No. 15-20030

IN THE UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT

ENVIRONMENT TEXAS CITIZEN LOBBY, INCORPORATED; SIERRA CLUB,

Plaintiffs-Appellants,

-v.-

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

Defendants-Appellees.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS

BRIEF FOR THE CITY OF HOUSTON, HARRIS COUNTY ATTORNEY, AND AIR ALLIANCE HOUSTON AS *AMICI CURIAE* IN SUPPORT OF APPELLANTS AND IN SUPPORT OF REVERSAL

Donna L. Edmundson
CITY ATTORNEY
Judith L. Ramsey
Chief, General Litigation Section
Mary Elizabeth (Mary Beth) Stevenson
Assistant City Attorney
CITY OF HOUSTON LEGAL DEPARTMENT
900 Bagby Street, 4th Floor
Houston, Texas 77002
Phone: 832.393.6259

Counsel for Amicus Curiae
City of Houston

Vince Ryan
HARRIS COUNTY ATTORNEY

Michael Hull
Senior Assistant County Attorney
1019 Congress, 15th Floor
Houston, Texas 77002
Phone: 713.274.5138

Counsel for Amicus Curiae
Harris County Attorney

(List of additional counsel inside cover.)

(Continuation of Counsel)

Kelly Haragan
ENVIRONMENTAL CLINIC
University of Texas School of Law
727 East Dean Keeton
Austin, TX 78705
Phone: 512.232.2654

Emma C. Cheuse
EARTHJUSTICE
1625 Massachusetts Ave., NW
Suite 702
Washington, DC 20036
Phone: 202.745.5220

Counsel for Amicus Curiae
Air Alliance Houston

SUPPLEMENTAL STATEMENT OF INTERESTED PERSONS

The undersigned counsel of record hereby certifies that, in addition to the persons and entities previously listed in the Certificate of Interested Parties contained in Appellants' Brief, ECF No. 00513045339, the following additional listed persons and entities have an interest in the outcome of this case, as described in the fourth sentence of Rule 28.2.1. These representations are made in order that the judges of this court may evaluate possible disqualification or recusal.

Additional Persons and Entities Affiliated With *Amici Curiae* In Support of Plaintiffs-Appellants

1. Air Alliance Houston, *Amicus Curiae*;
2. Earthjustice, and Emma C. Cheuse (Counsel for Air Alliance Houston);
3. University of Texas School of Law Environmental Clinic, and Kelly Haragan (Counsel for Air Alliance Houston);
4. City of Houston, *Amicus Curiae*; and Counsel: Mary Elizabeth (Mary Beth) Stevenson, Judith L. Ramsey, and City Attorney Donna L. Edmundson;
5. Harris County Attorney, *Amicus Curiae*; and Counsel: Harris County Attorney Vince Ryan and Michael Hull.

Respectfully submitted,

/s/ Emma C. Cheuse
Emma C. Cheuse

Counsel for Amicus Curiae Air Alliance Houston

TABLE OF CONTENTS

TABLE OF AUTHORITIES

CASES **PAGE(S)**

STATUTES

LEGISLATIVE HISTORY

FEDERAL REGISTER NOTICES

OTHER FEDERAL AGENCY MATERIALS

STATE MATERIALS

* *Authorities upon which we chiefly rely are marked with asterisks.*

STATEMENTS OF *AMICI CURIAE* PURSUANT TO RULE 29

Amici Curiae are local government entities serving the people of Houston and Harris County, Texas, and a nonprofit organization dedicated to securing clean, healthful air for Houston residents. Counsel for all parties have stated that they consent to the filing of this amicus brief. No party's counsel authored this brief in whole or in part, and no party, party's counsel, or person other than *Amici*, their members, or their counsel, contributed money intended to fund the brief's preparation or submission.

The City of Houston works to promote air quality and protect the health and well-being of all Houston residents, including through providing environmental investigation and enforcement services and through its network of fixed and mobile air monitors.

Harris County Attorney Vince Ryan represents Harris County in all civil matters filed in the state and federal courts and is responsible for enforcing the statutes and regulations designed to protect the health and environment of Harris County residents.

Air Alliance Houston is a nonprofit organization providing information and assistance to community members to improve local air quality and health protection in the Houston area.

Amici share a common interest in providing information to this Court regarding the need to ensure correct application of the Clean Air Act's health-based requirements and the enforcement of these requirements.

SUMMARY

Exxon committed thousands of Clean Air Act permit violations at its Baytown, Texas refining and chemical complex during the eight years covered by this case. The district court found nearly one hundred of these violations to be actionable under the Act's citizen suit provision. Yet the court completely denied any remedy – injunctive, monetary, or declaratory – for these violations.

As local government entities and public health advocates in the Harris County area, *Amici* have a unique perspective on the importance of this case to the health and well-being of the over four million residents of Harris County, which includes both the City of Houston and Exxon's Baytown complex. Exxon's facility is the largest petrochemical complex in the United States. It is located within the Houston-Galveston-Brazoria Ozone Nonattainment Area. This means that ozone pollution in the area around Exxon's complex is unsafe, and it has been for years. Studies commissioned by the City of Houston further illustrate myriad ways that local air pollution, including toxic pollution, is harming human health. Many of Exxon's violations released the very chemicals known to be responsible for this well-documented pollution.

Amici offer this brief to highlight the serious public health threats caused by Exxon's violations and key errors the district court made in denying any remedy for those violations. *Amici* add points illustrating how the court misinterpreted and misapplied the Clean Air Act's penalty assessment criteria, in contradiction of clear record evidence demonstrating that Exxon's violations presented a threat to public health and safety. These errors were compounded by the court's failures to both calculate and recover through a civil penalty any of the economic benefit that Exxon gained by not taking actions necessary to prevent these violations. As a result, the district court abused its discretion in not requiring Exxon to pay any penalty for its violations, and in denying an injunction to ensure the permit violations would finally cease. The need for reversal is even greater in light of the thousands of additional violations that should be recognized as actionable in this citizen suit. The district court's failure to provide a remedy of any kind is inconsistent with the Act and with precedent applying its enforcement framework.

