



May 30, 2023

Submitted via Email and Federal Express Overnight Mail

Dr. Earthea Nance
Regional Administrator, Region 6
1201 Elm Street, Suite 500
Dallas, TX 75270
Nance.Earthea@epa.gov

Anhthu Hoang
Acting Deputy Director
U.S. EPA External Civil Rights
Compliance Office (2310A)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460
Title_VI_Complaints@epa.gov

RE: Petition for Action on Louisiana's and Texas' Clean Air Act Programs for Abuse of the Significant Impact Levels Guidance and Violations of the Clean Air Act, State Implementation Plans, and Title VI of the Civil Rights Act.

Dear Dr. Nance and Ms. Hoang:

Enclosed is a copy of the Petition submitted on behalf of (b)(6) Privacy, (b)(7)(C) Enf. Privacy

and Sierra Club (collectively, "Petitioners"). The Petition addresses the systematic abuse by Louisiana and Texas (collectively, the "States") of EPA's Significant Impact Levels (SILs) Guidance.¹ The result of the States' abuse is to permit massive concentrations of air-polluting sources that threaten or exceed the National Ambient Air Quality Standards (NAAQS) and disproportionately harm Black, Latino, Indigenous, and low-income residents of the States with criteria air pollution. As we document in the Petition, this practice violates the Clean Air Act, the States' State Implementation Plans (SIPs), and Title VI of the Civil Rights Act of 1964 (Title VI).

Petitioners urge: **1)** EPA Region 6 to undertake an investigation of Louisiana and Texas (the "States") and take enforcement action to remedy the States' violations of the Clean Air Act and their SIPs; and **2)** EPA Office of External Civil Rights to undertake a Title VI compliance review for both States and to act on this Title VI complaint concerning LDEQ's ongoing practice of abusing the SILs in ways that disproportionately harm communities of color and/or low-income Louisianans.

We are sending this Petition both by email, with links to exhibits online (where available) and in Dropbox, and by overnight mail, with printed exhibits. The exhibits are available at:

¹ EPA, "Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program" (Apr. 17, 2018), https://www.epa.gov/sites/production/files/2018-04/documents/sils_policy_guidance_document_final_signed_4-17-18.pdf.

May 30, 2023
Page 2 of 2

<https://www.dropbox.com/>(b)(6) Privacy, (b)(7)(C) Enf. Privacy In both versions, we include an index of the exhibits we cite in the Petition. To simplify your review and conserve paper and file space, we have endeavored to excerpt voluminous exhibits (links are to the full document where available). To the extent EPA requires full copies, in electronic or hard copy, of any of the excerpted exhibits, please let us know and we would be happy to provide them.

Given the longstanding nature and seriousness of the deficiencies we raise, including harms to frontline environmental justice communities, Petitioners request that EPA expedite resolution of this matter. We look forward your response.

Sincerely,



Elizabeth Livingston de Calderon, Senior Attorney
Mike Brown, Senior Attorney
Earthjustice
900 Camp Street, Suite 303
New Orleans, LA
ecalderon@earthjustice.org
mlbrown@earthjustice.org
504-910-1735

Cc (via electronic mail only):

Daria Neal
Deputy Chief, Federal Coordination and Compliance Section
Civil Rights Division
U.S. Department of Justice
950 Pennsylvania Avenue, N.W.
Washington, D.C. 20530
Daria.Neal@usdoj.gov



**BEFORE THE ADMINISTRATOR OF THE
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**PETITION FOR ACTION REGARDING DEFICIENCIES
IN THE LOUISIANA AND TEXAS CLEAN AIR ACT PROGRAMS BY ABUSING
SIGNIFICANT IMPACT LEVELS, IN VIOLATION OF THE PREVENTION OF
SIGNIFICANT DETERIORATION PERMITTING PROGRAM, NATIONAL AMBIENT
AIR QUALITY STANDARDS, AND TITLE VI OF CIVIL RIGHTS ACT**

I. INTRODUCTION

(b)(6) Privacy, (b)(7)(C) Enf. Privacy [redacted] and Sierra Club ("Petitioners") petition the Administrator of the Environmental Protection Agency Region 6 ("Administrator" or "EPA"), pursuant to the Administrative Procedure Act, 5 U.S.C. § 551 *et seq.*, the Clean Air Act ("CAA" or "the Act"), 42 U.S.C. § 7401 *et seq.*, and the Act's implementing regulations, to address the failures of the State of Louisiana and the State of Texas (the "States") to implement properly the Act's Prevention of Significant Deterioration ("PSD") permitting, National Ambient Air Quality Standards ("NAAQS") requirements and protections, and specifically their abuse of EPA's "significant impact levels" ("SILs") guidance.

