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, Houston, The Honorable David Hittner, U.S. District Judge, USDC No. 4:10-CV-4969

BRIEF FOR PLAINTIFFS-APPELLANTS

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CERTIFICATE OF INTERESTED PARTIES

The undersigned counsel of record certifies that the following listed persons and entities as described in the fourth sentence of Rule 28.2.1 have an interest in the outcome of this case. These representations are made in order that the judges of this court may evaluate possible disqualification or recusal.

1. Environment Texas Citizen Lobby, Inc., Plaintiff-Appellant;
2. Sierra Club, Plaintiff-Appellant;
3. National Environmental Law Center, Counsel for Plaintiffs-Appellants (Charles C. Caldart, Joshua R. Kratka, Heather Govern, Kevin Budris);
4. David Nicholas, Counsel for Plaintiffs-Appellants;
5. Hilder & Associates, P.C., Counsel for Plaintiffs-Appellants (Philip H. Hilder, William Graham);
6. ExxonMobil Corporation, Defendant-Appellee;
7. ExxonMobil Chemical Company, Defendant-Appellee;
8. ExxonMobil Refining and Supply Company, Defendant-Appellee;
9. Beck Redden, L.L.P., Counsel for Defendants-Appellees (Russell Post, Fields Alexander, David Gunn, Eric Nichols, William Peterson, Bryon Rice);
10. Winstead, P.C., Counsel for Defendants-Appellees (Albert Axe, Jr., Keith Alan Courtney);

11. Baker Botts, L.L.P., Counsel for Defendants-Appellees (Jefferson Gregory Copeland)

Respectfully submitted,

/s/ Joshua R. Kratka
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STATEMENT REGARDING ORAL ARGUMENT

Pursuant to Federal Rule of Appellate Procedure 34(a) and Fifth Circuit Rule 28.2.3, Plaintiffs-Appellants Environment Texas Citizen Lobby, Inc. and Sierra Club ("Appellants") respectfully request oral argument in this matter. Oral argument will assist the Court's analysis of the state and federal Clean Air Act permits and the equitable criteria at issue in this appeal and will provide an opportunity for the parties to answer questions regarding the voluminous record.

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JURISDICTIONAL STATEMENT

On December 13, 2010, Plaintiffs-Appellants Environment Texas and Sierra Club ("Plaintiffs") brought this Clean Air Act ("CAA" or the "Act") citizen enforcement suit against Defendants (collectively, "Exxon") in the United States District Court for the Southern District of Texas, case number 4:09-cv-04969. Plaintiffs sued Exxon for violating the federal operating permits issued under Title V of the Act, 42 U.S.C. § 7661, et seq., that govern Exxon's industrial complex in Baytown, Texas ("Baytown Complex," or "Complex"). ROA.26. The Complex consists of a refinery ("Refinery") and two petrochemical plants ("Olefins Plant" and "Chemical Plant"), each of which is governed by one or more Title V permits. ROA.11360; ROA.11362. The District Court had jurisdiction pursuant to (1) 42 U.S.C. § 7604(a) & (f)(5), which confers jurisdiction on district courts to "enforce" Title V permits in suits brought by citizens, and (2) 28 U.S.C. § 1331, which confers jurisdiction over civil actions arising under federal law.

This is an appeal from the Findings of Fact & Conclusions of Law ("Opinion") (ROA.11358) and Judgment (ROA.11444) issued by the District Court (Hittner, J.) on December 17, 2014, following a bench trial. Plaintiffs timely filed this appeal on January 16, 2015. ROA.11595. The Opinion and Judgment disposed of Plaintiffs' claims in their entirety, and this Court has jurisdiction pursuant to 28 U.S.C. § 1291.

STATEMENT OF ISSUES PRESENTED

The two overarching issues presented are:

- May a defendant escape a finding of liability for thousands of Clean Air Act violations it has not disputed?
- Does a district court abuse its discretion by stating it will refuse to order any relief of any kind for thousands of violations of a federal law designed to protect public health, where the defendant has admitted these violations will continue?

More specifically:

Liability Issues

1. In ruling against Plaintiffs on liability under Count I, did the District Court commit reversible error by refusing to apply the emission limitation at issue (the "no upset emissions" provision of the Baytown Refinery permit) to the undisputed evidence of upset emissions?

2. In ruling against Plaintiffs on liability under Count II (violations of hourly emission limits) for all but 25 violations, did the District Court commit reversible error by finding that the parties' detailed factual stipulations, which document thousands of instances in which a specifically named pollutant was emitted in an amount that exceeded a specifically identified hourly emission limit, failed to prove that *any* of those limits was violated more than once?

3. In ruling against Plaintiffs on liability under Count VII (permit violations reported in "Deviation Reports") and against Plaintiffs in part on liability under Counts III (violations of the limit on highly reactive volatile organic compounds) and IV (violations of the limit on "smoking flares"), did the District Court commit reversible error by ruling that uncontroverted stipulations and party admissions, containing all facts needed to establish violations of permit requirements, needed additional "corroboration" in order to establish liability?

Remedy Issues

4. Did the District Court commit reversible error by ruling that, even if it had found all of the thousands of permit violations (constituting nearly 20,000 "days" of CAA violations) to be actionable, in addition to the 94 violations it did find actionable, no penalty is warranted pursuant to 42 U.S.C. § 7413(e)(1)? With respect to the specific statutory penalty factors the District Court was required to consider:

a. Did the District Court commit reversible error in determining that Exxon did not gain even one dollar of economic benefit by operating the nation's largest industrial facility for years without having implemented measures sufficient to prevent thousands of violations of the Act?

b. Did the District Court commit reversible error in determining that thousands of violations of health-based emission limits, resulting in over ten

million pounds of illegal emissions of carcinogens, statutorily-designated "hazardous air pollutants," ozone-forming chemicals, respiratory irritants, and flammable substances, were not "serious"?

c. Did the District Court commit reversible error in determining that there should be no penalty enhancement for the many violations that were of long duration, on the ground that Exxon also committed many additional violations of shorter duration?

d. Did the District Court commit reversible error in excusing Exxon's poor compliance history because the Baytown Complex is very large?

e. Did the District Court commit reversible error in finding that Exxon made a good faith effort to comply with its permits, even though it admitted to thousands of violations, continued to violate its permits up through the time of the trial, and initiated an agreement with the Texas Commission on Environmental Quality ("TCEQ") that erases future violations from its compliance history?

5. Did the District Court commit reversible error in declining to issue a declaratory judgment for the 94 violations it found actionable, on the ground that Plaintiffs did not ask for a judgment declaring Exxon committed "actionable" violations, where Plaintiffs made such a request in both their Complaint and their post-trial Proposed Conclusions of Law?

6. Did the District Court commit reversible error in declining to issue a declaratory judgment for the 94 violations it found actionable, despite also finding that "a public, court-ordered declaration that Exxon has violated its Title V permits would help deter Exxon from violating in the future"?

7. Plaintiffs requested an injunction prohibiting Exxon from continuing to violate its Title V permits. Given its failure to grant any other relief to curtail ongoing violations, and its finding that TCEQ does not demand that the Baytown Complex fully comply with its permits, did the District Court commit reversible error in denying an injunction in this citizen suit on the ground that the threat of TCEQ enforcement or a future citizen suit would be sufficient to deter Exxon's violations?

STATEMENT OF THE CASE

I. PROCEDURAL HISTORY.

Plaintiffs filed a Complaint on December 13, 2010. ROA.26. Exxon's motion to dismiss was denied on June 7, 2011. ROA.2013. The parties filed cross-motions for summary judgment on August 10, 2012. Judge Hittner denied Plaintiffs' motion on November 20, 2012, without explanation. ROA.6817. Judge Hittner referred Defendants' motion to Magistrate Judge Smith, who, in a written opinion, recommended that Defendants' motion be denied, except with respect to a subset of alleged permit violations on res judicata grounds. ROA.6842. On May

2, 2013, Judge Hittner adopted Judge Smith's recommendation. ROA.6911. A 13-day bench trial was conducted, beginning February 10, 2014. The Opinion and Judgment were entered on December 17, 2014.

II. PLAINTIFFS' CLAIMS.

Congress authorized citizens to sue persons who violate their Title V permits, and to seek enforcement of the terms of those permits. 42 U.S.C. § 7604(a) and (f)(5) (the Act's "citizen suit provision"). Citizen enforcement suits "serve as a supplemental and effective assurance that the Act is implemented and enforced." Weiler v. Chatham Forest Prods., Inc., 392 F.3d 532, 536 (2d Cir. 2004) (internal quotes, citations, and alterations omitted). Citizen plaintiffs in such cases seek to effectuate the public interest in clean air; they do not seek compensation for their own injuries. E.g., Pub. Interest Research Group of N.J. v. Powell Duffryn Terminals, Inc., 913 F.2d 64, 74 (3d Cir. 1990) (construing similar provision in the federal Clean Water Act).

The Clean Air Act is a strict liability statute. Pound v. Airosol Co., Inc., 498 F.3d 1089, 1097 (10th Cir. 2007); accord United States v. Anthony Dell'Aquilla Enters. & Subsidiaries, 150 F.3d 329, 332 (3d Cir. 1998); United States v. B & W Inv. Props., 38 F.3d 362, 367 (7th Cir. 1994).

Under the citizen suit provision of the Act, a plaintiff is authorized to bring an enforcement suit against a defendant who (1) committed violations of a Title V

permit condition that occurred only in the past, if the violation was repeated, or (2) is "in violation" of a Title V permit condition, which can be established by proving that the condition was violated at least once before and once after the complaint was filed (known as an "ongoing" or "continuing" violation). ROA.11390-92 (citing Carr v. Alta Verde Indus., Inc., 931 F.2d 1055, 1062 (5th Cir. 1991)). In the parlance of the District Court, such repeated past violations and ongoing violations are "actionable" under the CAA citizen suit provision. ROA.11390. In essence, if a permit condition is violated more than once, violations of that condition are actionable.

Here, Plaintiffs alleged that Exxon violated its Title V permits at the Complex during the period October 14, 2005, through September 3, 2013 (the "Claim Period"). ROA.11359.

To prove actionable violations, Plaintiffs put into evidence the applicable permits and the reports of permit violations that Exxon was required by law to either submit to TCEQ or maintain onsite. As directed by the District Court (ROA.7980), the parties jointly compiled the relevant contents of these reports into spreadsheets that were admitted as stipulations. Plaintiffs alleged seven types of Title V permit violations, six of which are the subject of this appeal.

Count I alleged that Exxon repeatedly violated the conditions of the Refinery's permit stating that emissions from "upset" events are not authorized

under any circumstances. Plaintiffs, counting each type of pollutant emitted during a Refinery upset event as a separate violation, claimed Exxon committed 10,749 "days of violation" of this permit condition.[1] ROA.11090. Exxon disputed that upset emissions violate the "upset emissions are not authorized" provision of the Refinery permit.

Count II alleged that the Refinery, Olefins Plant, and Chemical Plant repeatedly violated certain hourly emission limits set forth in their permits' Maximum Allowable Emission Rate Tables ("MAERTs"). Plaintiffs claimed that Exxon committed a total of 13,738 days of violation of those limits. ROA.11090. As stated by the District Court, "Exxon does not dispute that the alleged violations under Count II…of Plaintiffs' complaint constitute violations of an emission standard or limitation" under the CAA. ROA.11390 n.153; ROA.15018:18-15020:11.

Count III alleged that the Chemical and Olefins Plants repeatedly violated

[1] Each "day of violation" is subject to a civil penalty under the Act. 42 U.S.C. § 7413(b); 40 C.F.R. § 19.4. Violations that occur on different calendar days are counted separately. For a violation that extends uninterrupted beyond the calendar day on which it begins, a "day" is a 24-hour period, not a calendar day. S.F. Baykeeper v. W. Bay Sanitary Dist., 791 F. Supp. 2d 719, 762 (N.D. Cal. 2011) (construing identical language in CWA). For example, violations of two separate emission limits for two different pollutants during the same upset event, where the unauthorized emissions of each pollutant continued for 36 hours, constitutes four "days of violation" (two emission limit violations, each extending into two 24-hour periods).

the "HRVOC Rule," which imposes a 1,200 lbs/hr emission limit on ozone-forming "highly reactive volatile organic compounds." Plaintiffs claimed Exxon committed 18 days of violation of the HRVOC Rule. ROA.11090-91. Exxon did not dispute that these alleged violations constitute violations of an emission standard or limitation under the CAA. ROA.11390 n.153.

Count IV alleged that all three plants repeatedly violated a prohibition on visible emissions from flares lasting more than five minutes during any two consecutive hours (the "smoking flare" rule). Plaintiffs claimed Exxon committed 44 days of violation of the smoking flare rule. ROA.11091. Exxon did not dispute that these alleged violations constitute violations of an emission standard or limitation under the CAA. ROA.11390 n.153.

Count V alleged repeated violations of a requirement to operate flares with a pilot flame at all times. Plaintiffs claimed, and the District Court found, that Exxon committed 32 days of violation of the pilot flame requirement. ROA.11091-92.

Count VII alleged that all three plants repeatedly violated a variety of permit requirements, as set forth in the Complex's "Deviation Reports" filed with TCEQ. Plaintiffs claimed that the Deviation Reports documented 4,677 days of violation.

ROA.11092-93. Exxon disputed these violations.[2]

III. FACTS.

This case concerns an extraordinarily large number of Clean Air Act permit violations, proof of which is drawn from Exxon's own legally mandated compliance reports. As detailed below, thousands of these violations – involving millions of pounds of harmful, illegally emitted pollutants – stemmed from "upsets," also known as "emission events": mechanical breakdowns, operator errors, and design defects that caused "unauthorized" emissions. Single emission events spewed over 100,000 pounds of pollutants into the air. The Baytown Complex averaged more than one illegal emission event *per day* for eight full years. Hundreds of additional violations involved requirements regarding pollution control equipment, emission monitoring, and timely reporting. Violations continued through trial.

The undisputed portions of the Record on Appeal establish the following:

A. The Parties.

Plaintiffs are two non-profit citizen groups with members who live and spend time near the Exxon Complex. ROA.11376-82. Exxon owns and operates the Refinery, Olefins Plant, and Chemical Plant that comprise the Complex, which

[2] *Count VI* alleged violations of permit provisions prohibiting emissions of pollutants from "fugitive" emission sources. Plaintiffs do not appeal from this part of the District Court's decision.

is located in Baytown, Texas, a suburb of Houston along the heavily industrialized and densely populated Houston Ship Channel. ROA.11360-61.

B. Title V Permits Govern Operations At The Exxon Complex.

The Complex is governed by five operating permits issued by the TCEQ pursuant to Title V of the CAA, 42 U.S.C. § 7661, et seq. ROA.11362. These permits (and all revisions in effect during the Claim Period) were admitted into evidence as Plaintiffs' Exhibits ("PX") 191-215 (ROA.45413 et seq.) and 222-52 (ROA.46852 et seq.). ROA.12167:18-21. The Title V permits incorporate permits issued under the CAA's New Source Review ("NSR") and Prevention of Significant Deterioration ("PSD") programs. ROA.11362. These incorporated permits (and revisions) were also admitted into evidence, as PX 113-89 (ROA.42655 et seq.) and 216-21 (ROA.46839 et seq.). ROA.12167:22-25.

The NSR and PSD permits each contain a Maximum Allowable Emission Rate Table that lists each emission source covered by the permit, each contaminant (pollutant) that may be lawfully emitted from that source, and the limits on the hourly and annual rates of emissions of each such contaminant. ROA.12403:17-12406:1; 30 Tex. Admin. Code § 116.10(8); see, e.g., ROA.44744-46; ROA.44848-56 (excerpts from Permit 18287).

Under the Texas "flexible permitting" program, 30 Tex. Admin. Code § 116.710(a), NSR and PSD permits may set a single emission limit, or "cap," for a

contaminant emitted from multiple emission sources, rather than setting separate contaminant limits for each emission source. Texas v. EPA, 690 F.3d 670, 685 (5th Cir. 2012). Compliance with such a cap may be achieved by managing emissions from *any* of the sources of that contaminant.[3] The Refinery and the Olefins Plant are each covered by one flexible permit; each permit establishes a single plant-wide MAERT emission cap for each pollutant. See, e.g., ROA.44848-56 (NO_x emission cap in Permit 18287). Exxon personnel testified that Exxon sought and obtained this type of permit "for business reasons." ROA.12402:5-18.

C. Exxon Violated Limits Designed To Protect Public Health And Safety.

This case focuses largely on Exxon's violations of hourly emission limits. Exxon's permits contain hourly emission limits because TCEQ determined that "[h]ourly emission limits are necessary in order to ensure protection of public health from short-term exposure." 36 Tex. Reg. 943, 950 (February 18, 2011).[4]

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[3] As explained by this Court:

> [t]o determine a facility's cap under the Flexible Permit Program, the permit applicant must identify each air contaminant and each source it expects to be covered by the proposed permit. . . . The sum of the emission limits for each of the covered sources comprises the permit's cap on pollution for that contaminant. Thus, a facility remains in compliance so long as the aggregate sum of its emissions for a particular contaminant is less than the total output of all the sources under the permit.

Texas v. EPA, 690 F.3d at 684 (cites omitted).

[4] Available at http://texashistory.unt.edu/ark:/67531/metapth145988/m1/64/ (accessed May 15, 2015).

The District Court's comparisons of Exxon's *annual* emissions to its permitted *annual* limits, and of *annual* totals of unauthorized emissions to permitted emissions (ROA.11375-76), are thus irrelevant to Plaintiffs' claims.