Thousands of violations of law require a remedy if the law is to be taken seriously. The court's failure to provide relief adversely impacts *Amici* and their constituents. Unless the law is enforced, Harris County residents will suffer increased health problems. Without injunctive relief and a penalty to recoup the economic benefit obtained through noncompliance, there will be little incentive for Exxon and other sources to comply with their permits. *Amici* respectfully request

that this Court reverse the district court's decision and remand for further proceedings to apply the Clean Air Act's enforcement framework as intended to remedy and prevent clean air violations.

ARGUMENT

I. THE CLEAN AIR ACT IS DESIGNED TO PROTECT PUBLIC HEALTH IN AREAS WITH UNSAFE LEVELS OF POLLUTION, LIKE HARRIS COUNTY.

Congress enacted the Clean Air Act (the "Act") in response to the "mounting dangers to the public health and welfare" caused by air pollution. 42 U.S.C. § 7401(a)(2). The Act is designed "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population," including through "pollution prevention." *Id.* § 7401(b)(1), (c). In 1990, Congress strengthened the Act's control requirements because the statute's public health goals had not been achieved. S. Rep. 101-228, at 11 (1989), *reprinted in* 1990 U.S.C.C.A.N. 3385, 3397 (highlighting evidence that millions of people were still exposed to high levels of harmful air pollution). A primary way in which the Act seeks to protect public health is through prohibiting stationary sources of air pollution from operating without a valid permit or in violation of the terms of a permit, which is designed to include health-based emission limits and other requirements to assure compliance with those limits. 42 U.S.C. §§ 7661a, 7661c.

Although parts of the country have made important progress in addressing air pollution, some communities remain pollution hot spots.[1] Harris County's air has consistently failed to meet health-based standards. ROA.52163-65. Ozone levels in the Houston area are higher than the current national standard.[2] Importantly, the U.S. Environmental Protection Agency ("EPA"), based on advice from its independent scientific advisory committee, has proposed strengthening the current standard in light of evidence that it is insufficient to protect public health.[3]

Both the current and proposed ozone standard have an eight-hour averaging time in recognition of the health and safety impacts caused by shorter-term

---

[1] EPA, Second Integrated Urban Air Toxics Report at xv (2014), *available at* http://www2.epa.gov/sites/production/files/2014-08/documents/082114-urban-air-toxics-report-congress.pdf ("Some areas around the country have elevated levels of risks from air toxics."). In some instances, *Amici* cite information outside of the record that is from governmental and other authoritative sources to illustrate the importance of effective Clean Air Act enforcement in Harris County. *See, e.g.*, *In re Halo Wireless, Inc.*, 684 F.3d 581, 597 (5th Cir. 2012) ("it is within the Court's discretion to take judicial notice of information … capable of accurate and ready determination by resort to a source whose accuracy on the matter cannot reasonably be questioned") (quotation omitted). *Amici* acknowledge that even if only record evidence is considered, reversal is required.

[2] Tex. Comm'n on Envtl. Quality ("TCEQ"), Nonattainment Areas, Fact Sheet (May 2012), *available at* https://www.tceq.texas.gov/assets/public/permitting/air/factsheets/factsheets-psd-na-maparea.pdf (showing Houston-Galveston-Brazoria as 8-hr Ozone Nonattainment Area (1997 and 2008 8-hr standard)).

[3] The current standard is 75 ppb ozone, and the EPA has proposed a standard between 65-70 ppb ozone, and is considering whether to further reduce the standard to 60 ppb based on information from its scientific advisory committee. *See* EPA, National Ambient Air Quality Standards ("NAAQS") for Ozone, Proposed Rule, 79 Fed. Reg. 75,234, 75,236 (Dec. 17, 2014) (proposing that the current primary ozone standard "is not requisite to protect public health with an adequate margin of safety, and that it should be revised to provide increased public health protection").

exposure to elevated ozone levels.[4] The district court assumed that exceedances of short-term (hourly) emission limits do not matter if annual limits are met. ROA.11375-76 (comparing annual authorized and unauthorized totals of emissions). That is incorrect. Short-term exposure to elevated levels of ozone causes adverse health effects and illegal short-term emissions of volatile organic compounds, like those for which Appellants seek to hold Exxon accountable, are a known cause of such ozone exceedances in the Houston area.[5]

Further, a University of Texas School of Public Health Report found "significant health threats" in the Houston area from ozone, benzene, 1,3-butadiene, and particulate matter – pollutants released during Exxon's violations. ROA.51682-83.[6] Cancer risk is high in this area and highest along the Houston Ship Channel corridor, where most of the area's petrochemical plants are located.

---

[4] *See id.*; EPA, NAAQS for Ozone, Final Rule, 73 Fed. Reg. 16,436, 16,742-43 (Mar. 27, 2008).

[5] Murphy, C., *et al.*, "Hydrocarbon Emissions from Industrial Release Events in the Houston-Galveston Area and Their Impact on Ozone Formation," 39 Atmospheric Envt. 3785-98 (2005), *available at* http://www.sciencedirect.com/science/article/pii/S135223100500261X# ("Industrial emission events can lead to elevated concentrations of ozone. Specifically, peak, area-wide ozone concentration can be increased by as much as 100 ppb for large HRVOC [Highly Reactive Volatile Organic Compound] emission events."); *see also* EPA, Approval and Promulgation of Implementation Plans, 75 Fed. Reg. 68,989, 68,996 (Nov. 10, 2010) (explaining local "flaring and upset events could contribute to ozone NAAQS nonattainment").

[6] Appellants' expert's report referenced the following study: Univ. of Tex. School of Pub. Health, "A Closer Look at Air Pollution in Houston: Identifying Priority Health Risks," *available at* http://www.greenhoustontx.gov/reports/UTreport.pdf.

