the four environmental improvement projects from the Agreed Order.¹⁰⁸ Although the Circuit upheld the Court’s rejection of

¹⁰⁷ Plaintiffs contended on the first remand that this amount should be reduced given the Court’s finding on Count VII; however, as this issue was not appealed or part of the Fifth Circuit’s instructions on the first remand, the Court will not revisit this issue. Now, on limited remand, Plaintiffs do not contend this amount should be reduced to account for violations for which standing is not established nor do Plaintiffs point the Court to evidence in the record that would allow the Court to adjust the previously assessed amount. Therefore, the Court declines to reduce the previously assessed amount.

¹⁰⁸ *Revised Findings of Fact and Conclusion of Law*, Document No. 257, ¶ II.12.

Bower's expert testimony on this issue as not credible,¹⁰⁹ the Circuit held that Plaintiffs elicited

¹⁰⁹ As to Bower's testimony, the Court's initial opinion made the following findings, in paragraphs 41–42 of the Court's *Findings of Fact and Conclusions of Law*, Document No. 225: Plaintiffs claim Exxon's economic benefit of noncompliance is \$657 million as of June 2014. This number is based on Bowers's opinion that the Events and Deviations would not have occurred if (1) if Exxon would have spent \$90 million more annually on maintenance and (2) if Exxon would have installed certain capital equipment (an additional sulfur unit costing \$100 million, an additional sour gas flare costing \$10 million, and two additional compressor stations costing \$50 million each). Plaintiffs offered the testimony of an economist, Jonathan Schefftz, who used Bowers's inputs as to maintenance and capital expenditure costs delayed to calculate present-day economic benefit using the weighted-average cost of capital. The Court finds Schefftz's method of calculating economic benefit to be reliable. However, Schefftz made it very clear that he had no opinion as to the reliability of the inputs given to him by Bowers. For reasons explained *infra*, the Court finds Bowers's inputs to be neither reliable, credible, nor persuasive. Therefore, Schefftz's economic benefit of noncompliance figure is equally unreliable.

41. Bowers is a retired refinery and chemical plant engineer. Bowers's opinions and the bases for his opinions were vague and undetailed. Of the \$90 million Bowers opined should have been spent on maintenance, Bowers opined half of the \$90 million needed to be spent to hire 900 new employees to "run[] around inspecting things" and "[j]ust do more" maintenance and "stuff that needs to be done." He opined the remainder of the \$90 million needed to be spent on "material." He said his estimate was a "crude estimate," and he did not create a detailed budget of the type that he would have created when he was a project manager. Neither Bowers nor any other evidence credibly demonstrated that spending an additional \$90 million on maintenance would have prevented any of the Events or Deviations. Similarly, neither Bowers nor any other evidence credibly demonstrated that any of Bowers's suggested capital improvements would have prevented any of the Events or

testimony on this issue from Shefftz that was independent of Bower's testimony. *Env't Tex.*, 824 F.3d at 529, 529 n.17. The Circuit noted this Court found Shefftz's method for calculating the economic benefit reliable. On the first remand, the Court was instructed that "the economic benefit estimate must 'encompass *every* benefit that defendants received from violation of the law' regardless of the inherently speculative nature of the inquiry." *Id.* at 530 n.19 (citing *United States v. Gulf Park Water Co.*, 14 F. Supp. 2d 854, 864 (S.D. Miss 1998)). Further, after making such findings, the Court was instructed to consider whether those four improvement projects were necessary to correct the violations. The Circuit noted the evidence indicated the projects "appear to be correlated in at least a general way" and the Court's inquiry on remand "should center on whether the projects will ameliorate the kinds of general problems that have resulted in at least some of the permit violations upon which Plaintiffs have sued." *Id.* at 530, 530 n.19.

68. The Court interpreted the Fifth Circuit's opinion on initial remand as instructing it to do a two-step analysis: (1) enter findings based on Shefftz's

Deviations. Instead, the preponderance of the credible evidence shows Bowers's suggested capital improvements would not help reduce emissions. Moreover, Exxon has spent a substantial amount of money on maintenance, emissions-reduction and emissions-detection equipment, and capital improvement projects in an effort to reduce emissions and unauthorized emissions events. This includes four environmental improvement projects costing approximately \$20 million that Exxon was not required to undertake under law, and over \$500 million on maintenance and maintenance-related capital projects each year at issue.

testimony as to the economic benefit Exxon received from delaying implementation of the projects ¹¹⁰; and (2) enter findings on the “necessary to correct” prong as to whether the four improvement projects would generally ameliorate the violations on which the Plaintiffs have sued, without requiring a showing that the projects are specifically tied to the prevention of each violation.

69. On the first step, the Court turns to Shefftz’s testimony as to any economic benefit Exxon received from delaying implementation of the four projects in the Agreed Order. The Court previously found Shefftz’s methodology reliable. Shefftz calculated the economic benefit to Exxon from delaying implementation as \$11,746,234 as of November 22, 2013 (the date of Shefftz’s report).¹¹¹ The economic benefit would increase by \$61,066 per month until the economic benefit was disgorged in the form of a civil penalty.¹¹² The Court’s Revised Findings of Fact and Conclusions of Law were issued in April 2017, which encompassed forty-one additional months from the date of Shefftz’s report. Therefore, the economic

¹¹⁰ The Court interprets the Circuit’s opinion as holding that Shefftz’s testimony alone is sufficient to carry Plaintiff’s burden of proof on the first step. To the extent Exxon contests the sufficiency of Shefftz’s testimony, in regards to the interest rate chosen in the calculations and because he failed to account for the cost of delay by ignoring the increase in equipment expense, the Circuit instructed the Court to consider “every benefit ... regardless of the inherently speculative nature of the inquiry.” *Env’t Tex.*, 824 F.3d at 530 n.19 (emphasis in original).

¹¹¹ *Trial Transcript* 5-57:14 to 58:13; *Plaintiffs’ Exhibit* 556 at 1, 18–21.

¹¹² *Plaintiffs’ Exhibit* 556 at 14, 19; *Trial Transcript*, 5-49:5–9, 5-52:6–10.

benefit would encompass an additional \$2,503,706 and the total economic benefit from delay is \$14,249,940. Accordingly, the Court finds Exxon received an economic benefit of \$14,249,940 from the delayed implementation of the improvement projects.¹¹³

70. The Court now turns to the Circuit’s direction on the second step, whether a delayed project is “necessary to correct” the types of violations in the complaint. The Circuit has articulated a general correlation standard to utilize in analyzing this step.¹¹⁴ As an example of the general correlation standard, the Circuit notes that “one project aims to ‘more effectively monitor and troubleshoot’ a refinery flare system in order to ‘improve the identification and characterization of flaring events’ (Count IV) and the order estimates that the projects will specifically achieve reductions in HRVOC emissions (Count III).” *Env’t Tex.*, 824 F.3d at 530. Given the Fifth Circuit’s holding that at least one project meets the general correlation standard, the Court finds the Plaintiffs have met their burden as to at least one project on the “necessary to correct” step. Additionally, the Circuit noted this Court had previously recognized in its

¹¹³ Plaintiffs previously contended on the first remand that because the Circuit instructed the Court to consider every benefit, the one billion dollars the Court found demonstrated Exxon’s good faith efforts to comply should be included in the calculation of the economic benefit from delay. The Court reincorporates its prior findings as to this contention. *Revised Findings of Fact and Conclusions of Law*, Document No. 257, ¶ III.69 n.248. On limited remand, Plaintiffs do not reassert this contention and thus, the Court need not address it further.

¹¹⁴ *Revised Findings of Fact and Conclusion of Law*, Document No. 257, ¶ III.67.

order the “projects reflect ‘an effort to reduce emissions and unauthorized emissions events’ at the Baytown complex.”¹¹⁵ *Id.* As the Fifth Circuit instructed the Court to analyze the “necessary to correct” step at a high level of generality, the Court finds Plaintiffs have carried their burden of proof.¹¹⁶ Plaintiffs have demonstrated that: (1) the Plant Automation Venture “is intended to provide early identification of potential events and/or instrumentation abnormalities, allowing proactive response”¹¹⁷; (2) the Fuels North Flare System Monitoring/Minimization Project is intended to “more effectively monitor and troubleshoot” the refinery flares¹¹⁸; (3) the BOP/BOPX Recovery Unit Simulators Project is intended to “improve operator training and competency, resulting in reduced frequency and severity of emissions events”¹¹⁹; and (4) the Enhanced Fugitive Emissions Monitoring Project is a program to locate VOC and HRVOC leaks.¹²⁰ Accordingly, under the generally correlated standard articulated by the Fifth Circuit, the Court finds the four improvement projects were “necessary to correct” the violations at issue in this suit.

¹¹⁵ *Revised Findings of Fact and Conclusion of Law*, Document No. 257, ¶ II.12.

¹¹⁶ To the extent Exxon argues the projects were voluntary and not required for compliance, and therefore, not a proper basis for determining delayed economic benefit, the Court notes the Fifth Circuit directed it to use those projects on remand in its analysis of the factor.

¹¹⁷ *Defendants’ Exhibit 222*, ¶ 12.a.

¹¹⁸ *Defendants’ Exhibit 222*, ¶ 12.a.

¹¹⁹ *Defendants’ Exhibit 222*, ¶ 12.b.

¹²⁰ *Defendants’ Exhibit 222*, ¶ 12.d.

71. The four projects that formed the basis of the economic benefit calculations, when considered together, had the effect of reducing emission events and unauthorized emission events overall. Furthermore, each of the four projects discussed above addressed the types of violations found traceable by this Court. For example, the Fuels North Flare System Project would have helped to monitor and troubleshoot the --- days of flaring violations found by this Court to be traceable and actionable by this Court. Thus, the Court's findings as to traceability and the Act of God defense on limited remand do not alter the Court's economic benefit determination.

72. The Court has found Exxon received an economic benefit of \$14,249,940 by delaying implementation of four improvement projects that were necessary to correct the violations at issue in this suit. Accordingly, the Court finds the economic benefit of noncompliance factor weighs in favor of assessing a penalty.

f. Seriousness

72. The CAA does not define "seriousness" in relation to the penalty assessment factors. *See* 42 U.S.C. § 7413(e)(1). Some circuit courts, not including the Fifth Circuit, have held that "a court may still impose a penalty if it finds there is a risk or potential risk of environmental harm even if there is "a lack of evidence on the record linking [a defendant's] CAA violations to discrete damage to either the environment or the public." *Pound*, 498 F.3d at 1099 (citing *Pub. Interest Research Grp. of N.J., Inc. v. Powell Duffryn Terminals Inc.*, 913 F.2d 64, 79 (3d Cir. 1990)). The Fifth Circuit, however, did not

issue any guidance in its opinion as to the proper definition of the term. Instead, on the first remand, the Fifth Circuit held the Court abused its discretion in viewing the violations it found to be more serious as offset by the numerous less serious violations. In doing so, the Circuit noted—without explicitly adopting—courts have recognized that “the overall number and quantitative severity of emissions or discharges may properly be relied upon as evidence of seriousness.” *ETCL*, 824 F.3d at 532 (citing *Pub. Interest Research Grp. of N.J., Inc. v. Powell Duffryn Terminals Inc.*, 913 F.2d 64, 79 (3d Cir. 1990)).

73. In light of the Circuit’s guidance, the Court looks to the overall number and quantitative severity of the emissions or discharges.¹²¹ The overall number

¹²¹ The Court maintains its findings from its initial findings of fact and conclusions of law that most the violations were not serious from a public health and environmental perspective. As is necessary for parts of the Court’s initial judgment left undisturbed by the Fifth Circuit’s opinion, which relied on those findings, the Court reiterates here paragraphs 47 and 48 from the *Findings of Fact and Conclusions of Law*, Document No. 225:

47. Plaintiffs claim the Events and Deviations were serious because they adversely affected public health. To support this claim, Plaintiffs submitted evidence of the potential health effects caused by the types of pollutants emitted during the Events and Deviations. For example, hydrogen sulfide, which smells like rotten eggs or feces, can cause sore throat, cough, fatigue, headaches, nausea, and poor memory at low concentrations. Factors affecting potential risk of harm from pollutants include duration of exposure and concentration of pollutants. As discussed *supra*, the Events and Deviations differ tremendously in terms of duration and amount. Plaintiffs’ aforementioned evidence of the potential health effects caused by the types of pollutants

emitted does not include credible evidence that any of the specific Events and Deviations were of a duration and concentration to even potentially—adversely affect human health or the environment. Although Plaintiffs’ evidence of potential health effects provides some support of a potential risk of harm to human health, this evidence in this case is too tenuous and general to rise above mere speculation.

48. Plaintiffs also claim the Events and Deviations were serious because they created “nuisance-type impacts” to the community that interfered with daily life. Four Plaintiffs’ members experienced impacts to their life while living or visiting near the Complex, including pungent odors, allergies, respiratory problems, disruptive noise from flaring, concerns for their health after seeing haze believed to be harmful, and fears of explosion after seeing flares. However, these impacts could have been caused by Exxon’s authorized emissions or other companies’ emissions, because certain emissions and flares are authorized by permit and the nearby area in which the Complex operates is populated with numerous other refineries, petrochemical plants, and industrial facilities. Indeed, unauthorized emissions were a very small percentage of total emissions at the Complex for each year at issue. Plaintiffs’ members were only able to correlate some of the impacts, such as odor and noise, to five Events or Deviations at issue in this case. Moreover, Plaintiffs’ members’ testimonies regarding impacts were controverted by persuasive testimony from three other residents of the community who have lived very close to the Complex for many years. These residents testified the Complex has not impacted their lives, including that they have had no health problems they attribute to the Complex and that they have not experienced any problems with flaring, odors, noises, or emissions coming from the Complex. For all these reasons, the proposition that the Events or Deviations were serious because they created nuisance-type impacts on the surrounding

of violations weighs in favor finding the violations serious. 3,651 days of violations are supported by the evidence.¹²² The Court notes the days of violations found to be traceable are significantly lower than the previous number of violations found by this Court. However, the remaining violations that Plaintiffs have shown to be traceable involve higher levels of emissions. The overall quantitative severity of the emissions totaled approximately ten million pounds of pollutants released into the atmosphere as a result of the violations in this case.¹²³ There were over 1.5 million pounds of pollutants released from traceable reported violations out of the refinery alone.¹²⁴ Accordingly, the Court finds given the number of days of violations and the quantitative amount of emissions released as a result, the seriousness factor still weighs in favor of the assessment of a penalty.

g. Balancing the Factors

74. The maximum penalty for each day of violation is \$32,500 for violations occurring before January 13, 2014, and \$37,500 for violations occurring on January 13, 2009, and thereafter. 42 U.S.C. § 7413(e)(2); 40 C.F.R. § 19.4. Plaintiffs contend the total maximum penalty, after deducting for overlapping violations, is \$343,105,000. However, Plaintiffs previously sought \$40,815,618 in penalties

community is not supported by the preponderance of the credible evidence.

¹²² Days of violations per count are as follows: (1) Count I: 2,120 days; (2) Count II: 1,462 days; (3) Count III: 18 days; (4) Count IV: 44 days; and (5) Count V: 7 days.

¹²³ *Plaintiffs' Exhibit* 609.

¹²⁴ *See Plaintiffs' Exhibit* 587; *Traceability Spreadsheets*, *supra* note 17, Exhibit 2; *supra* ¶ III.A.b.

on the first remand ¹²⁵ and now seek \$19,951,278.¹²⁶ Exxon contends it should be assessed a penalty in an amount no more than \$1,365,000.