The States, which each administer the Act's air pollutant emission permitting programs through an EPA-approved State Implementation Plan ("SIP") and related State regulations, regularly fail to comply with the Act and SIP requirements when issuing PSD permits based on EPA's 2018 Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program (the "SILs Guidance").¹ They instead use the SILs unlawfully as a tool to permit large concentrations of heavy-emitting industry to build in areas where modeling shows the air may no longer meet the NAAQS. They do it without exercising the case-by-case discretion that the SILs Guidance requires or complying with the Clean Air Act's prohibition on causing or contributing to such violations. And in nearly every instance we describe, the resulting harm—air that is dangerous to breathe—falls most heavily on the predominately Black, Latino, or Indigenous, as well as low-income communities that live closest to these industrial facilities. This is how sacrifice zones are created.

The States' failings are not simply the product of poor individual permitting decisions. These errors and omissions are repeated in permit after permit and reflect statewide policies that ignore the mandates of the CAA, misapplying their respective SIPs, abusing EPA's SILs

¹ EPA, "Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program" (Apr. 17, 2018), https://www.epa.gov/sites/production/files/2018-04/documents/sils_policy_guidance_document_final_signed_4-17-18.pdf.

Guidance, and brutalizing environmental justice.² Specifically, our experience and the evidence and examples below show that the States are systematically committing the four following legal violations: **1)** omitting the exercise of case-specific discretion despite using SILs in areas at risk of violating or increasing violations of the public-health-based NAAQS; **2)** issuing PSD permits to construct when modeling shows the new sources will cause or contribute to NAAQS violations, contravening the PSD permitting program’s core purpose; **3)** failing to take any other remedial measures to cure the NAAQS and increment violations that appear in new sources’ air quality modeling or to collect and account for SILs use data. Further, each of these three kinds of Clean Air Act violations **4)** harm, disproportionately, frontline Black, Latino, Indigenous, and other communities of color and low-income communities, in violation of environmental justice and civil rights mandates.

In enacting the CAA, Congress foresaw that states would be tempted to subvert PSD requirements to advance other policy objectives, and Congress wisely provided EPA with ample authority to remedy exactly the kind of illegal action now prevalent in the States’ programs.

II. REMEDIES REQUESTED

Consequently, the Petitioners petition EPA to use its statutory authority to address the States’ abuse of the SILs Guidance. EPA possesses a wide range of legal authority empowering, and in some instances requiring it, to correct this harm, under both the Clean Air Act and Title VI of the Civil Rights Act.

A. Clean Air Act.

We first ask EPA Region 6 to act in its oversight role under the Clean Air Act to correct Louisiana Department of Environmental Quality’s (“LDEQ”) and Texas Commission on Environmental Quality’s (“TCEQ”) failures to comply with the Act, and properly implement the States’ SIPs, in their air permitting programs. Namely, we ask EPA Region 6 to: **1)** find and issue notice that States are failing properly to implement the Clean Air Act and their SIP permitting provisions by allowing new sources to “cause or contribute” to NAAQS violations or avoid cumulative air quality modeling altogether, *see* 42 U.S.C. §§ 7410(k)(5), 7413(a)(2), (5), 7509(a)(4); **2)** prohibit the use of SILs to permit new or modified major stationary sources in Louisiana and Texas, under 42 U.S.C. § 7413(a)(5); **3)** enforce the Act and SIP by amending permits that were issued based on abuse of SILs Guidance, including in the examples described below, under 42 U.S.C. § 7413(a)(2), **4)** impose sanctions on the States, under 42 U.S.C. §§ 7509(b) and 7410(m), and **5)** keep these prohibitions and enforcement measures in place for each State until it comes into compliance with the Act. Petitioners also request that **6)** EPA exercise its oversight authority under 42 U.S.C. § 7413(a)(2), (5), *inter alia*, to investigate **A)** each State’s use or abuse of the SILs guidance and **B)** the cumulative air pollutant emissions associated with the use or abuse of the SILs guidance throughout Region 6, including revising the SIPs as necessary to address the violations, *see* 42 U.S.C. § 7410(k)(5).

² This Petition focuses on the States’ abuse of the SILs Guidance, as applied. Nothing in this Petition is meant to suggest, and the Petitioners do not concede, that the SILs Guidance itself is a lawful policy under the Clean Air Act. *See Sierra Club v. EPA*, 955 F.3d 56 (D.C. Cir. 2020) (raising facial challenge to SILs Guidance). Petitioners are simply not raising that issue at this time.