ROA.51682, ROA.51848. Cancer is the second-leading cause of death in Harris County and the leading cause of death for the county's Latino population.[7]

In Harris County, there are significant subpopulations of people who are more likely to suffer adverse health effects from exposure to air pollution, including: almost 800,000 people living in poverty, almost 400,000 seniors, and over 1 million children.[8] ROA.51683-84. Recent studies have found that children living near the Houston Ship Channel have a significantly elevated risk of childhood leukemia compared with children living farther from the ship channel. ROA.51687; *see also* ROA.51816-24 (study linking residential proximity to benzene releases and incidence of Non-Hodgkin Lymphoma). Other at-risk populations in Harris County include: over 100,000 pediatric and over 225,000 adult asthma sufferers; over 150,000 people with Chronic Obstructive Pulmonary Disease; and over 215,000 people with cardiovascular disease.[9] Studies by researchers from Rice University have shown a direct correlation between increases in ozone pollution in the Houston area and out-of-hospital cardiac arrests

[7] Harris Co. Pub. Health & Envtl. Servs., Leading Causes of Death in Harris County, Texas at 1 tbl.1 (Feb. 2014), *available at* http://www.hcphes.org/UserFiles/Servers/Server_72972/File/Death.pdf (citing data from Texas Department of State Health Services, Center for Health Statistics, 2011).

[8] American Lung Ass'n, State of the Air 2015 at 151 (2015), *available at* http://www.stateoftheair.org/2015/assets/ALA_State_of_the_Air_2015.pdf.

[9] State of the Air 2015 at 151 (2015), *supra* n.8.

(which have a greater than 90% death rate).[10] In response, the City of Houston is now investing in Cardiopulmonary Resuscitation training in communities that are at risk due to air pollution.[11] The harms caused by air pollution go beyond the direct health impacts, and include increased hospital visits, lost school and work days, and a range of other impacts to the local community.[12]

The Clean Air Act is designed to protect particularly vulnerable communities, like those in Harris County and surrounding areas, by reducing the dangerous levels of air pollution they breathe. *See, e.g.*, 42 U.S.C. §§ 7502-15 (requiring particular protections in nonattainment areas); S. Rep. 101-228, at 35, 129, 1990 U.S.C.C.A.N. at 3421, 3514 (citing ozone problems in Houston area specifically; and, regarding amendments to the toxics program, citing "an equity concern, the very high risk of health problems experienced by individuals living near large industrial facilities or in highly developed urban corridors").

---

[10] Ensor, K., *et al.*, "A Case-Crossover Analysis of Out-of-Hospital Cardiac Arrest and Air Pollution," 127 *Circulation* 1192-99 (2013), *available at* http://circ.ahajournals.org/content/early/2013/02/13/CIRCULATIONAHA.113.000027.full.pdf.

[11] City of Houston, "Study Identifies String of Houston Neighborhoods at Higher Risk for Cardiac Arrests Also Lack Knowledge of CPR" (July 2013), http://www.houstontx.gov/health/NewsReleases/bystander.html.

[12] *See, e.g.*, EPA, The Benefits and Costs of the Clean Air Act 1990 to 2020, Final Report Rev. A at 8-12 to 8-17 (Apr. 2011), *available at* http://www.epa.gov/cleanairactbenefits/feb11/fullreport_rev_a.pdf (explaining assessment of costs of air pollution and benefits of reductions based on lost work-days, hospital visits, and other indicators).

II. ENFORCEMENT IS CRITICAL TO ACHIEVE THE ACT'S GOALS.

Any law loses its force if it can be broken over and over again without consequence. As the House Report accompanying the 1990 Amendments to the Clean Air Act explained:

> Enforcement is an important part of any law. Without it, the law's policy and requirements will have little impact. Thus, it is important that there are adequate and effective enforcement tools and that they are properly, effectively, timely, and fairly utilized.

H.R. Rep. 101-490(I), at 390 (1990), *reprinted in* 2 Legislative History of the Clean Air Act Amendments of 1990, 3021, 3414 (1993).

Congress provided federal Clean Air Act enforcement authority to the EPA. 42 U.S.C. § 7413(a)-(d). It determined, however, that such authority would be insufficient, alone, to render the Clean Air Act effective. Thus, it added the citizen suit enforcement provision. *Id.* § 7604(a); *Natural Res. Def. Council v. Train*, 510 F.2d 692, 700 (D.C. Cir. 1974) (explaining that due to possibility that government enforcement might falter or stall, "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"). In 1990, Congress strengthened this provision, including by authorizing citizen suits to seek civil penalties, as well as injunctive relief.

Government enforcement alone has proved insufficient to address clean air violations in Texas. For example, the Texas Commission on Environmental Quality, the primary state environmental enforcement agency, brings enforcement actions for only a small percentage of the environmental violations it documents.[13] And while the City of Houston and Harris County pursue their own environmental enforcement actions when possible and appropriate, they face declining budgets and an expanding universe of area air pollution sources. As the record shows, investigation and prosecution of even one of these cases – which culminated in a 13-day trial in this instance – takes substantial time and resources.

Recognizing the limits on its own enforcement capacity, the U.S. Department of Justice ("DOJ") Environment and Natural Resources Division "views citizen enforcement as an important tool" because:

> The responsible exercise of citizen enforcement proceedings provides a strong incentive for regulated entities to comply with the law. Thus, citizen suits help fill the gap between the government's limited

[13] TCEQ Enforcement Div., Annual Enforcement Report Fiscal Year 2014, at pp. 1-7, 2-1 to 2-2, 2-5, 4-6, figs.1-4, 2-1, 2-2, tbls.2-2, 4-1 (Nov. 2014), *available at* https://www.tceq.texas.gov/assets/public/compliance/enforcement/enf_reports/AER/FY14/enfrptfy14.pdf (showing that in 2014, TCEQ issued over 15,000 Notices of Violation, but obtained only about 1,700 administrative enforcement orders, 13% of which were for air violations, and only 23 civil judicial orders).

> enforcement resources and the number of violations that may warrant enforcement.[14]

Like DOJ, *Amici* support ensuring citizen suits remain an available and meaningful avenue for filling the expanding enforcement gap and, thus, assuring deterrence of clean air violations.