75. After carefully considering all the penalty assessment factors discussed above, the Court determines a penalty is appropriate in this case.¹²⁷ The size and economics factor, duration factor, economic benefit from noncompliance factor, and seriousness factor, all weigh towards assessing a penalty. While Exxon's compliance history weighs against assessing a penalty, that factor is not sufficient to outweigh the factors supporting assessing a penalty. Any penalty assessed will deduct the \$1,423,632 Exxon was already penalized from the amount.

76. The CAA does not prescribe a specific method for determining appropriate penalties. Some courts use the top-down approach, in which the court starts at the maximum penalty allowed by law and reduces downward as appropriate considering the factors as mitigating factors. *CITGO Petroleum Corp.*, 723 F.3d at 552. Other courts employ the bottom-up approach, in which the court starts at the economic benefit of noncompliance and adjusts upward or downward as appropriate considering the factors. *Id.* Rejecting a requirement that a district court must employ either

¹²⁵ *Plaintiffs' Proposed Findings of Fact and Conclusions of Law Following Remand*, Document No. 253, Exhibit 1, ¶ 52.

¹²⁶ *Plaintiffs' Proposed FFCL on Limited Remand*, *supra* note 13, at 33.

¹²⁷ Exxon did not contend in its initial proposed findings of fact and conclusions of law that the Court should consider the "justice so requires" factor. Therefore, the Court declines to address those arguments on remand.

the top-down or bottom-up approach, some circuit courts have held the district court can “simply rely[] upon [the] factors to arrive at an appropriate amount” without starting at a specific amount because “[t]he statute only requires that the [penalty] be consistent with a consideration of each of the factors.” *United States v. Anthony Dell’ Aquilla, Enters. & Subsidiaries*, 150 F.3d 329, 339 (3d Cir. 1998); *see Pound*, 498 F.3d at 1095. “The [Fifth] [C]ircuit has never held that a particular approach must be followed” and has left such decision to the discretion of the district court. *CITGO Petroleum Corp.*, 723 F.3d at 552, 554.

77. Based on the violations for which Plaintiffs contend they have established standing, Plaintiffs calculate the maximum penalty as follows¹²⁸: (1) Count I: 6,056 days of violation with a \$211,960,000 penalty; (2) Count II: 3,653 days of violations with a \$127,855,000 penalty; (3) Count III: 18 days of violations with a \$630,000 penalty; (4) Count IV: 44 days of violations with a \$1,540,000 penalty; and (5) Count V: 32 days of violations with a \$1,120,000 penalty. This calculates to a total maximum penalty of \$343,105,000. Given Plaintiffs fail to establish standing as to all these violations, the Court disagrees with this calculation. Rather, the Court finds the appropriate calculation for maximum penalty to be: (1) Count I: 2,120 days of violation with

¹²⁸ As on the first remand, Plaintiffs apply a penalty rate of \$35,000 per day across the board, given that approximately half the violations occurred when the rate was \$32,500 and half when the rate was \$37,500. Defendants do not contest this specific point in determining the maximum penalty. Therefore, as it is uncontested, the Court adopts this methodology as well.

a \$74,200,000 penalty; (2) Count II: 1,462 days of violations with a \$51,170,000 penalty; (3) Count III: 18 days of violations with a \$630,000 penalty; (4) Count IV: 44 days of violations with a \$1,540,000 penalty; and (5) Count V: 7 days of violations with a \$245,000 penalty. As the Court found Exxon liable on the refinery violations in Count I, it will not include the refinery violations in Count II when calculating the maximum penalty. The total maximum penalty, therefore, is \$127,785,000.

78. Plaintiffs have submitted proposed findings of fact and conclusions of law that adopt a bottom-up approach, which calculates the penalty at an amount that is fifty percent higher than the economic benefit from noncompliance.¹²⁹ Therefore, as the Court has discretion as to which method to follow, the Court adopts the bottom-up approach presented by the Plaintiffs. In addition, the majority of the factors weigh towards imposing a penalty, which the Court determines justifies an increase from the base economic benefit from noncompliance number. However, in light of the significant decrease in traceable violations (12,735 less violations), the Court finds a fifty percent multiplier would be more than necessary to address the factors. The Court therefore finds that a penalty that is ten percent higher than the economic benefit from noncompliance is sufficient. The Court determined the economic benefit from noncompliance to be \$14,249,940.¹³⁰ Using

¹²⁹ *Plaintiffs' Proposed Findings of Fact and Conclusions of Law Following Remand*, Document No. 253, Exhibit 1, ¶52.

¹³⁰ Plaintiffs' proposed findings of fact and conclusions of law utilized a higher base amount (approximately \$28 million);

Plaintiffs' proposed methodology for calculating the penalty (with a 10% multiplier now), the resulting penalty is \$15,674,934. Subtracting the \$1,423,632 already paid by Exxon in penalties, the resulting penalty amount is \$14,251,302.

III. CONCLUSION

Based on the foregoing, the Court hereby

ORDERS that Plaintiffs Environment Texas Citizen Lobby, Inc. and Sierra Club's requests in this case for a declaratory judgment, injunctive relief, and appointment of a special master, are DENIED. Plaintiffs' request for penalties against Defendants is GRANTED IN THE AMOUNT OF \$14,251,302.¹³¹

The Court will issue a separate Final Judgment.

however, as the Court rejected Plaintiffs' theory that led to the higher base amount, the Court uses the amount in the actual finding to calculate the penalty. *Supra* ¶ 111.69; *Plaintiffs' Proposed Findings of Fact and Conclusions of Law Following Remand*, Document No. 253, Exhibit 1, ¶ 52.

¹³¹ The Court's prior order granting an award of attorney's fees and costs to Plaintiffs and denying as to Defendants remains in effect. *See Revised Findings of Fact and Conclusions of Law*, Document No. 257, ¶ 111.84, Part IV; *see also Order*, Document No. 292.

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[47 F.4th 408]

UNITED STATES COURT OF APPEALS,
FIFTH CIRCUIT

No. 17-20545

ENVIRONMENT TEXAS CITIZEN LOBBY, INCORPORATED;
SIERRA CLUB,

Plaintiffs—Appellees,

v.

EXXONMOBIL CORPORATION; EXXONMOBIL CHEMICAL
COMPANY; EXXONMOBIL REFINING; SUPPLY COMPANY,
Defendants—Appellants.

FILED August 30, 2022

Appeal from the United States District Court for
the Southern District of Texas USDC No. 4:10-CV-
4969, David Hittner, U.S. District Judge

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Houston, TX, Charles Craig Caldart, Esq., National
Environmental Law Center, Seattle, WA, Joshua
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Before DAVIS, COSTA, and OLDHAM, Circuit Judges.

GREGG COSTA, Circuit Judge:

Environmental groups sued ExxonMobil under the Clean Air Act for thousands of unauthorized emissions from the company's complex in Baytown, Texas. The first time we considered the case, we found Exxon liable for many of those violations and remanded for the district court to determine an appropriate penalty. When the case came to us again a few years later, we primarily addressed whether the plaintiffs have standing to seek redress for those violations. The case now returns to us after a limited remand for factfinding on traceability and Exxon's

affirmative defenses. Finding no error in the district court's fact-intensive analysis of standing or penalty, we affirm.

I

This long-pending Clean Air Act suit stems from operations at ExxonMobil's massive Baytown complex. The complex, which houses a refinery, a chemical plant, and an olefins plant, is heavily regulated by federal permits that are enforced jointly by the Texas Commission on Environmental Quality and the United States Environmental Protection Agency. *Environment Texas Citizen Lobby, Inc. v. ExxonMobil Corp. (ETCL I)*, 824 F.3d 507, 512 (5th Cir. 2016). The permits require Exxon to document, and sometimes to report, certain instances of noncompliance. Exxon's substantive obligations and reporting requirements are explained in detail in *ETCL I*, 824 F.3d at 512–22.

Environment Texas Citizen Lobby and Sierra Club, on behalf of their members who live, work, and recreate near Baytown, sued Exxon under the Clean Air Act's citizen suit provision, 42 U.S.C. § 7604(a)(1), for thousands of self-reported permit violations that occurred between October 2005 and September 2013. After some litigation, Exxon stipulated to 16,386 days of violations. *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp. (ETCL II)*, 968 F.3d 357, 363 (5th Cir. 2020); *see also id.* at 363 n.1 (explaining that “[i]f an emissions event released multiple pollutants, each with its own emissions standard, . . . each standard violat[ion] [counts] as a separate day of violation”). Those violations fall into five categories, including unplanned emissions, emissions exceeding

authorized rates, and unsafe or unauthorized flaring. *See id.* at 363 (describing the five types of violations).

After a bench trial, the district court found only a few of the violations actionable and declined to assess a penalty against the company. *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 66 F. Supp. 3d 875, 895–902, 911–12 (S.D. Tex. 2014). We agreed with the environmental groups that the district court erred in its analysis of Exxon's substantive liability and abused its discretion in addressing three of the factors that courts consider in assessing civil penalties. *ETCL I*, 824 F.3d at 515–23 (liability), 524–33 (remedies); *see also* 42 U.S.C. § 7413(e)(1) (listing the penalty factors). On remand, the district court reconsidered the factors and fined Exxon \$19.95 million dollars. *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 2017 WL 2331679, at*25–31 (S.D. Tex. Apr. 26, 2017).

Then Exxon appealed. The company asserted that the plaintiffs only proved standing for a handful of violations and challenged the new penalty determination. This panel determined that the organizational plaintiffs established two out of the three requirements for Article III standing: injury-in-fact and redressability. *ETCL II*, 968 F.3d at 367–68 (injury); *id.* at 371–72 (redressability). We further explained that the district court should analyze traceability by asking whether each violation (1) “causes or contributes to the kinds of injuries” alleged by the plaintiffs and (2) has a “‘specific geographical or other causative nexus’ such that the violation could have affected their members.” *Id.* at 369–70 (quoting *Sierra Club, Lone Star Chapter v. Cedar Point Oil Co., Inc.*, 73 F.3d 546, 557, 558 n.24 (5th Cir. 1996)).

(internal quotation marks in first quotation omitted)). We remanded for the limited purpose of determining which violations are fairly traceable to Exxon’s actions¹ and reserved judgment on the appropriate penalty. *Id.* at 374–75.

Our instructions had a significant impact on remand. Applying our guidance, the district court determined that plaintiffs proved traceability for only 3,651 of the 16,386 violation days. *Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 524 F. Supp. 3d 547, 565 (S.D. Tex. 2021). It then revised its penalty calculation. It held that a penalty was appropriate because of the size, duration, and seriousness of the violations as well as Exxon’s economic benefit from noncompliance. *Id.* at 576. It ordered Exxon to pay \$14.25 million dollars, lessening the penalty by more than five million dollars to reflect the reduced number of justiciable violations. *Id.* at 577.

Because Exxon disagrees with both the standing and penalty determinations, we now weigh in for the third time.

II

[1–3] Only those disputes that meet the “irreducible constitutional minimum” of standing can be heard in a federal forum. *Lujan v. Defs. Of Wildlife*, 504 U.S. 555, 560, 112 S.Ct. 2130, 119 L.Ed.2d 351 (1992). The three components of standing are familiar: injury-in-fact, traceability, and redressability. *Id.* at 560–61, 112 S.Ct. 2130. Clean

¹ We also directed the district court to consider whether Exxon proved its Act of God defense for any of the violations. *ECTL II*, 968 F.3d at 373. The district court found that it did not. Exxon does not challenge that determination.

Air Act plaintiffs must prove these elements for each claimed violation. *ETCL II*, 968 F.3d at 365–67. We first consider whether the plaintiff organizations met this burden.

A

[4] After our last remand, the district court made additional findings on traceability. *Env’t Tex. Citizen Lobby*, 524 F. Supp. 3d at 555–65. Exxon does not challenge that factfinding. Instead, the company dedicates more than two thirds of its brief to asking us to revisit our approach to standing. Exxon takes two shots at our standing framework. First, it says that a recent decision from the Supreme Court abrogates our finding of injury-in-fact. Second, it argues that our traceability precedent is overly broad and risks exceeding the bounds of Article III. Neither reason compels us to redo our prior opinion. Nor could we; our prior opinion is law of the case. *White v. Murtha*, 377 F.2d 428, 431–32 (5th Cir. 1967). The reason for that rule ring true in this long-running case: Suits would never end “if a question, once considered and decided by [a court] were to be litigated anew in the same cases upon any and every subsequent appeal.” *Id.* at 431 (quoting *General Am. Life Ins. Co. v. Anderson*, 156 F.2d 615, 618 (6th Cir. 1946)). A prior ruling in a case thus can be disturbed only if new evidence is substantially different, controlling authority has changed, or maintaining the decision would result in manifest injustice. *Id.* at 432. None of those exceptions apply.

1

[5] Exxon first takes aim at our finding of injury-in-fact. We previously determined that the plaintiffs “easily” met their burden of proving injury for each

alleged violation because “throughout the claims period, [they] regularly saw flares, smoke, and haze coming from the complex; smelled chemical odors; suffered from allergy-like or respiratory problems; feared for their health; refrained from outdoor activities; or moved away.” *ETCL II*, 968 F.3d at 367–68. Exxon asserts that even if this holding was correct when decided, *TransUnion LLC v. Ramirez*, — U.S. —, 141 S. Ct. 2190, 210 L.Ed.2d 568 (2021), is an intervening change in law that requires us to reconsider.

[6, 7] Of course, Supreme Court rulings can overrule our precedent. But we cannot disregard our precedent simply because we think the Court might someday disagree with it. *See United States v. Alcantar*, 733 F.3d 143, 146 (5th Cir. 2013). Until the highest court “unequivocally” overrules our precedent, we are bound by it. *United States v. Zuniga-Salinas*, 945 F.2d 1302, 1306 (5th Cir. 1991). This aspect of the rule of orderliness rule promotes stability in the law. *United States v. Longoria*, 958 F.3d 372, 378 (5th Cir. 2020).

In *TransUnion*, a class of consumers sued a credit reporting agency for failing to reasonably ensure the accuracy of their credit files. 141 S. Ct. at 2200. Although all of the plaintiffs had a cause of action under the Free Credit Reporting Act, the Court held that only some of them had Article III standing. *Id.* at 2201, 2209. The class members whose credit reports the agency disseminated to potential creditors suffered a constitutional injury because their reputations were harmed by the inaccurate disclosures. *Id.* at 2209. The others lacked standing because the mere inclusion of misleading information

in their files, without publication to any third party, was not a concrete harm of the type “traditionally recognized as providing a basis for a lawsuit in American courts.” *Id.* at 2204, 2209–10. Distinguishing between the groups, the Court emphasized the “important difference” between a statutory cause of action and actual injury and reiterated that the latter is always required for federal jurisdiction. *Id.* at 2205.

[8, 9] *TransUnion* did not unequivocally overrule *ETCL II* or any of the cases it relies on. The requirement that plaintiffs have a concrete stake in federal litigation is not new. *TransUnion* merely reaffirmed the well-established rule that a violation of a federal law alone is not an Article III injury. *See, e.g., Spokeo, Inc. v. Robins*, 578 U.S. 330, 341, 136 S.Ct. 1540, 194 L.Ed.2d 635 (2016) (“[A plaintiff] could not . . . allege a bare procedural violation, . . . and satisfy the injury-in-fact requirement of Article III.”); *Summers v. Earth Island Inst.*, 555 U.S. 488, 496, 129 S.Ct. 1142, 173 L.Ed.2d 1 (2009) (“[D]eprivation of a procedural right without some concrete interest . . . is insufficient to create Article III standing.”). That rule was canon in our court long before *ETCL II*. *See, e.g., Lee v. Verizon Commc’ns, Inc.*, 837 F.3d 523, 529–30 (5th Cir. 2016) (concluding that a “bare allegation of incursion on [a] purported statutory right” is not a constitutional injury absent an “allegation of a real risk” to the plaintiff).