Exxon's permits implement several CAA programs designed to protect public health:

NSR Program. The NSR program requires special permits for air pollution sources located in areas not meeting one or more of the National Ambient Air Quality Standards ("NAAQS") for the six air pollutants, known as "criteria pollutants," found to "cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare," 42 U.S.C. § 7408(a)(1)(A): sulfur dioxide (SO_2), carbon monoxide (CO), particulate matter (PM), ozone (O_3), oxides of nitrogen (NO_x), and lead. 42 U.S.C. § 7409; 40 C.F.R. §§ 50.4-17.

Harris County, Texas, which includes Houston and Baytown, is out of compliance with the NAAQS for ozone; its non-attainment status is listed as "severe," which means that ozone levels in the county are unhealthy. 40 C.F.R. § 81.344; ROA.52163-64; ROA.12316:14-24. Ozone forms when volatile organic compounds (VOCs) react with sources of oxygen molecules in the atmosphere, such as No_x and CO, in the presence of sunlight. ROA.52159. Exxon has emitted all of these pollutants in large quantities during emission events at issue in this case.

PSD Program. A purpose of the PSD permitting program "is to protect the public from any adverse health or welfare effects of air pollution that may occur *despite achievement of NAAQS*." Resisting Envtl. Destruction on Indigenous Lands, REDOIL v. EPA, 716 F.3d 1155, 1159-1160 (9th Cir. 2013) (citing 42 U.S.C. § 7470(1), (5)) (emphasis added). Congress recognized that NAAQS

> do not provide an adequate margin of safety on health impacts; they are based on a false assumption that no-effects threshold levels exist; [NAAQS] do not adequately protect against genetic mutations, birth defects, cancer, or diseases caused by long-term chronic exposures or periodic short-term peak concentrations, and hazards due to derivative pollutants and to cumulative or synergistic impacts of various pollutants.

Hawaiian Elec. Co. v. EPA, 723 F.2d 1440, 1447 (9th Cir. 1984).

New Source Performance Standards ("NSPS"). Pursuant to 42 U.S.C. §7411(b)(1)(A) and (B), EPA sets national technology-based NSPS, including hourly emission limits, for certain categories of air pollution sources that EPA finds are "reasonably…anticipated to endanger public health or welfare." Util. Air Regulatory Group v. EPA, 744 F.3d 741, 743 (D.C. Cir. 2014).

National Emissions Standards for Hazardous Air Pollutants ("NESHAPs"). The CAA directs EPA to set national technology-based emissions standards for hazardous air pollutants. Sierra Club v. EPA, 551 F.3d 1019, 1022-23 (D.C. Cir. 2008).

Title V monitoring requirements. "Fundamental to [the Title V permit scheme] is the mandate that '[e]ach permit ... shall set forth ... monitoring ...

requirements to assure compliance with the permit terms and conditions.'" Sierra Club v. EPA, 536 F.3d 673, 677 (D.C. Cir. 2008) (quoting 42 U.S.C. § 7661(c)).

D. Exxon Is Required To Document Its Title V Permit Violations.

In enacting Title V of the Act in 1990, Congress required facilities to document and report permit violations, providing "readily accessible information that citizens can use to determine compliance status of sources" and "unprecedented opportunities to use the courts to compel full implementation of the CAA's provisions." Hon. Henry A. Waxman, An Overview of the Clean Air Act Amendments of 1990, 21 ENVTL. L. 1721, 1809 & 1747-1748 (1991).

Exxon submits State of Texas Electronic Environmental Reporting System ("STEERS") Reports to TCEQ to document "emission events" that release greater than a threshold quantity of pollutants; these are known as "reportable" emission events. 30 Tex. Admin. Code §§ 101.1(88) & 101.201; ROA.11362-63. Similar documentation of "recordable" emission events, those not meeting the STEERS reporting threshold, is kept on-site at the Complex ("Recordable Lists"). 30 Tex. Admin. Code §101.201(b); ROA.11363.

Exxon witnesses acknowledged that *every* reported or recorded emission event involves an emission of one or more air pollutants that was not authorized by any permit or regulation. ROA.12420:13–12422:22; Tex. Health & Safety Code § 382.0215 (a)(1); 30 Tex. Admin. Code §§ 101.1(28) (defining "emission event"

as, "[a]ny upset event or unscheduled maintenance, startup, or shutdown activity, from a common cause that results in unauthorized emissions of air contaminants from one or more emissions points") & 101.1(108) (defining "unauthorized emissions" as those "that exceed any air emission limitation in a permit, rule, or order of the commission or as authorized by Texas Health & Safety Code, § 382.0518(g)").

Exxon's STEERS Reports and Recordable Lists specify, *inter alia*, the start date and duration of the emission event; the name of the process unit or area that experienced the emission event; the amount of each contaminant released during the event; the governing emission limit; and whether any portions of the emissions were authorized. ROA.12427:4-6; ROA.12428:3–12431:17.

In addition, Exxon files "Deviation Reports" with TCEQ. Exxon personnel testified that Deviation Reports document permit violations. ROA.12409:21-23. Deviation Reports include the date, duration, and location of violations, and identify the specific permit term or regulatory requirement violated. ROA.12412:15–12413:1. Violations of reporting, monitoring, and operational requirements are included in Deviation Reports. ROA.12414:11-16.

The Complex's STEERS Reports (PX 16-22; ROA.39712 et seq.), Recordable Lists (PX 101-12; ROA.42044 et seq.), and Deviation Reports (PX 23-100; ROA.40412 et seq.) were admitted into evidence. ROA.11146. The parties

also stipulated to the relevant contents of these documents. ROA.11363. These stipulations were Plaintiffs' Exhibits 1A through 7E (ROA.12168:3-15); they correspond to each of the seven counts in the Complaint.

E. Exxon's Permit Violations Are Numerous And Significant.

The 241 Reportable Events and 3,735 Recordable Events at issue (ROA.11363-64) average out to more than one event per day throughout the Claim Period, and this does not take into account the fact that many events lasted more than one day. Because emission events often released more than one pollutant, they frequently involved violations of more than one emission limit.

Many individual emission events released tens of thousands of pounds of pollutants. ROA.51471-88. From 2006-2012 (seven years of the eight-year Claim Period) Exxon released well over nine million pounds (4,500 tons) of "criteria pollutants" and well over 100 additional tons of non-criteria pollutants during emission events. ROA.12321:12–12323:1; ROA.56077 (summary of Complex's annual emission inventories); ROA.49222-433 (annual emission inventories).

Some of the 901 additional permit violations at issue (ROA.11364) do not directly involve excessive emissions, such as improper operation of pollution control equipment and failures to comply with maintenance, monitoring, recordkeeping, and reporting requirements. In its ruling on summary judgment, the District Court found that such violations "may lead to future emissions or other

dangerous events such as an explosion." ROA.6859 (recommended decision); ROA.6911 (adoption of recommendation).

F. Exxon's Violations Released Pollutants Harmful To Human Health.

The parties stipulated to the admissibility of government documents describing the adverse health effects of the pollutants emitted by Exxon during emission events. ROA.13740:8-12 (admitting PX 493, 496, 499-500, 502-04, 517-52, 554-55; exhibits appear at ROA.51840 et seq.). These pollutants include:

- *Respiratory hazards*, such as SO_2, CO, No_x, PM, and hydrogen sulfide ("H_2S");
- *Ozone-forming chemicals*, such as No_x, CO, and volatile organic compounds ("VOCs");
- *Carcinogens and other "hazardous air pollutants" ("HAPs").* See 42 U.S.C. § 7412(a)(6), (b)(1) & (2). Carcinogens emitted include benzene, 1,3-butadiene, ethylbenzene, hexane, isoprene, and xylene; other HAPs emitted include hydrogen chloride, carbon disulfide, carbonyl sulfide, hydrogen cyanide, toluene, methylbenzene, and naphthalene.

In addition, pollutants released by Exxon are flammable, creating a risk of fire and explosion. ROA.14395:21–14396:2. The "small" fires caused by extension cords and cigarette butts cited by the District Court (ROA.11368-69) are thus potential ignition sources (ROA.12717:6-22). See ROA.51274, ROA.12837:11–12838:12 (353 emission events involved fires). Exxon's engineering expert testified that leaks of flammable gases should be minimized in

order to reduce explosion risk at the Complex. ROA.14682:5-14.

G. Negative Effects Of Exxon's Violations Are Felt In The Community.

People who have lived near the Complex and experienced ill effects from emission events testified at trial (described at ROA.11376-82). Plaintiffs put into evidence the Complex's extensive log of citizen air pollution complaints from the surrounding community. ROA.12438:9-12; ROA.50305-31. Moreover, Exxon conceded that emissions from flaring at the Complex can be "a nuisance to the public" (ROA.51492), and that reducing emissions from the Complex improves air quality and public health (ROA.56582:11-22; ROA.56583:21-23; ROA.51495.

Exxon's own air dispersion modeling of selected emission events[5] showed that, in many cases, the predicted off-site concentrations of pollutants exceeded safety thresholds (Effects Screening Levels, NAAQS, or other "air comparison values").[6] Even Recordable Events caused offsite pollutant concentrations to exceed air comparison values more than 100 times. ROA.13825:22–13826:1.

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[5] Exxon did *not* commission modeling of approximately 100 of the largest emission events at issue. ROA.13824:17–13825:17.

[6] Excerpts from a table created by Exxon's air modeling expert, David Cabe, show, in the column titled "Ratio of Concentration to Comparison Value," by how much an off-site concentration of a pollutant exceeded the relevant safety threshold. For example, the number "5.88" in that column at ROA.56081 means the concentration of ammonia was 5.88 *times* higher than the threshold. ROA.13886:19–13888:21; PX 610A (ROA.56081), 611A (ROA.56093); ROA.13902:22–13903:8. Exxon modeling performed in response to TCEQ requests showed numerous additional exceedances of safety thresholds. E.g., ROA.49437-38 (hydrogen chloride levels

H. Exxon Has Not Achieved Compliance.

Although the number of Reportable Events has decreased since Plaintiffs filed suit in 2010, unauthorized emissions remain high: approximately 400,000 pounds (200 tons) of unauthorized emissions in 2012 and approximately 300,000 pounds (150 tons) in 2013. ROA.56077; ROA.56569:3-12. Exxon's own engineering expert declined to say, when asked at trial, that Exxon's annual tonnage represents good performance. ROA.14653:10–14654:25. He also testified that Exxon's "good engineering practices" may have to be upgraded if emission events are to be avoided. ROA.14671:2-5; see also ROA.14669:22-25.

Exxon did not increase its maintenance budget to address the violations alleged in this case. ROA.13667:23–13668:5. Exxon also chose not to install flare gas recovery compressors, which it determined could have prevented up to 449 tons of unauthorized emissions, for the half of the flares at the Complex that lack them, because it did not consider this expenditure to be "economic" for the company. ROA.56073; ROA.14107:10–14109:1.

Instead, seeking greater "certainty" regarding environmental compliance after receiving Plaintiffs' notice of intent to sue (ROA.14851:6-13), Exxon drafted a proposed administrative enforcement order relating to emission events and asked TCEQ to issue it. ROA.14851:6-17; ROA.56198-99. That initial draft eventually

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were 33.2 times the safety threshold), and other instances cited at ROA.10973-78 (Plaintiffs' Proposed Findngs of Fact).

became a February 2012 Agreed Order between Exxon and TCEQ (the "Agreed Order", ROA.48972).[7] That Agreed Order allows the Complex to continue violating its permits:

- Exxon is not required to eliminate emission events or other violations.
- Exxon can erase future violations from its compliance history by paying pre-set stipulated penalties for future emission events, thus securing more favorable treatment in enforcement, in permitting, and in the press. ROA.48977 (Agreed Order, ¶ 5); ROA.56243 (at 152:13 – 153:3); ROA.56247 (at 168:13 – 169:18); ROA.12236:2-11; ROA.12237:2-13.
- Pre-determining the regulatory cost of future violations achieves Exxon's goal of operating with greater economic certainty, reducing deterrence.
- Exxon could have implemented the Order's four "Environmental Improvement Projects" years ago. ROA.56363:4-6; ROA.56364:2–56366:5; ROA.12850:9-14; ROA.13679:2-9. The delay in incurring this $20 million compliance expense returned an economic benefit of $11.7 million to Exxon (ROA.54512, ROA.54529-32, ROA.54535 (Plaintiffs' expert report)), as calculated by a methodology the District Court found "reliable." ROA.11421.

In fact, neither the Agreed Order nor TCEQ's more general oversight of the Baytown Complex has brought Exxon into compliance with its permits. Violations continued throughout the Claim Period. In 2013, the year before the trial, the

[7] The TCEQ Executive Director and the enforcement chief who helped negotiate this Agreed Order left the agency to form a lobbying firm that was, almost immediately after the Agreed Order was issued, hired by Exxon to help obtain TCEQ approval for a proposed Complex expansion. ROA.14801:11-23; ROA.14803:17-18; ROA.14764:20–14765:4; ROA.14802:19–14803:18; ROA.14805:24–14806:2.

stipulated spreadsheets show 1,224 days of reported permit violations. See, e.g., ROA.55544-46 (showing hourly emission violations during Refinery Reportable Events in 2013). Violations occurred even during trial. ROA.13284:2-22; ROA.13688:13-13690:24. And Exxon witnesses testified that violations will continue. E.g., ROA.56439:2-8; ROA.56441:12-18 (errors and failures, and thus violations, are inevitable); compare ROA.13174:9–13176:18 (Plaintiff's expert testified that better plant design could ensure that errors and failures, even if "inevitable," do not cause unauthorized emissions).

IV. THE DISTRICT COURT'S OPINION.

The District Court ruled that Plaintiffs have standing. ROA.11384-89.

On Counts II, III, IV, and V, the District Court ruled that Plaintiffs had proven 94 actionable permit violations, which included all of the violations alleged in Count V.[8] ROA.11403-09; ROA.11438-43 (Appendix). The Court denied liability on the remainder of Counts II, III, and IV, and wholly denied liability on Counts I, VI, and VII.

The District Court refused to order any relief for the 94 permit violations it found actionable, and held further that it would have ordered no penalty even had it found every violation alleged by Plaintiffs to be actionable. ROA.11413.

[8] Because a number of these violations lasted longer than 24 hours (see ROA.11438-43), these 94 violations account for 111 "days of violation" for penalty purposes. See 42 U.S.C. § 7413(e).

SUMMARY OF ARGUMENT

In evaluating the violations alleged under Count II, the District Court invoked the wrong legal standard for determining what constitutes a repeated or continuing violation of an emission limit. The District Court compounded this error by failing to apply even this erroneous standard to the undisputed facts. Under either standard, a comparison of the stipulated emissions data with the applicable hourly emission limits establishes thousands of violations of the Maximum Allowable Emission Rate Tables in the Refinery, Olefins Plant, and Chemical Plant permits.

In evaluating the violations alleged under Count I, the District Court failed to apply the Refinery permit's prohibition against upset-related emissions to the stipulated emissions data that establish thousands of violations of that prohibition. This failure to properly apply an unambiguous permit term to the undisputed facts was an error of law.

In evaluating the violations alleged under Counts III, IV, and VII, the District Court erred as a matter of law in holding that a company's own legally mandated compliance reports, containing all of the factual elements required to establish a violation, require additional "corroboration" to be actionable in a citizen suit.

The District Court's failure to order any remedy for the 94 violations it found actionable, and its declaration that it would order no penalty even were it to find every alleged violation actionable, contravenes Congress's intent that the Clean Air Act be strictly enforced and, by condoning a status quo of noncompliance, constitutes an impermissible relaxation of Exxon's permit requirements. Although courts have discretion in fashioning relief in CAA citizen suits, here the District Court abused that discretion.

The District Court's decision that no civil penalty is warranted, even if all of the more than 18,000 days of violation at issue were actionable, is based on a misapplication of the statutory factors governing penalty assessment.

The District Court's conclusion that Exxon gained "$0" in economic benefit by operating during the eight-year Claim Period without having made a timely commitment of resources to prevent the violations at issue is clearly erroneous. It contradicts both the Court's own factual findings and Exxon's own admissions that it delayed in spending money to implement measures that would have substantially reduced its unlawful emissions. The District Court's conclusion also represents a failure to make a reasonable approximation of economic benefit, as the Court was required to do, using either Plaintiffs' methodology (which the Court found reliable) or an alternative methodology (such as the profits Exxon gained by

operating its oil and chemical production facilities while in continuous violation of permit requirements).

The District Court erroneously concluded that the "seriousness of the violation" factor weighs against assessing a penalty. The Court failed to assess the seriousness of each violation, as required by the statute, and then improperly used the larger number of "smaller" violations at issue as grounds to *discount* the seriousness of the numerous violations that the Court considered "more serious," even those that released tens of thousands of pounds of harmful pollutants. The Court also ignored undisputed evidence – including the hazardous nature of the pollutants emitted, Exxon's own analyses showing its emissions caused exceedances of safety thresholds in the community, and documented public health problems in the area – in holding that Exxon's violations did not create even a *potential* risk of harm, which is the legal standard for "seriousness." Witness testimony about nuisance-type impacts the Court found credible was improperly rejected for purposes of the seriousness assessment.

The District Court abrogated its statutory duty to weigh the "duration of the violation" in assessing a penalty, by reasoning that Exxon's violations of lengthy duration were less deserving of a penalty because many of Exxon's other violations were of shorter duration.