To deter violations of the Act, courts must apply the statute as written and enforce emission limits in permits without creating extra-statutory hurdles. Congress intended for the courts to enforce, rather than second-guess, the objective limits in rules and permits established by EPA and state permitting authorities. *Train*, 510 F.2d at 723-24 (citing legislative history stating citizen suit provision "would not substitute a 'common law' or court-developed definition of air quality" because "[t]hese matters would have been settled in the administrative procedure leading to an implementation plan or emission control provision") (citation omitted); *see also Virginia v. Browner*, 80 F.3d 869, 873 (4th Cir. 1996) (explaining an air permit is intended to act as "a source-specific bible for Clean Air Act compliance").

[14] Pauline Milius, U.S. Dep't of Justice, Chief, Env't & Natural Resources Div., "Role of the Policy, Legislation, and Special Litigation Section," 48 U.S. Attorney's Bulletin 12, 14 (Feb. 2000), *available at* http://www.justice.gov/sites/default/files/usao/legacy/2006/06/30/usab4801.pdf.

III. GRANTING NO REMEDY OF ANY KIND FOR VIOLATIONS THAT IMPERILED PUBLIC HEALTH WAS CONTRARY TO THE ACT AND AN ABUSE OF DISCRETION.

The nearly one hundred repeated violations the district court found actionable, as well as the thousands of uncontested additional violations, warrant a remedy. ROA.11436; ROA.11438-43; ROA.11413; *see infra* Part IV. Exxon must not be allowed to avoid taking responsibility for its permit violations, while the people of Harris County who have no ability to prevent these violations face real consequences for their health and well-being. This Court should reverse the district court's errors of law and fact in denying both a penalty and injunctive relief, to ensure that Exxon's years of repeated non-compliance at the Baytown complex finally come to an end.

A. THE DECISION TO AWARD NO CIVIL PENALTY SHOULD BE REVERSED.

The Clean Air Act requires district courts to consider specified criteria in determining the amount of any penalty. 42 U.S.C. § 7413(e); *Pound v. Airosol Co.*, 498 F.3d 1089, 1098 (10th Cir. 2007); *U.S. ex rel. Adm'r of EPA v. CITGO Petrol. Corp.*, 723 F.3d 547, 553 (5th Cir. 2013) (reversing CWA penalty under similar provision, read *in pari materia* with CAA provision). *Amici* offer additional information on the court's failure to properly consider two of the key statutory penalty assessment factors: "the seriousness of the violation[]," and "the economic benefit of noncompliance," *Pound*, 498 F.3d at 1098 (interpreting 42

U.S.C. § 7413(e)(1)). As the EPA has emphasized, proper treatment of these two factors is vital to achieve the goal of deterrence through a penalty that "recovers the economic benefit of noncompliance" and "reflects the seriousness of the violation."[15] And as the Supreme Court has explained, "[a] would-be polluter may or may not be dissuaded by the existence of a remedy on the books, but a defendant once hit in its pocketbook will surely think twice before polluting again." *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 186 & n.2 (2000).

1. THE RECORD SHOWS VIOLATIONS THAT ARE SERIOUS FOR PUBLIC HEALTH AND SAFETY.

The district court committed reversible error by misapplying the statutory "seriousness" factor in ruling that no proven violations were serious. ROA.11429.

i. <u>The District Court Committed Errors Of Law And Fact In Finding That No Emission Releases Caused Serious Health Threats.</u>

Despite acknowledging that some of Exxon's violations "were more serious," the court nonetheless found that the seriousness factor did not support a penalty for even these more serious violations because it found that some of

[15] EPA, Clean Air Act Stationary Source Civil Penalty Policy at 4 (Oct. 25, 1991) ("EPA Penalty Policy"), *available at* http://www2.epa.gov/sites/production/files/documents/penpol.pdf. EPA interprets and applies the penalty assessment factors in § 7413(e)(1) in assessing penalties in its own enforcement actions. *Id.* (authorizing the "Administrator" to determine appropriate penalty in administrative actions under § 7413(d)). Although EPA's statutory interpretation of § 7413(e)(1) is not binding on the courts, its application of the penalty factors provides relevant guidance. *See, e.g., Pound*, 498 F.3d at 1100 (citing EPA Penalty Policy).

Exxon's violations were "less serious" in terms of the amount of pollution released. ROA.11423-25. The court thus erred by ruling that less serious violations can somehow reduce the seriousness of more serious violations. Instead, "the gravity component factors … should be calculated separately for each violation." EPA Penalty Policy at 22, *supra* n.15.

For example, a violation that increases the cancer threat to residents near Exxon's fenceline is not made any less serious simply because another violation did not last as long or emit as dangerous a pollutant. Furthermore, over eight years, Exxon repeatedly released dangerous chemicals into a community already overburdened by air pollution. "Generally, the longer a violation continues uncorrected, the greater the risk of harm." EPA Penalty Policy at 9, 10, *supra* n.15 (also considering "sensitivity" of the area where violation occurred); *cf. United States v. Marine Shale Processors*, 81 F.3d 1329, 1357-58 (5th Cir. 1996) (affirming CAA fine where violations had continued for years). Each of Exxon's violations must be understood to have a cumulative effect, increasing the resulting

health threats and overall seriousness. The district court's ruling that some violations diminished the seriousness of other violations should be reversed.[16]

Also requiring reversal is the district court's clearly erroneous finding that there was no "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." ROA.11426. The district court's conclusion was untenable, given the extensive evidence of harm in the record. *Amici* highlight the following three significant examples to show that reversal is required.

Evidence of cancer-causing, hazardous air pollution. Exxon's violations releasing toxic or hazardous air pollutants, many of which cause harm at extremely low levels of human exposure, are more serious and should result in larger

[16] Exxon's emissions are likely higher even than the record shows. Experts Ranajit Sahu and Keith Bowers testified for Appellants regarding the underestimation of flare emissions and methods to reduce such emissions, respectively. ROA.13146-48; ROA.12844-45. Although the district court stated in a footnote that it was "not persuaded by" Sahu, ROA.11425 n.247, since that time new information has confirmed that pollution from flares at refineries is likely greater than reported because most past reports have been based on outdated information about flare destruction efficiency rates and emission factors. *See, e.g.*, Memorandum from Jeff Coburn, RTI International to Andrew Bouchard and Brenda Shine, Office of Air Quality Planning Standards, EPA, Petroleum Refinery Sector Rule: Flare Impact Estimates at 9 tbl.4 (Jan. 16, 2014), *available at* http://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OAR-2010-0682-0209&disposition=attachment&contentType=pdf (using flare data showing an average volatile organic compound control efficiency rate of 93.9% instead of the previously assumed 98%: "[it is clear . . . that flares may be a much larger source of emissions than projected"); *see also* EPA, New and Revised Emission Factors for Flares and Other Refinery Process Units, Final Action, 80 Fed. Reg. 26,925 (May 11, 2015). *Amici* note that in the mid-2000s, Mr. Bowers provided technical consulting on similar issues with a predecessor organization to Air Alliance Houston.

penalties. EPA Penalty Policy at 9, *supra* n.15 (considering the "[t]oxicity of the pollutant" as part of the seriousness factor).