In addition, to ensure the States meet the Clean Air Act requirements when applying the existing guidance on SILs, Petitioners call for EPA Region 6 to direct LDEQ and TCEQ on the factors that constitute a “basis for concern” under the SILs Guidance, and so disqualify the application of SILs at the preliminary screening level to forego cumulative modeling and full impacts review.³ As this Petition demonstrates, such bases for concern arise, for example, *a*) where modeling for a criteria pollutant shows an exceedance of NAAQS or increment, *b*) where an “attainment area” compliance status is not based on monitoring; and *c*) where a facility would impact environmental justice communities or other communities carrying (or slated to carry) a disproportionate pollution burden.

B. Title VI of the Civil Rights Act.

Further, because many of the States’ abuses of the SILs Guidance meet the four factor disproportionate impacts test, the Petitioners request that EPA *6*) perform a Title VI compliance review and exercise its full authority under the Civil Rights Act of 1964 to reverse and remedy the attendant environmental injustices; and *7*) consider this Petition to also constitute a Title VI complaint and initiate investigation on LDEQ’s ongoing practice of violating the Civil Rights Act of 1964, including within the last 180 days by its decisions on *A*) December 5, 2022 to extend the Formosa Plastics major source air permits’ deadlines to commence construction, and *B*) March 28, 2023 to grant the Commonwealth LNG major source air permits.⁴

III. PETITIONERS

A. (b)(6) Privacy, (b)(7)(C) Enf. Privacy

[REDACTED]

B. (b)(6) Privacy, (b)(7)(C) Enf. Privacy

[REDACTED]


³ SILs Guidance, *supra* note 1, at 18 (“However, upon considering the permit record in an individual case, if a permitting authority has a basis for concern that a demonstration that a proposed source’s impact is below the relevant SIL value at all locations is not sufficient to demonstrate that the proposed source will not cause or contribute to a violation, then the permitting authority should require additional information from the permit applicant to make the required air quality impact demonstration.”).

⁴ 42 U.S.C. § 2000d; 40 C.F.R. § 7.35(b). LDEQ is a recipient of federal funding forbidden from administering its permitting program to have discriminatory effects, i.e., “the effect of subjecting individuals to discrimination because of their race, color, national origin, or sex.” 40 C.F.R. § 7.35(b); *see also id.* §§ 7.115(a) (authorizing EPA to initiate compliance reviews); 7.120(a) (requiring EPA to undertake prompt investigation of all Title VI complaints).

(b)(6) Privacy, (b)(7)(C) Enf. Privacy



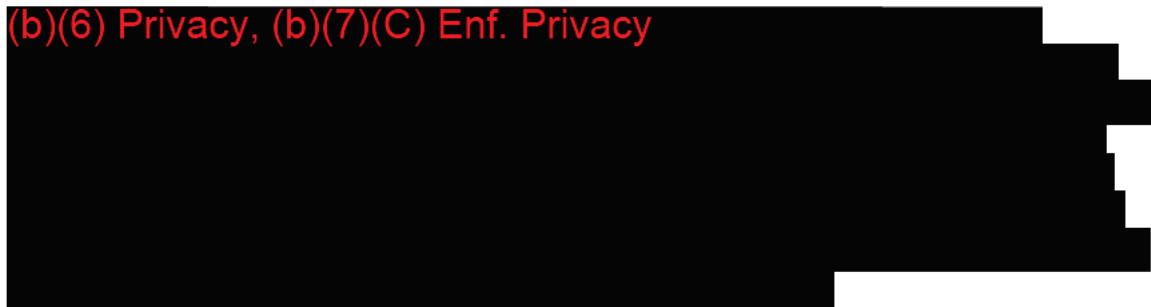
C. (b)(6) Privacy, (b)(7)(C) Enf. Privacy




D. (b)(6) Privacy, (b)(7)(C) Enf. Privacy



E. (b)(6) Privacy, (b)(7)(C) Enf. Privacy



F. (b)(6) Privacy, (b)(7)(C) Enf. Privacy



G. Sierra Club is a not for profit organization whose mission is to explore, enjoy and protect the wild and beautiful places of the Earth; to practice and promote the responsible use of the Earth's ecosystems and resources; to educate and enlist people to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives. Sierra Club has tens of thousands of members in Louisiana and Texas, including in the areas of those states most burdened by the abuse of EPA's SILs Policy.