In weighing Exxon's full compliance history, the District Court disregarded congressional intent and TCEQ regulations when it excused Exxon's vast number of violations because of the large size of the Baytown Complex. The District Court also erred by attributing government-ordered environmental improvement projects to Exxon's good faith efforts to comply.

Given the District Court's finding that a declaratory judgment would help deter Exxon from violating in the future; given Exxon's insistence that none of its violations were actionable in a citizen enforcement suit; and given that Exxon remains out of compliance with its permits, the District Court abused its discretion by declining to issue a declaratory judgment regarding the 94 violations it found actionable.

Given its failure to grant any other form of relief to curtail violations it found to be ongoing, the District Court's refusal to enjoin Exxon from further violations was an abuse of discretion. Citing cases in which injunctions were denied but other forms of relief had been issued to bring the violator into compliance, the Court employed internally contradictory rationales to justify its decision not to order Exxon even to comply with the terms of its permits.

ARGUMENT

I. STANDARDS OF REVIEW.

A. Issues of Law, Including Questions Regarding the Application of Law to Fact, Are Reviewed De Novo.

Questions of law, such as interpretations of statutory or regulatory language, are reviewed de novo. Kemp v. G.D. Searle & Co., 103 F.3d 405, 407 (5th Cir. 1997). Interpretation of the unambiguous terms of permits issued pursuant to environmental statute, like interpretation of the unambiguous language of contracts, is an issue of law that is reviewed de novo. Alaska Cmty. Action of Toxics v. Aurora Energy Servs. LLC, 765 F.3d 1169, 1172 (9th Cir. 2014) (unambiguous terms of a discharge permit issued under the Clean Water Act reviewed de novo); Ergon-W. Va., Inc. v. Dynegy Mktg. & Trade, 706 F.3d 419, 424 (5th Cir. 2013) ("The construction of an unambiguous contract is reviewed de novo"). In addition, "the question [of] whether the district court applied the proper standard of proof is a question of law" subject to de novo review. United States v. Melrose E. Subdivision, 357 F.3d 493, 498 (5th Cir. 2004); accord United States v. Goad, 44 F.3d 580, 585 (7th Cir. 1995). Similarly, the application of law to fact is also a question of law that is reviewed de novo. AF-CAP, Inc. v. The Republic of Congo, 383 F.3d 361, 368 (5th Cir. 2004); Gandy v. United States, 234 F.3d 281, 284 (5th Cir. 2000).

B. Findings of Fact Are Reviewed for Clear Error, Unless They Are Based on an Incorrect Legal Principle.

In a bench trial, findings of fact are reviewed for clear error. In re Mid-South Towing Co., 418 F.3d 526, 531 (5th Cir. 2005); see also McCuller v. Nautical Ventures, L.L.C., 434 F. App'x 408, 411 (5th Cir. 2011). However, when a factual finding is essentially based on an incorrect legal principle, clear error review does not apply and the appellate court disregards any such possible findings. McCuller, 434 F. App'x at 411 (citation and internal quotes omitted).

"A finding is clearly erroneous if a review of the record leaves a definite and firm conviction that a mistake has been committed," Boudreaux v. United States, 280 F.3d 461, 466 (5th Cir. 2000) (citations and internal quotes omitted), giving "due regard" to the district court's opportunity to judge the credibility of witnesses, Canal Barge, Co. v. Torco Oil Co., 220 F.3d 370, 375 (5th Cir. 2000) (citation and internal quotes omitted). "[I]nternally inconsistent factual findings…are, by definition, clearly erroneous." In re Sentinel Mgmt. Group, Inc., 728 F.3d 660, 670 (7th Cir. 2013). Thus, a district court's finding of fact is clearly erroneous where it is "fundamentally inconsistent" with other findings also made by the court. Westwego Citizens for Better Gov't v. City of Westwego, 946 F.2d 1109, 1121-22 (5th Cir. 1991).

C. Equitable Decisions Are Reviewed for Abuse of Discretion and Consistency with Applicable Law.

Equitable decisions, such as denial of an injunction or refusal to impose a civil penalty, are reviewed for abuse of discretion. Aransas Project v. Shaw, 775 F.3d 641, 663 (5th Cir. 2014) (injunctive relief); cf. Tull v. United States, 481 U.S. 412, 427 (1987) (civil penalties under CWA are discretionary calculations). However, a court "must exercise its discretion with an eye to the congressional policy as expressed in the relevant statute." United States v. Marine Shale Processors, 81 F.3d 1329, 1360 (5th Cir. 1996); see also Melrose, 357 F.3d at 498 ("the district court abuses its discretion if it grounds its decision on an erroneous view of the governing legal standards"). "The district court abuses its discretion if it (1) relies on clearly erroneous factual findings … (2) relies on erroneous conclusions of law … or (3) misapplies the factual or legal conclusions." Peaches Entm't Corp. v. Entm't Repertoire Assoc., 62 F.3d 690, 693 (5th Cir. 1995).

II. THE DISTRICT COURT ERRED IN NOT FINDING THAT EXXON'S OWN REPORTS PROVED OVER 18,000 DAYS OF ACTIONABLE VIOLATIONS.

As a matter of law, a permittee's own records of violations are sufficient to establish liability. St. Bernard Citizens for Envtl. Quality, Inc. v. Chalmette Ref., LLC (St. Bernard I), 354 F. Supp. 2d 697, 706-07 (E.D. La. 2005) (summary judgment granted to citizen plaintiffs as to liability on CAA violations based entirely on defendants' "written reports, which document unauthorized

[emissions]"); United States v. Aluminum Co. of Am., 824 F. Supp. 640, 648-649 (E.D. Tex. 1993) (in CWA case, defendant's monitoring reports submitted to EPA are "conclusive evidence" of violations); Pub. Interest Research Group of N.J., Inc. v. Elf Atochem N. Am., Inc., 817 F. Supp. 1164, 1177-78 (D.N.J. 1993) ("It is well-established that [a defendant's reports] may be relied on in Clean Water Act cases to establish liability on summary judgment.").

As a result, the stipulated spreadsheets documenting self-reported violations of the permits that were entered into evidence are sufficient to establish Exxon's violations and liability under the CAA. The District Court's failure to so find was based on a variety of reversible errors.

A. In Adjudicating Count II, The District Court Erred In Holding That Plaintiffs Did Not Identify The Specific Permit Conditions That Have Been Repeatedly Violated.

Count II alleges violations of hourly emission limits. ROA.11398; ROA.35-36 (Complaint ¶¶ 28-30). Hourly limits are contained in Maximum Allowable Emission Rate Tables. ROA.12404:7-13. These MAERTs appear in the Complex's NSR and PSD permits, which are incorporated into the Complex's Title V permits. ROA.12403:23–12404:6. The hourly limits are set separately for each pollutant.

For each pollutant listed in a MAERT, the MAERT identifies the pollution source(s), called "emission points" (*e.g.*, flares, stacks, tanks), covered by the

hourly emission limit for that pollutant. In the Complex's "flexible" permits, a single hourly emission limit for a pollutant, called a cap, covers a number of sources in aggregate. 30 Tex. Admin. Code § 116.715(c)(7); see, e.g., ROA.44848-56 (MAERT NO_x cap in Refinery Permit 18287). For the Complex's non-flexible ("standard") permits, each pollution source has its own hourly emission limit for each separate pollutant. See, e.g., ROA.43411-12 (MAERT in Chemical Plant Permit 36476).

Exceedance of an hourly emission limit or cap is a violation of the permit. 30 Tex. Admin. Code § 116.715(b). In addition, under both the flexible and standard permits, emissions from a facility that are not specifically identified by a MAERT are completely "unauthorized" and thus are violations. These situations include (1) the emission of a *pollutant* not named in a MAERT, and (2) the emission of a pollutant from a *source* not covered by a MAERT. In these two situations, the emission limit is zero because no portion of the emission is allowed.

Although Exxon did not dispute that the violations alleged in Count II constitute violations of an emission standard or limitation, ROA.11390 n.153 (Opinion), the District Court ruled against Plaintiffs on Count II, stating that (1) the stipulated spreadsheets containing data relevant to Count II (PX 2A-2F) "do not

appear to reference any specific *conditions* of" the permits in question,[9] and that (2) Plaintiffs failed to prove repeated or continuing violations of "the *same, specific* limitations under this Count."[10] As a matter of law, the District Court was wrong, and the Court should have found that Exxon committed over 10,000 days of actionable violations of hourly emission limits.

1. The stipulated spreadsheets do provide the information that proves Exxon violated specific permit conditions.

To determine whether a permittee has violated an emission limitation in its permit, courts need only compare the amount (or rate) of pollution allowed to be emitted by the permit with the amount (or rate) actually emitted. Louisiana Envtl. Action Network v. LWC Mgmt. Co., Inc., Civ. Action No. 07-0595, 2007 WL 2491360, at *6 (W.D. La. August 14, 2007) (Clean Water Act ["CWA"]);[11] see e.g., Concerned Citizens v. Murphy Oil USA, Inc., 686 F. Supp. 2d 663, 680-681 (E.D. La. 2010) (comparison made in CAA citizen suit); St. Bernard Citizens for Envtl. Quality, Inc. v. Chalmette Ref., LLC (St. Bernard II), 399 F. Supp. 2d

[9] ROA.11399 (referencing the Refinery permit; emphasis in original); see ROA.11401 (same, for Olefins Plant) & ROA.11403-05 (same, for all but 25 entries on the Chemical Plant spreadsheets).

[10] ROA.11399-11401 (emphasis in original); see also ROA.11402-03; ROA.11404-05.

[11] "Because the CAA and CWA are similar in mechanism and operation, courts routinely turn to cases decided under one when interpreting the other." WildEarth Guardians v. Lamar Util. Bd., Civ. Action No. 11-cv-00742-MSK-MJW, 2012 WL 1059981, at *3, n.1 (D. Colo. March 29, 2012); see also Dell'Aquilla, 150 F.3d at 338 n.9 (the two statutes are *in pari materia*).

726, 732-733 (E.D. La. 2005) (same); Sierra Club v. Pub. Serv. Co. of Colo., Inc., 894 F. Supp. 1455, 1459 (D. Colo. 1995) (same); PennEnvironment v. GenOn Ne. Mgmt. Co., Civ. Action No. 07-475, 2011 WL 1085885, at *12 (W.D. Pa. March 21, 2011) (comparison made in CWA citizen suit). Plaintiffs' Exhibits 2A-2F, the stipulated spreadsheets that compile information from Exxon's own records and reports of recordable and reportable emission events, provide the information necessary to make this comparison and determine whether Exxon violated specific permit conditions. ROA.28523; ROA.38607; ROA.38877; ROA.38930; ROA.39030; ROA.39054.

As this Court has noted, Congress made such compliance records and reports publicly available "to ensure that 'citizen enforcers' will have access to any and all information they will need in prosecuting enforcement suits." NRDC v. EPA, 489 F.2d 390, 397 (5th Cir. 1974), rev'd in part on other grounds sub nom, Train v. NRDC, 421 U.S. 60 (1975); see also 42 U.S.C. §7661b(e) ("[a] copy of each…emissions or compliance report…shall be available to the public"); Waxman, supra, at 1747-48, 1809 (principal author of 1990 CAA amendments notes that Title V permit program "provide[s] readily accessible information that citizens can use to determine…compliance status" and "compel full implementation of the CAA's provisions" in court).

The stipulated spreadsheets state: (1) the pollutant emitted,[12] (2) the number of pounds emitted[13] and the duration of the emissions measured in hours,[14] which can be used to calculate a lbs/hr figure for actual emissions, and (3) the applicable emission limit from the MAERT, in lbs/hr.[15] To determine whether a violation occurred, one compares the lbs/hr of a pollutant emission with the applicable lbs/hr emission limit for that pollutant. If the former exceeds the latter, a violation occurred. Plaintiffs performed this exercise for each emission of a pollutant reported in PX 2A-2F. The results are in PX 589-94 (ROA.55475 et seq.) in the column titled "Number of Days of Violation." If a violation did not occur, that column is left blank. If a violation did occur, that column either provides the number of 24-hour periods ("days of violation") over which the violation occurred[16] or notes that the violation for this pollutant from this source was "already counted" elsewhere on the spreadsheet (because this violation occurred at more than one emission source covered by the same limit).

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[12] In PX 2A, 2C, and 2E, this is listed in column J, titled "Contaminant"; in PX 2B, 2D, and 2F, this is listed in column G, titled "Air Contaminant."

[13] In PX 2A, 2C, and 2E, this is listed in column K, titled "Amount Released (lbs)"; in PX 2B, 2D, and 2F, this is listed in column H, titled "Emissions (lbs)."

[14] In PX 2A, 2C, and 2E this is listed in column E, titled "Duration (h:mm)"; in PX 2B, 2D, and 2F this is listed in column F, titled "Duration (Hrs)."

[15] In PX 2A, 2C, and 2E, this is listed in column L, titled "Reported Emission Limit (lbs/hr)"; in PX 2B, 2D, and 2F this is listed in column I, titled "Permit Limit (lbs/Hr)."

[16] See footnote 1, *supra.*

In PX 2A, 2C, and 2E, the phrase "not specifically authorized" sometimes appears in column F, titled "Authorization." The District Court refers to this in its discussion of the Refinery permit:

> [A]lthough the spreadsheets corroborate certain emissions were 'not specifically authorized' or perhaps were not authorized by permit 18287, the spreadsheets do not corroborate violation of the specific conditions enumerated under this Count.

ROA.11399. As discussed above, "not specifically authorized" simply means that the emission involved a pollutant, or was from a source, not covered by the MAERT. In this circumstance, the MAERT emission limit is zero, and a violation of that limit is apparent from the spreadsheets.[17]

Because, as a matter of law, a permittee's own records of violations are sufficient to establish liability, see p. 29, *supra*, the spreadsheets establish Exxon's violations and liability under the CAA. No further corroborating evidence is required to prove a violation. The District Court's determination otherwise was an error of law.

[17] At other times, Exxon used the phrase "portions are authorized" or "[x] lbs. out of [y] total lbs. are authorized" in the "Authorization" column (column F). This means that the lbs/hr emission limit in the MAERT was exceeded, as opposed to the entire emission being unauthorized; this type of violation, too, is apparent from the spreadsheets. ROA.12431:12-17.

2. Plaintiffs proved repeated and ongoing violations of the same emission limits.

To explain its conclusion that the spreadsheets failed to establish repeated or continuing violations of the same emission limits under Count II, the District Court cited a few instances in which the spreadsheets listed a different numerical emission limit for the same pollutant.[18] The District Court then reasoned that "because Plaintiffs categorized different limits together under this Count," Plaintiffs did not meet their burden to prove *any* repeated violations of *any* emission limit in the Refinery and Olefins Plant permits, and proved repeated violations of only a few emission limits in the Chemical Plant permits. ROA.11400-01; ROA.11403-05. This reasoning is flawed in several respects.

First, a violation need only be of the same "type" to be considered repeated or ongoing. Patton v. Gen. Signal Corp., 984 F. Supp. 666, 672 (W.D.N.Y. 1997) (cited by the District Court, ROA.11393). Recurring violations of the hourly limit for a particular pollutant emitted from a particular source or group of sources are of the same "type," regardless of whether the limit's specific emission rate (expressed in lbs/hr) has changed over time. For example, recurring violations of the Refinery's hourly limit for nitrogen oxides are all of the same type, even if the NO_x

[18] See ROA.11400 and n.177; ROA.11402 and n.184; ROA.11405 n.190.

limit increases or decreases over the years to reflect that more or fewer NO_x emission sources are covered by the cap.[19]

As courts have held in the CWA context, it is the "parameter" (pollutant) that is the key to determining whether a violation from a source is ongoing. NRDC v. Texaco Ref. and Mktg., Inc., 2 F.3d 493, 499 (3d Cir. 1993) (ongoing violations can be established by proving one or more post-complaint violations "of the same parameter"); Sierra Club v. Union Oil Co., 716 F. Supp. 429, 433 (N.D. Cal. 1989) (a violation is ongoing "[i]f the same parameter is exceeded").

The District Court did not consider a violation of the hourly limit for the same pollutant from the same source or group of sources to be the same type of violation; this was a failure to apply the proper legal standard to the evidence. As a result, the Court ignored Plaintiffs' exhibits that separated and categorized violations by pollutant and source(s). Precisely because the stipulated spreadsheets (which follow the format in which Exxon reported and maintained its compliance information) list emission violations chronologically, rather than by type of violation, Plaintiffs provided additional summaries categorized by type of

[19] Exxon's state-issued permits are subject to renewal every 10 years, 30 Tex. Admin. Code § 116.315(d)(2), and may be amended from time to time in response to physical changes at the Complex, 30 Tex. Admin. Code §§ 116.605, 116.721(a).

violation. These summaries are in PX 10 (ROA.39686), which was admitted into evidence.[20] The data in PX 10 were not challenged by Exxon.

Plaintiffs calculated a total of 13,738 days of continuing (pre- and post-complaint) or repeated (only pre-complaint) violations of Exxon's hourly emission limits. See ROA.11086-90 (Plaintiffs' Proposed Findings of Fact and Conclusions of Law ("Pl. F&C")); ROA.11269-70 (Plaintiffs' Revised Proposed Findings of Fact and Conclusions of Law (Rev. Pl. F&C)). In PX 10, Plaintiffs identified, for each parameter in each permit, whether the violations were continuing or repeated, and provided the total number of days of violation for each such parameter. ROA.39686 (PX 10). Accordingly, Plaintiffs respectfully request that this Court rule that under Count II, Exxon committed 13,738 days of actionable violations of its Title V permits.