In particular, "health policy since the mid-1950s has been premised on the principle that there is no safe level of exposure to a carcinogen." S. Rep. 101-228, at 175, 1990 U.S.C.C.A.N. at 3560 (emphasis added). Thus, violations involving emissions of carcinogens warrant a penalty. *Cf. United States v. Midwest Suspension & Brake*, 824 F. Supp. 713, 737 (E.D. Mich. 1993) (because asbestos has no safe level of exposure "as a matter of law . . . the violations are very serious"), *aff'd*, 49 F.3d 1197 (6th Cir. 1995). Moreover, there are significant cancer threats presented by existing local air pollution. *See supra* Part I. For *Amici* who provide services to and are concerned about the well-being of their constituents who are cancer patients, it defies reason to ignore the credible evidence of the cancer-causing effects of Exxon's violations when assessing the seriousness factor. Yet the district court's opinion includes no reference to the toxicity of the pollutants released or the cancer threats caused by the violations. Reversal is warranted to assure proper consideration of all unlawful releases of cancer-causing pollutants, including over 370 days of violations for benzene alone. *See, e.g.*, Appellants' Br. at 41, 85 (citing ROA).

Evidence of ozone pollution. The releases of ozone-forming chemicals, including volatile organic compounds and nitrogen oxides, associated with at least

40 permit violations, are plainly serious. *Id.* at 84 (citing ROA). Yet, the district court failed to acknowledge Houston's serious ozone problem in rendering its decision. The only reference to ozone anywhere in the opinion is in a footnote.

Ozone inflames the lungs, harms lung function, makes it more difficult to breathe freely, and exacerbates asthma. Breathing ozone can also cause other kinds of respiratory and cardiovascular problems, premature death, and central nervous system and developmental harm. Children, people with asthma, the elderly, people who work outdoors, and people with other kinds of existing health problems are particularly vulnerable to the effects of breathing ozone.[17] About 7 percent of children in Harris County have asthma according to 2007-2010 data.[18] As levels of ozone in the air increase, so does the severity of health problems. For this reason, EPA publishes an air quality index to warn people when ozone levels are high and to suggest reducing time outdoors.[19]

---

[17] *See, e.g.*, ROA.51682-51685; ROA.13529; *see also* EPA, Integrated Science Assessment for Ozone and Related Photochemical Oxidants at 1-6 to 1-8 (Feb. 2013), *available at* http://ofmpub.epa.gov/eims/eimscomm.getfile?p_download_id=511347; EPA, Ground-level Ozone, Health Effects, http://www.epa.gov/air/ozonepollution/health.html (last updated Nov. 26, 2014).

[18] Tex. Dep't of State Health Servs., Asthma Burden Among Children in Harris County, Texas, 2007 to 2012 at 3 tbl.2, 4 tbl.3 (Oct. 2014), *available at* http://www.dshs.state.tx.us/asthma/pdf/Data-Requests/FINAL-for-website–-Asthma-Burden-Among-Children-in-Harris-County,-Texas,-2007-to-2012_10-24-14.doc (1,103 asthma hospitalizations in 2011).

[19] *See* EPA, Air Quality Index - A Guide to Air Quality and Your Health, http://www.airnow.gov/index.cfm?action=aqi_brochure.index (last updated Oct. 3, 2014) (explaining the index); ROA.13417-18 (expert testimony on high ozone days).

Ozone levels in Houston and Harris County are already above the current health-based national standards, and far above what EPA's independent science advisors have found is necessary to protect public health. *See supra* n.3. Certain permit limits Exxon violated were established to prevent ozone exceedances. *See, e.g.*, ROA.13837-38 (Exxon testimony that volatile organic compound limits were designed to address ozone pollution); ROA.51699-700 (Appellants' expert report). In interpreting the "seriousness" penalty factor, EPA has acknowledged "excessive emissions in a nonattainment area are usually more serious than excessive emissions in an attainment area." EPA Penalty Policy at 9, *supra* n.15. Accordingly, illegal emissions of ozone-causing chemicals in an area where ozone levels *already violate* health standards are by definition serious violations that warrant a penalty. *See, e.g.*, *Train*, 510 F.2d at 723 (directing courts not to second-guess emission limits in citizen enforcement suits).

Evidence of emission events creating safety threats. The record also documents violations that caused immediate safety concerns as well as emission releases, such as those involving leaks of flammable chemicals, and fires. ROA.12781-84 (expert testimony explaining how leaks and other deviations are "near misses" and "warning events" connoting serious threats); *see also* ROA.12803, ROA.12809-19 (additional testimony on leaks and corrosion); ROA.51118-250 (list of 1,758 leak emission events); ROA.12837-39 (expert

testimony Tr. 4-133-35), ROA.51274-95 (list of 353 fire emission events). Yet the district court failed to find the potential harm presented by these violations to be serious. ROA.11429.