Our prior opinion faithfully applied the fundamental rule that there is no standing absent concrete injury. We distinguished between suits under the False Claims Act, whereby uninjured citizens can sue to redress an injury to the

government, and environmental citizen suits, which are subject to the ordinary injury rule. *ETCL II*, 968 F.3d at 364 (“[U]nlike *qui tam* relators . . . citizens suing under the bountyless environmental statutes must meet the standing requirement in their own right.” (citations omitted)). We then explained that the injuries suffered by the plaintiffs—interference with recreation, breathing and smelling polluted air, and allergy-like or respiratory problems—are concrete harms that have long been a basis for constitutional standing. *Id.* at 368 (“Each of those experiences was an Article III injury.”).

Rather than overruling *ETCL II*, *TransUnion* supports it. To illustrate the concrete harm requirement, *TransUnion* offered the example of two people, a Maine citizen and a Hawaii citizen, each hoping to sue a Maine factory for violations of a federal environmental law. 141 S. Ct. at 2205. The Maine citizen, whose property was directly affected by the factory’s unlawful pollution, could sue to redress that injury. *Id.* at 2205–06. But the Hawaii citizen, whose interest in abating the nuisance was largely conceptual, lacked the personal stake in the litigation our Constitution requires. *Id.* The present plaintiffs are the Maine citizen: They live, work, and recreate near Baytown and personally experience the effects of Exxon’s unauthorized emissions. *ETCL II*, 968 F.3d at 368. They are not, as Exxon asserts, “merely seeking to ensure [Exxon’s] ‘compliance with regulatory law.’” *TransUnion*, 141 S. Ct. at 2206 (quoting *Spokeo*, 578 U.S. at 345, 136 S.Ct. 1540 (Thomas, J., concurring)).

TransUnion did not upset our approach to injury-in-fact,² so our prior holding controls: The plaintiffs satisfied the first requirement of standing.

2

[10] Exxon takes a second shot at *ETCL II*'s standing framework, now aiming for our holding on traceability. Again, it misses.

Our prior opinion provided the lower court detailed directions on how to determine which of the 16,386 alleged days of violations are traceable to Exxon's actions. We explained that because injury must only be *fairly* traceable to the challenged conduct, plaintiffs "need not 'connect the exact time of their injuries with the exact time of an alleged violation.'" *ETCL II*, 968 F.3d at 368 (quoting *Texans United for a Safe Econ. Educ. Fund v. Crown Petrol. Corp.*, 207 F.3d 789, 793 (5th Cir. 2000)). Consequently, we held, Article III is satisfied if Exxon's violations were "of a type that 'causes or contributes to the kinds of injuries alleged by the plaintiffs.'" *Id.* (quoting *Cedar Point*, 73 F.3d at 557). Translating these principles to the Clean Air Act context, we explained that the plaintiffs must show that each alleged violation (1) "causes or contributes to the kinds of injuries" they allege and (2) has a "specific geographic or other causative nexus" such that the violation could have affected their members."

² Exxon also claims that *TransUnion* is relevant to our traceability analysis. That cannot be. *TransUnion* is entirely about standing's concrete harm requirement. Exxon cites no court applying it to traceability analysis. If an opinion that does not even mention a legal concept allows us to wipe away decades of precedent on that topic, our "unequivocal override" standard is meaningless.

Id. at 369–70 (quoting *Cedar Point*, 73 F.3d at 557, 558 n.24 (internal quotation marks omitted from first quotation)).

Exxon takes issue with this test. In the prior appeal, however, the company objected to the district court’s traceability findings but did not question our court’s approach to traceability. *See id.* at 368 n.4 (“Exxon does not question the vitality of *Cedar Point* or our other decisions applying this [traceability] standard”). Now it objects to *ETCL II*’s reading of *Cedar Point*. But on this issue, Exxon does not even try to invoke an exception to the law-of-the-case doctrine.

[11] In any event, Exxon’s position is unconvincing. The company’s view is that Article III requires plaintiffs to show that each challenged emission is a but-for cause of their injuries. But none of the cases Exxon cites support its position. Although a but-for causal connection is *sufficient* to establish traceability, *see Duke Power Co. v. Carolina Env’t Study Grp., Inc.*, 438 U.S. 59, 74–78, 98 S.Ct. 2620, 57 L.Ed.2d 595 (1978), the Supreme Court has never said such proof is *required*. Consider *Friends of the Earth, Inc. v. Laidlaw Env’t Servs. (TOC), Inc.*, 528 U.S. 167, 120 S.Ct. 693, 145 L.Ed.2d 610 (2000). There, citizen-suit plaintiffs had constitutional standing to challenge 489 Clean Water Act permit violations that occurred between 1987 and 1995. *Id.* at 176, 180–88, 120 S.Ct. 693. The Court did not conduct a separate standing inquiry for each violation, nor did it require the plaintiffs to connect their injuries to specific unlawful discharges. Instead, it credited testimony that the plaintiffs’ members no longer recreated near or waded in a river because of their concerns about

pollutants. *Id.* at 182–83, 120 S.Ct. 693. Exxon’s position cannot be reconciled with *Laidlaw*. And *Lujan v. Defenders of Wildlife*, which Exxon says is its best case, did not address the issue at all. See generally 504 U.S. 555, 112 S.Ct. 2130, 119 L.Ed.2d 351 (1992).

[12] Exxon’s position is also at odds with more than three decades of law from this court holding that traceability “requires less of a causal connection than tort law.” *ETCL II*, 968 F.3d at 368; *Texans United*, 207 F.3d at 793 (“No relevant case law supports [the] argument that [plaintiffs] must connect the exact time of their injuries with the exact time of an alleged violation”); *Cedar Point*, 73 F.3d at 557, 558 n.24 (adopting the two-part test described above); *Save Our Cmty. v. EPA*, 971 F.2d 1155, 1161 (5th Cir. 1992) (noting that traceability does not require plaintiffs to connect their harms to the defendant’s actions by a “scientific certainty”) (quotation omitted).

[13] Other circuits agree. As then-Judge Alito explained, “Article III standing demands ‘a causal relationship,’ but neither the Supreme Court nor our Court has ever held that but-for causation is always needed.” *Khodara Env’t, Inc. v. Blakey*, 376 F.3d 187, 195 (3d Cir. 2004); see also, e.g., *Webb as next friend of K.S. v. Smith*, 936 F.3d 808, 814 (8th Cir. 2019) (“[T]he fairly-traceable inquiry is much more forgiving than the merits-based, tort-causation inquiry.”); *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 161 (4th Cir. 2000) (en banc) (Wilkinson, C.J.) (“[T]he ‘fairly traceable’ standard is ‘not equivalent to a requirement of tort causation.’” (quoting *Pub. Int. Rsch. Grp. of N.J. v.*

Powell Duffryn Terminals, Inc., 913 F.2d 64, 72 (3d Cir. 1990))).

Even Exxon realizes that its position is an outlier. It acknowledged at oral argument, acknowledging that but-for causation is not always appropriate, even in the tort context, and ceded that it is enough that the defendant's conduct provide "at least some contribution" to the plaintiff's injury. The "causes or contributes to" test that we outlined in *ETCL II* requires just that.

We are bound by our prior articulation of the test for traceability, and we stand by it.

B

[14] Having confirmed that the standing framework from *ETCL II* remains good law, we now consider whether the district court applied it correctly on remand. Exxon does not challenge any of the findings underlying the district court's justiciability determination. The company's challenge is more conceptual: It says that our prior opinion impermissibly restricted the district court's factfinding ability.

It did not. Initially, the district court found standing for all 16,386 violation days. 2017 WL 2331679, at *11. We affirmed its conclusions across-the-board for injury and redressability. For traceability, however, we reached a mixed result. As we explained:

1. For any violation that could cause or contribute to flaring, smoke, or haze, the district court's findings have established traceability. The district court need only

decide which violations fall within this category.

2. For violations that could not contribute to flaring, smoke, or haze, the district court should first consider whether the pollutant emitted could cause or contribute either to (a) chemical odors or (b) allergy-like or respiratory symptoms. If so, the district court will conduct the geographic nexus inquiry described [previously], finding it satisfied if the emission (i) violated a nonzero emissions standard, (ii) had to be reported under Texas regulations, or (iii) is otherwise proven to be of sufficient magnitude to reach Baytown neighborhoods outside the Exxon complex in quantities sufficient to cause chemical odors, allergy-like symptoms, or respiratory symptoms.

ETCL II, 968 F.3d at 371. We thus concluded that the then-existing “findings have established traceability” for some categories of violations. *Id.* But for other categories, we could not sustain the fact-finding on the current record and provided a framework for the district court to apply on remand. That is not appellate court factfinding, it is ordinary appellate review of factfinding that reached different conclusions for different types of violations.

Plus, the outcome on remand belies Exxon’s contention that we left the district court with a “vanishingly small” window for factfinding. The district court reduced the number of justiciable violations by 12, 735, which is over 75% percent. *See Env’t Tex. Citizen Lobby*, 524 F. Supp. 3d at 565.

[15–17] As a fallback, Exxon says that the district court erred by describing the criteria it used to identify the traceable violations rather than listing each justiciable violation individually. Following a bench trial, the district court must “find the facts specially.” FED. R. CIV. P. 52(a)(1). This show-your-work requirement ensures that we have a meaningful record to review. *Garner v. Kennedy*, 713 F.3d 237, 242–43 (5th Cir. 2013). But Rule 52 does not require “punctilious detail” or “slavish tracing of the claims issue by issue.” *Ratliff v. Governor’s Highway Safety Program*, 791 F.2d 394, 400 (1986). The district court need only include “sufficient detail to enable the appellate court to consider the findings under the applicable reviewing standard.” *Burma Navigation Corp. v. Reliant Seahorse MV*, 99 F.3d 652, 657 (5th Cir. 1996).

[18] The district court’s 10-page traceability analysis was thorough and sufficiently explained. It conducted separate analyses for violations based on category (flaring, smoke, haze, chemical odor, and asthma-like symptoms) and explained how it evaluated traceability for each. *Env’t Tex. Citizen Lobby*, 524 F. Supp. 3d at 555–65. Take flaring, for example. The plaintiffs testified that they could see flares from their homes and other part of Baytown, so we found the geographic nexus requirement met for violations “that could cause or contribute to flaring” and instructed the district court to identify those instances. *ETCL II*, 968 F.3d at 371. The district court reviewed the evidence and found 1,801 traceable flaring violations. *Env’t Tex. Citizen Lobby*, 524 F. Supp. 3d at 557–58. It explained that plaintiffs did not prove that every emission from a flare stack causes visible flaring. *Id.* at 557. But it credited trial

testimony that flaring occurs when a compressor trips or shuts down. *Id.* It thus found traceability for the subset of flaring violations that occurred at a flare stack and were caused by the failure of a compressor. *Id.* One need only compare this description to the stipulated spreadsheet of violations to determine which of the flaring events qualify.

The district court's analysis of the other categories is similarly detailed and rigorous. *See id.* at 558–65. It did not have to list all sixteen thousand alleged violations and state whether each is justiciable or not. In fact, we specifically said that it did not have to make “line-by-line findings for the thousands of violations” and could instead “group violations by type and magnitude.” *ETCL II*, 968 F.3d at 371. The lower court faithfully followed this instruction. Rule 52 is satisfied.

Our standing framework is legally sound. So are the district court's findings. The environmental organizations could sue for 3,651 days of violations.

III

Several thousand violations are justiciable. And Exxon accepts substantive liability for those claims. *See ETCL II*, 968 F.3d at 364 (explaining that Exxon appealed only standing, affirmative defenses, and penalty). The remaining question, then, is whether the district court abused its discretion in ordering a \$14.25 million dollar penalty.

Courts may, but are not required to, assess civil penalties for Clean Air Act violations. 42 U.S.C. § 7413(e)(2); *see also ETCL I*, 824 F.3d at 524. In making that determination, they have a statutory obligation to consider:

the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence (including evidence other than the applicable test method), payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation.

42 U.S.C. § 7413(e)(1). They must also account for "such other factors as justice may require." *Id.*

The district court found that almost all of the statutory factors favor a penalty. On the first two, it noted that because of Exxon's large size and profitability, only a large penalty would be meaningful. *Env't Tex. Citizen Lobby*, 524 F. Supp. 3d at 568. It also found that the duration and seriousness of the many violations, as well as the significant economic benefit Exxon received from not meeting its Clean Air Act obligations, counseled against the company. *Id.* at 570–76. One factor, however, weighed against a penalty. The district court credited Exxon's good faith and "substantial efforts to improve environmental performance and compliance." *Id.* at 569–71. Balancing those considerations and deducting the \$1.42 million dollars Exxon already paid regulators for the violations, the court concluded that a \$14.25 million penalty is appropriate. *Id.* at 571, 576–77. Exxon challenges the district court's findings on the economic benefit, duration, and seriousness factors.

[19, 20] We are highly deferential to the district court’s penalty assessment. We review its application of the penalty factors for abuse of discretion and its underlying findings for clear error. *Cedar Point*, 73 F.3d at 573; *see also Tull v. United States*, 481 U.S. 412, 427, 107 S.Ct. 1831, 95 L.Ed.2d 365 (1987) (noting the “highly discretionary” nature of weighing the similar Clean Water Act penalty factors). The district court did not err on either front, so we affirm the \$14.25 million dollar penalty.

A

[21, 22] We begin with the economic benefit factor. This consideration seeks to prevent polluters from gaining a competitive advantage through noncompliance with environmental laws. Benefit can be calculated in two ways: by determining the cost of capital (what it would cost the polluter to fund pollution prevention), or by determining the return on capital (what the polluter earned on the funds it should have spent on pollution control but instead invested elsewhere). *ETCL I*, 824 F.3d at 527 (citing *United States ex rel. EPA v. CITGO Petrol. Corp.*, 723 F.3d 547, 552 (5th Cir. 2013)).

[23–25] Improvements that are “necessary to correct” the violations alleged in the suit are benefits of noncompliance. *ETCL I*, 824 F.3d at 530 (quoting *CITGO*, 723 F.3d at 552); *see also United States v. Allegheny Ludlum Corp.*, 366 F.3d 164, 178 (3d Cir. 2004) (stating that the economic benefit calculation “starts with the costs spent or that should have been spent to achieve compliance [with the Clean Water Act]”). Plaintiffs need not tie the projects to prevention of specific violations. *ETCL I*, 824 F.3d at 530 n.19. Rather, the inquiry centers on “whether the

projects will ameliorate the kinds of general problems that have resulted in at least some of the permit violations upon which Plaintiffs have sued.”³ *Id.*

[26] The district court valued Exxon’s benefit of noncompliance at more than fourteen million dollars (\$11.75 million dollars at the time of the expert’s report plus \$61,000 per month after that) because the company delayed implementation of four emission-reducing projects mandated by a 2012 agreement between Exxon and state regulators. *Env’t Tex. Citizen Lobby, Inc.*, 524 F. Supp. 3d at 573. Its conclusion that the projects are necessary to correct the violations was not clear error. The projects represent “an effort to reduce emissions and unauthorized emissions events” at the Baytown complex. *ETCL I*, 824 F.3d at 530 (quoting *Env’t Tex. Citizen Lobby, Inc.*, 66 F. Supp. 3d at 908). Such unauthorized emissions are the heart of the violations alleged in this suit. The district court carefully compared the goal of each of the four projects to the remaining violations and concluded that each project “addressed the types of violations found traceable by this Court.” *Env’t Tex. Citizen Lobby, Inc.*, 524

³ Exxon says that this test is non-binding dictum because it is peripheral to the holding in *ETCL I*. “A statement is not dictum if it is necessary to the result or constitutes an explication of the governing rules of law.” *Int’l Truck & Engine Corp. v. Bray*, 372 F.3d 717, 721 (5th Cir. 2004). *ETCL I*’s footnote 19 meets this definition. It explicates the legal standard “necessary to correct [noncompliance].” And it was necessary to *ETCL I*’s holding that the district court should have considered Exxon’s benefit from delaying the four projects: The plaintiffs did not attempt to tie those projects to preventing specific violation days, so the footnote made clear that that kind of proof was not necessary.