[20] For the Refinery and the Olefins Plant, which are each covered by a single flexible permit with plant-wide emission caps, every violation involving a particular pollutant is a violation of the same MAERT limit for that pollutant. Thus, in PX 10, Plaintiffs categorized the Refinery and Olefins Plant violations simply by type of pollutant, and treated all unauthorized emissions of a particular pollutant as the same type of violation. See ROA.39687-88 (PX 10, pp. 2-3).

The Chemical Plant, in contrast, is covered by numerous permits, only one of which is a flexible permit. Plaintiffs thus categorized violations of these permits first by emission point, and then by type of pollutant, to match the individualized MAERT limits. See ROA.39689-90 (PX 10, pp. 4-5). As a separate matter, Plaintiffs counted the "zero limit" violations at the Chemical Plant as repeated only when the same pollutant had been repeatedly released without any MAERT authorization. See ROA.39690-91 (PX 10, pp. 5-6).

3. Even if "the same type of violation" is limited to violations of the identical numeric limit, the stipulated spreadsheets prove thousands of continuing and repeated violations.

The undisputed factual record establishes thousands of days of continuing and repeated violations under Count II even if one looks (as the District Court suggests) only to those instances in which the same precise numeric limit was violated more than once. After trial, the District Court requested, and Plaintiffs provided, native Microsoft Excel versions of the stipulated spreadsheets (including PX 2A-2F and 589-94). ROA.56275. Excel enables one to sort and count the violations according to the number of times each specific version of each permit limit at issue under Count II was violated.

The tables below show the results of sorting PX 2A through 2F (and the corresponding tables in PX 589-94) by each specific numeric limit.[21] For each permit, the tables list each hourly MAERT limit that was violated during an emission event. For example, "ammonia" is listed three times on the Refinery table because Exxon reported ammonia violations under three different numerical limits: a limit of "0" lbs/hr (because there was no MAERT authorization for these

[21] The charts below are proper for consideration by this Court, as they do not introduce non-record facts but merely illustrate facts in the Record on Appeal that were fully available to the trial court. See, e.g., Weymouth v. Colo. Interstate Gas Co., 367 F.2d 84, 99 (5th Cir. 1966) (allowing illustrative schedules in response to post-argument memoranda).

emissions; see, e.g., ROA.38523 (PX 2A)[22]); a limit of 76.86 lbs/hr (the Refinery MAERT cap in effect beginning 4/6/2009); and a limit of 80.65 lbs/hr (the Refinery MAERT cap in effect prior to 4/6/2009). The total number of days each limit was violated during Reportable and Recordable Events are listed, based on PX 589-94. The final column notes whether each limit was exceeded in two or more separate violations (making the violations actionable).

[22] Even though ammonia was emitted for over 17 hours in violation of this hourly limit of zero, Plaintiffs counted only one "day of violation" because the hourly violations all occurred within the same 24-hour period. ROA.55475 (PX 589).

BAYTOWN REFINERY, Flexible Permit 18287
Sorted information from PX 2A, 2B, 589, and 590

Pollutant	Emission Limit (lbs/hr)	Days of Violation – Reportable Events (PX 589)	Days of Violation – Recordable Events (PX 590)	Was Limit Violated More Than Once?
Ammonia	0	98	165	Y
Ammonia	76.86	4	9	Y
Ammonia	80.65	2	-	Y
Ammonia Hydroxide	0	-	1	N
Benzene	0	47	309	Y
Benzene	91.88	1	13	Y
Benzene	91.92	9	-	Y
Carbon Disulfide	0	9	8	Y
Carbon Disulfide	1	6	21	Y
Carbon Monoxide	0	150	734	Y
Carbon Monoxide	542.7	1	-	N
Carbon Monoxide	3736.48	26	211	Y
Carbon Monoxide	3804.09	13	-	Y
Carbonyl Sulfide	0	9	36	Y
Carbonyl Sulfide	1	-	1	N
Carbonyl Sulfide	1.9	-	1	N
Carbonyl Sulfide	29	5	-	Y
Carbonyl Sulfide	155.6	-	1	N
Crude Oil	0	2	26	Y
Halon 1301	0	2	-	Y
Hydrogen Chloride	0	-	5	Y
Hydrogen Chloride	193.22	-	1	N
Hydrogen Cyanide	0	96	132	Y
Hydrogen Sulfide	0	71	723	Y
Hydrogen Sulfide	15.68	1	-	N
Hydrogen Sulfide	15.78	24	112	Y
Hydrogen Sulfide	15.86	4	-	Y
Hydrogen Sulfide	61.67	-	1	N
NOx	0	137	465	Y

BAYTOWN REFINERY, Flexible Permit 18287 *(cont'd)*

Pollutant	Emission Limit (lbs/hr)	Days of Violation – Reportable Events (PX 589)	Days of Violation – Recordable Events (PX 590)	Was Limit Violated More Than Once?
NOx	33.6	1	-	N
NOx	1747.18	18	123	Y
NOx	1775.47	11	-	Y
NOx	1914.29	6	-	Y
N-Methyl-2-pyrrolidone	0	5	53	Y
Opacity	0 %	30	1	Y
Opacity	30 %	3	-	Y
Particulate Matter	0	92	165	Y
Particulate Matter	554.40	4	-	Y
Particulate Matter	570.71	1	19	Y
Phosphoric Acid	0	-	2	Y
Sodium Hydroxide	0	-	2	Y
Sodium Hypochlorite	0	-	9	Y
Sulfur Compounds	0	5	8	Y
Sulfur Compounds	15.78	4	-	Y
Sulfur Dioxide	0	124	438	Y
Sulfur Dioxide	39	1	-	N
Sulfur Dioxide	3242.67	28	538	Y
Sulfur Dioxide	3317.49	5	-	Y
VOCs	0	107	1,780	Y
VOCs	401	1	-	N
VOCs	6010.61	30	-	Y
VOCs	6014.44	10	4	Y
VOCs	6117.32	5	550	Y
TOTALS (of repeated violations only)		**1,203**	**6,661**	

BAYTOWN OLEFINS PLANT, Flexible Permit 3452
Sorted information from PX 2C, 2D, 591 and 592

Pollutant	Emission Limit (lbs/hr)	Days of Violation – Reportable Events (PX 591)	Days of Violation – Recordable Events (PX 592)	Was Limit Violated More Than Once?
Ammonia	0	1	4	Y
Ammonia	13.9	-	1	N
Ammonia	51.8	3	9	Y
Carbon Monoxide	0	70	654	Y
Carbon Monoxide	6627.58	72	350	Y
Chlorine	0	-	22	Y
Dimethyl Formamide	0	-	15	Y
Dimethyl Sulfide	0	-	8	Y
Hydrogen Chloride	0	-	2	Y
Hydrogen Cyanide	0	-	2	Y
Hydrogen Sulfide	0	6	4	Y
NOx	0	51	230	Y
NOx	1630.75	49	325	Y
NOx	1659.61	18	-	Y
Opacity	0%	40	-	Y
Opacity	20%	1	-	N
Opacity	30%	1	-	N
Particulate Matter	0	-	293	Y
Sodium Bisulfite	0	-	3	Y
Sodium Nitrate	0	-	3	Y
Sulfur Dioxide	0	4	1	Y
VOCs	0	143	1,315	Y
VOCs	8.55	1	-	N
VOCs	709.48	69	195	Y
TOTALS (of repeated violations only)		**526**	**3,435**	

BAYTOWN CHEMICAL PLANT
Sorted information from PX 2E, 2F, 593 and 594

Pollutant	Emission Limit (lbs/hr)	Days of Violation – Reportable Events (PX 593)	Days of Violation – Recordable Events (PX 594)	Was Limit Violated More Than Once?
Permit 4600 (Flares 9, 23, 24)				
Carbon Monoxide	78.2	1	-	N
Carbon Monoxide	840.59	7	85	Y
NOx	10.8	1	-	N
NOx	116.81	5	82	Y
VOCs	113.9	1	-	N
VOCs	1731.12	4	476	Y
Permit 5259 (Furnaces)				
Carbon Monoxide	4.36	-	5	Y
Sulfur Dioxide	5.99	-	1	N
Flexible Permit 20211 (Flare 12)				
Carbon Monoxide	67.73	4	-	Y
Carbon Monoxide	72.40	-	1	N
Hydrogen Chloride	1061.34	1	6	Y
Hydrogen Chloride	1132.10	3	1	Y
NOx	10.02	6	-	Y
NOx	13.15	4	-	Y
VOCs	169.45	1	-	N
Flexible Permit 20211 (Butyl Polymers)				
Particulate Matter	2.61		7	Y
VOCs	2137.54	4	1	Y
VOCs	2145.60	-	41	Y

BAYTOWN CHEMICAL PLANT *(cont'd)*

Pollutant	Emission Limit (lbs/hr)	Days of Violation – Reportable Events (PX 593)	Days of Violation – Recordable Events (PX 594)	Was Limit Violated More Than Once?
Flexible Permit 20211 (Aromatics & Paraffins Area)				
Carbon Monoxide	15.00	-	1	N
Carbon Monoxide	91.19	-	2	Y
Sulfur Dioxide	2.00	-	1	N
Sulfur Dioxide	33.83	-	1	N
VOCs	336.82	-	12	Y
Flexible Permit 20211 (Aromatics & Paraffins Tanks)				
VOCs	239.8	-	31	Y
Permit 36476 (Flare 28)				
Ammonia	5.21	1	-	N
Ammonia	5.31	1	2	Y
Carbon Monoxide	103.55	-	1	N
Carbon Monoxide	992.28	3	4	Y
Carbonyl Sulfide	0.04	2	-	Y
Carbonyl Sulfide	1.80	5	-	Y
Hydrogen Cyanide	0.10	2	-	Y
Hydrogen Cyanide	3.31	1	-	N
Hydrogen Sulfide	0.01	-	1	N
Hydrogen Sulfide	0.70	2	-	Y
Hydrogen Sulfide	28.4	5	3	Y
NOx	3.00	1	1	Y
NOx	30.46	1	-	N
NOx	41.91	1	5	Y
NOx	41.99	1	-	N
Sulfur Dioxide	0.04	-	1	N

BAYTOWN CHEMICAL PLANT *(cont'd)*

Pollutant	Emission Limit (lbs/hr)	Days of Violation – Reportable Events (PX 593)	Days of Violation – Recordable Events (PX 594)	Was Limit Violated More Than Once?
Sulfur Dioxide	67.72	2	-	Y
Sulfur Dioxide	2768.94	5	-	Y
VOCs	0.10	2	-	Y
VOCs	3.31	2	4	Y
Permit 36476 (Syngas Fugitives)				
Ammonia	0.07	-	3	Y
Hydrogen Sulfide	0.17	-	10	Y
Carbon Monoxide	2.16	-	8	Y
Carbonyl Sulfide	0.21	-	2	Y
NOx	1.40	-	1	N
No Permit Authorization				
Ammonia	0	10	73	Y
Carbon Monoxide	0	22	118	Y
Carbonyl Sulfide	0	7	42	Y
Freon R-22	0	-	3	Y
Hydrogen Chloride	0	14	29	Y
Hydrogen Cyanide	0	1	-	N
Hydrogen Sulfide	0	7	67	Y
NOx	0	22	-	Y
Opacity	0 %	2	-	Y
Particulate Matter	0	1	-	N
Sulfur Dioxide	0	8	-	Y
VOCs	0	35	301	Y
TOTALS (of repeated violations only)		**198**	**1,424**	

Thus, if this Court considers the "same type of violation" to be limited to violations of an identical numeric limit, then Plaintiffs proved a total of 13,443 days of violations of hourly emission limits, and Plaintiffs respectfully request that this Court rule that under Count II Exxon committed 13,443 days of actionable violations of its Title V permits.

B. In Adjudicating Count I, The District Court Erred As A Matter Of Law By Failing To Apply The "Upset Emissions Are Not Authorized" Provision Of The Refinery Permit.

Plaintiffs presented an alternative theory of liability for the upset emissions occurring at the Baytown Refinery: a provision in the Refinery permit, separate from the MAERT, flatly prohibits all upset-related emissions.[23]

The Refinery's Title V permit (number O1229) incorporates the terms of a state-issued flexible permit, a combined NSR and PSD permit numbered 18287/PSD-TX-730M4 ("Permit 18287"). ROA.45414; ROA.45551. Special Conditions 38 (concerning emissions from flares) and 39 (concerning emissions from other sources) of Permit 18287 both contain the following provision:

> This permit does not authorize upset emissions, emissions from maintenance activities that occur as a result of upsets, or any unscheduled/unplanned emissions associated with an upset. Upset emissions are not authorized, including situations where that upset is within the flexible permit emission cap or an individual emission limit.

[23] For the Refinery, the violations in Counts I and II overlap to a large extent because they both concern emission violations stemming from emission events. Unlike the Refinery permit, however, the permits for the Olefins and Chemical Plants contain no provision prohibiting all upset emissions.

ROA.44819-820.[24] This permit term is unambiguous: upset emissions are not authorized – are not allowed – and the amount of pollutants allowed to be emitted during refinery upsets therefore is zero.

However, in adjudicating Count I, the District Court did not compare the amount of pollutants allowed to be emitted during refinery upsets – *zero* – with the actual amounts emitted, which are evidenced in STEERS Reports, Recordable Lists, and the stipulated spreadsheets of data from those reports (PX 1A and 1B). Instead, the Court stated that it would compare the *hourly emission limits* (expressed in pounds/hour) in the Refinery MAERT to the actual amounts emitted. This approach would have been proper for Count II, but was not for Count I. In short, the Court invoked the wrong permit provision in making a ruling on Count I. This is an erroneous application of law to fact that is reviewed de novo and must be reversed. AF-CAP, 383 F.3d at 368; Gandy, 234 F.3d at 284; Alaska Cmty. Action, 765 F.3d at 1172 (application of terms of CWA permit reviewed de novo).

1. Contrary to the District Court's ruling on Count I, Plaintiffs clearly set forth the specific permit standard Exxon violated.

The District Court justified its ruling by stating, "[I]t is unclear exactly which standards or limitations Plaintiffs contend were violated in Count I."

[24] Prior to October 30, 2006, these Special Conditions were numbered 60 and 61, respectively; earlier versions of the Permit 18287 are at PX 159-175. ROA.43876-44791.

ROA.11395; see also ROA.11394 ("As to specific standards or limitations violated [under Count I], Plaintiffs' contentions have been inconsistent."). But the District Court in fact understood Plaintiffs' Count I contention very clearly, as it correctly articulated Plaintiffs' Count I claim twice in its Opinion: see ROA.11394 ("Count I alleges Exxon violated the provision of the Complex's Title V permit that prohibits emissions from upset events."); ROA.11397 n.167 ("Under Count I…Plaintiffs considered every hourly emission limit to be zero because they claim no emissions from upset events are authorized.").

Moreover, the record is clear that Plaintiffs consistently took the position under Count I that no emissions are authorized during Refinery upsets, regardless of whether they are within the hourly emission limits in the MAERT. ROA.35 (Complaint ¶ 27); ROA.8138 (Joint Pretrial Order); ROA.11953:9-23 (opening statement); ROA.12175:7-21 (testimony of Plaintiffs' witness); ROA.10802 (Pl. F&C); ROA.11280 (Rev. Pl. F&C).

Disregarding this consistent record, the District Court cited to two documents purportedly showing that Plaintiffs were inconsistent in presenting their Count I claim. One is Plaintiffs' Revised Proposed Findings of Fact and Conclusions of Law (submitted after the Court directed both parties to file shorter versions of their Proposed Findings and Conclusions). The Court stated, incorrectly, that Plaintiffs had cited to permit General Conditions 8 and 15 in their

original Proposed Findings and Conclusions, but had "removed" reference to these conditions in the revised version. ROA.11394-95. General Conditions 8 and 15 of Permit 18287 simply make clear that emissions not specifically authorized by the permit are considered permit violations. ROA.44799. In fact, the Revised Proposed Findings and Conclusions *do* refer to – and even quote – Conditions 8 and 15. ROA.11218.[25]

The Court also characterized Plaintiffs as having "added a contention of violation of 'Title V permit O1229'" in the Revised Proposed Findings and Conclusions. ROA.11395. But this was neither a last-minute addition nor a change of argument. The Refinery's Title V permit incorporates Permit 18287; this reference to the Title V permit simply notes, again, that a violation of Permit 18287 is also a violation of Title V permit O1229.

The District Court also cited Plaintiffs' Exhibit 9 as an indication of "inconsistency" on Count I. ROA.39684-85. The District Court pointed to the omission of the words "Special Conditions 38 and 39" from a column heading in this exhibit. ROA.11395. PX 9 is a summary chart. ROA.12180:24-12181:5. Pursuant to Fed. R. Evid. 1006, its only evidentiary function is "to prove the content of voluminous writings." Specifically, PX 9 sorts and totals the number of

[25] General Conditions 8 and 15 are not listed in a summary table included at page 58 of the Revised Proposed Findings and Conclusions, but Special Conditions 38 and 39 (the prohibition against upset emissions) *are* listed there.

days each air contaminant listed in the stipulated spreadsheets (PX 1A-1B, ROA.38169-522, and 587-588, ROA.55117-474[26]) was emitted as the result of an upset. PX 9 summarizes the evidence supporting the permit violations alleged in Count I; its failure to also repeat all of the specific legal arguments set forth in Plaintiffs' pre- and post-trial briefing on Count I does not deprive those arguments of their content or persuasiveness. Moreover, the overall heading to the table in question in PX 9 states the substance of Special Conditions 38 and 39: "Because any emissions resulting from upset events *are not authorized* by the Refinery permit's plant wide emission caps, each regulated air contaminant is counted separately for purposes of repeated violations." ROA.39684 (emphasis added).