Of the over 55 individual facility investigations by the U.S. Chemical Safety Board ("CSB") in the last decade, more than half involved refineries, chemical plants, or petrochemical operations, including the February 2015 explosion at Exxon's Torrance, California refinery.[20] The Houston area has seen too many petrochemical plant accidents that have killed and injured plant workers and endangered nearby communities. Most recently, in 2014 a chemical leak at a DuPont Plant in LaPorte killed four workers.[21] The record shows that problems leading up to the Chevron Richmond (California) refinery fire in 2012 were similar to incidents reported at Exxon's Baytown complex and illustrate the explosion risks and serious safety threats presented by such incidents. ROA.12785-89, ROA.12793-95; ROA.50371-86 (Bowers testimony and report, including evaluation of CSB Chevron Richmond report).[22]

---

[20] CSB, ExxonMobil Refinery Explosion, http://www.csb.gov/exxonmobil-refinery-explosion-/ (stating that investigation is currently ongoing); *see also* CSB, Completed Investigations, http://www.csb.gov/investigations/completed-investigations/?Type=2 (listing 52 investigations from 2005 to 2015, including 24 at petrochemical facilities).

[21] CSB, DuPont LaPorte Facility Toxic Chemical Release, Nov. 15, 2014, Investigation Information, http://www.csb.gov/dupont-laporte-facility-toxic-chemical-release-/.

[22] CSB, Chevron Refinery Fire, http://www.csb.gov/chevron-refinery-fire/ (final report released on Jan. 28, 2015).

Petrochemical plants are volatile environments where even small deviations from protocols can lead to death. Violations associated with onsite fires and other similar problems could have extremely serious consequences to health, and thus warrant treatment as serious infractions.

In sum, reversal is warranted because no proper application of the "seriousness" factor to the substantial and credible evidence of health and safety impacts in the record could possibly result in the conclusion that Exxon committed no serious violations of any kind.

ii. It Was An Error Of Law To Find That Deviations Not Associated With Direct Emissions, Including Reporting, Recordkeeping, and Monitoring Violations, Are Not Serious.

The district court also erred by finding that, because they did not involve unauthorized emissions, Exxon's reporting, recordkeeping, and emission testing violations were necessarily not serious. ROA.11429; ROA.11369 (citing ROA.14261-62, ROA.39161-261). The Act's penalty provision does not include this bright-line rule. Rather, courts have awarded penalties for reporting violations. *See, e.g.*, *United States v. Vista Paint Corp.*, No. EDCV 94-0127 RT, 1996 WL 477053, at *13, *16 (C.D. Cal. Apr. 16, 1996) (applying CAA penalty of $552,250 for reporting and recordkeeping violations), *aff'd* 129 F.3d 129, 1997 WL 697295 (9th Cir. Nov. 4, 1997); *see also Sierra Club v. Simkins Indus., Inc.*, 847 F.2d 1109, 1111 (4th Cir. 1988) (affirming CWA civil penalty of $977,000 for

monitoring and reporting violations occurring for over two and one-half years), *abrog. in part on other grounds as recognized by Friends of Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc.*, 149 F.3d 303, 306 n.4 (4th Cir. 1998). It was error for the court to assume, without analysis, that all violations that did not result in immediate unauthorized emissions were necessarily not serious.

The record includes significant examples of serious violations of reporting, recordkeeping, and monitoring requirements. For example, Exxon failed to file timely reports or keep records as required. ROA.39224 (PX 7A, Row 487: notification of failed inspections not submitted); ROA.39236 (Row 597: failure to file timely report); ROA.39209 (Row 376: failure to file timely report of exceedance); ROA.39227 (Row 518: "Annual leak testing reports were missing required information"); ROA.39228 (Row 520: "reconstruction notification … was not sent"); ROA.39228 (Row 521: "records were not maintained for lower explosive limit detectors"). Exxon failed to perform required testing and monitoring to assure compliance. *See, e.g.*, ROA.39228 (Row 522: "numerous … valves and connectors were not monitored"); ROA.39231 (Row 544: failure to timely monitor safety relief valve released after power failure); ROA.39233 (Rows 566, 574: testing not performed); ROA.39237 (Row 605: failed to monitor flares to assure effective). Exxon also failed, for a year and a half, to install required continuous emission monitors on furnace stacks. ROA.39176 (Rows 106-110).

The failure to comply with monitoring, recordkeeping, and reporting requirements can mask emission-release violations and delay compliance with pollutant limits. That is why the Act requires each permit to include "inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance." 42 U.S.C. § 7661c(c); *see also id.* § 7661b(b)(1)-(2) (requiring progress reports on compliance, certification, and "to promptly report any deviations from permit requirements"). As this Court has recognized, the Act's reporting and disclosure requirements "play a crucial role in assuring effective citizen enforcement" and "are designed to ensure that 'citizen enforcers' will have access to any and all information they will need in prosecuting enforcement suits or in deciding whether to bring them." *NRDC v. EPA*, 489 F.2d 390, 397 (5th Cir. 1974) (construing predecessor to 42 U.S.C. § 7661b(e)), *rev'd in part on other grounds sub nom.*, *Train v. NRDC*, 421 U.S. 60 (1975).

Reporting and monitoring violations have significant "[i]mportance to the regulatory scheme," and to the actual level of compliance by permitted facilities, and thus are "serious" enough to aggravate a penalty. EPA Penalty Policy at 9, *supra* n.15. Reporting, monitoring, and recordkeeping requirements "enable the State, EPA, and the public to better determine the requirements to which the source is subject, and whether the source is meeting those requirements." S. Rep. 101-228, at 347, 1990 U.S.C.C.A.N. at 3730.

Reversal is needed to ensure that the district court conducts the required evaluation of the seriousness of these violations, rather than assuming they are *de facto* not serious.

2. THE FINDING OF ZERO ECONOMIC BENEFIT FROM NON-COMPLIANCE WAS BASED ON MISAPPLICATION OF THE STATUTORY TEST.

As this Court has recognized, "the economic benefit factor creates a nearly indispensable reference point" for assessing a reasonable penalty. *CITGO*, 723 F.3d at 553-54 (reversing penalty based on flawed economic benefit determination); 42 U.S.C. § 7413(e)(1). The district court's finding of zero economic benefit does not reflect a "reasonable approximation" of the economic benefit, as required. ROA.11423; *CITGO*, 723 F.3d at 549. The opinion includes no reasoned method to support its finding. The district court did not consider costs routinely included in economic benefit calculations. "Typically, a violator benefits economically by avoiding or delaying the construction of antipollution equipment that would have placed it in compliance." *United States v. Mun. Auth.*, 150 F.3d 259, 266 (3d Cir. 1998) (discussing available methods and affirming CWA penalty to recoup "wrongful profits"); *see also* EPA Penalty Policy at 4, 15, *supra* n.15 (prioritizing recouping "costs which are delayed by noncompliance" and "costs which are avoided completely by noncompliance").