F. Supp. 3d at 573–74. Exxon does not contest those determinations.

The company would have us reduce the value of its noncompliance because the number of justiciable violation days is a fraction of the number of violations previously found. But that approach would give Exxon an unwarranted discount. Exxon needed to invest \$11.75 million dollars in improvements to comply with its Clean Air Act obligations. That figure does not depend on how many times Exxon violated its permits. Say, for example, a plumber quotes you \$250 to fix a leaky faucet. The repair cost would be the same regardless whether you called the plumber after the first few drops or waited for multiple buckets to fill. And the district court properly accounted for the reduced number of violations in its final balancing of the statutory factors, reducing the penalty multiplier from 50% of the value of noncompliance to 10%. *Id.* at 577. The district court’s conclusion on economic benefit stands.

B

[27] Courts must also factor “the duration of the violation as established by any credible evidence” into the penalty assessment. 42 U.S.C. § 7413(e)(1). We previously reserved judgment on whether this penalty factor “requires scrutiny of the length of each individual violation or allows for assessment of an overall violation period.” *ETCL I*, 824 F.3d at 531. The district court took the latter approach. Finding that Exxon averaged more than one violation per day across the eight years covered by the suit, it concluded that the duration of the violation weighed in favor of a penalty. *Env’t Tex. Citizen Lobby*, 524 F. Supp. 3d at 571.

[28] We see no error in the district court’s analysis. Courts across the country agree that “when multiple ‘intermittent’ violations over a span of time are at issue, a court may consider the overall length of the period during which the violations occurred.” *ETCL I*, 824 F.3d at 531; *see also, e.g., Pound v. Airosol Co., Inc.*, 498 F.3d 1089, 1098 (10th Cir. 2007) (remanding for the district court to consider that the defendant’s “violations lasted more than a decade”); *United States v. Vista Paint Corp.*, 1996 WL 477053, at *15 (C.D. Cal. Apr. 16, 1996); *United States v. B & W Inv. Props., Inc.*, 1994 WL 53781, at *4 (N.D. Ill. Feb. 18, 1994); *United States v. Midwest Suspension & Brake*, 824 F. Supp. 713, 736–37 (E.D. Mich. 1993); *United States v. A.A. Mactal Const. Co., Inc.*, 1992 WL 245690, at *3 (D. Kan. Apr. 10, 1992) (all considering the length of the violation period). No court has rejected the overall-violation-period approach. *See Env’t Tex. Citizen Lobby*, 524 F. Supp. 3d at 570 n.5 (“Exxon contends the Court should continue to look to duration of the violations standing alone in analyzing this factor. However, Exxon cites no case law to support this proposition.”). And it makes sense in the context of this suit. Exxon’s unlawful omissions occurred regularly for many years. Considering the length of only select few of those thousands of violations would not fully reflect the extent of Exxon’s unlawfulness. We will not disturb the district court’s conclusion that the duration factor weighs for a penalty.

C

[29] Exxon next challenges the district court’s determination that its violations were serious. *See* 42 U.S.C. § 7413(e)(1) (commanding consideration of

“the seriousness of the violation”). We previously observed that other courts assess seriousness by looking at the risk the emissions potentially pose to the environment as well as “the overall number and quantitative severity of emissions or discharges.” *ETCL I*, 824 F.3d at 532 (citing *Pound*, 498 F.3d at 1099; *Powell Duffryn*, 913 F.2d at 79). The district considered both. It first determined that Exxon’s violations posed a low risk to the environment because the plaintiffs did not show that any individual violation was concentrated enough to harm people or the planet. *Env’t Tex. Citizen Lobby*, 524 F. Supp. 3d at 575 n.121. But it concluded that the quantity of emissions weighed the other way because the traceable violations emitted over 1.5 million pounds of pollutants. *Id.* at 575–76. Exxon does not challenge this finding, and we see no reason to find it clearly erroneous.

Exxon argues, as it did for the duration factor, that the court must consider the seriousness of each violation individually. But the district court did consider each violation; it found that the traceable violations involved relatively high levels of emissions and necessarily considered the amount of each violation when it added them up to reach the 1.5-million-pound figure. Exxon does not offer any alternative definitions of “seriousness” that the district court could have applied instead. There was no abuse of discretion on the seriousness factor.

D

[30] Finally, Exxon faults the district court for not assessing whether its ruling might deter the industry from negotiating with regulators in the future, a consideration the company believes is required in the

interest of justice. *See* 42 U.S.C. § 7413(a) (allowing consideration of “other factors as justice may require”). Any error on this factor lies with Exxon, not the district court. Exxon did not offer this argument in its initial proposed findings to the district court,⁴ so it forfeited the ability to raise it on appeal. *See Rollins v. Home Depot USA*, 8 F.4th 393, 397 (5th Cir. 2021).

* * *

This time, the district court got it right. It properly considered each of the penalty factors and found that the many factors favoring a penalty outweigh the one that does not. It also subtracted more than five million dollars from Exxon’s bill in recognition of the reduced number of justiciable violations. The district court’s penalty determination was well within its wide discretion.

* * *

AFFIRMED.

ANDREW S. OLDHAM, Circuit Judge, dissenting:

This case is a jurisdictional mess. In fairness to my esteemed colleagues in the majority, some of the mess predates our panel’s first decision in this case. *See Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.* (“*ETCL I*”), 824 F.3d 507 (5th Cir. 2016). And in fairness to the esteemed district court judge, most of the mess stems from our decisions, not the district

⁴ The record belies Exxon’s claim that it made this policy argument below. Exxon recommended detailed findings on each of the penalty factors, but never raised this additional consideration. It did briefly express a concern about undermining the government’s enforcement discretion, but that was in the context of its suggested approach to calculating a penalty amount, not its assessment of the factors.

court's. *See ibid.*; *Env't Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.* (“*ETCL II*”), 968 F.3d 357, 375 (5th Cir. 2020) (Oldham, J., concurring in part, dissenting in part, and concurring in the judgment). What's clear is that only our *en banc* court can clean this up.

I.

Some basics first. To invoke our jurisdiction, plaintiffs must satisfy the familiar tripartite test for Article III standing by showing: (1) an injury in fact; (2) that's fairly traceable to the defendant's conduct; and (3) that's likely redressable by a favorable decision. *See Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560–61, 112 S.Ct. 2130, 119 L.Ed.2d 351 (1992). Plaintiffs must show standing “with the manner and degree of evidence required at the successive stages of the litigation.” *Id.* at 561, 112 S.Ct. 2130. So “in a case like this that proceeds to trial, the specific facts set forth by the plaintiff to support standing must be supported adequately by the evidence adduced at trial.” *TransUnion LLC v. Ramirez*, — U.S. —, 141 S. Ct. 2190, 2208, 210 L.Ed.2d 568 (2021) (quotation omitted). Plaintiffs thus must “prove standing by a preponderance of the evidence.” *ETCL II*, 968 F.3d at 367; *see also E.T. v. Paxton*, 41 F.4th 709, 714 (5th Cir. 2022).

The traceability requirement is particularly important here. The Supreme Court has explained that a plaintiff can establish traceability without establishing the tort requirement of proximate causation. *See Lexmark Int'l, Inc. v. Static Control Components, Inc.*, 572 U.S. 118, 134 n.6, 134 S.Ct. 1377, 188 L.Ed.2d 392 (2014) (“Proximate causation is not a requirement of Article III standing, which requires only that the plaintiff's injury be fairly

traceable to the defendant’s conduct.”). The Court has also said that a plaintiff need not show but-for causation. *See Khodara Env’t, Inc. v. Blakey*, 376 F.3d 187, 195 (3d Cir. 2004) (Alito, J.) (“Article III standing demands ‘a causal relationship,’ but neither the Supreme Court nor our Court has ever held that but-for causation is always needed.”).

It’s nonetheless true that a plaintiff must establish, at a minimum, *causation in fact*. *See, e.g., Dep’t of Com. v. New York*, — U.S. —, 139 S. Ct. 2551, 2566, 204 L.Ed.2d 978 (2019) (“Because Article III ‘requires no more than *de facto* causality,’ traceability is satisfied here.” (quoting *Block v. Meese*, 793 F.2d 1303, 1309 (D.C. Cir. 1986) (Scalia, J.))). That is, the plaintiff must show that the defendant’s action X did in fact cause the plaintiff’s injury Y.¹ Our

¹ *See, e.g., Allen v. Wright*, 468 U.S. 737, 758, 104 S.Ct. 3315, 82 L.Ed.2d 556 (1984) (holding that plaintiffs failed to establish traceability because “it is entirely speculative . . . whether withdrawal of a tax exemption from any particular school would lead the school to change its policies”—that is, whether the tax exemption is the but-for cause of plaintiffs’ injuries); *Duke Power Co. v. Carolina Env’t Study Grp., Inc.*, 438 U.S. 59, 74–78, 98 S.Ct. 2620, 57 L.Ed.2d 595 (1978) (holding that “a ‘but for’ causal connection” between plaintiff’s injury and defendant’s act sufficed for traceability); *Warth v. Seldin*, 422 U.S. 490, 505, 95 S.Ct. 2197, 45 L.Ed.2d 343 (1975) (holding that Article III requires plaintiffs “to establish that, in fact, the asserted injury was the consequence of the defendants’ actions”); *California v. Texas*, — U.S. —, 141 S. Ct. 2104, 2117, 210 L.Ed.2d 230 (2021) (“[T]he States also have failed to show how this injury is *directly traceable* to any actual or possible unlawful Government conduct in enforcing § 5000A(a).” (emphasis added)); *TransUnion*, 141 S. Ct. at 2203 (“the injury was *likely caused* by the defendant” (emphasis added)); cf. Richard H. Fallon, Jr., *Of Justiciability, Remedies, and Public Law Litigation: Notes on the Jurisprudence of Lyons*, 59 N.Y.U. L.

sister circuits have dutifully followed those instructions.²

The Supreme Court also recently reaffirmed that “standing is not dispensed in gross; rather, plaintiffs must demonstrate standing for each claim that they press and for each form of relief that they seek (for example, injunctive relief and damages).” *TransUnion*, 141 S. Ct. at 2208; *see also, e.g., Town of Chester v. Laroe Ests., Inc.*, — U.S. —, 137 S. Ct. 1645, 1650, 198 L.Ed.2d 64 (2017) (“Our standing decisions make clear that standing is not dispensed in gross.” (quotation omitted)). Trying to align with that principle, the *ETCL II* panel explained that in the context of the Clean Air Act, we must do “a separate standing inquiry for each *violation* asserted as part of that claim.” 968 F.3d at 365. That is, plaintiffs must show for *each violation*, not just each claim—an injury in fact that is fairly traceable to the *violation* and that is likely to be redressed by a favorable judicial decision. And here, plaintiffs must do so with trial-

REV. 1, 17 n.91 (1984) (observing that the Supreme Court’s causation analysis “replicate[s] the tort law concept of ‘cause in fact’ or ‘but for’ causation”).

² *See, e.g., Cmty. Nutrition Inst. v. Block*, 698 F.2d 1239, 1247 (D.C. Cir. 1983) (“A plaintiff need only make a reasonable showing that ‘but for’ defendant’s action the alleged injury would not have occurred.”); *Caraco Pharm. Lab’ys, Ltd. v. Forest Lab’ys, Inc.*, 527 F.3d 1278, 1292 (Fed. Cir. 2008) (“Such but-for causation is sufficient to satisfy the traceability requirement of Article III standing.”); *cf. Honeywell Int’l, Inc. v. EPA*, 705 F.3d 470, 472 (D.C. Cir. 2013) (Kavanaugh, J.) (“Honeywell’s injury is fairly traceable to the now-permanent 2008 interpollutant transfers by Arkema and Solvay because the injury would not have occurred but for the 2008 transfers.”).

appropriate evidence and by the preponderance of the evidence.

II.

The majority opinion conflicts with these basic principles. I first (A) explain how the majority dispenses standing in gross. I then (B) explain how the majority overlooks plaintiffs' failures to establish traceability.

A.

In recognition of our inability to dispense standing in gross, the *ETCL II* panel concluded that a plaintiff must establish standing "for each *violation* asserted as part of that claim." 968 F.3d at 365. That conclusion was right. But what the panel concluded next was wrong. It proceeded to define the injury generically and create *per se* rules for when the district court must irrebuttably presume that the generic injury is traceable to a specific violation. *See id.* at 371. In so doing, the panel allowed the very thing it sought to forbid—standing in gross.

To show an injury in fact, plaintiffs must state "specific facts" and back those facts up with adequate evidence. *Lujan*, 504 U.S. at 561, 112 S.Ct. 2130. The injury-infact requirement thus includes two different parts: The first governs *specification* (or identification) of the injury, and the second governs the level (or type) of *proof* required for that specified injury. The *ETCL II* majority misunderstood both.

First, specification. The plaintiff must specify an injury that's fairly traceable and redressable. Here, given that plaintiffs must show standing for each violation, traceability requires plaintiffs to specify their injuries with some granularity. For example,

they must trace their particular injuries to particular violations on particular days. Otherwise, a court could not determine whether a particular violation in fact caused a particular injury, or instead whether plaintiffs seek to use one injury for standing in gross to challenge violations that never injured them.

Consider, for example, plaintiffs' alleged aesthetic injury: They say they saw flares. The aesthetic injury of seeing a flare cannot be fairly traced to the defendants without specifying: I saw a flare on Day *A*, which was during Violation *X*; or I was in town on Day *B*, which was during Violation *Y*. If plaintiffs do not show their injury in fact at that level of specificity, then we cannot be sure that the traceability requirement is met—that is, plaintiffs have not met their burden of showing that the violation “likely caused” their injury. *TransUnion*, 141 S. Ct. at 2203. If plaintiffs instead specify their injury as “aesthetic harms more generally,” then their injury could’ve occurred on Day *C*, which was not during any violation, or on Day *D*, when plaintiffs were out of town.

Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc., 528 U.S. 167, 120 S.Ct. 693, 145 L.Ed.2d 610 (2000), is not to the contrary. *See ante*, at 417–18. First, traceability wasn’t at issue in *Laidlaw*, so the Court had no occasion to address how an injury must be specified. *See ETCL II*, 968 F.3d at 377–78 (opinion of Oldham, J.). That effectively makes *Laidlaw* a drive-by traceability ruling, which doesn’t get much weight. *Cf. Steel Co. v. Citizens for a Better Env’t*, 523 U.S. 83, 91, 118 S.Ct. 1003, 140 L.Ed.2d 210 (1998) (“drive-by

jurisdictional rulings of this sort . . . have no precedential effect”).

Second, the Supreme Court subsequently narrowed *Laidlaw*. In *Clapper v. Amnesty International USA*, 568 U.S. 398, 133 S.Ct. 1138, 185 L.Ed.2d 264 (2013), for example, the Court construed *Laidlaw* to support standing only where the plaintiffs took “preventive measures” to avoid “concededly ongoing” violations of the Clean Water Act. *Id.* at 419, 133 S.Ct. 1138 (quotation omitted). Here, by contrast, there’s no adequate contention, backed by trial-appropriate evidence, that any of plaintiffs’ members took reasonable preventive measures to avoid Exxon’s violations, let alone measures that they would non-speculatively stop if the violations did. Nor are there concededly ongoing violations for each type of violation. At no point did plaintiffs clearly spell out, in this appeal or before it, that each violation repeatedly reoccurred *after* the complaint was filed, even though it has always been plaintiffs’ burden to do so. *See E.T.*, 41 F.4th at 718 n.2.