Similarly, the absence of references to Special Conditions 38 and 39 in the stipulated spreadsheets (PX 1A and1B) is irrelevant. ROA.11395-96. As the District Court correctly noted, these documents form "[t]he evidentiary support" for Count I. Id. They "reference permit 18287," id., but do not need to specifically cite Special Conditions 38 and 39. To determine whether the allegations under Count I had been proven, the District Court had only to compare the factual emissions data in the stipulated spreadsheets (dates and durations of upset

[26] The spreadsheets in PX 587 and 588 are identical to the stipulated spreadsheets in PX 1A and 1B, respectively, except that they include an additional column entitled "Number of Days of Violation," which provides Plaintiffs' calculation of the number of days that they claim each emission listed on PX 1A and 1B violated the prohibition on upset emissions. ROA.12168:22-12169:11.

emissions, types of pollutants emitted) with the "no upset emissions" conditions of Permit 18287 referenced in Plaintiffs' legal arguments.

2. Contrary to the District Court's ruling, hourly MAERT limits are irrelevant to the determination of liability under Count I.

The District Court also reasoned that, because "Plaintiffs claim 'each regulated air contaminant is counted separately for purposes of repeated violations,' and their tallied table is divided by air contaminant," the Court should therefore "address whether violations of conditions that apply to separate air contaminants, particularly hourly limits, are actionable under Count I." ROA.11396-97; see also ROA.11397 n.167 ("the Court considers the hourly emissions limits of each contaminant due to Plaintiffs' approach to proving repeated violations under Count I contaminant-by-contaminant"). This was an error of law.

The contaminant-by-contaminant (or parameter-by-parameter) approach to proving actionable violations under Count I has nothing to do with the hourly MAERT limits. Indeed, Special Conditions 38 and 39 make clear that the "upset emissions are not authorized" provision is separate from the MAERT limits: they state that upset emissions "are not authorized" *even when* they would otherwise fall "within the flexible permit emission cap or an individual emission limit" found in the MAERT. ROA.44819-20.

The contaminant-by-contaminant approach to assessing violations of the "upset emissions are not authorized" limit is appropriate because each pollutant emitted during an upset is a separate violation. When emissions of air contaminants *are* authorized under Permit 18287, each pollutant is authorized separately. See ROA.44799-800 (General Condition 8 and Special Condition 1); John R. Jacus, et al., Clean Air Act Fundamentals, Major Programs, and Strategies in the Federal Clean Air Act, §III.A 2007, NO. 5 ROCKY MTN. MIN. L. FOUND. PAPER NO. 1 (2007) ("Emission limits apply on a pollutant-by-pollutant basis."); see also, David Schoenbrod, et al., Air Pollution: Building on the Successes, 17 N.Y.U. ENVTL. L.J. 284, 294-295 (2008) (noting that states regulate pollutant-by-pollutant despite the fact that "sources typically emit many kinds of pollutants and many pollutants are controlled by the same methods").[27]

Moreover, Special Conditions 38 and 39 are worded so as to prohibit upset *emissions*, rather than upset *events*.[28] Upset events often result in the release of more than one type of regulated air contaminant at a time. Since separate, specific authorization for each pollutant is required to make its emission legally

[27] The Clean Water Act adopts this same pollutant-by-pollutant approach to regulation and to determining permit violations. Texaco, 2 F.3d at 499; Chesapeake Bay Found., Inc. v. Gwaltney of Smithfield, Ltd., 890 F.2d 690, 698 (4th Cir. 1989).

[28] A prohibition on "upset events" would suggest each emission event would constitute a single permit violation, regardless of the number of different regulated air contaminants emitted without authorization.

permissible, an upset event releasing numerous types of unauthorized pollutants causes numerous violations of the ban on upset emissions. See ROA.10803 (Pl. F&C); ROA.12174:6-25.

Accordingly, to determine the number of actionable violations of the prohibition against upset emissions, Plaintiffs assessed each pollutant separately when counting the number of times (and over how many days) pollutants were emitted during upset events. For example, a release of carbon monoxide during a Refinery upset was not considered actionable unless carbon monoxide was also emitted during one or more subsequent Refinery upsets.[29]

3. The undisputed record establishes thousands of days of actionable violations of the "upset emissions are not authorized" provision.

It is clear on the face of PX 1A and 1B that many different pollutants were emitted during Refinery upsets. Each such emission was in an amount greater than zero, and thus constituted a violation. One can also determine from PX 1A and 1B which pollutants were emitted repeatedly, and thus which of the reported violations are actionable. Since almost every Refinery upset involved releases of more than

[29] Because PX 1A and 1B are compilations of data as they appear in Exxon's STEERS Reports and Recordable Lists, they do not always list a zero emission limit. In its STEERS Reports and Recordable Lists for Refinery upsets, Exxon sometimes entered "0" and sometimes entered the hourly emission rate from the MAERT as the applicable emission limit for a particular pollutant. That is because Exxon does not acknowledge that Special Conditions 38 and 39 prohibit *all* upset-related emissions.

one pollutant, and many lasted longer than 24 hours, Plaintiffs provided a line-by-line tally of the number of days of violation caused by each upset emission. This tally is in PX 587 (violations during Reportable Events) and 588 (violations during Recordable Events). See, e.g., ROA.55117 (included in Record Excerpts). PX 9 then breaks down the number of violations by pollutant, showing whether violations were continuing (occurred both pre- and post-complaint) or repeated (recurred only pre-complaint). These exhibits show that the Complex emitted 25 different pollutants in continuing or repeated violations, for a total of 10,749 days of violations. See ROA.11086-90 (Pl. F&C); ROA.11269-70 (Rev. Pl. F&C). Exxon did not challenge the math behind PX 9, 587, or 588.

Thus, as a matter of law, Exxon's own records prove 10,749 days of actionable violations under Count I, and Plaintiffs respectfully request that this Court make such a ruling.[30]

[30] Rather than apply an emission limit of zero to each upset emission covered by Count I, the District Court stated that it would apply the hourly emission limits in the Permit 18287 MAERT. But the District Court did not actually do this. As it did in its Count II analysis, the Court noted that there were instances in which the PX 1A and 1B spreadsheets listed different hourly limits for the same pollutant, and ruled there were no actionable violations because "Plaintiffs categorized different limits together." ROA.11397-98 ("Although the spreadsheets corroborate carbon monoxide limits were repeatedly violated, the spreadsheets show *different* carbon monoxide limits were violated."). This is the same erroneous approach to the MAERT limits that the Court took under Count II, and that approach is addressed fully above.

4. Even absent a pollutant-by-pollutant approach, the record establishes thousands of actionable violations under Count I.

Even if this Court were not to take a pollutant-by-pollutant approach to determining violations under Count I, but instead were to adopt the view that each upset event is a single violation of the "upset emissions are not authorized" provision, the undisputed record would still prove thousands of days of continuing violations. PX 1A and 1B (and their underlying documents) prove Exxon committed 112 reportable Refinery emission events occurring over 320 days, and 2,086 recordable Refinery emission events occurring over 4,152 days, for a total of 4,472 days of violation, and Plaintiffs would respectfully request that this Court make such a ruling should it adopt this alternative approach to Count I.

C. The District Court Erred As A Matter Of Law By Finding That Certain Alleged Violations Under Counts III And IV Needed To Be "Corroborated."

The District Court held that nine of the 18 alleged Highly Reactive Volatile Organic Compound Rule violations (Count III) and 16 of the 44 alleged "smoking flare" rule violations (Count IV) were not violations at all, and thus could not be "actionable," because the stipulated spreadsheets do not contain certain information the Court deemed necessary to "corroborate" those violations. ROA.11406-08; ROA.11441-43; see also ROA.39692; ROA.39694. As a matter of law, this holding is wrong, and Plaintiffs request that this Court rule that all 18

alleged HRVOC violations and 44 alleged smoking flare violations were in fact actionable violations.

First, Exxon conceded at trial that all of the alleged violations under Counts III and IV constituted "violations of an emission standard or limitation." ROA.11390 n.153. Given this judicial admission, further corroboration was unnecessary.

Second, the stipulated spreadsheets, *which were jointly prepared by the parties*, expressly state that they describe "violations." PX 3 is titled "HRVOC Rule Violations In STEERS & Deviation Reports (Count III)." ROA.39131. PX 4 is titled "Smoking Flare Violations In STEERS & Deviation Reports (Count IV)." ROA.39135.

Third, the District Court's ruling is contrary to Congress' intent to allow citizens to bring CAA enforcement suits based on a facility's own compliance reports without corroborating evidence. See *supra* at p. 29. And indeed, all of the spreadsheet entries that the District Court found insufficient to establish violations, in fact *on their face* do establish violations. Each entry in the Count III and Count IV spreadsheets contains information from STEERS Reports, from Deviation Reports, or both, that clearly establishes the alleged violation.

Count III: For HRVOC Rule violations established by STEERS Reports alone, PX 3 shows that the amount of HRVOCs released, when divided by the

duration of the emission event, exceeded the 1,200 pounds per hour HRVOC limit. ROA.39131-34. The District Court is incorrect that it is necessary to confirm this math with a Deviation Report containing "verbiage" (ROA.11406) stating that an HRVOC violation occurred. See pp. 31-32, *supra* (courts need only compare the amount of pollutants allowed to be emitted by the permit with the amounts actually emitted to determine violations).

Count IV: For smoking flare violations established by Deviation Reports alone, PX 4 shows these reports literally state that the smoking flare rule was violated. ROA.39135-40. The District Court is incorrect that it is necessary for the spreadsheets to also contain additional information such as opacity percentages or opacity limits,[31] particularly since, as alleged in the Complaint at ¶ 35 (ROA.37), there is only one smoking flare limit and it is not expressed in terms of opacity percentage. Rather, it states that flares may not show any "visible emissions" for more than five minutes in any two consecutive hours, a violation that can be documented verbally.

The District Court should be directed to enter a finding that all of the alleged violations under Counts III and IV are actionable.

[31] Opacity, used as a way to measure emissions of particulate matter, or smoke, is defined as "The degree to which an emission of air contaminants obstructs the transmission of light expressed as the percentage of light obstructed as measured by an optical instrument or trained observer." 30 Tex. Admin. Code §101.1(73).

D. The District Court Erred As A Matter of Law By Applying The Wrong Standard Of Proof To Assess Whether Exxon's Deviation Reports Establish Permit Violations Under Count VII.

EPA regulations require the owners or operators of facilities holding Title V permits to perform regular compliance monitoring, and to report instances of non-compliance, called "deviations," in bi-annual reports. 40 C.F.R. § 71.6. The parties stipulated to the contents of Deviation Reports submitted by Exxon to TCEQ. These stipulations were admitted into evidence as Plaintiffs' Exhibits 7A through 7E (ROA.39161-310), each spreadsheet corresponding to one of Exxon's Title V permits. Plaintiffs alleged in Count VII that each of the reported deviations in the stipulated spreadsheets constituted a violation of the applicable Title V permit condition described therein.

The District Court, reasoning that a "deviation" is characterized under both EPA and TCEQ regulation as an "indication of noncompliance," held that "Plaintiffs have not met their burden to show how, in light of these provisions, the Deviations at issue in this case are actual violations and not merely *indications* of noncompliance." ROA.11411-12 (emphasis in original). In other words, the District Court held that, as a matter of law, Deviation Reports by themselves are not sufficient to establish violations; that Plaintiffs had the burden of coming forward with *additional* evidence to corroborate the evidence in the reports; and

that Plaintiffs failed to carry this burden. This is incorrect as a matter of law, and a clearly erroneous statement of the undisputed factual record.

First, each stipulated Deviation entry contains all of the *prima facie* evidence needed to establish that a permit violation occurred. Each stipulated entry includes the date, time, and duration of the violation; the unit at the facility where the violation occurred; the permit term or incorporated regulatory requirement that was violated; and a description of the action or omission constituting the violation. ROA.12411:11-12413:1. Each entry also specifies whether the violation was of an emission standard or a monitoring or reporting requirement and, if the former, the pollutant(s) emitted. No additional information is needed to establish a CAA permit violation.

Second, the applicable EPA reporting regulation supports the sufficiency of the evidence contained in the stipulations. The regulation states that "deviation means any situation in which an emissions unit *fails to meet a permit term or condition*," and that "[a] deviation can be determined by observation or through review of data obtained from any testing, monitoring, or recordkeeping established in accordance with [EPA regulation]." 40 C.F.R. § 71.6(a)(3)(iii)(C) (emphasis added). To be sure, as the District Court noted, that regulation also provides that a deviation "is not always a violation." Id. But the reporting system accounts for

this possibility, and allows the permittee to include any evidence indicating that the reported deviation was *not* a violation:

> The owner or operator may include information in the certification [of compliance] to document that compliance was achieved during any periods in which a possible exception is noted … .
>
> . . . .
>
> When… all such occurrences have been adequately addressed by other information, as explained above[], this will be interpreted as a certification of continuous compliance.

62 Fed. Reg. 54,900, 54,937 (Oct. 22, 1997).[32] In short, a reported deviation indicates that a violation *has* been committed *unless* the report also contains "other information" to explain why, in the particular situation, no violation has actually occurred. Exxon submitted no such information as part of any of the Deviation Reports at issue, nor did it submit any such information at trial.

Third, even if the burden *were* on Plaintiffs to come forward with additional evidence to "corroborate" the stipulated spreadsheets, Plaintiffs have carried that burden by presenting testimony from Exxon confirming that the deviations at issue were, in fact, violations. Exxon's environmental supervisor testified at trial that the Exxon personnel assigned to compile Deviation Reports are trained to recognize violations of applicable CAA requirements, and that the deviations Exxon includes in its reports are, in fact, instances of "non-compliance" or

[32] See also H.R. Rep. No. 101-490, pt. 1, at 348 (1990) (legislative history for U.S.C. § 7661b(b)(2) ("The subsection also requires prompt reporting to the permitting authority by the permittee of any permit violation, subject to the constitutional safeguards against self-incrimination.").

"violations." ROA.12393:14-12392:3; ROA.12406:25-12408:22; ROA.12408:17-20; ROA.12409:21-23; ROA.12446:8-12447:15; ROA.12533:8-12536:8; ROA.12538:16-12539:3; ROA.14398:16-14399:8.[33]

The District Court thus erred as a matter of law by failing to rule that the Deviation Reports established 901 instances of permit violations, for which Plaintiffs calculated 4,677 days of repeated violations. See ROA.39700-10 (PX 15). Plaintiffs respectfully request that this Court make this ruling now.

III. THE DISTRICT COURT COMMITTED A NUMBER OF REVERSIBLE ERRORS IN DECIDING NO REMEDY IS WARRANTED.

Although a district court has discretion in determining the appropriate relief for violations of federal environmental statutes, it "must exercise [that] discretion with an eye to the congressional policy as expressed in the relevant statute." Marine Shale, 81 F.3d at 1360 (CWA case). Congress intended persons who violate the CAA, which has as its "root purpose" the "protection of public health," to "be held strictly accountable." United States v. J & D Enters. Of Duluth, 955 F. Supp. 1153, 1158 (D. Minn. 1997) (quoting H.R. Rep. No. 94-1175, at 52 (1976) (legislative history of the 1977 amendments to the CAA)).

[33] Exxon personnel testified that Exxon uses the phrases "non-compliance" or "exceedance" of a permit condition to mean "violation" (ROA.12408:17-20), and that a Deviation Report identifies "non-compliance with a term or condition of a Baytown Complex Title V permit" (ROA.12409:21-23).

Here, however, the District Court not only refused to order any remedy for the 94 violations it found actionable, but it went further and ruled that, even if it "had found every Event and Deviation in this case [] actionable, the Court would still find Exxon should not be penalized." ROA.11413. The District Court's wholesale failure to enforce the terms of Exxon's CAA permits improperly condones a status quo of thousands of continuing violations. And by carving out a *de facto* exception for larger facilities, see infra at pp. 89-91, the District Court effectively created a perverse incentive for the *relaxation* of compliance at these facilities.

The District Court's declaration that it will not grant relief for any of the more than 18,000 days of alleged actionable violations is also a *de facto* rewrite of Exxon's permits. By holding that Exxon should not be expected to comply with its permit limits, the District Court in effect rewrote the applicable permits to allow for substantial noncompliance. This is not allowed in a CAA enforcement action.[34] See United States v. EME Homer City Generation, L.P., 727 F.3d 274, 296-98 (3d Cir. 2013) (district courts do not have jurisdiction to hear collateral challenges to Title V permits); see also St. Bernard II, 399 F. Supp. 2d at 736 ("When it decides whether permit violations have occurred, the Court is thus not called upon to itself

[34] On the other hand, as the District Court acknowledged, district courts *do* have jurisdiction to second-guess government *enforcement* of the CAA when agency efforts have not been sufficient to secure compliance. ROA.6850 (recommended decision on summary judgment).

delve into the complex question of … what various industries can be expected to accomplish in reducing pollution.") (internal quotation marks, citations, and alterations omitted).

In short, the District Court's refusal to hold Exxon accountable in any way, much less "strictly accountable," for vast numbers of violations contravenes congressional policy. A discussion of specific reversible errors follows.