The district court's disagreement with Appellants' expert regarding the amount of economic benefit was insufficient, alone, to support its finding. And, the court's consideration of Exxon's costs for current or future projects that, if undertaken earlier, could have at least partly avoided violations was improper and cannot be used to reduce benefit received from delayed costs. The benefit calculation requires a "retrospective rather than a prospective analysis." *Pound*, 498 F.3d at 1099-100.

The district court's failure to require a penalty based on the economic benefit Exxon obtained is not only unfair to any competitors who have complied with the Clean Air Act, but also weakens the incentive for future compliance. The petrochemical sector along the Houston ship channel is the largest in the country and the Port of Houston is the sixth largest port in the world.[23] It is simply impossible for *Amici* or other government agencies to constantly monitor Clean Air Act compliance at all area pollution sources. To fill the gap, the Clean Air Act's robust penalty provisions must provide a strong compliance incentive. *See* 136 Cong. Rec. S16,903/2 (daily ed. Oct. 27, 1990) (Exhibit 1 to statement of Sen. Mitchell), *reprinted in* 1 Legislative History of the Clean Air Act Amendments of 1990, at 789 ("[f]acilities subject to the requirements of the Act must know that compliance is the best and least expensive route for them to choose.").

[23] A Closer Look at Air Pollution in Houston: Identifying Priority Health Risks at 8, *supra* n.6.

B. THE DECISION TO DENY INJUNCTIVE RELIEF SHOULD BE REVERSED.

The district court also abused it discretion in determining that no injunctive relief was warranted, in view of the recurring violations shown in the record. ROA.11435; *see* ROA.55544-47 (violations during 2013); ROA.13688-90 (violations during trial, referring to ROA.13284). Appellants met the test for an injunction: (1) irreparable injury has occurred; (2) remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) the balance of hardships favors a remedy in equity; and (4) the public interest would not be disserved. *ITT Educ. Servs. v. Arce*, 533 F.3d 342, 347-48 (5th Cir. 2008) (affirming injunction to remedy breach of confidentiality agreement for which there was "no cure").

The first two factors and factor four tip the balance toward an injunction. Appellants succeeded in proving nearly one hundred actionable violations, and showed that thousands more violations that should have been found actionable also occurred. *See supra* Part III.A.1, *infra* Part IV. In addition, the demonstrated harm from cancer and ozone-causing pollution, the catastrophic risk from safety problems, and the other harms highlighted above and in the record, "cannot be undone" by monetary damages. *See, e.g.*, *City of Meridian v. Algernon Blair, Inc.*, 721 F.2d 525, 529 (5th Cir. 1983) (citation omitted). These harms are more than enough to show that irreparable injury has occurred and will continue if Exxon's

violations do not end, and that an injunction to stop such violations is in the public interest.

In denying the injunction, the court relied mainly on the potential burdens of an injunction under factor three. ROA.11434-35. But, Exxon's costs associated with a tailored injunction would be equivalent to what it is required to spend to ensure compliance with its air permits, and thus such costs must be presumed reasonable. Further, although any injunction poses some judicial burden, a court has full equitable power to "craft[] an injunction to balance the equities" in an appropriate manner to minimize such burdens. *See, e.g.*, *Abraham v. Alpha Chi Omega*, 708 F.3d 614, 627 (5th Cir. 2013).

In sum, the balance tips so heavily toward injunctive relief that it was an abuse of discretion to deny an injunction. *Cf.*, *Nat'l Ass'n of Farmworkers Orgs. v. Marshall*, 628 F.2d 604, 616 (D.C. Cir. 1980) (holding in reversing district court's denial of preliminary injunction that short-term economic burdens it might cause "would never approach the value of the children's health to the nation"). The court's failure to grant an injunction is an even greater abuse of discretion in light of the court's failure to award relief of any kind to end and prevent Exxon's permit violations, leaving the local community with no remedy or protection. *See supra* Part III.A.

IV. EXXON SHOULD BE HELD ACCOUNTABLE FOR ALL REPEATED VIOLATIONS.

The district court's finding that no more than 94 violations were actionable should be reversed because it both misinterpreted and misapplied the statutory requirement that a violation must be continuing or must have been "repeated" to be actionable in a citizen suit. 42 U.S.C. § 7604(a)(1); *see, e.g.*, ROA.11397 ("Plaintiffs must prove repetition of the *same, specific* limitation."); ROA.11398, ROA.11400-03 (same).[24] The district court's interpretation limiting repeated violations to those which exceed an identical numerical emission limit threatens to allow violators to evade citizen suit liability for serious violations that are part of an ongoing pattern of noncompliance.

In 1990, Congress amended the Act specifically to expand the scope of citizen enforcement, by clarifying that wholly past violations are actionable in citizen suits if "repeated" at least once. 42 U.S.C.§ 7604(a)(1); CAA Amendments of 1990 Chafee-Baucus Senate Managers' Statement, 136 Cong. Rec. S16,953/1 (daily ed. Oct. 26, 1990), 1 Legislative History of the Clean Air Act Amendments of 1990, at 946 ("It is the intention of the conferees that citizens should be allowed to seek civil penalties against violators of the act whenever two or more violations

[24] Regardless, even under the district court's own interpretation, the court's refusal to find many more violations were actionable was clearly erroneous as a matter of fact, for reasons shown in Part II of Appellants' Brief.

have occurred in the past."). It would undermine the Act's objectives to limit this provision as the district court did; instead, this Court should hold that violations are repeated if they are violations of the limit applicable to the same pollutant from the same emission point or the same group of emission points (under a single flexible permit cap), even if some changes in the "specific" numeric limit occur over time.