Second, plaintiffs’ burden. Traceability requires not just specification but also non-speculative *proof* of causation. The majority contends it would be impossible to prove causation on a per-violation basis. *See ante*, at 417–18; *ETCL II*, 968 F.3d at 368 (“Requiring proof that specific is not consistent with the traceability requirement, which requires less of a causal connection than tort law (and even tort causation would not require such specific proof).”). That may or may not be true, but it’s irrelevant. The Supreme Court has been clear that standing is no “mere pleading requirement[] but rather an indispensable part of [plaintiffs’] case” and that

plaintiffs' burden is the preponderance of the evidence. *Lujan*, 504 U.S. at 561, 112 S.Ct. 2130; see also *ETCL II*, 968 F.3d at 367 (recognizing as much). And as we've held, "analyzing standing at this level of granularity can be tedious in a sweeping challenge like this one. But it's what Article III requires." *In re Gee*, 941 F.3d 153, 165 (5th Cir. 2019) (per curiam).

TransUnion illustrates the point. In that case, the plaintiffs argued that they met their burden of showing their credit reports were sent to third parties (the injury) by pointing to a stipulation governing other similarly situated individuals. 141 S. Ct. at 2212. The Supreme Court rejected that argument. Instead, the Court held "[t]he plaintiffs had the burden to prove at trial that their reports were actually sent to third-party businesses. The inferences on which the argument rests are too weak to demonstrate that the reports of any particular number of the 6,332 class members were sent to third-party businesses." *Ibid.* The inferences were especially weak given that the plaintiffs "presumably could have" put forth stronger evidence. See *ibid.* (citing *Interstate Cir., Inc. v. United States*, 306 U.S. 208, 226, 59 S.Ct. 467, 83 L.Ed. 610 (1939) ("The production of weak evidence when strong is available can lead only to the conclusion that the strong would have been adverse.")). The takeaway is that the Court required the plaintiffs to prove standing—regardless of how difficult that might be to do. In my view, we should've done the same thing in this case.

B.

If we'd applied the rules properly, plaintiffs would have standing to challenge violations on approximately 40 days, not 3,651.

The principal source of our legal error lies in *ETCL II*, which created rigid *per se* rules that allowed plaintiffs to bypass the strictures of Article III. This hypothetical explains why:

To illustrate, consider a hypothetical plaintiff Bob who lives in Baytown. Bob has asthma—that is, an injury. The question is whether his asthma injury is traceable to Exxon’s illegal emissions. From January 1 through January 10, Bob was visiting his sister in France. Meanwhile:

- On January 2, Exxon emitted pollutants that could have reached beyond the Exxon complex into the offsite areas of Baytown where Plaintiffs’ members lived and recreated.
- On January 5, Exxon released pollutants in excess of nonzero emissions limits or that constituted a reportable quantity under state regulations.
- On January 8, Exxon emitted pollutants that could have caused or contributed to flaring, smoke, or haze, even if the emission was of a small magnitude.

ETCL II, 968 F.3d at 378 (opinion of Oldham, J.) (quotation omitted). That hypothetical should have yielded an obvious result: no standing. Bob obviously wasn’t harmed by any of the violations when he was breathing French air. So one would think that’d squelch any standing to recover for such violations.

But alas, today’s majority says the proverbial Bob was injured, has standing, and can recover. The relevant time period here is “October 2005 through

September 2013.” *Id.* at 363. And the time after September 2012 is critically similar to my hypothetical. Plaintiffs put on testimony from four of their members. The only members (Marilyn Kingman and Diane Aguirre Dominguez) who testified to suffering injuries *after* September 2012 did not live in Baytown, and one of those members stopped visiting Baytown regularly after March 2013 (Diane Aguirre Dominguez). *See id.* at 367; *see also Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, No. CV H-10-4969, 2017 WL 2331679, at *7–8 (S.D. Tex. Apr. 26, 2017). And Kingman “was not able to correlate any of her experiences or concerns to specific [violations].” *Id.* at *7. She also testified that from her home in Mont Belvieu, she could not smell odors related to the chemical releases. Nor does she have any medical problems or conditions related to the alleged violations. She at best “heads to Baytown a few times a week to run errands, recreate, and go to church.” *ETCL II*, 968 F.3d at 367. Plaintiffs provided no evidence showing which days Kingman went into Baytown, even though such evidence surely existed. So how can we say that Kingman more likely than not suffered from a particular violation? *See TransUnion*, 141 S. Ct. at 2212 (recognizing that “[t]he production of weak evidence when strong is available can lead only to the conclusion that the strong would have been adverse” (quotation omitted)).

Yet under the majority’s view, *every* violation after September 2012 (and even March 2013) is fairly traceable to some injury. That’s so even if there is a violation every day from September 2012 to September 2013 and, concededly, no member of plaintiffs was in Baytown every day. That’s hardly a reasonable inference from the evidence. *See Ctr. for*

Biological Diversity v. EPA, 937 F.3d 533, 545 (5th Cir. 2019) (“At some point this common sense observation becomes little more than surmise. At that point certainly the requirements of Article III are not met.” (quotation omitted)); *In re Gee*, 941 F.3d at 164 (“Article III requires more than theoretical possibilities.”). If anything, it’s equivalent to the very “conjecture” the majority previously conceded was insufficient to establish standing. *See ETCL II*, 968 F.3d at 368 (“Traceability instead requires something more than conjecture (‘The Exxon complex in Baytown emits pollutants, and I live in Baytown’).”).

In sum, the *ETCL II* majority sanctioned defining the injury in fact at too high level of generality, making it impossible to properly assess traceability. The majority then created *per se* rules and irrebuttable presumptions for traceable injuries that, in fact, did not exist. The majority, for example, allowed a plaintiff who only suffered injuries *three* days of the week to get relief for all *seven*. *See Spokeo, Inc. v. Robins*, 578 U.S. 330, 340, 136 S.Ct. 1540, 194 L.Ed.2d 635 (2016) (“A ‘concrete’ injury must be ‘*de facto*’; that is, it must actually exist.”). In so doing, the majority effectively “eliminate[d] traceability altogether.” *ETCL II*, 968 F.3d at 375 (opinion of Oldham, J.). And it dispensed standing in gross, in violation of *TransUnion*.³

³ There’s another problem lurking in all of this: redressability. Plaintiffs do not receive any of the civil penalties; they all go to the U.S. Treasury. And although plaintiffs’ lawyers get attorney’s fees, it’s well-established that such fees can’t establish standing. *See, e.g., Uzuegbunam v. Preczewski*, — U.S. —, 141 S. Ct. 792, 801, 209 L.Ed.2d 94 (2021); *Steel Co.*, 523 U.S. at 107, 118 S.Ct. 1003; *cf. Thomas v. Reeves*, 961 F.3d 800, 827–29 (5th Cir. 2020) (Oldham, J., concurring). So you

* * *

The implications of the majority’s approach are alarming. “By permitting citizens to pursue civil penalties payable to the Federal Treasury, the [Clean Air Act] . . . turns over to private citizens the function of enforcing the law.” *Laidlaw*, 528 U.S. at 209, 120 S.Ct. 693 (Scalia, J., dissenting). And by easing or eliminating the Article III minima for standing, today’s majority all but erases the distinction between private citizens and the government agencies that otherwise enforce the Clean Air Act.

I respectfully dissent.

might be wondering how plaintiffs’ injuries are likely to be redressed when the most apparent beneficiaries of these citizen suits are the lawyers and the federal fisc. *Laidlaw* offers one answer. The Court there suggested that the redressability requirement is met because the penalties for *past* violations and *past* injury can reduce *future* violations and thus plaintiffs’ *future* injuries. *See* 528 U.S. at 185–88, 120 S.Ct. 693; *contra id.* at 202–09, 120 S.Ct. 693 (Scalia, J., dissenting). So maybe *Laidlaw*’s redressability holding compels finding redressability in almost every citizen-suit case. But in my view, the better reading of the opinion is that redressability remains a vital requirement in citizen suits, as in all others. *See id.* at 187, 120 S.Ct. 693 (majority op.) (“In this case we need not explore the outer limits of the principle that civil penalties provide sufficient deterrence to support redressability.”). And this case appears to be a particularly good vehicle to consider the contours of *Laidlaw*’s redressability holding. *See, e.g., Env’t Tex. Citizen Lobby, Inc. v. ExxonMobil Corp.*, 524 F. Supp. 3d 547, 569 (S.D. Tex. 2021) (finding, among other things, that “[d]espite good practices, it is not possible to operate any facility—especially one as complex as the Complex—in a manner that eliminates all Events and Deviations” and that “there is no credible evidence that any of the Events or Deviations resulted from a recurring pattern or that improvements could have been made to prevent recurrence”).

290a

[968 F.3d 357]

UNITED STATES COURT OF APPEALS,
FIFTH CIRCUIT

No. 17-20545

ENVIRONMENT TEXAS CITIZEN LOBBY, INCORPORATED;
SIERRA CLUB,

Plaintiffs-Appellees

v.

EXXONMOBIL CORPORATION; EXXONMOBIL CHEMICAL
COMPANY; EXXONMOBIL REFINING; SUPPLY COMPANY,

Defendants-Appellants

FILED July 29, 2020
REVISED August 3, 2020

Appeal from the United States District Court
for the Southern District of Texas

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Before DAVIS, COSTA, and OLDHAM, Circuit Judges.

GREGG COSTA, Circuit Judge:

The Clean Air Act authorizes “any person” to sue polluters. 42 U.S.C. § 7604(a). Any recovery goes to the government. This citizen suit provision harkens back to pre-Founding English law that allowed private individuals, through various writs, to enforce laws on behalf of the government. *See* Steven L. Winter, *The Metaphor of Standing and the Problem of Self-Governance*, 40 STAN. L. REV. 1371, 1396–99 (1988); Raoul Berger, *Standing to Sue in Public Actions: Is It a Constitutional Requirement*, 78 YALE L. J. 816, 827 (1969). But modern citizen suits present challenges for the Article III “cases” or “controversies”

requirement under which a plaintiff must suffer an injury from the defendant's conduct. *See generally* RICHARD FALLON ET AL, HART & WECHSLER'S THE FEDERAL COURTS AND FEDERAL SYSTEM 151–54 (5th ed. 2003). Indeed, citizen suits under two other environmental statutes—the Clean Water Act and Endangered Species Act—resulted in leading Supreme Court standing decisions. *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs., Inc.*, 528 U.S. 167, 180–81, 120 S.Ct. 693, 145 L.Ed.2d 610 (2000); *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–61, 112 S.Ct. 2130, 119 L.Ed.2d 351 (1992).

This citizen suit seeking to recover for Clean Air Act violations at the largest petroleum and petrochemical complex in the nation again raises this tension between citizen suits and Article III. The principal issue in this second appeal of the case is whether plaintiffs have standing to recover for more than 16,000 violations of emission standards.

I.

The ExxonMobil complex in Baytown, Texas is massive. It includes refinery, a chemical plant, and an olefins plant.

Emissions from the complex are regulated in part by permits. The Texas Commission on Environmental Quality issues the permits under Title V of the Clean Air Act. The Commission, along with the EPA, enforces the permits.

To monitor compliance, the Commission requires polluters to document unauthorized “emissions events”—that is, unplanned or unscheduled emissions. If the event produces pollutants in excess of thresholds, the polluter must report it to the Commission. *See* 30 TEX. ADMIN CODE § 101.201(a);

see also id. 101.1(88), (89) (setting “reportable quantit[ies]” of emissions). We will call these “reported events.” If the event produces pollutants below reportable levels, polluters must nevertheless maintain records documenting the emission. *Id.* § 101.201(b). We will call these “recorded events.”

In addition to the powers it gives regulators, the Clean Air Act gives citizens a role in enforcing its requirements. A citizen may seek civil penalties, payable to the government, for each day of repeated or ongoing violations of an emissions standard. 42 U.S.C. §§ 7604(a)(1), 7413(e)(2). Environment Texas Citizen Lobby and Sierra Club brought such a suit for each of Exxon’s reported and recorded emissions events from October 2005 through September 2013 in total, 241 reported events and 3,735 recorded events. By Plaintiffs’ calculations, which Exxon does not challenge,¹ the nearly 4,000 emissions events resulted in 16,386 days of violations.

The thousands of violations fell into the following buckets:

- Count I alleged violations of a permit condition prohibiting “upset emissions.” An upset emission is an “un-planned and unavoidable breakdown or excursion of a process or operation that results in unauthorized emissions.” 30 TEX. ADMIN CODE § 101.1(110). Plaintiffs calculated 10, 583 days of upset-

¹ If an emissions event released multiple pollutants, each with its own emissions standard, Plaintiffs counted each standard violated as a separate day of violation. A violation lasting less than a day could thus count as multiple days of violations. The district court adopted this calculation method, and Exxon does not dispute it.

emission violations, spanning 24 different pollutants, at the Baytown refinery.

- Count II alleged violations of the Maximum Allowable Emission Rate Tables—permit conditions setting hourly emissions limits for specific pollutants. Plaintiffs calculated 5,709 days of these violations, spanning more than a dozen pollutants, at the olefins plant and chemical plant.
- Count III alleged 18 days of violations of a 1,200 pound/hour limit on emissions of highly reactive volatile organic compounds.
- Count IV alleged 44 days of violations of an EPA rule limiting visible emissions from flares (which are used to burn waste gases) to no more than 5 minutes during any 2-hour period.
- Count V alleged 32 days of violations of a rule requiring flares to operate with a pilot flame.

Our court has already grappled with this case. Following a bench trial, the district court initially found that only a small fraction of the violations were “actionable” because the Clean Air Act limits citizen suits to violations that were repeated in the past or ongoing at the time of the complaint. 66 F. Supp. 3d 875, 895–902 (S.D. Tex. 2014); *see also* 42 U.S.C. § 7604(a)(1) (allowing suit if defendant caused “repeated” violations or is “in violation”). It went on to rule that even if every alleged violation were actionable, it would decline to assess a civil penalty against Exxon. 66 F. Supp. 3d at 904. A panel of this court vacated and remanded, concluding that the district court had too narrowly analyzed actionability and three of the factors (duration, seriousness, and the economic benefit of noncompliance) courts must

consider in assessing a civil penalty. 824 F.3d 507, 514 (5th Cir. 2016); *see also* 42 U.S.C. § 7413(e)(1) (enumerating penalty factors).

On remand, the district court determined that the 16,386 days of violations alleged in Counts I–V were actionable. And after reconsidering the penalty factors, the district court imposed a \$19.95 million civil penalty. Exxon appeals, attacking the judgment on three fronts: standing, affirmative defenses, and penalty factors.

II.