IV. LEGAL BACKGROUND

A. Environmental Injustice in Louisiana and Texas Air Pollutant Emissions.

Environmental injustice and the disproportionate burden of industrial pollution on Black, Brown and low-income communities in Louisiana and Texas is well established. EPA's own October 2022 Letter of Concern to Louisiana's Department of Environmental Quality ("LDEQ") and its Department of Health ("LDH") chronicles the ongoing history of environmental injustice in Louisiana. For example, its initial fact findings "indicate[] that census tracts with the highest cancer risks from air toxics in Louisiana are almost exclusively within the Industrial Corridor and also have a high percentage of Black population."⁵ Similarly, EPA cites "significant evidence suggesting that the Departments' actions or inactions have resulted and continue to result in disparate adverse impacts on Black residents of St. John the Baptist Parish, St. James Parish, and the Industrial Corridor."⁶ Now, data confirms that LDEQ's permitting practices result in discrimination against Black and other environmental justice communities throughout Louisiana.⁷

In Texas, communities of color and low-income communities are also disproportionately hurt by industrial air pollution that is permitted by TCEQ. A ProPublica study showed that the cities of Freeport, Port Arthur, Longview, Port Lavaca, and Laredo in Texas were hotspots for hazardous industrial air pollution that causes cancer.⁸ In each of these cities the percentage of Hispanic/Latino, Black/African American, and/or low-income populations exceed that of the

⁵ EPA Title VI Letter of Concern regarding LDEQ and LDH (Oct. 12, 2022), p. 5 ("EPA Oct. 2022 Title VI Letter of Concern"), <https://www.epa.gov/system/files/documents/2022-10/2022%2010%2012%20Final%20Letter%20LDEQ%20LDH%2001R-22-R6%2C%2002R-22-R6%2C%2004R-22-R6.pdf>, attached as **Exhibit 1**.

⁶ *Id.* at 2.

⁷ Kimberly A. Terrell & Gianna St. Julien, *Discriminatory outcomes of industrial air permitting in Louisiana*, 10 Journal of Environmental Challenges (Jan. 2023), <https://doi.org/10.1016/j.envc.2022.100672>, attached as **Exhibit 2**.

⁸ Al Shaw, *et al.*, *The Most Detailed Map of Cancer-Causing Industrial Air Pollution in the U.S.*, ProPublica (Nov. 2, 2021, updated March 15, 2022), <https://projects.propublica.org/toxmap/>, attached as **Exhibit 3**; see also Lylla Younes, *et al.*, *Poison in the Air*, ProPublica (Nov. 2, 2021), <https://www.propublica.org/article/toxmap-poison-in-the-air> (explaining significance of map), **Exhibit 4**.

State of Texas.⁹ The ProPublica study also identified the city of Houston as a hot spot for cancer-causing industrial air pollution.¹⁰ An independent study confirmed that communities of color and low-income communities experience a disproportionately high level of this air pollution in the Houston area.¹¹ Similar concerns have been raised about air pollution in other environmental justice communities across the state, from Corpus Christi's Refinery Row¹² to West Dallas,¹³ and Brownsville¹⁴ to El Paso.¹⁵

B. The Clean Air Act, Its Public Health Based Protections, and State Implementation Plans.

The Clean Air Act ("CAA" or the "Act") is designed to protect and improve the nation's air quality and public health into the future.¹⁶ As part of its scheme to accomplish its expansive

⁹ In Texas 12.9% of the population is Black/African American, 39.7% is Hispanic/Latino, and 13.9% lives in poverty. By comparison, in Freeport 17.6% of the population is Black/African American, 64% is Hispanic/Latino and 25.5% of the population lives in poverty. In Port Arthur 42.2% of the population is Black/African American and 26.7% of the population lives in poverty. In Longview 22.6% of the population is Black/African American and 18.6% of the population lives in poverty. In Port Lavaca 64.4% of the population is Hispanic/Latino. In Laredo 95.5% of the population is Hispanic/Latino and 23.9% of the population lives in poverty. U.S. Census Bureau, Quick Facts: Laredo, Port Lavaca, Longview, City, Port Arthur, and Freeport, Texas, <https://www.census.gov/quickfacts/fact/table/laredocitytexas,portlavacacitytexas,longviewcitytexas,portarthurcitytexas,freeportcitytexas,TX/PST045221>, **Exhibit 5**.

¹⁰ Al Shaw, *supra* note 8.