The numeric limits in Texas permits are modified frequently, often at the request of the permittee and often with no public notice or review.[25] This is particularly true for "flexible permits" – which cover multiple emission points under a single cap. With a flexible permit, operational adjustments at any one of the multiple units subject to the cap, or the addition or deletion of units from the cap, can require changes to the cap's numeric emission limits.[26] In addition, many flexible permits expressly require permittees to comply with increasingly stringent numeric limits that are phased in over time. For example, Exxon's Flexible Permit 18287 required Exxon to meet increasingly stringent limits on nitrogen oxides that were phased in each year between 2001 and 2005. *See* ROA.43788 (permit as

[25] TCEQ allows companies to make certain changes to their emission limits through permits by rule or alterations, without public notice or review. 30 Tex. Admin. Code § 106.4 (2014) & § 116.116(c) (2010).

[26] *See* Tex. Natural Res. Conservation Comm'n, Victoria Hsu, Flexible Permits and the Plantwide Applicability Limit (Dec. 31, 1998), https://www.tceq.texas.gov/assets/public/permitting/air/Guidance/Historical/palmemo.txt ("it is not uncommon to see the emission cap go down significantly each time additional controls are put in place").

amended Feb. 2006); ROA.43824 (Permit Special Conditions 1A & 1B, MAERT); *see also* ROA.11397-98, ROA.11402 (citing decreasing limits for carbon monoxide).

Regardless which of the numeric limits for nitrogen oxides Exxon exceeded, its exceedances were indicative of a repeated failure to adequately control its nitrogen oxide emissions. In addition, where the numeric limit in a permit term is made more stringent, emissions that violated the earlier limit would, in every case, also have been a violation of the new, more stringent limit. The district court's interpretation discourages compliance by providing an incentive for polluters to repeatedly change their numeric emission limits to game the permitting system and reduce their liability for violations.

Finally, *Amici* note that the court committed an error of law in requiring Appellants to point to the "specific" conditions violated in order to prove actionability. *See, e.g.*, ROA.11399, ROA.11401, ROA.11405. There is no such requirement in the Clean Air Act. And, as shown in the permits in the record, some limits are *narrative* conditions and some are *numerical* limits listed in the permit's maximum allowable emission rate table ("MAERT"), but all are federally enforceable requirements. *Compare* ROA.44746, *with* ROA.44855, ROA.43411-12. Listing the pollutant and numerical limit from the table contained in a permit

itself, as Appellants did, is enough as a matter of law to reference the term violated.

CONCLUSION

The district court's judgment should be reversed. The combined denial of any and all relief – injunctive, monetary, and declaratory – for the 94 Clean Air Act violations the district court determined were actionable and for the thousands more it should have recognized as actionable, in an area where air pollution already exceeds health-based standards, was based on legal and factual errors and was a clear abuse of discretion. Repeated violations of any law, particularly violations which threaten public health, should not go unremedied. *Amici* could find no other case where a court found so many harmful Clean Air Act violations but ordered no relief of any kind. *Amici* and people in the Houston-Baytown area whom they serve need this Court to reverse the district court's decision and to ensure proper enforcement of the Clean Air Act's requirements, which were designed to protect public health and safety.

Dated: May 22, 2015

Respectfully submitted,

DONNA L. EDMUNDSON
City Attorney
JUDITH L. RAMSEY
Chief, General Litigation Section

/s/ *Mary Beth Stevenson*
Mary Elizabeth (Mary Beth) Stevenson
Assistant City Attorney
CITY OF HOUSTON LEGAL DEPARTMENT
900 Bagby Street, 4th Floor
Houston, Texas 77002
Phone: 832.393.6269
Fax: 832.393.6259
marybeth.stevenson@houstontx.gov

Counsel for Amicus Curiae
City of Houston

VINCE RYAN
Harris County Attorney

/s/ *Michael Hull*
Michael Hull
TBN: 24003733
Senior Assistant County Attorney
1019 Congress, 15th Floor
Houston, Texas 77002
Phone: 713.274.5138
Fax: 713.755.8848

Counsel for Amicus Curiae
Harris County Attorney

/s/ *Kelly Haragan*
Kelly Haragan
ENVIRONMENTAL CLINIC
University of Texas School of Law
727 East Dean Keeton
Austin, TX 78705
Phone: 512.232.2654
Fax: 512.232.2311
kharagan@law.utexas.edu

/s/ *Emma C. Cheuse*
Emma C. Cheuse
EARTHJUSTICE
1625 Massachusetts Ave., NW,
Suite 702
Washington, DC 20036
Phone: 202.745.5220
Fax: 202.667.2356
echeuse@earthjustice.org

Counsel for Amicus Curiae
Air Alliance Houston

CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of May, 2015, I have served the foregoing Brief For The City of Houston, Harris County Attorney, And Air Alliance Houston As *Amici Curiae* In Support of Appellants And In Support Of Reversal on all registered counsel through the Court's electronic filing system (ECF), and on the following counsel by U.S. Mail:

Jefferson Gregory Copeland
Baker Botts, LLP
Suite 3000
910 Louisiana Street
1 Shell Plaza
Houston, TX 77002

Counsel for Defendants-Appellees

Respectfully submitted,

/s/ Emma C. Cheuse
Emma C. Cheuse

Counsel for Amicus Curiae
Air Alliance Houston

CERTIFICATE OF COMPLIANCE

I hereby certify that, on May 22, 2015, this document was transmitted to the Clerk of the United States Court of Appeals for the Fifth Circuit via the Court's CM/ECF document filing system.

I hereby certify that (1) required privacy redactions (i.e., *none*) have been made pursuant to 5th Cir. R. 25.2.13; (2) the electronic submission is an exact copy of the paper document pursuant to 5th Cir. R. 25.2.1; and (3) the electronic submission has been scanned with the most recent version of commercial virus-scanning software and was reported free of viruses.

I hereby certify that this brief complies with the type-volume requirement of Federal Rule of Appellate Procedure 32(a)(7)(B) because it contains 6,953 words, excluding the parts of the brief exempted by Rule 32(a)(7)(B)(iii), and complies with the typeface and style requirements of Rule 32(a)(5) and (a)(6) because it was prepared in Microsoft Word Using 14-point Times New Roman typeface.

Respectfully submitted,

/s/ Emma C. Cheuse
Emma C. Cheuse

Counsel for Amicus Curiae Air Alliance Houston