Congress granted “any person” the right to sue under the Clean Air Act. 42 U.S.C. § 7604(a). But that does not mean that any person can always bring such a suit. The Constitution limits congressional grants of federal court jurisdiction. *Hodgson v. Bowerbank*, 9 U.S. (5 Cranch) 303, 304, 3 L.Ed. 108 (1809) (“Turn to the article of the constitution of the United States, for the statute cannot extend the jurisdiction beyond the limits of the constitution.”). Those limits include Article III’s case-or-controversy requirement, which, among other things, requires that the plaintiff have standing. *Lujan*, 504 U.S. at 560–61, 112 S.Ct. 2130. And unlike *qui tam* relators bringing False Claims Act cases, who have standing via the government’s injury because their entitlement to a bounty is a partial assignment of the claim to the relator, *Vt. Agency of Nat. Res. v. United States ex rel. Stevens*, 529 U.S. 765, 773–74, 120 S.Ct. 1858, 146 L.Ed.2d 836 (2000), citizens suing under the bountyless environmental statutes must meet the standing requirement in their own right, *Laidlaw*, 528 U.S. at 180–81, 120 S.Ct. 693 (explaining in Clean Water Act citizen suit that “the relevant showing for purposes of

Article III standing . . . is not injury to the environment but injury to the plaintiff”). Plaintiffs thus must show an injury, traceable to the defendant’s challenged conduct, that will be redressed by a favorable decision. *Lujan*, 504 U.S. at 560–61, 112 S.Ct. 2130.

A.

As a threshold matter, Plaintiffs argue that because the prior panel reached the merits, it must have determined it had jurisdiction. If that is the case, then Plaintiffs’ standing is the binding law of the case. *See Todd Shipyards Corp. v. Auto Transp., S.A.*, 763 F.2d 745, 750 (5th Cir. 1985) (“The law of the case doctrine . . . generally precludes reexamination of issues of law or fact decided on appeal, either by the district court on remand or by the appellate court itself on a subsequent appeal.”).

But we cannot assume that the prior panel implicitly decided standing. Because Article III standing goes to our subject matter jurisdiction, broad applications of the law of the case doctrine are inappropriate. *See Propes v. Quarterman*, 573 F.3d 225, 228 (5th Cir. 2009) (quoting 18B CHARLES ALAN WRIGHT ET AL., *FEDERAL PRACTICE AND PROCEDURE* § 4478.5, at 790 (2d ed. 2002)). For that reason, a later panel cannot “defer to the prior panel’s exercise of jurisdiction as correct where the issue was neither raised by the parties nor addressed by the court.” *USPPS, Ltd. v. Avery Dennison Corp.*, 647 F.3d 274, 284 (5th Cir. 2011). Exxon’s brief to the original panel did include a footnote disputing that Plaintiffs had standing. But the footnote went on to say that Exxon was not disputing the issue because the district court’s original decision found no repeated and

ongoing violations to support penalties. The prior panel’s decision makes no mention of standing, and we cannot infer from a single, equivocating footnote on the issue that the panel resolved standing without saying so.

B.

We thus must address standing. The main legal dispute is whether Plaintiffs must prove standing for each violation they alleged.

An explanation of interaction between Clean Air Act claims, violations, and penalties is needed to understand the parties’ dispute. The Act provides a cause of action—that is, a claim—only for repeated violations of a particular emission standard. 42 U.S.C. § 7604(a)(1); *Env’t Tex.*, 824 F.3d at 518–19. That means a plaintiff must assert at least two violations of the same standard in order to allege a claim. Once that threshold is met, however, there is no ceiling on how many violations of that emission standard a plaintiff may pack into that claim. And a “penalty may be assessed for each day of violation.” 42 U.S.C. § 7413(e)(2). There is a cap on the penalty for each day of violation: \$32,500 or \$37,500 in this case, depending on when the violation occurred.²

² The EPA can seek no more than the per-day maximum when it seeks civil penalties. 42 U.S.C. § 7413(b); *see also* 40 C.F.R. § 19.4 (showing increases in section 7413(b)’s maximum to adjust for inflation). But although citizen suits may seek a penalty for “each day of violation,” the Clean Air Act does not expressly limit citizen suits to the per-day maximum. *See* 42 U.S.C. § 7413(e). It differs in that way from the Clean Water Act. *See* 33 U.S.C. §§ 1319(d), 1365(a). Despite this textual incongruity, some courts apply the per-day maximum to Clean Air Act citizen suits. *See, e.g., Pound v. Airosol Co.*, 498 F.3d

Consequently, if Plaintiffs could sue only for 100 days of violations, they could at most recover roughly \$3.5 million. In light of the more than 16,000 days of violations found in this case, the statutory cap exceeded \$600 million. Thus the dispute about whether Plaintiffs must demonstrate standing for each violation.

Plaintiffs argue that although they must prove standing for each Clean Air Act *claim* (that is, group of violations of a particular emission standard), there is not a separate standing inquiry for each *violation* asserted as part of that claim. But what we have just explained—that Clean Air Act penalties are tied to violations, not the broader claims—refutes this position. Plaintiffs’ argument thus runs up against the principle that one injury does not entitle a litigant to right other wrongs that did not injure it. Assuming that Plaintiffs’ members’ injuries were traceable to some of Exxon’s violations, that does not mean they “possess by virtue of that injury the necessary stake in litigating conduct of another kind, although similar, to which [they have] not been subject.” *Blum v. Yaretsky*, 457 U.S. 991, 999, 102 S.Ct. 2777, 73 L.Ed.2d 534 (1982). This principle typically arises in suits against the government, preventing plaintiffs with standing to challenge one facet of a regulatory scheme from challenging the whole regulatory scheme. See, e.g., *id.* at 1000–01; *Legacy Cmty. Health Servs., Inc. v. Smith*, 881 F.3d 358, 366–70 (5th Cir. 2018). But because it rests on Article III’s case-or-controversy requirement, it applies to this suit too.

1089, 1095 (10th Cir. 2007). Plaintiffs in this case do not deny that the per-day maximum applies.

An example with an obvious answer shows why it must generally be true that a plaintiff needs standing for each violation for which it seeks a penalty. Assume that a citizen moved from Florida to a Baytown neighborhood near the Exxon complex in 2005. That citizen would not have standing to assert violations that occurred in 2004. So Clean Air Act plaintiffs cannot seek penalties for a particular violation if they would lack standing to sue for that violation in a separate suit, any more than a plaintiff with the “right to complain of *one* administrative deficiency” can “bring the whole structure of state administration before the courts for review.” *Lewis v. Casey*, 518 U.S. 343, 358 n.6, 116 S.Ct. 2174, 135 L.Ed.2d 606 (1996).

Admittedly, no court appears to have found standing for some Clean Air Act violations but not others, and that gives us some pause. Numerous cases have instead recognized standing in environmental citizen suits without separate analyses for each violation. In *Laidlaw*, for instance, a Clean Water Act defendant violated its mercury discharge limits on 489 occasions. 528 U.S. at 176, 120 S.Ct. 693. The Court did not parse one day of violations from another in holding that the plaintiff had standing. *See id.* at 180–88, 120 S.Ct. 693. Neither did this court when we analyzed standing to sue under the Clean Air Act for 625 days of emissions violations at a refinery near the one in this case. *Texans United for a Safe Econ. Educ. Fund v. Crown Cent. Petroleum Corp.*, 207 F.3d 789, 791 n.4 (5th Cir. 2000).

But these other cases do not involve the number and variety of violations that this case does (24 different pollutants). That explains why in this case, unlike in *Laidlaw* and *Texans United*, the standing

inquiry is not one-size-fits all. Citizens suits under the environmental laws typically allege injuries from discharges or emissions of one or two pollutants exceeding one or two emissions standards, all in the same manner. *See, e.g., Laidlaw*, 528 U.S. at 176, 120 S.Ct. 693 (recounting defendant's discharge of mercury, in excess of its permitted allotment, from its wastewater treatment plant into a river); *Texans United*, 207 F.3d at 791 (observing that defendant exceeded federal emissions limits for sulfur dioxide and hydrogen sulfide); *Sierra Club v. Tenn. Valley Auth.*, 430 F.3d 1337, 1340–41 (11th Cir. 2005) (analyzing standing to sue for emitting smoke that was darker than maximum opacity limits permitted); *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 153 (4th Cir. 2000) (noting plaintiffs' allegation that defendant regularly exceeded discharge limits during releases into a lake). That the plaintiffs in those cases repeatedly suffered the same injury resulting from a series of similar discharges does not mean that a plaintiff injured by one violation can automatically challenge all a defendant's violations.

Another difference is that in each of the cases on which Plaintiffs rely, there was no doubt that the pollutant emitted could cause the alleged injury. The *Laidlaw* plaintiffs, for instance, asserted injuries to their aesthetic and recreational interests because the defendant's discharges polluted a river that they otherwise would have enjoyed. 528 U.S. at 183–84, 120 S.Ct. 693. Plaintiffs, by contrast, assert a variety of aesthetic and health-related injuries, allegedly traceable to 24 different pollutants emitted in a variety of ways (flaring, leaks, workplace accidents, etc.). The impact of those different violations varied

greatly. Count I, for instance, alleges violations of a prohibition on upset—that is, unplanned or accidental—emissions. Because upset emissions are not authorized in any amount, each pollutant emitted during an upset event is a violation, regardless of how small the emission may have been. As the district court observed, that means Exxon’s thousands of violations include accidents as minor as smoke caused by plugging in an extension cord and a fire in a cigarette butt can that lasted one minute. Both accidents lasted “0.0 hours” and emitted 0.01 pounds of carbon monoxide and 0.01 pounds of nitrous oxide. By Plaintiffs’ calculations, that meant a total of four days of violations.³

To be sure, many of Exxon’s emissions violations were of a serious magnitude. Some flaring events and leaks lasted for hours and spilled thousands of pounds of harmful pollutants into the air. But because of the great variety of the challenged emissions—both in terms of type and scale—we cannot say that Plaintiffs’ proving standing for some violations necessarily means they prove standing for the rest.

C.

Having decided that Clean Air Act plaintiffs must prove standing for each violation in support of their claims, we now examine whether these plaintiffs have done so. Before doing so, we emphasize it does not follow from the need to establish standing for each violation that separate proof of standing is needed for each violation. As we have discussed, many courts

³ Count II also alleged violations of emissions limits on more than a dozen pollutants, for some of which there is no authorized amount. So like Count I, Count II includes violations of 0.0 pound-per-hour emissions limits.

including our court and the Supreme Court—have allowed the same testimony to support standing for multiple violations (just not the number and variety of violations at issue here). And, as always, a factfinder may rely on circumstantial evidence and draw reasonable inferences from the evidence. *Gaston Copper*, 204 F.3d at 163.

Because this case was tried, Plaintiffs needed to prove standing by a preponderance of the evidence. *See Lujan*, 504 U.S. at 561, 112 S.Ct. 2130. A factual finding that a plaintiff met that burden is reviewed for clear error. *Department of Commerce v. New York*, — U.S. —, 139 S. Ct. 2551, 2565, 204 L.Ed.2d 978 (2019); *In re Deepwater Horizon*, 739 F.3d 790, 805 (5th Cir. 2014); *Cole v. Gen. Motors Corp.*, 484 F.3d 717, 721 (5th Cir. 2007).

We address standing's three requirements in turn.

1.

Plaintiffs easily demonstrated that their members were injured. They put on testimony from four of their members, which the district court credited. Here is a sampling. Sharon Sprayberry, who lived in Baytown from 2004 through 2012, could see flares, smoke, and haze coming from the Exxon complex from her house. She experienced respiratory problems when she lived in Baytown and does not return to visit friends because the last time she did, the air quality made it hard to breathe. Richard Shae Cottar, who lived a quarter mile from the complex from April 2010 through September 2012, could also see emissions from the Exxon complex and ultimately moved two miles away out of concern for his family's health and safety. He likes to take his family to visit a nature center next to the Exxon complex, but he leaves

whenever he sees emissions. Marilyn Kingman heads to Baytown a few times a week to run errands, recreate, and go to church. But she's scared of what she smells coming from the complex and limits her grandchildren's outdoor activities in Baytown whenever she smells odors or sees haze. Diane Aguirre Dominguez lived in Houston but regularly visited her parents in Baytown until she moved in March 2013. She is a runner, but she stopped running in Baytown because it hurt her throat and made it hard to breathe.

In sum, throughout the claims period, at least one of Plaintiffs' members regularly saw flares, smoke, and haze coming from the complex; smelled chemical odors; suffered from allergy-like or respiratory problems; feared for their health; refrained from outdoor activities; or moved away. Each of those experiences was an Article III injury. *See Laidlaw*, 528 U.S. at 183–84, 120 S.Ct. 693 (interference with recreational activity); *Texans United*, 207 F.3d at 792 (“breathing and smelling” polluted air); *Sierra Club, Lone Star Chapter v. Cedar Point Oil Co. Inc.*, 73 F.3d 546, 557 (5th Cir. 1996) (unpleasant sights and smells of pollution); *Sierra Club v. EPA*, 762 F.3d 971, 977 (9th Cir. 2014) (“credible threat to the plaintiff’s physical well-being from airborne pollutants” (quoting *Hall v. Norton*, 266 F.3d 969, 976 (9th Cir. 2001))). Plaintiffs have thus met standing’s first requirement. *See Summers v. Earth Island Inst.*, 555 U.S. 488, 494, 129 S.Ct. 1142, 173 L.Ed.2d 1 (2009) (noting that organizations can establish standing through a member).

2.

The next question is whether the injuries these individuals suffered are traceable to the violations. This is the crux of the dispute. And while Plaintiffs view traceability too loosely in contending that proving it for one violation proves it for all, Exxon views this element too strictly when it comes to how specific the proof must be.

Exxon argues that Plaintiffs cannot trace any of their injuries to violations except for those occurring during five “correlated” events. These are five instances when one of Plaintiffs’ members linked a particular violation to a particular injury suffered on a particular day. One member, for instance, took a video of an emissions event that woke him up in the middle of the night, then checked Exxon’s reported emissions and linked what he had seen, heard, and smelled to the report Exxon filed after the event.

Requiring proof that specific is not consistent with the traceability requirement, which requires less of a causal connection than tort law (and even tort causation would not require such specific proof). See *Gaston Copper*, 204 F.3d at 161 (“[T]he ‘fairly traceable’ standard is ‘not equivalent to a requirement of tort causation.’” (quoting *Pub. Interest Research Grp. of N.J. v. Powell Duffryn Terminals, Inc.*, 913 F.2d 64, 72 (3d Cir. 1990))). After all, the standard is that the injury be *fairly* traceable to the challenged conduct, not definitively so. See, e.g., *Laidlaw*, 528 U.S. at 180, 120 S.Ct. 693; *Allen v. Wright*, 468 U.S. 737, 751, 104 S.Ct. 3315, 82 L.Ed.2d 556 (1984). Indeed, our court has already rejected Exxon’s argument: Clean Air Act plaintiffs need not “connect the exact time of their injuries with the exact

time of an alleged violation.” *Texans United*, 207 F.3d at 793.

Traceability instead requires something more than conjecture (“The Exxon complex in Baytown emits pollutants, and I live in Baytown”) but less than certainty (“I was outside the Baytown complex on November 15, between 1:00 and 5:00 pm, at which time hydrogen sulfide was emitted, and I recall my throat feeling sore even though it did not feel sore earlier in the day”). We have described the showing as requiring evidence that the defendant’s violations were of a type that “causes or contributes to the kinds of injuries alleged by the plaintiffs.”⁴ *Cedar Point*, 73

⁴ Exxon does not question the vitality of *Cedar Point* or our other decisions applying this standard, but Judge Oldham’s opinion does. And while he notes that this standard originated in the Third Circuit, neither that court nor others with a similar approach have concluded that subsequent Supreme Court decisions require something different. In order to do so, we would have to find not just that Supreme Court decisions since 1996 have cast some doubt on *Cedar Point*, but that they mark an “unequivocal” change in the governing law. *Gruver v. La. Bd. of Supervisors*, 959 F.3d 178, 181 (5th Cir. 2020).