A. The District Court's Refusal To Impose A Penalty Was An Abuse Of Discretion.

The District Court concluded that "the large size and profitability of Exxon weigh towards imposing a penalty," and that "Exxon will only be impacted by a large penalty and has the ability to pay the alleged maximum penalty." ROA.11414-15. After considering the other statutory penalty factors, the District Court then determined that no monetary sanction is warranted for any of the 18,509 days of violation at issue in this case. This was an abuse of discretion.[35]

Congress deems civil penalties in Clean Air Act enforcement suits, including citizen suits, to be "necessary for deterrence, restitution, and retribution." S. Rep. No. 101-228, 1990 U.S.C.C.A.N. 3385, at 3756 (1989); United States v. A.A.

[35] Plaintiffs do not seek penalties for violations stemming from Refinery emission events under *both* Counts I and II. Eliminating this overlap in the more conservative manner (by not counting towards penalty assessment the larger number of Refinery violations established under Count I, as compared with Count II), Plaintiffs sought penalties under Counts II, III, IV, V and VII for a total of 18,509 days of violation. ROA.11119-20 (Pl. F&C ¶¶ 130-132).

Mactal Constr. Co., Civ. Action No. 89-2372-V, 1992 WL 245690, at *2 (D. Kan. April 10, 1992) (citing Tull, 481 U.S. at 422, which discusses the "similar provision" on penalties in the CWA); see also NRDC v. EPA, 749 F.3d 1055, 1062 (D.C. Cir. 2014). In the context of a CWA citizen suit, the Supreme Court has cautioned that Congress's determination that civil penalties are necessary to deter violations "warrants judicial attention and respect." Friends of the Earth, Inc. v. Laidlaw Envtl. Servs., Inc., 528 U.S. 167, 185 (2000).

The mere *availability* of penalties is not sufficient; for citizen suits to accomplish what Congress intended, courts must *impose* penalties where appropriate. See id. at 186 ("[I]t is reasonable for Congress to conclude that an actual award of civil penalties does in fact bring with it a significant quantum of deterrence over and above what is achieved by the mere prospect of such penalties.").

Accordingly, courts impose significant penalties for violations that are orders of magnitude smaller in number than Exxon's here. See, e.g., United States v. SCM Corp., 667 F. Supp. 1110, 1126, 1128 (D. Md. 1987) ($350,000 penalty – 47% of statutory maximum penalty – imposed for 30 days of CAA violations); United States v. Chevron USA, Inc., 639 F. Supp. 770, 777, 779-80 (W.D. Tex. 1985) ($6,054,000 penalty imposed for 1,524 days of CAA violations); see also

Powell Duffryn, 913 F.2d at 68, 81 (statutory maximum penalty of $4,205,000 imposed for 386 CWA violations).

Courts must consider the penalty criteria specified in the Act. Pound, 498 F.3d at 1095 n.3, 1097-98. These criteria are:

> … 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 the noncompliance, and the seriousness of the violation.

42 U.S.C. § 7413(e)(1).[36] Congress was particularly concerned that violators "not be able to obtain an economic benefit…as a result of their noncompliance with environmental laws." 136 Cong. Rec. S16,895-01 (1990) (Chafee-Baucus Statement of Senate Managers).

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[36] The maximum penalty per day of violation is $37,500 for violations occurring on January 13, 2009, and after, and $32,500 for violations occurring before January 13, 2009. 42 U.S.C. § 7413(e); 40 C.F.R. § 19.4. The District Court emphasized here that "**Plaintiffs ask the Court to assess the maximum penalty allowed by law for each Event and Deviation, regardless of degree of seriousness.**" ROA.11423-24 (bold in original); see also ROA.11419 (same point made in Court's discussion of the "duration of violation" factor) Plaintiffs argued that the statutory maximum penalty was appropriate, given that the calculated economic benefit from noncompliance was roughly equivalent to the statutory maximum penalty (ROA.11109 (Pl. F&C ¶ 105)), and given that (as the District Court found, ROA.11414-15) only a large penalty will be sufficient to have a deterrent impact on Exxon. But Plaintiffs also acknowledged the District Court's discretion in determining the amount of an appropriate penalty (ROA.11108 (Pl. F&C ¶ 103)), did not argue for an "all or nothing" approach to penalties, and provided a comprehensive overview of the violations (ROA 11109-16 (Pl. F&C ¶¶ 108-121A)).

1. The District Court failed to make a "reasonable approximation" of economic benefit, as it is required to do.

"Proper consideration of economic benefit is integral to arriving at an appropriate [penalty] award." United States v. CITGO Petroleum Corp., 723 F.3d 547, 553 (5th Cir. 2013) (CWA). As this Court has held, "a district court generally must make a reasonable approximation of economic benefit when calculating a penalty." Id. at 552 (citation and internal quotes omitted); see also Sierra Club, Lone Star Chapter v. Cedar Point Oil Co., 73 F.3d 546, 576 (5th Cir.1996) (same). As another court summarized in the context of a Resource Conservation and Recovery Act enforcement action, "the goal of the economic benefit analysis is to prevent a violator from profiting from its wrongdoing, level the economic playing field, and prevent violators from gaining an unfair competitive advantage." United States v. Rineco Chem. Co., No. 4:07-cv-001189-SWW, 2009 WL 801608, at *14 n.22 (E.D. Ark. March 4, 2009) (citing United States v. Mun. Auth. (Mun. Auth. II), 150 F.3d 259, 263-264 (3d Cir. 1998) (CWA); Pound, 498 F.3d at 1099-1100).

As the experts for both sides agreed, a company need not have deliberately chosen to violate to have gained an economic benefit. ROA.13003:3-11; ROA.14754:1-11. However, unless the penalty exceeds economic benefit, regulated entities "would understand that they have nothing to lose by violating" the law. United States v. Mun. Auth. (Mun. Auth. I), 929 F. Supp. 800, 806 (M.D.

Pa. 1996), aff'd, 150 F.3d 259 (3d Cir. 1998) (CWA); see also United States v. Gulf Park Water Co., Inc., 14 F. Supp. 2d 854, 862-863 (S.D. Miss. 1998) ("[T]o serve the purpose of deterrence, [a penalty] should exceed the economic benefit enjoyed by defendants.").

A district court is not bound to a particular methodology for calculating economic benefit. CITGO, 723 F.3d at 552 (acknowledging various potential measures of economic benefit). It can calculate the benefit to the violator of delaying or avoiding capital expenditures and maintenance costs. Id.; Pound, 498 F.3d at 1099-1100. Or, since a violator can always cease operations in order to comply, 30 Tex. Admin. Code § 122.143(4); Marine Shale, 81 F.3d at 1337 (CWA); Atl. States Legal Found., Inc. v. Tyson Foods, Inc., 897 F.2d 1128, 1141-42 (11th Cir. 1990), a court can approximate "some degree of profits gained" by the violator by virtue of operating in a non-compliant state. Pound, 498 F.3d at 1100.

Here, the District Court did not approximate the amount of profits Exxon gained from operating instead of shutting down to comply.[37] Nor did it

[37] The District Court found that Exxon earned $41 billion in after-tax net profits in 2011, and $44 billion in 2012. ROA.11360. Even if the Complex (the largest petroleum and petrochemical complex in the United States, ROA.2016 (Answer ¶ 1)) contributed only 1% to those profits, that would be $850 million (more than the penalty sought by Plaintiffs), *for just two out of the eight years at issue in this case.* If the Complex had contributed a mere 0.1% to Exxon's profits, that would have been $85 million for those two years alone.

approximate the amount Exxon earned as a result of delaying or avoiding capital and maintenance expenditures that would have reduced the number or severity of violations. Thus, the Court committed clear error in its economic benefit analysis.

Instead, the District Court simply concluded, "the most reasonable estimate of Exxon's economic benefit [from] noncompliance is $0" – that is, "Exxon received no economic benefit from not complying." ROA.11423. The District Court reached this conclusion based on two determinations: (a) that the testimony of Plaintiffs' engineering expert Keith Bowers as to steps Exxon could have taken to reduce or eliminate violations lacked credibility; and (b) that "Exxon has spent a substantial amount of money" on efforts to comply. ROA.11422. Neither determination justified a finding of no economic benefit.

First, Exxon itself admitted it failed to take specific measures that would have prevented violations, which establishes economic benefit even without Mr. Bowers' testimony that such measures would have reduced violations. Exxon determined that two large capital improvements would have significantly reduced unlawful emissions.[38] In a report prepared for its experts, Exxon estimated that an additional sulfur recovery unit would have reduced unlawful emissions by up to 43.34 tons during five of the emission events at issue, and that additional flare gas recovery compressors would have reduced the release of pollutants during

[38] In fact, these were the two largest projects Mr. Bowers recommended that the Complex undertake. ROA.11421.

unlawful flaring events by up to 449 tons. ROA.56075; ROA.56073; ROA.10897-98; ROA.10899-900. Exxon also admitted that it is now, at this late date, preparing to install additional flare gas recovery compressors for the purpose of reducing flaring events. ROA.51492. Exxon testified that it failed to install additional flare gas recovery compressors earlier because it did not consider that expenditure to be "economic." ROA.14107:14-14109:1.

Plaintiffs' economics expert, Jonathan Shefftz, used a methodology that the District Court found reliable to calculate the economic benefit of these two projects. ROA.11421.[39] Mr Shefftz determined that Exxon's failure to make these two improvements allowed the company to gain an economic benefit of approximately $73 million. ROA.54567 (expert report of Mr. Shefftz).[40] Plaintiffs respectfully request that this Court direct the District Court to factor this amount into a revised civil penalty assessment.

Second, the District Court found that, in 2012, under Exxon's Agreed Order with TCEQ, Exxon embarked upon four improvement projects, to be implemented over a five-year period, "in an effort to reduce emissions and unauthorized

[39] Mr. Shefftz calculated the return earned by Exxon as a result of having available for other business uses funds it could have used to reduce unlawful emissions. ROA.11037-38 (Pl. F&C ¶¶ 1104-09).

[40] Mr. Shefftz calculated economic benefit based on an additional sulfur recovery unit with an approximate capital cost of $100 million, and two additional gas compressor stations, with an approximate capital cost of $50 million. ROA.50357-59 (initial expert report of Mr. Bowers).

emissions events." ROA.11422. The Order itself states that these projects "will reduce emissions…from emissions events." ROA.11416. The District Court found that these projects will cost "approximately $20 million." ROA.11422. Again, Mr. Bowers' testimony was unnecessary for this finding.

Had Exxon undertaken these four projects years earlier, reductions in permit violations could have been realized earlier. Relying on testimony by Exxon's Fed. R. Civ. P. 30(b)(6) deponents as to (a) the capital and operation and maintenance costs of each of these projects (which are consistent with the District Court's $20 million finding, see ROA.54531-32), and (b) the fact that each of them could have been implemented prior to the statute of limitations period in this case (which is consistent with subsequent trial testimony, see ROA.56363:4-6; ROA.56364:2–56366:5; ROA.12850:9-14; ROA.13679:2-9), Mr. Shefftz (again using the methodology the District Court found reliable) testified that Exxon gained an economic benefit of $11.7 million by postponing these expenditures until 2012-2017. ROA.54529-32. Plaintiffs respectfully request that this Court direct the District Court to also incorporate this amount into a revised civil penalty assessment.[41]

[41] Whether Exxon was required by law to implement these improvement projects (ROA.11422) is irrelevant to the economic benefit analysis; as long as earlier implementation of these projects would have reduced the number and/or extent of the violations at issue, the money Exxon earned by delaying them is a proper component of the economic benefit calculation. In any event, because Exxon has

Third, while the District Court found that Exxon "made substantial efforts to improve environmental performance and compliance" that "achieved significant reduction in the number of Reportable Events [and] … unauthorized emissions … over the years at issue in this case," ROA.11416, it left unsaid that, had these "substantial efforts" been made sooner, the extremely high number of violations at the earlier end of the Claim Period could have been avoided. The Court made no approximation of the benefit Exxon gained by delaying implementation of these efforts.[42]

2. The District Court abused its discretion in holding that Exxon's violations were not "serious."

Even when taking into consideration all 18,509 days of days of violation for which Plaintiffs sought penalties – violations which encompass the release of over nine million pounds of pollutants and the disregard of important reporting, monitoring, and pollution control requirements – the District Court concluded that "the seriousness factor weighs against assessing a penalty." ROA.11429. The District Court's rationale for this conclusion is based on errors of law and clearly erroneous factual findings, and thus constitutes an abuse of discretion.

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an obligation to comply with its permits, these projects – or other actions that would achieve compliance – *are* required by the Act.

[42] Mr. Bowers estimated Exxon's underspending on preventive maintenance to be $90 million per year for approximately seven years. ROA.50388 (revised supplemental expert report of Mr. Bowers). Mr. Shefftz calculated Exxon's economic benefit from these avoided operation and maintenance costs to be $556 million. ROA.54566.

a. The District Court erred in concluding that violations it considered less serious negated violations it considered more serious.

To support its conclusion that no penalty is warranted, the District Court reasoned that there were many more "less serious" violations than there were "more serious" violations. A "less serious" violation, according to the Court, was one that involved no emissions (such as violations of reporting, monitoring or pollution control requirements) or emissions below the threshold necessitating a STEERS Report (*i.e.*, Recordable Events). A "more serious" violation, according to the Court, was one necessitating a STEERS Report. ROA.11424-25.

Essentially, the District Court relied on violations it considered less serious to negate or offset, rather than enhance, the significance of other violations it considered more serious. The District Court's approach is both illogical and contrary to the plain language of the CAA. The CAA directs the federal courts to assess "the seriousness *of the violation*," 42 U.S.C. § 7413(3(1) (emphasis added) – not the seriousness of the "average violation" or the "violation most often committed."

A serious violation does not become less so simply because it is accompanied by other, less serious violations. To analogize from criminal law, a defendant who commits grand larceny is not given a lighter sentence if he has also committed numerous petty thefts. Had Plaintiffs sued Exxon *only* for the

violations arising from the 241 Reportable Events at issue, the District Court's opinion suggests that the seriousness factor would have weighed in favor of a penalty. It defies reason that the commission of thousands of *additional* violations should tip the scales against a penalty.

To the contrary, courts recognize that the total number of violations can only be viewed as a more powerful indicator of seriousness. "The first aspect of the seriousness of the violations is their number and continuous nature." NRDC v. Texaco Ref. & Mktg., Inc., 800 F. Supp. 1, 23 (D. Del. 1992) (finding 365 violations – comprising 3,300 days of violation – to be serious because of their number); accord Pub. Interest Research Group of N.J. v. Powell Duffryn Terminals, Inc., 720 F. Supp. 1158, 1163 (D.N.J. 1989) (total of 386 violations is "significan[t]" because it is a "large number of violations"), aff'd in part 913 F.2d 64 (3rd Cir. 1990); Gulf Park Water, 14 F. Supp. 2d at 859 ("the number of violations" is first factor in assessing seriousness); Haw.'s Thousand Friends v. City & Cnty. Of Honolulu, 821 F. Supp. 1368, 1383 (D. Haw. 1993) (same). Here, despite a total number of days of violation many times larger than in the cases cited above, the District Court has turned the usual approach on its head.

The error in the District Court's approach can also be seen in the violations it chose to highlight. In its seriousness analysis, the Court cites to only two examples of emission events: a smoking electrical power cord and a small fire in a

cigarette butt can. ROA.11425. Not only did the Court wholly discount the risk of explosion posed by fires at a petrochemical facility, ROA.11429, but it failed to assess any of Exxon's myriad releases of substantial amounts of harmful pollutants and failures to operate and document pollution controls as required.

Plaintiffs respectfully request that this Court direct the District Court to consider the total number of Exxon's violations in a reevaluation of the seriousness factor.

b. The undisputed evidence shows Exxon's violations created "a potential risk of harm" and therefore, as a matter of law, were serious.

Proof of actual harm to the public or the environment is not necessary to establish that a violation is "serious" for purposes of penalty assessment; "a risk or potential risk of…harm" is sufficient to establish seriousness. See Pound, 498 F.3d at 1099 ("measurable harm to the public or the environment" is not required to establish seriousness); Powell Duffryn, 913 F.2d at 79 ("particularized showing" of the harm caused is not required to establish seriousness); United States v. Smithfield Foods, Inc., 972 F. Supp. 338, 344 (E.D. Va. 1997) ("a significant penalty" is appropriate if "there is a risk or potential risk of environmental harm, even absent proof of actual deleterious effect"). "[B]ecause actual harm to the environment is by nature difficult and sometimes impossible to demonstrate, it need not be proven to establish that substantial penalties are appropriate." Mun.

Auth. I, 929 F. Supp. at 807. "[I]f we required specific proof that particular violating discharges caused discrete, identifiable harms, we would encourage a permittee to ignore the requirements of its permit with impunity so long as it discharged into already polluted [areas]." NRDC v. Texaco, 800 F. Supp. at 24.

Indeed, this Circuit has found a history of frequent violations of the Clean Water Act to be serious "even though there was little, if any, evidence of actual environmental harm." Gulf Park, 14 F. Supp. 2d at 859 (construing Marine Shale, 81 F.3d at 1336–37), 860 (noting that the plaintiff "does not have the burden of quantifying the harm caused").

Courts are thus foreclosed from allowing "the luck of the draw" to affect their assessment of seriousness. For example, the fact that the wind happened to carry a cloud of hydrochloric acid released from the Chemical Plant west over the Houston Ship Channel, rather than east into a children's playground, does not diminish the potential for harm created by such an emission event. See ROA.14069:9-14070:12. Similarly, violations of the HRVOC Rule that happen to occur at night, when there is no sunlight to create an ozone plume, are nonetheless indicative of operational deficiencies with the potential to create a public health hazard. ROA.13834:17-13835:10.