In fact, the only subsequent Supreme Court standing decision involving a citizen suit is at odds with a tightened, tort-like traceability standard that would require directly connecting a plaintiff’s injury to a specific day’s discharge. In *Laidlaw*, the Court recognized standing for a Friend of the Earth member who said she no longer “picnicked, walked, birdwatched, and waded in and along the” polluted river because “she was concerned about harmful effects from discharged pollutants.” 528 U.S. at 182, 120 S.Ct. 693. Her testimony was not more specific than that; she did not, for example, tie her concerns to discharges occurring on particular days. Indeed, the *Laidlaw* dissent criticized the Court for recognizing standing based on “unsupported and unexplained affidavit allegations of ‘concern.’” *Id.* at 714 (Scalia, J., dissenting). *Laidlaw* thus reiterates that

F.3d at 557 (quoting *Powell Duffryn*, 913 F.2d at 72); see also *Friends of the Earth, Inc. v. Crown Cent. Petroleum Corp.*, 95 F.3d 358, 360–61 (5th Cir. 1996) (same).

With these general principles in mind, we can address whether Plaintiffs demonstrated traceability. The district court made findings relevant to this question: Plaintiffs’ members’ observational injuries—seeing flares, smoke, and haze were obviously traceable to Exxon because those visual blights originated from the Baytown complex. Chemical odors could likewise be traced to Exxon because they got stronger when Plaintiffs’ members approached or happened to be downwind from the complex. Seeing flares, smoke, and haze, as well as smelling chemical odors, made Plaintiffs’ members fear for their health, which in turn made them refrain from outdoor activities or move away from the complex. The chemical odors could be traced to the Exxon complex because they got stronger when the wind blew in the direction of a member’s home or when a member drove closer to the complex. And because members’ physical symptoms improved when they moved away from the complex, those injuries were traceable to Exxon too.

The district court also observed correctly as we have already explained that traceability does not require Plaintiffs to draw a causal connection between their members’ injuries and specific incidents on particular days. Just as the would-be fishermen, hikers, and bird watchers in *Laidlaw* did not have to connect their injury to specific days when

the “fairly traceable” requirement does not require tort-like causation with its proximate cause requirement.

discharges into the river occurred, *see* 528 U.S. at 183–84, 120 S.Ct. 693, a person living near a refinery who cannot “enjoy[] . . . their surroundings” because of emissions need not connect their injuries to the “exact dates” when violations happened, *see Texans United*, 207 F.3d at 792–93.

But despite the district court’s sound reasoning, we must remand due to our holding that Plaintiffs needed to prove standing for each violation. The district court outlined in general terms how Exxon’s violations had injured Plaintiffs’ members; it did not assess traceability as to each violation. That is necessary because it is not apparent that all of Exxon’s violations were capable of causing the types of injuries Plaintiffs’ members suffered.

To address that problem and establish traceability on remand, Plaintiffs must make two showings. First, that each violation in support of their claims “causes or contributes to the kinds of injuries” they allege. *Cedar Point*, 73 F.3d at 557 (quoting *Powell Duffryn*, 913 F.2d at 72). Given the district court’s findings regarding injury and traceability, a violation will satisfy that standard if it (1) created flaring, smoke, or haze; (2) released pollutants with chemical odors; or (3) released pollutants that cause respiratory or allergy-like symptoms.

Second, Plaintiffs must demonstrate the existence of a “specific geographic or other causative nexus” such that the violation could have affected their members. *Cedar Point*, 73 F.3d at 558 n.24; *cf. Center for Biological Diversity v. EPA*, 937 F.3d 533, 538–39 (5th Cir. 2019) (holding that plaintiffs could not establish injury based on their general use of parts of the Gulf of Mexico to challenge drilling permits for

specific areas of that vast body of water). In Clean Water Act cases, for example, the nexus requirement means that a plaintiff significantly downstream from the defendant must do more than point to the defendant's having discharged pollutants upstream to show traceability. *Cedar Point*, 73 F.3d at 558 n.24; *see also, e.g., Crown Cent.*, 95 F.3d at 361–62 (finding that plaintiffs eighteen miles downstream lacked evidence of discharges' range of impact such as water samples or expert testimony). That said, there is no need for evidence of geographic range when plaintiffs "sit[] squarely in the discharge zone of a polluting facility" such that their proximity speaks for itself. *Gaston Copper*, 204 F.3d at 162.

In making this geographic nexus inquiry, the district court should distinguish between two kinds of violations. On the one hand, there were small-magnitude emissions events that constituted violations only because Exxon's permits established zero-emissions standards. For these events, the district court must decide whether evidence shows that the emitted pollutants could have reached beyond the Exxon complex into the offsite areas of Baytown where Plaintiffs' members lived and recreated. It is possible—particularly given the size of the Exxon complex (3,400 acres),—that pollutants emitted in a small quantity could have dissipated before leaving Exxon grounds. *See Ctr. for Biological Diversity*, 937 F.3d at 545 (noting that not only "the proximity of the source and the injury" but also "whether discharges will evaporate or become diluted" bears on the standing inquiry). We repeat, though, that there is no need for "scientific certainty" *Save Our Community v. EPA*, 971 F.2d 1155, 1161 (5th Cir. 1992) (quoting *Powell Duffryn*, 913 F.2d at

72). If the district court finds by a preponderance of the evidence that an emission was large enough that it could have sent pollutants in discernible quantities—that is, enough to cause chemical odors, allergy symptoms, or respiratory symptoms⁵—across the fence surrounding the Baytown complex, Plaintiffs will have standing to recover a civil penalty for that emission. They need not offer direct evidence that their members actually inhaled pollutants from each emission.

But other violations involve Exxon’s releasing pollutants in excess of nonzero emissions limits. For emissions that exceeded those thresholds, it is an easier inference that the pollutants escaped the Baytown complex. The same is true for emissions of pollutants that, though not permitted in any amount, were nevertheless of a “reportable quantity” under state regulations. *See* 30 TEX. ADMIN. CODE § 101.1(89). While it is not clear that emissions of a trace amount of pollutants could have reached outside the Exxon complex to affect Plaintiffs’ member, it is reasonable to conclude that emissions in excess of 5,000 pounds of carbon monoxide or 500 pounds of sulfur dioxide—the reportable thresholds for those pollutants, *id.* § 101.1(89)(A)(i)(III)(-d-); 40 C.F.R. pt. 355, app. A—could have. And because Plaintiffs’ members lived and recreated in immediate proximity to the Exxon complex, they were “squarely in the

⁵ Because there is some evidence on these topics—for instance, Plaintiffs’ expert Edward Brooks testified about the levels of sulfur dioxide and hydrogen sulfide necessary to cause adverse health effects,—a remand is appropriate for the district court to decide whether it is credible and sufficient to meet Plaintiffs’ burden.

discharge zone” for emissions of those quantities. *Gaston Copper*, 204 F.3d at 162.

Finally, we note that the geographic nexus inquiry is unnecessary for any violation that could have caused or contributed to flaring, smoke, or haze, even if the emission was of a small magnitude. Plaintiffs’ members could undoubtedly see—as they said they did in the testimony the district court credited—flares, smoke, and haze from their homes and other areas outside the Exxon complex. That evidence is enough for these violations.

Under the above rubric, the district court’s findings support traceability for a substantial number of Exxon’s violations. Many of Count I’s upset emissions and Count II’s excessive emissions caused flaring, and the violations in Count IV consist of flaring events that caused excessive smoke. Also, each of the 241 reported events caused multiple days of violations.

A limited remand is needed, however, for the district court to determine what other violations could have contributed to Plaintiffs’ members’ injuries and then tabulate its findings. This is no doubt an arduous task, but we do not require line-by-line findings for the thousands of violations. When consistent with the principles we have outlined, the court may group violations by type and magnitude in making its findings.

The following should guide the district court’s inquiry:

1. For any violation that could cause or contribute to flaring, smoke, or haze, the district court’s findings have established traceability. The district court need only

decide which violations fall within this category.

2. For violations that could not contribute to flaring, smoke, or haze, the district court should first consider whether the pollutant emitted could cause or contribute either to (a) chemical odors or (b) allergy-like or respiratory symptoms. If so, the district court will conduct the geographic nexus inquiry described above, finding it satisfied if the emission (i) violated a nonzero emissions standard, (ii) had to be reported under Texas regulations, or (iii) is otherwise proven to be of sufficient magnitude to reach Baytown neighborhoods outside the Exxon complex in quantities sufficient to cause chemical odors, allergy-like symptoms, or respiratory symptoms.

3.

Because the evidence supports the district court's findings of injury and traceability for a number of the violations, we proceed to the final standing requirement: redressability. Exxon argues that Plaintiffs failed to prove that civil penalties would "likely" redress their members' injuries. *Lujan*, 504 U.S. at 561, 112 S.Ct. 2130.

But when violations are "ongoing at the time of the complaint," civil penalties redress injuries caused by those violations because they "encourage defendants to discontinue current violations and deter them from committing future ones." *Laidlaw*, 528 U.S. at 186, 188, 120 S.Ct. 693. The idea is that "a defendant once

hit in its pocketbook will surely think twice before polluting again.” *Id* at 186, 120 S.Ct. 693.

The question, then, is whether Exxon continued to commit violations after the plaintiffs filed suit. Plaintiffs sued in December 2010 and seek penalties for violations that occurred through September 2013. It seems straightforward that this almost three-year postsuit continuation of wrongdoing establishes redressability. *See, e.g., id.* at 176–77, 120 S.Ct. 693 (finding redressability when plaintiffs sued in 1992 for violations that continued through 1995); *Gaston Copper*, 204 F.3d at 163 (finding redressability when hundreds of violations occurred after the suit was filed).

In the face of this authority, Exxon raises a novel argument: it contends its violations are undeterrable because they do not arise from a single “root cause.” Penalizing Exxon for past violations will not prevent future violations, the argument goes, because it is impossible to fix every possible cause of violations. Even if Exxon fixes the problems that caused its past violations, new issues will inevitably lead to future violations. This case thus presents the rare circumstance according to Exxon, when “the deterrent effect of a claim for civil penalties becomes so insubstantial or so remote that it cannot support citizen standing.” *Laidlaw*, 528 U.S. at 186, 120 S.Ct. 693.

Exxon overstates the redressability requirement. Civil penalties need not completely prevent future violations. It is enough for the Plaintiffs to show that Exxon’s violations are susceptible to a reduction in frequency or magnitude. *See Massachusetts v. EPA*, 549 U.S. 497, 524, 127 S.Ct. 1438, 167 L.Ed.2d 248

(2007) (“While it may be true that regulating motor-vehicle emissions will not by itself *reverse* global warming, it by no means follows that we lack jurisdiction to decide whether EPA has a duty to take steps to *slow* or *reduce* it.”).

There is a glaring problem with the idea that Exxon could not have reduced its emissions violations after the filing of this suit: Exxon has done just that. Exxon steadily and substantially reduced the rate and magnitude of emissions violations throughout the claims period. Annualized violations declined from roughly 300 tons of emissions in 2010 to roughly 100 tons by September 2013. The three-year average of emissions violations at the Baytown complex shows even more success: it went from about 700 tons/year from 2008–10 all the way down to just over 100 tons/year for 2011–13. What is more, Exxon agreed with state regulators in a February 2012 settlement to undertake projects that would substantially reduce emissions of several different pollutants.

Even if Exxon cannot address every “root cause” of its emissions violations, it has implemented measures that drastically reduced those violations. The district court thus correctly found that Plaintiffs’ injuries are redressable.

III.

Next are Exxon’s affirmative defenses. The district court did not need to consider them the first time around because it declined to impose civil penalties. Exxon reasserted two on remand, an “Act of God” defense and a statutory no-fault defense, but the district court rejected both. Plaintiffs have standing for at least some of the violations that Exxon asserts the defenses against: at a minimum, many of the

challenged violations involved flaring. Some of that flaring occurred during the Hurricane Ike shutdown, the subject of the Act of God defense, and Exxon also contends its statutory defenses apply to some flaring. So we will address Exxon's defenses.

A.

Exxon asserted the Act of God defense under the Texas Water Code. *See* TEX. WATER CODE § 7.251. The defense excuses emissions violations that were "caused solely by an Act of God, war, strike, riot, or other catastrophe." *Id.* Exxon argues that Hurricane Ike was such an occurrence and that Ike caused 10 reported events, resulting in 199 days of violations.

The district court rejected the Act of God defense because it concluded it is not part of Texas's state implementation plan (SIP). A brief background on SIPs is in order. Under the Clean Air Act, each state submits an SIP for EPA approval. 42 U.S.C. § 7410. The SIPs detail how the state will achieve compliance with National Ambient Air Quality Standards. *See generally Luminant Generation Co. v. EPA*, 675 F.3d 917, 921–22 (5th Cir. 2012). Once approved, a state must seek EPA approval to modify its SIP. *Tenn. Valley Auth.*, 430 F.3d at 1346; *see* 42 U.S.C. § 7410(n)(1). That is because when the EPA approves a SIP, it becomes federal law. *Safe Air for Everyone v. EPA*, 488 F.3d 1088, 1096–97 (9th Cir. 2007). Unless an SIP authorizes a state-law defense, the defense is not available in a Clean Air Act suit. *Tenn. Valley Auth.*, 430 F.3d at 1346.

Texas's SIP, as approved by the EPA in 1972, contains an Act of God defense. It incorporates part of the Texas Clean Air Act, *see* 40 C.F.R. § 52.2270(e), which included the following provision when the SIP

was approved: “The liabilities which would otherwise be imposed by this Act . . . shall not be imposed due to any violation caused by an act of God . . . or other catastrophe.” TEX. REV. CIV. STAT. art. 4477-5, § 4.05 (West 1976). But that provision was repealed in 1989. Act of June 14, 1989, 71st Leg., ch. 678, § 13(1), 1989 TEX. SESS. LAW SERV. 3165 (West). Today, the Texas Clean Air Act’s “enforcement mechanisms” are codified in the Water Code, *see BCCA Appeal Grp., Inc. v. City of Houston*, 496 S.W.3d 1, 4–5 (Tex. 2016), which has a defense similar to the old one in the Texas Clean Air Act: “If a person can establish that an event that would otherwise be a violation . . . was caused solely by an act of God . . . or other catastrophe, the event is not a violation. . . .” TEX. WATER CODE § 7.251. But the Water Code provision never made its way directly into Texas’s SIP.

Exxon thus blundered by citing the Water Code for the Act of God defense. But the Water Code defense is nearly identical to the repealed Texas Clean Air Act provision, which the EPA approved as part of the SIP long before it left the statute books. The Texas SIP—the governing federal law under the Clean Air Act—thus incorporates an Act of God defense. Exxon’s ability to assert the defense should not turn on its failure to cite the decades-old statute, which was made part of the SIP, rather than its current statutory home. We remand for findings on whether Exxon proved its Act of God defense for the relatively small number of violations occurring during Hurricane Ike.

B.

The Texas SIP also includes affirmative no-fault defenses to liability for specific types of emissions. 40

C.F.R. § 52.2270(c) (incorporating TEX. ADMIN. CODE § 101.222). One defense, for instance, applies to “non-excessive upset events,” provided the violator can show that it met each of eleven criteria—they generally show that the violator was not at fault and that the violation was not particularly serious. TEX. ADMIN CODE § 101.222(b).

Exxon pursued some of these no-fault defenses on remand. In support, it submitted 200 paragraphs of proposed findings. Those paragraphs included brief descriptions of 97 emissions events, and references to the reports and trial testimony of experts.⁶

The district court ruled that Exxon failed to meet its burden because it did not identify evidence establishing it met the relevant criteria for each individual emissions event. It characterized Exxon as having “only provided a general citation to the testimony and record.” That characterization was not unreasonable. The trial testimony Exxon cited did not examine particular events; it instead opined that all the criteria were met for each violation, across the board. And Exxon did not pinpoint pages of the expert report, instead referring to hundreds of pages of reports in their entirety.

Exxon responded with a Rule 52(b) motion to amend the judgment, to which it attached an exhibit purporting to more specifically cite the portions of expert reports and testimony pertinent to each of the 97 events. But that exhibit just copied and pasted

⁶ Exxon also alluded to the Texas Commission on Environmental Quality’s determination that Exxon met the criteria for each event. But the district court found that the state’s determination was “not sufficient” to meet Exxon’s burden of proof, a finding Exxon does not challenge.

identical references to voluminous expert testimony and reports into each entry for each emissions event. Some of that evidence had no bearing on the emissions events for which it purportedly proved a defense.

The district court rejected Exxon's 52(b) motion because the motion did not do anything Exxon could not have done in its proposed findings. We affirm that rejection for an alternative reason, the same reason we affirm the district court's original rejection of Exxon's section 101.222 defenses: "Judges are not ferrets!" *Nicholas Acoustics & Specialty Co. v. H&M Const. Co.*, 695 F.2d 839, 847 (5th Cir. 1983); *see also Chavez v. Sec. Fla. Dep't of Corrections*, 647 F.3d 1057 (11th Cir. 2011) ("[D]istrict court judges are not required to ferret out delectable facts buried in a massive record."). We defer to the district court's "broad discretion in managing [its] docket," *Sims v. ANR Freight Sys., Inc.*, 77 F.3d 846, 849 (5th Cir. 1996), which permits a district court to refuse to do litigants' work for them.

IV.

Lastly, Exxon challenges the penalty the district court imposed. It argues that the district court erred in reconsidering all three factors on which the prior panel remanded—economic benefit, duration, and seriousness—as well as in declining to consider Exxon's argument on "such other factors as justice may require" Because we remand for the district court to determine the number of violations for which Plaintiffs have standing, as well as whether Exxon proved its Act of God defense for any violations, the court will also have to reassess the penalties. It thus does not make sense to address Exxon's penalty

arguments now. It is worth noting that however many violations the court finds Plaintiffs have standing to pursue, the overall number of violations at the Baytown complex remains relevant as part of “the violator’s full compliance history” that a court considers in assessing the amount of each penalty within the statutory range. 42 U.S.C. § 7413(e)(1). We express no opinion about the extent to which a reduction in the number of violations should affect, if at all, the total penalty imposed.

* * *

We VACATE the district court’s judgment and REMAND for the limited purpose of allowing the district court to make additional findings on traceability and the Act of God defense. The case will then be returned to this panel.

ANDREW S. OLDHAM, Circuit Judge, concurring in part, dissenting in part, and concurring in the judgment:

I agree that the district court’s judgment must be vacated, and that we must remand the case for additional proceedings. I write separately to emphasize that our precedents in this area are a mess. The majority admirably attempts to make sense of them. But I’m afraid that task is too big for any panel. Eventually, our en banc court should clean up this confusion.

I.

The mess started in 1990. That’s when the Third Circuit created a three-part standard for determining traceability in citizen suits under the Clean Water Act. *See Pub. Interest Research Grp. of N.J., Inc. v. Powell Duffryn Terminals Inc.*, 913 F.2d 64, 72 (3d

Cir. 1990). Under *Powell Duffryn*, the plaintiff must show:

a defendant has 1) discharged some pollutant in concentrations greater than allowed by its permit 2) into a waterway in which the plaintiffs have an interest that is or may be adversely affected by the pollutant and that 3) this pollutant causes or contributes to the kinds of injuries alleged by the plaintiffs.

Ibid. It's not obvious how the Third Circuit devised that standard because the court cited nothing at all to support it. *See ibid.*

For better or worse, we relied on *Powell Duffryn's ipse dixit* in *Sierra Club, Lone Star Chapter v. Cedar Point Oil Co. Inc.*, 73 F.3d 546, 557–58 (5th Cir. 1996). Oddly, our *Cedar Point* decision did not *even cite*—much less analyze—the Supreme Court's canonical decision on Article III standing in *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 112 S.Ct. 2130, 119 L.Ed.2d 351 (1992). Much of *Cedar Point* contravenes *Lujan* and its progeny. Compare, e.g., *Cedar Point*, 73 F.3d at 556–57 (embracing the plaintiffs' theory of “threatened injury” without discussing the requirement that it be “concrete,” “imminent,” and “certainly impending”), with *Lujan*, 504 U.S. at 567 nn.2–3, 112 S.Ct. 2130 (requiring plaintiffs to establish a “concrete injury” that was “imminent” and “certainly impending”), and *Clapper v. Amnesty Int'l USA*, 568 U.S. 398, 409, 133 S.Ct. 1138, 185 L.Ed.2d 264 (2013) (similar). But even when *Cedar Point* relied on the Third Circuit's standard rather than Supreme Court precedent, it recognized that “a literal reading of *Powell Duffryn* may produce results

incongruous with our usual understanding of the Article III standing requirements.” 73 F.3d at 558 n.24. Therefore, *Cedar Point* utilized a more amorphous approach to Article III standing that turned on things like whether the relevant waterway is “large.” *Ibid.*

The third prong of the *Powell Duffryn-Cedar Point* standard is the most pernicious. It says that the plaintiff need only prove that the relevant pollutant “causes or contributes to the *kinds of injuries* alleged by the plaintiffs.” *Powell Duffryn*, 913 F.3d at 72 (emphasis added); *see also Cedar Point*, 73 F.3d at 557 (adopting this *ipse dixit*). That eliminates traceability altogether. Think about it. Would we ever say: my house burned down; arsonists burn down houses; therefore, an arsonist burned down my house? Of course not. My house could have burned down because the wiring was faulty, I left the stove on, my dog tipped over a candle, a bolt of lightning struck the roof, a litterbug’s cigarette started a wildfire, or myriad other potential causes. Therefore, we would require *some sort* of allegation of but-for causation linking the fire to the arsonist. But *Powell Duffryn-Cedar Point* eliminates that. It’s enough to say that someone has asthma; pollutant X can cause asthma; therefore, pollutant X caused someone’s asthma. *Cum hoc ergo propter hoc*.

Rather than recognize the fallacies inherent in *Powell Duffryn-Cedar Point*, some courts have extended its illogic. For example, the Fourth Circuit relied on both cases to hold that the “fairly traceable” standard is “not equivalent to a requirement of tort causation.” *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 161 (4th Cir.

2000) (quotation omitted). It is unclear what that sentence is supposed to mean. I suppose it could mean that a plaintiff can establish traceability without establishing the tort requirement of *proximate* causation. That's true. *See, e.g., Lexmark Int'l, Inc. v. Static Control Components, Inc.*, 572 U.S. 118, 134 n.6, 134 S.Ct. 1377, 188 L.Ed.2d 392 (2014) ("Proximate causation is not a requirement of Article III standing, which requires only that the plaintiff's injury be fairly traceable to the defendant's conduct.").

But some of our sister circuits *also* have eliminated *but-for* causation. For example, the Sixth Circuit said: "In the nebulous land of 'fairly traceable,' where causation means more than speculative but less than but-for, the allegation that a defendant's conduct was a motivating factor in the third party's injurious actions satisfies the requisite standard." *Parsons v. U.S. Dep't of Justice*, 801 F.3d 701, 714 (6th Cir. 2015). That's much like *Powell Duffryn*, which distinguished the "requirement of tort causation" from "scientific certainty." 913 F.2d at 72. And much like *Powell Duffryn*, *Parsons* cited exactly *nothing* to support its *ipse dixit*. Also much like *Powell Duffryn*, *Parsons* makes little sense. Asking whether a particular allegation is "more than speculative but less than but-for," *Parsons*, 801 F.3d at 714, is like asking whether a particular product is more than a preponderance but less than defective. The first is the plaintiff's burden; the second is the actual fact that the plaintiff must prove.

Our circuit already has recognized the constitutional problems posed by the ever-growing mountain of *ipse dixits* and logical fallacies that

comprise the *Powell Duffryn*-*Cedar Point*-*Gaston Copper-Parsons* line of cases. *Cedar Point* itself recognized its approach could generate “results [that are] incongruous with our usual understanding of the Article III standing requirements.” 73 F.3d at 558 n.24. And we’ve reiterated that concern in other cases. For example, we’ve held that plaintiffs could not establish traceability by showing that they “use[d] a body of water located three tributaries and 18 miles ‘downstream’ from” a polluting refinery. *Friends of the Earth, Inc. v. Crown Cent. Petroleum Corp.*, 95 F.3d 358, 361 (5th Cir. 1996); *see also ibid.* (“We are persuaded that this case presents a situation in which *Powell Duffryn*’s focus on the plaintiff’s interest in the ‘waterway’ into which unlawful pollution flows passes Article III bounds.”). We’ve also held that the *Powell Duffryn*-*Cedar Point*-*Gaston Copper-Parsons* standard must be limited to “a case involving a small body of water, close proximity, well-understood water currents, and persistent discharges.” *Ctr. for Biological Diversity v. EPA*, 937 F.3d 533, 545 (5th Cir. 2019). And although we have at least one Clean Air Act case that describes *Cedar Point* as “the law in this Circuit,” *Texans United for a Safe Economy Education Fund v. Crown Central Petroleum Corp.*, 207 F.3d 789, 793 (5th Cir. 2000), apparently we’ve never applied the *Powell Duffryn*-*Cedar Point*-*Gaston Copper-Parsons* traceability standard to air pollution. (Indeed, it’s quite awkward to do so because that standard turns on whether the relevant waterway is “large”—an adjective that makes no sense as applied to air.)

II.

Today's panel confronted the unenviable task of making sense of the *Powell Duffryn-Cedar Point-Gaston Copper-Parsons* line of cases; squaring it with *Crown Central*, *Center for Biological Diversity*, and *Texans United*; and then attempting to reconcile the whole mess with Article III of the Constitution. I admire the majority's efforts to square the circle. In my view, however, it's impossible.

A.

Let's start with the common ground between the majority and me. We all agree that the *Powell Duffryn-Cedar Point-Gaston Copper-Parsons* line of cases allows for something less than "tort-like . . . proximate cause" to establish traceability. *See ante*, at 368–69 & n.4. Of course, that does not excuse the plaintiffs from proving *but-for* causation.

After all, the Supreme Court long has held that a plaintiff's injuries are not fairly traceable without but-for causation. *See, e.g., Allen v. Wright*, 468 U.S. 737, 758, 104 S.Ct. 3315, 82 L.Ed.2d 556 (1984) (holding that plaintiffs failed to establish traceability because "it is entirely speculative . . . whether withdrawal of a tax exemption from any particular school would lead the school to change its policies"—that is, whether the tax exemption is the but-for cause of plaintiffs' injuries); *Duke Power Co. v. Carolina Envtl. Study Grp., Inc.*, 438 U.S. 59, 74–78, 98 S.Ct. 2620, 57 L.Ed.2d 595 (1978) (holding that "a 'but for' causal connection" between plaintiff's injury and defendant's act sufficed for traceability); *Warth v. Seldin*, 422 U.S. 490, 505, 95 S.Ct. 2197, 45 L.Ed.2d 343 (1975) (holding that Article III requires plaintiffs "to establish that, in fact, the asserted injury was the

consequence of the defendants' actions"); *see also* Richard H. Fallon, Jr., *Of Justiciability, Remedies, and Public Law Litigation: Notes on the Jurisprudence of Lyons*, 59 N.Y.U. L. REV. 1, 17 n.91 (1984) (observing that the Supreme Court's causation analysis "replicate[s] the tort law concept of 'cause in fact' or 'but for' causation"). As have some of our sister circuits. *See, e.g., Cmty. Nutrition Inst. v. Block*, 698 F.2d 1239, 1247 (D.C. Cir. 1983) ("A plaintiff need only make a reasonable showing that 'but for' defendant's action the alleged injury would not have occurred."); *cf. Honeywell Int'l, Inc. v. EPA*, 705 F.3d 470, 472 (D.C. Cir. 2013) (Kavanaugh, J.) ("Honeywell's injury is fairly traceable to the now-permanent 2008 interpollutant transfers by Arkema and Solvay because the injury would not have occurred but for the 2008 transfers."). Even the Third Circuit—which gave us the unfortunate *Powell Duffryn* standard says the traceability "requirement is akin to 'but for' causation in tort and may be satisfied even where the conduct in question might not have been a proximate cause of the harm." *Finkelman v. Nat'l Football League*, 810 F.3d 187, 193 (3d Cir. 2016) (quotation omitted).

Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc., 528 U.S. 167, 120 S.Ct. 693, 145 L.Ed.2d 610 (2000), obviously says nothing to the contrary. The Court in that case did not say anything at all about but-for causation. And it certainly didn't purport to overrule any of its traceability cases that applied but-for causation—like *Allen v. Wright* or *Duke Power*. Reasonable people might disagree—as the Justices did in *Laidlaw* over whether Friends of the Earth proffered sufficient evidence of traceability. *See ante*, at 368 n.4

(summarizing the disagreement). But that doesn't mean *Laidlaw* announced *sub silentio* a new legal standard. See *Steel Co. v. Citizens for a Better Env't*, 523 U.S. 83, 91, 118 S.Ct. 1003, 140 L.Ed.2d 210 (1998) ("We have often said that drive-by jurisdictional rulings of this sort . . . have no precedential effect."). So the but-for causation requirement remains part of the irreducible constitutional minimum for Article III traceability.

B.

So where do I diverge from the majority? First, it's not obvious to me that the *Powell Duffryn-Cedar Point-Gaston Copper-Parsons* doctrine should apply at all. As noted above, *Cedar Point* turns on whether a particular body of water is "large." 73 F.3d at 558 n.24. Whatever sense that might make in water-pollution cases, it makes little or none in air-pollution cases.

Second, even if the *Powell Duffryn-Cedar Point-Gaston Copper-Parsons* doctrine applies, the en banc court should revisit it. The district court already has conducted two trials in this case. We are remanding for a third. And there's no guarantee that the third time will be a charm. One problem with an inherently indeterminate doctrine—like *Powell Duffryn* and its progeny—is that it cannot generate predictable results the first time around.

To illustrate, consider a hypothetical plaintiff Bob who lives in Baytown. Bob has asthma—that is, an injury. The question is whether his asthma injury is traceable to Exxon's illegal emissions. From January 1 through January 10, Bob was visiting his sister in France. Meanwhile:

- On January 2, Exxon emitted pollutants that “could have reached beyond the Exxon complex into the offsite areas of Baytown where Plaintiffs’ members lived and recreated.” *Ante*, at 370.
- On January 5, Exxon released “pollutants in excess of nonzero emissions limits” or that constituted “a ‘reportable quantity’ under state regulations.” *Ante*, at 370.
- On January 8, Exxon emitted pollutants “that could have caused or contributed to flaring, smoke, or haze, even if the emission was of a small magnitude.” *Ante*, at 371.

Can Bob recover for these emissions? Obviously, our decision today doesn’t say. And I don’t know the answer under the *Powell Duffryn-Cedar Point-Gaston Copper-Parsons* line of cases. Nor do I envy the district court, which will have to hazard a guess. The only thing I know for sure is that Article III’s traceability requirement bars Bob from recovering a penny.

* * *

The *Powell Duffryn* framework cannot be squared with Article III’s traceability requirement. *Cedar Point*’s half-hearted adoption of *Powell Duffryn* fares little better. Although in many cases we may be able to distinguish and disapply *Cedar Point*, our ability to faithfully apply Article III should not turn on whether a lawsuit involves a lake, a Gulf, or a smokestack. At some point, our en banc court should bring our precedent in line with the Constitution.