Here, the District Court acknowledged the "potential risk" standard (see ROA.11423 (citing Pound and Powell Duffryn)), but did not articulate whether or

how it applied that standard. After finding Plaintiffs provided evidence of "the potential health effects caused by the type of pollutants emitted during the Events and Deviations" (ROA.11426), the District Court's full analysis of the potential for risk of harm caused by Exxon's emission violations consists of the following conclusory statement:

> Plaintiffs' aforementioned evidence of potential health effects … did not provide 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.

ROA.11426-27 (footnote omitted).

This conclusion constitutes reversible error. Regardless of whether the District Court in fact applied an improperly rigorous "actual harm" standard, rather than the potential risk standard,[43] its conclusion that Exxon's violations created not even a "potential risk" of adverse impacts is, as discussed below, clearly erroneous when considered in light of the undisputed evidence. Plaintiffs respectfully

[43] The District Court's discussion of seriousness suggests that Plaintiffs were required to show actual harm or measurable risk from each emission to prove them serious. The Court acknowledged, for example, that Exxon's own air dispersion modeling showed exceedances of off-site pollutant concentration safety thresholds, but refused to factor this evidence into its findings because of "conflicting evidence" on the "import" of such exceedances. ROA.11426 n.254. Exxon's evidence on the "import" of these exceedances was testimony arguing they did not cause any *actual* health effects. See ROA.10486 and ROA.10489 (Exxon's Proposed Findings of Fact and Conclusions of Law at ¶¶ 766, 771).

request that this Court direct the District Court to reconsider the potential risk posed by Exxon's violations.

i. Exxon admitted that its emissions adversely affect the surrounding community.

Exxon conceded that reducing the amount of air pollutants emitted from the Baytown Complex would improve air quality and public health in the surrounding area. At trial, a senior manager in Exxon's Security, Safety, Health, and Environmental Department testified:

> Q: [Reducing emissions from the Baytown Complex] helps people outside the fence line, right? …
> A: That is the point. It helps the environment, yes, sir.
> Q: … It helps public health, too, right?
> A: Yes.
> Q: Less emissions, better public health, agreed?
> A: Yes, sir.
> **C.** * *
> Q: … So emissions [at the Complex] should still come down because it's more protective of public health, right?
> A: Yes, sir.

ROA.56582:11-22; ROA.56583:21-23; see also ROA.56580:4-9 & 18-22.

Further, in a publicly distributed brochure, entitled "2012 Environmental Progress Report – ExxonMobil Baytown," the company states that reducing "air incidents" – emission events – at the Baytown Complex would help "deliver emission reductions and *cleaner air for our local community and the greater Houston area*." ROA.51494-95 (emphasis added).

Moreover, during a presentation by Exxon to the Baytown City Council on

October 24, 2013,[44] Lisa Chisholm, of Exxon's Environment Department staff, told the Council, "we really recognize that flaring creates emissions[;] *it definitely can be a nuisance to the public*." ROA.51491-92 (emphasis added).

ii. Exxon's violations released pollutants found by Congress and EPA to be harmful to human health.

Many of the pollutants unlawfully released by Exxon have been targeted by Congress as particularly dangerous; this, too, supports a finding of risk to the surrounding community. See Pound, 498 F.3d at 1099 (finding it "[p]articularly important" that Congress in the CAA banned release of the pollutant in question); Powell Duffryn, 913 F.2d at 79 (attaching great weight to government findings of potential harm from the pollutants unlawfully released). Exxon's violations involve numerous and substantial emissions both of *criteria* pollutants, the six air pollutants found to "cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare," 42 U.S.C. § 7408(a)(1)(A), and of *hazardous air pollutants*, chemicals specifically listed by Congress as known or suspected to cause cancer or other serious health effects, such as reproductive or birth defects, 42 U.S.C. § 7412(a)(6), (b)(1) & (2).

The Baytown Complex emitted 9,404,940 pounds (4,702.47 tons) of criteria pollutants during Reportable and Recordable Events from 2006 through 2012 alone

[44] A transcript of the hearing was admitted into evidence. ROA,14829:5-12.

(approximately one year less than the full Claim Period). ROA.12321:12-12323:1; ROA.56077; ROA.49228-70; ROA.49272-433. And the Complex unlawfully released numerous additional tons of 21 different hazardous air pollutants during the emission events at issue.[45]

That Exxon's overall emissions of these pollutants may be within *annual* permit limits (ROA.11375) is beside the point. As TCEQ found, hourly limits such as those at issue here "are necessary in order to ensure protection of public health from short-term exposure." 36 Tex.Reg. 950 (February 18, 2011).

iii. Exxon's illegal emissions caused pollutant levels in the surrounding community to exceed safety thresholds.

Exxon hired an air dispersion modeler to quantify the off-site concentrations of air pollutants emitted during the *least* serious emissions events at issue in this case. ROA.13902:6-13903:8 (nearly 100 larger releases not modeled). This modeling determined that 144 of these emission events caused off-site ambient air concentrations to exceed an applicable "air comparison value" for one or more pollutants.[46] The District Court characterized these air comparison values as

[45] See ROA.10903-05 (Pl. F&C), ROA.40-43 (Complaint), and ROA.2023-24 (Exxon's Answer) for a list of all the pollutants unlawfully released by the Refinery, the Olefins Plant, and the Chemical Plant, respectively, during the Claim Period.

[46] ROA.13902:22-13903:3; ROA.13825:22-13826:1; ROA.13900:13-18; ROA.13886:19-13888:15; ROA.14060:13-18.

"safety thresholds."[47] ROA.11426 n.254.

Off-site pollutant concentrations were as high as *21 times* the applicable threshold (ROA.56082 (PX 610A)); in 75 instances, off-site concentrations were more than double the regulatory threshold (ROA.56081(PX 610A); ROA.56093 (PX 611A)).[48]

This undisputed evidence from Exxon's own modeling expert is – by definition – proof of *actual* risk of harm. The District Court's finding that there was no "credible evidence" of even the potential for harm is thus clearly erroneous.

iv. High background levels of air pollution make Exxon's violations more serious.

The District Court discounted the seriousness of the "nuisance-type impacts" of Exxon's violations – such as pungent odors, allergic and respiratory problems, and health concerns created by visible emissions from the Complex – because Exxon's unlawful emissions are smaller in annual quantity than Exxon's legally authorized emissions, and because "numerous other refineries, petrochemical plants, and industrial facilities" in the area may also contribute to these problems. ROA.11427. This is contrary to the prevailing law. See Gulf Park Water, 14 F.

[47] The air comparison values selected by Cabe are government-set standards or advisory levels for air pollutants or, in some cases, other thresholds deemed relevant to the assessment of human health risk. ROA.13296:2-8.

[48] Moreover, Plaintiffs presented evidence that this modeling methodology systematically *understated* the actual offsite pollutant concentrations caused by Exxon's emissions. ROA.13149:13-13160:1 (trial testimony of Dr. Ranajit Sahu).

Supp. 2d at 859-60 (rejecting the argument that "violations of the Clean Water Act were not serious[] because there are other sources of pollution on the Gulf Coast" and noting that "[t]his same argument has been rejected by other courts"). It is also factually erroneous.

In general, high existing concentrations of air pollutants make additional emissions *more* serious than they would be in a pristine setting. Exxon's air dispersion modeling experts testified that air pollution levels are "additive": the "background" concentration of a pollutant is added to the concentration of new emissions of that pollutant to determine how much people are breathing. ROA.13309:25–13310:6; ROA.13890:8-15. Thus, when pollutant concentrations are already at or near safety thresholds, the marginal risk created by each *additional* emission is greater. Moreover, Exxon's toxicology expert conceded that air pollution is also synergistic: an emitted pollutant can interact with other pollutants already present in the air to create adverse health effects. ROA.14017:14-25 (margins of safety are built into exposure thresholds to account for such interactions); see Hawaiian Elec., 723 F.2d at 1446-47 (some thresholds do not account for "synergistic impacts of various pollutants").

Here, moreover, Plaintiffs were able to pinpoint effects from Exxon's unlawful emissions despite background concentrations. Four of Plaintiffs' members correlated, by date, emission event, and health symptom, the specific

contribution made by certain of Exxon's violations. ROA.11427-28; ROA.11379 n.111.[49]

v. Exxon's violations contributed to documented health problems in the surrounding community.

Exxon's unlawful emissions include pollutants known to cause specific pollution-related health problems present in Harris County. The District Court's failure to weigh these undisputed facts in its seriousness evaluation was an abuse of discretion.

Ground-Level Ozone: It is undisputed that ground-level ozone causes a number of serious health problems. ROA.13529:9-19 (trial testimony of Dr. Edward Brooks of University of Texas Health Center); ROA.51925 (EPA fact sheet). It is also undisputed that the air in the communities near the Baytown Complex has unhealthy levels of ozone. ROA.51682 (expert report of Dr. Brooks); ROA.52163-65 (EPA ozone non-attainment report). Harris County has been designated as in "nonattainment" of the 1-hour ozone NAAQS every year from 1992 to the present and has been designated as in "nonattainment" of the 8-hour ozone NAAQS every year from 2004 to the present. ROA.52163-65; ROA.12315:12–12316:20.

[49] Although the Court downplayed the number of specific correlations, it is not surprising they could not, years later, tie particular effects to particular violations. And, as the District Court acknowledged, it is not the case that "such link is required for a finding that the Events and Deviations were serious under a penalty analysis." ROA.11428 n.259.

Exxon's unlawful emissions included large quantities of ozone precursors (VOCs, NO_x, and CO), and caused 18 days of violation of the HRVOC Rule, which Exxon's air modeling expert admitted is specifically designed to prevent large industrial releases from creating harmful ozone plumes (ROA.13837:20-13838:15). Exxon's releases included:

- ten emission events that each released 100,000 to over 500,000 lbs. of CO (ROA.51471);
- ten emission events that each released 6,000 to over 20,000 lbs. of NO_x (ROA.51472-73);
- ten emission events that each released 40,000 to over 160,000 lbs. of VOCs (ROA.51480-81); and
- ten emission events that each released 15,000 to over 125,000 lbs. of HRVOCs (ROA.51482-83).

Exxon's air modeler testified that emissions of ozone precursors from Baytown can cause ozone formation in distant parts of Harris County (ROA.13842:10-16), and that the best way to prevent the occurrence of elevated ozone levels is to reduce the overall levels of ozone precursors in the air (ROA.13838:2-5).

Cancer Risk: A Task Force at the University of Texas School of Public Health (the "UT Task Force") concluded that benzene and 1,3-butadiene represent a "definite risk to human health," and an unacceptable increased cancer risk, in Houston's air. ROA.51682-83. Exxon's violations included ten emission events in which from 800 to nearly 20,000 lbs. of 1,3-butadiene were released in each

event (ROA.51485), and ten emission events in which from 900 to over 5,700 lbs. of benzene were released in each event (ROA.51484). Exxon's unlawful emissions have also included xylene, isoprene, naphthalene, and methylbenzene, all known to cause cancer (ROA.13518:9–13519:15; ROA.56373:4-25), as well as the suspected human carcinogen ethylbenzene (ROA.53556-57; ROA.53561-64).

Exxon did not dispute Plaintiffs' evidence that: there is no safe threshold level below which exposure to a carcinogen poses no risk of cancer; the risk of getting cancer increases the more carcinogens a person breathes; and this risk does not dissipate or lessen over time. ROA.51695 (expert report of Dr. Brooks); ROA.13502:2–13504:16; ROA.13509:16–13511:3; ROA.13512:4-23.

Particulate Matter: The UT Task Force "found [in 2006] that *existing and projected* ambient concentrations of … PM2.5 [fine particulates], *are almost certainly causing respiratory and cardiopulmonary effects* in some individuals, as well as *contributing to premature death*." ROA.51682 (emphasis added). Exxon's violations include 311 days on which particulate matter was unlawfully released. ROA.39684-85 (PX 9); see also ROA.55117-474 (PX 587, PX 588).

c. The District Court's conclusion that "nuisance-type impacts" were not supported by a preponderance of the evidence is clearly erroneous.

The District Court found that "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." ROA.11428-29. This was clear error.

First, it is contradicted by the District Court's own findings. The Court found that four of Plaintiffs' individual members suffered health impacts and other "impacts to their life" – "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" – as a result of Exxon's emissions. ROA.11427. As discussed above, the Court found further that they had been able to correlate some of these impacts with five specific emission events occurring during the Claim Period (ROA.11427-28), and with a sixth that occurred during trial (ROA.11379 n.111). For example, during Exxon flaring events one Sierra Club member "smelled strong, pungent odors" that were so powerful they "caused him headaches and awoke him at night." ROA.11380.

Second, the District Court ignored undisputed evidence that community concern about emission events is *not* limited to these four witnesses. During Exxon's October 24, 2013, presentation to the Baytown City Council, a Baytown city councilman stated that his constituents are concerned about flaring at the Exxon Complex and frequently call him with questions about it. ROA.11000 (Pl. F&C ¶ 965). And the District Court summarily dismissed the significance of the voluminous Baytown Complex citizen complaint log, which specifically notes

when citizen complaints were correlated with an emission event, because Plaintiffs did not go through it line by line in their Proposed Findings. ROA.11428 n.259.

Third, the District Court's finding that the testimony of three community members with ties to Exxon,[50] who testified they were not themselves concerned about Exxon's pollution, somehow "controverted" the evidence above (ROA.11428) is clearly erroneous. Even if considered wholly persuasive, this testimony does not establish that Plaintiffs' witnesses and other members of the community are *not* affected by Exxon's illegal emissions. Having found the testimony of Plaintiffs' members sufficiently credible to establish standing, it was clear error to then hold that this same testimony does not establish the nuisance-type impacts that supported standing. Plaintiffs respectfully request that this Court direct the District Court to consider the nuisance-type harm caused by Exxon's violations in reevaluating the seriousness factor.

3. The District Court abused its discretion by using violations of short duration to diminish the significance of the many violations of longer duration.

In assessing penalties under the CAA, courts are directed to consider "the duration of the violation as established by any credible evidence (including evidence other than the applicable test method)." 42 U.S.C. § 7413(e)(1).

[50] ROA.14184:16-22, ROA.14188:7-18, ROA.14199:1-5, ROA.14200:8-21, ROA.14201:15-23; ROA.14452:25-14453:19; ROA.14705:8-20, ROA.14711:23-14712:6.

Some courts have approached this penalty factor by examining the period of time over which the violations at issue occurred. See United States v. Vista Paint Corp., EDCV 94-0127 RT, 1996 WL 477053, at *15 (C.D. Cal. Apr. 16, 1996), aff'd, 976 F.2d 739 (9th Cir. 1992) (where the violations "spanned a period of almost six years," "[s]uch duration of violations supports a substantial penalty"); United States v. Midwest Suspension & Brake, 824 F. Supp. 713, 737 (E.D. Mich.1993), aff'd, 49 F.3d 1197 (6th Cir. 1995) (because the 25 violations at issue occurred intermittently over a six-year period, the "duration of the violations" factor "does not weigh in favor of reducing the statutory maximum penalty"). Exxon averaged more than one unauthorized emission event *per day* over the entire eight-year period at issue in this case. Moreover, because Exxon often committed more than one violation on a single day, there were more *days of violation* over this period than there were *days* over the period. Thus, under the approach to "duration" approved by the Ninth and Sixth Circuits, this factor weighs heavily in favor of assessing a substantial penalty.

The District Court rejected this approach, however, in favor of assessing the duration of each individual violation, noting that duration "differs tremendously" from violation to violation. ROA.11419. While an individualized approach is also consistent with the language of the statute (which specifies "duration *of the violation*"), the District Court did not actually perform such an analysis. Rather,

the Court simply concluded that, "with some [violations] being long and some being short, … the duration factor weighs neither for nor against assessing a penalty." ROA.11419-20. The Court's finding that a shorter violation somehow offsets the significance a longer violation suffers from the same logical and legal errors in the District Court's analysis of the seriousness factor (see pp. 71-73, *supra*).

A violation of lengthy duration does not become less deserving of a penalty simply because it is accompanied by other violations of shorter duration. Had Plaintiffs sued Exxon *only* for the violations arising from the 1,701-hour-long Reportable Event in 2008, the 6,768-hour-long Recordable Event in 2009, the Deviation involving a 672-hour-long failure in 2010 to operate Refinery Flare 20 at a temperature high enough to combust pollutants adequately (ROA.51471; ROA.39226, row 506), and similarly lengthy violations, the District Court would have weighted the duration factor in favor of a higher penalty. It defies reason, and is an abuse of discretion, to conclude as the District Court did that the commission of thousands of *additional* violations, regardless of each one's length, should diminish the penalty appropriate for violations of lengthy duration.

While the District Court could not reasonably be expected to give individual consideration to each of the thousands of violations, the parties provided the Court with the means to group violations by duration. Exxon provided a breakdown,

adopted by the Court, showing that 11% of the Recordable Events (408 events, each comprising one or more separate violations) lasted more than 24 hours, 18% more than 12 hours, and so on. ROA.11419. And the native Excel versions of the stipulated spreadsheets the Court asked Plaintiffs to submit list the duration of each violation, allowing one to calculate that, for violations occurring during Reportable Events, 138 separate violations lasted more than 48 hours, 107 violations lasted more than 24 hours, 99 violations lasted more than 12 hours, 279 violations lasted more than 1 hour, and 111 violations lasted less than 1 hour. ROA.38523-606 (PX 2A); ROA.38877-929 (PX 2C); ROA.39030-53 (PX 2E).[51]

In light of this evidence, the District Court's failure to conclude that the duration factor weighs in favor of assessing a penalty for a significant number of Exxon's violations was an abuse of discretion. Plaintiffs respectfully request that this Court direct the District Court to reconsider the duration factor without using shorter violations to offset longer violations.

4. The District Court abused its discretion in finding that Exxon's full compliance history and efforts to comply weigh against assessing a penalty.

The District Court relied both on erroneous conclusions of law and erroneous factual findings in concluding that Exxon's full compliance history and

[51] This summary of the evidence introduced at trial is properly considered by this Court on appeal. See, e.g., Weymouth, 367 F.2d at 99.

efforts to comply weigh against assessing a penalty, and thus abused its discretion. Peaches Entm't, 62 F.3d at 693.

The District Court reasoned that, because the Complex is one of the largest industrial sites in the United States, "there are numerous opportunities for noncompliance" and the number of violations "is not the best evidence of compliance history." ROA.11415. The District Court further determined 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 [Emission] Events and Deviations." ROA.11415-16. It was an error of law for the Court to conclude that larger facilities are allowed to commit greater numbers of violations and that full compliance is impossible.

TCEQ regulations implementing the CAA reject the notion that size of facility or difficulty of compliance is a defense: "It shall not be a defense in an enforcement action that it would have been necessary to *halt or reduce* the permitted activity in order to comply with the permit terms and conditions of the permit." 30 Tex. Admin. Code § 122.143(4) (emphasis added)[52]; St. Bernard II, 399 F. Supp. 2d at 736 ("Strict enforcement of applicable permits … 'plainly reflects a congressional intent that claims of technological and economic

[52] Although the District Court acknowledged that "impossibility is not a defense to penalties," and stated that it was not invoking presumed impossibility of compliance "as a reason to not impose penalties," ROA.11416 n. 221, that is in fact precisely what the Court did.

infeasibility not constitute a defense.'") (quoting Friends of the Earth v. Potomac Elec. Power Co., 419 F. Supp. 528, 535 (D.D.C. 1976)); cf. United States v. City of Hoboken, 675 F. Supp. 189, 198 (D.N.J. 1987) (in a CWA enforcement case, the court stated, "[e]xcuses are irrelevant; under the Act the party must either achieve the discharge levels it has been allowed, or pay the consequences of its discharge, or stop discharging").

This effectuates Congress's intent that the CAA be a "technology-forcing" statute. Union Electric Co. v. EPA, 427 U.S. 246, 257 (1976); see also Whitman v. Am. Trucking Ass'ns, Inc., 531 U.S. 457, 490-91 (2001) (Breyer, J., concurring) (Congress intended CAA to protect public health "even if that means that 'industries will be asked to do what seems to be impossible at the present time'") (quoting 116 Cong. Rec. 32901–32902 (1970)).

No one forced Exxon to make the (highly profitable) business decision to construct and operate a facility the size of the Baytown Complex; it is the company's responsibility to ensure that the Complex is operated in compliance with the permits it applied for and accepted. Exxon acknowledged as much at trial: the company's environmental supervisor admitted that in a larger facility—with a greater number of valves, piping, and other equipment—the owner has a greater responsibility to ensure that these components do not leak or otherwise violate the facility's permit conditions. ROA.56586:25–56587:14.

The District Court also pointed to the four environmental improvement projects Exxon agreed to undertake under its Agreed Order with TCEQ, and found that these "substantial efforts" to reduce emissions demonstrated good faith. This was an erroneous factual finding. As discussed at pp. 20-21, *supra*, the Agreed Order was negotiated, at Exxon's instigation, only after Plaintiffs gave pre-suit notice of this lawsuit to Exxon. The improvement projects were either imposed as punishment in settlement of an enforcement action, or (as Plaintiffs argued) put forward by Exxon in an attempt to undercut more stringent citizen enforcement. Either way, all four of the projects could have been implemented earlier, and Exxon gained an economic benefit of $11.7 million by delaying them. See pp. 68-70, *supra*. The Agreed Order also allows Exxon to continue to violate its permits, which is the opposite of a good faith effort to comply. See pp. 20-21, *supra*. Nor did the Court take into account that two of the TCEQ officials responsible for negotiating the Agreed Order – one of whose testimony the Court cited as evidence of good faith – left the agency and were hired by Exxon shortly after the Agreed Order was entered. See p. 21 n.7, *supra.*

Also erroneous was the District Court's rejection of Plaintiffs' expert's opinion that certain capital improvements would have prevented emissions.

ROA.11416. Exxon itself admitted that these projects would have reduced unlawful emissions. See p. 68, *supra*.[53]

Lastly, the District Court did not consider several other factors relevant to Exxon's compliance history: the number of similar violations in the past, the number of violations that occurred after the Complaint was filed, and the prior enforcement lawsuit brought by the United States against Exxon for CAA violations at the Complex. See Gulf Park Water, 14 F. Supp. 2d at 864 (construing similar penalty factors under the CWA).

Plaintiffs agree with the District Court that the amount of any past administrative penalties should be deducted from the penalty to be imposed in this case. ROA.11420. However, the total of approximately $1.4 million in administrative penalties that Exxon has paid sporadically over the Claim Period for a few of the violations at issue (ROA.11365-66 and n.36; ROA.49163), constitutes a minuscule percentage of the economic benefit earned by Exxon (as detailed above).

[53] Although the District Court concluded that "there is no credible evidence that…improvements could have been made to prevent recurrence" of any of the violations at issue (ROA.11417), this is plainly at odds with Exxon's admission that these projects would have reduced unlawful emissions, and is also inconsistent with the Court's own finding that the four projects which Exxon agreed to undertake as a part of the Agreed Order, all of which Exxon could have implemented earlier, will reduce unlawful emissions. The District Court's conclusion on this point thus represents clear error.

Plaintiffs respectfully request that this Court direct the District Court to reconsider the history of violations and good faith efforts to comply factors, making no allowances for the size of the Baytown Complex or Exxon's assertions that full compliance is impossible; making no finding that government-ordered improvement projects (such as those to be implemented pursuant to the Agreed Order) constitute a showing of good faith; and in accordance with the considerations set forth in Gulf Park.

5. The District Court abused its discretion by failing to penalize Exxon for the violations it found "actionable."

A penalty is appropriate here even if the only "actionable" violations were the 94 violations (comprising 111 days of violation) found to be so by the District Court. Although they represent less than *one percent* of the total days of violation committed by Exxon over the Claim Period, these violations nonetheless posed a risk to the surrounding community. The Appendix to the District Court's opinion shows that these violations resulted in the unlawful emission of approximately 1,300 pounds of carbon monoxide, 25,000 pounds of hydrochloric acid (hydrogen chloride, or HCl) in four concentrated bursts, tens of thousands of pounds of VOCs, 28 unlawful releases of particulate matter (as measured by opacity), and 32 flare pilot flame outages (rendering the flares useless for pollution control). They ranged in duration from less than one hour to more than 100 hours, with nearly 20% lasting more than 10 hours. Nine of the incidents resulted in at least 30 hourly

violations of the HRVOC Rule, which was put in place specifically to prevent ozone formation in the Harris County ozone non-attainment area. ROA.11438-43.

Moreover, in determining an appropriate penalty for these violations, the District Court was required to take into account Exxon's "full compliance history," which includes the roughly 18,000 non-overlapping days of violation within the Claim Period that the District Court found *not* actionable in a citizen suit. Exxon's "economic benefit of noncompliance," discussed above, must also be considered. See 42 U.S.C. § 7413(e)(1). Finally, the District Court was required to take into account its finding that Exxon's vast financial resources mean it "will only be impacted by a large penalty." ROA.11414.

These factors weigh in favor of the imposition of a penalty at or near the statutory maximum, which is more than $3,500,000 for these 111 days of adjudicated violations. See Midwest Suspension & Brake, 824 F. Supp. at 736 (imposing $50,000 civil penalty on small company for 20 CAA violations committed over six years, "[a]n amount," the court found, "which represents 25% of defendant's [annual] net income…[a]nd thus an amount that is sufficient to deter…future violations and…to punish [defendant] for its past violations"). The District Court's failure to impose *any* penalty on Exxon for these adjudicated violations was an abuse of discretion.

B. The District Court's Failure to Grant a Declaratory Judgment To Clarify Exxon's Obligations Under Its Permits and Its Liability Under the Citizen Suit Provision Was an Abuse of Discretion.

A district court's decision granting or denying declaratory relief is reviewed for abuse of discretion. United Teacher Assocs. Ins. Co. v. Union Labor Life Ins. Co., 414 F.3d 558, 569 (5th Cir. 2005). However, "[a]ll agree that the exercise of discretion must be a 'sound' one," Hanes Corp. v. Millard, 531 F.2d 585, 591 (D.C. Cir. 1976) (citations omitted), and "the district courts may not decline on the basis of whim or personal disinclination," Hollis v. Itawambe Cnty. Loans, 657 F.2d 746, 750 (5th Cir. 1981). Rather, the district court's discretion "is to be 'exercised in the public interest,'" Millard, 531 F.2d at 591-92 (quoting Eccles v. Peoples Bank, 333 U.S. 426, 431 (1948)). A declaratory judgment is appropriate "when the judgment will serve a useful purpose in clarifying and settling the legal relations in issue," Concise Oil & Gas P'ship v. La. Intrastate Gas Corp., 986 F.2d 1463, 1471 (5th Cir.1993) (citations omitted), may be issued regardless of whether injunctive relief is also granted, Powell v. McCormack, 395 U.S. 486, 499 (1969), and does not require a finding of irreparable harm, Steffel v. Thompson, 415 U.S. 452, 472 (1974).

Here, Plaintiffs sought a judgment declaring Exxon to be in violation of various provisions of its Title V permits and establishing Exxon's liability for these violations under the Act's citizen suit provision. ROA.10808; ROA.11093. The

District Court determined that issuing such a judgment would serve a useful purpose in the public interest: "[A] public, court-ordered declaration that Exxon has violated its Title V permits would help deter Exxon from violating in the future." ROA.11389. Moreover, the fact that the District Court found that Exxon *is* likely to continue violating its Clean Air Act permits in the future (ROA.11434) weighs in favor of issuing a declaratory judgment. See Venator Group Specialty, Inc. v. Matthew/Muniot Family, LLC, 322 F.3d 835, 840 (5th Cir. 2003) (district court should consider "the likelihood that future events will occur" in determining whether to issue a declaratory judgment).

Nonetheless, the District Court denied the request for declaratory relief:

> The Court declines to issue such declaratory judgment because the issue in a citizen suit is not *solely* whether the defendant has violated the CAA. Indeed, it is undisputed that Exxon violated some emission standards or limitations. Rather, the issue is whether there was repeated violation pre-complaint, violation both before and after the complaint, or a continuing likelihood of recurrence. The Court has already made these findings.

ROA.11412 (footnotes omitted). This rationale does not justify the denial of declaratory judgment.

First, while it is true that violation of the Act was not the *only* issue to be decided in determining Exxon's liability in this action, it clearly was a necessary component of that determination; before one is able to determine whether violations were repeated or continuing, one must first determine whether violations

were committed. And, as the District Court found, a determination "that Exxon has violated its Title V permits" is likely to deter future non-compliance.

Second, to the extent that the District Court suggested that Plaintiffs did not request a declaration that Exxon is liable for ongoing and repeated violations, such a suggestion was clearly erroneous. Plaintiffs specifically proposed such a declaration in their Proposed Findings and Conclusions. ROA.10808; ROA.11093.

Third, to the extent that the District Court suggested there was little dispute as to Exxon's liability, this was also clearly erroneous. As the District Court noted, "Exxon does dispute that the alleged violations under Counts I, VI, and VII constitute violations of an emission standard or limitation." ROA.11390 n.153. Further, Exxon argued that *none* of the alleged violations are actionable under the CAA citizen suit provision. See, e.g. ROA.10473-74; ROA.11341-42. Certainly, then, a declaratory judgment would "clarify[] and settl[e] the legal relations in issue, and…afford relief from the…controversy giving rise to the proceeding." Concise Oil & Gas, 986 F.2d at 1471. Indeed, the importance of defining and clarifying the nature of Exxon's liability under the CAA citizen suit provision was underscored by the District Court itself, as the Court cited the "threat of [future] citizen suits should [Exxon] not comply with the CAA" as a reason for denying injunctive relief. ROA.11434.

Fourth, to the extent that the District Court is suggesting there would be no difference between a formal declaratory judgment and its "actionability" findings, the Court misreads the import of a declaratory judgment. The declaratory judgment is a well-known mechanism for enforcing the rule of law, and it carries with it the imprimatur of a formal judicial pronouncement. See Steffel, 415 U.S. at 470 (noting the persuasive effect of a court's opinion and declaratory judgment). In the District Court's own words, it is the effect of "a *public*, *court-ordered declaration* that Exxon has violated its Title V permits" – and not simply a finding of repeated exceedance – that will help deter Exxon from future violations. ROA.11389.

Given the District Court's finding that Exxon committed 94 actionable violations (constituting 111 days of violations because some lasted more than one day), Plaintiffs respectfully request that this Court direct the District Court to enter a declaratory judgment that Exxon committed 111 days of actionable violations of its permits. Should this Court reverse the District Court's liability findings against Plaintiffs on any or all of the other alleged actionable violations, Plaintiffs respectfully request that this Court direct the District Court to reflect any such additional actionable violations in its entry of declaratory judgment. See generally 28 U.S.C. § 2106; Wiwa v. Royal Dutch Petroleum, 392 F.3d 812, 819 (5th Cir.

2004) (Circuit Court has "broad power" to "make such disposition of the case as justice may require," and to instruct the District Court accordingly).

C. In Light Of Its Failure To Grant Any Other Relief To Curtail Exxon's Ongoing Violations, The District Court's Refusal To Issue An Injunction Was An Abuse Of Discretion.

The District Court cites two Clean Water Act decisions for the proposition that issuance of an injunction is not mandatory in suits to enforce federal environmental laws (ROA.11433), and it is true that issuance or denial of injunctive relief rests with a court's equitable discretion. In both of the cited cases, however, *the district court had issued relief designed to bring the violator into compliance with the law*. See Weinberger v. Romero-Barcelo, 456 U.S. 305, 321 n.* (1982) (Powell, J., concurring) (district court did not order immediate cessation of the unlawful activity, but "nonetheless issued affirmative orders aimed at securing compliance"); Laidlaw, 528 U.S. at 168 (district court assessed a civil penalty). Indeed, while the Supreme Court in Laidlaw affirmed that district courts have flexibility in fashioning relief, the Court also made clear that a district court's discretion must be directed toward securing compliance: "[T]he district court has discretion to determine which form of relief is best suited, in the particular case, to abate current violations and deter future ones." Id. at 192. Romero-Barcelo says much the same: "Should it become clear that…compliance with [the Act] will not

be forthcoming, the statutory scheme and purpose would require the court to reconsider the balance it has struck." 456 U.S. at 320.

Here, the District Court has made no finding that Exxon has attained, or will attain, compliance with its permits. Yet, even after concluding that TCEQ does not expect full compliance at the Baytown Complex, ROA.11374, the Court nonetheless found no compelling need for injunctive relief because Exxon "already faces threat of TCEQ enforcement." ROA.11434. Equally confounding is the District Court's reasoning that, though it has refused in this citizen suit to enforce Exxon's permits despite thousands of violations, the future "threat of citizen suits" will serve as a deterrent. Id. In other words, the Court declined to order relief in this citizen suit because *another* group of citizens could theoretically file *another* citizen suit (which would, under 42 U.S.C. § 7604(c)(1), need to be filed in the same court) over the same type of violations, and hope for a better result. These "through the looking glass" rationales are not what the Supreme Court had in mind when it counseled district courts to fashion relief that will "abate current violations and deter future ones." Laidlaw, 528 U.S. at 192.

The District Court also concluded that even an injunction that did no more than require Exxon to prove it is complying with its permits "would be unduly burdensome on Exxon," and that this burden outweighs the benefit that would accrue to the public from reducing Exxon's unlawful emissions. ROA.11434.

Given Exxon's admission that reducing its emissions would improve public health (ROA.56582:11-22; ROA.56583:21-23), the fact that Exxon already tracks and reports compliance with its Title V permits, and the District Court's finding that Exxon has immense financial resources (ROA.11360) which could be devoted to improving compliance with its permits, this was an abuse of discretion. See Sierra Club v. Franklin Cnty. Power of Ill., 546 F.3d 918, 936 (7th Cir. 2008) (balance of equities tips in favor of injunction where requiring compliance with CAA "would likely result in decreased emissions and improved public health").

In sum, the District Court's failure to issue an injunction ordering Exxon's compliance with its permits, particularly in light of that Court's denial of declaratory relief and penalties, was an abuse of discretion and Plaintiffs request that this Court direct the District Court to reconsider its assessment.

CONCLUSION

For the foregoing reasons, this Court should reverse the District Court's judgment in favor of Exxon and remand the case back to the District Court for further proceedings in accordance with this Court's decision.

May 15, 2015

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on May 15th, 2015, I electronically filed the foregoing Brief of Appellants with the Clerk of Court using the CM/ECF system, which will send notification of this filing to Appellees' counsel:

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CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B) and this Court's May 5, 2015 Order granting Appellants' unopposed motion to file a brief exceeding the word limit (but not to exceed 23,400 words), because this brief contains 23,375 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii).

2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word 2011 word processing software in 14-point Times New Roman typeface.

DATED: May 15, 2015

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