¹¹ Sustainable Systems Research, LLC, *Evaluation of Vulnerability and Stationary Source Pollution in Houston* (Sept. 2020), <https://www.nrdc.org/sites/default/files/houston-stationary-source-pollution-202009.pdf>; see also Yukyan Lam et al., *Toxic Air Pollution in the Houston Ship Channel: Disparities Show Urgent Need for Environmental Justice*, NRDC (Aug. 31, 2021), <https://www.nrdc.org/resources/toxic-air-pollution-houston-ship-channel-disparities-show-urgent-need-environmental> (explaining significance of study), **Exhibit 6**.

¹² Aman Azhar, *In Corpus Christi's Hillcrest Neighborhood, Black Residents Feel Like They Are Living in a 'Sacrifice Zone'*, Inside Climate News (July 4, 2021), <https://insideclimatenews.org/news/04072021/corpus-christi-texas-highway-infrastructure-justice/>, **Exhibit 7**.

¹³ Darryl Fears, *Shingle Mountain: How a pile of toxic pollution was dumped in a community of color*, *Washington Post* (Nov. 16, 2020), <https://www.washingtonpost.com/climate-environment/2020/11/16/environmental-racism-dallas-shingle-mountain/>, **Exhibit 8**.

¹⁴ Carmen Rocco & Dolly Lucio Sevier, *Air Pollution a concern if LNG comes to the Valley*, *Rio Grande Guardian* (Sept. 7, 2016), <https://riograndeguardian.com/roccosevier-air-pollution-a-concern-if-lng-comes-to-valley/>, **Exhibit 9**; Gus Bova, *Bridge to Nowhere*, *Texas Observer* (Sept. 16, 2019), <https://www.texasobserver.org/liquefied-natural-gas-rio-grande-valley-endangered-pollution/> (discussing concerns about air pollution impacts if three proposed LNG export terminals are built near the low-income *colonia* of Laguna Heights, which is home to many Mexican immigrants who work in the area's hotels and restaurants), attached as **Exhibit 10**.

¹⁵ Isa Gutierrez, et al., *'Like a Dumping Ground': Latina moms in Texas border city are fighting air pollution*, *NBC News* (Feb. 22, 2022), <https://www.nbcnews.com/news/latino/-dumping-ground-latina-moms-texas-border-city-are-fighting-air-polluti-rcna16789>, **Exhibit 11**.

¹⁶ 42 U.S.C. §§ 7401(b), 7410(a)(2)(C), 7475, 7503.

and forward-looking environmental and public health goals, the Act requires sources of air pollution to obtain permits that limit emissions of pollution to levels that are protective of public health. The CAA allows states to issue federal air pollution permits as long as the state's permitting program meets minimum federal standards and is approved by the EPA in a State Implementation Plan ("SIP").¹⁷ States develop SIPs to attain and maintain health- and welfare-based National Ambient Air Quality Standards ("NAAQS") promulgated by EPA and meet other requirements under the CAA. *See* 42 U.S.C. § 7410(a). But Congress also entrusted EPA to take an active role overseeing state implementation and enforcing state compliance when necessary. The Act vests EPA with authority to revoke or modify the SIP, to prohibit permitting new or modified major source facilities, to enforce compliance both from , as well as to issue sanctions when a SIP does not meet the requirements of the Act, or a State is not implementing its SIP in compliance with the Act. *See. e.g.,* 42 U.S.C. § 7410(k)(5) (authority to order revisions to SIPs that fail to attain or maintain NAAQS); 42 U.S.C. § 7413(a)(5) (authority to prohibit new or modified permits); 42 U.S.C. § 7413(a)(2) (authority to enforce or order compliance with SIP and Act); 42 U.S.C. § 7509(b) (authority to issue sanctions); 42 U.S.C. § 7410(m) (authority to issue sanctions). EPA has authority to order states to perform air quality modeling and supply data on potential violations of the Act or disproportionate harm from air permitting. *See* 42 U.S.C. § 7410(a)(2)(K).¹⁸

Congress also placed EPA in charge of ensuring that state agencies comply with Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d; 40 C.F.R. § 7.30. Title VI states that "[n]o person in the United States shall, on the ground of race, color, or national origin . . . be subjected to discrimination under any program or activity receiving Federal financial assistance." *Id.* These EPA regulations prohibit discrimination by recipients of federal funds, such as LDEQ and TCEQ, whether intentional or not. *See* 40 C.F.R. § 7.35. A state agency's mere compliance with federal environmental law—were that the case—does not assure compliance with Title VI's prohibition on disparate harm.¹⁹ To protect civil rights, permitting agencies should incorporate civil rights and environmental justice reviews into their individual permitting, from the very start of the process.²⁰ Agencies should identify environmental justice communities and account for

¹⁷ 42 U.S.C. § 7407(a).

¹⁸ EPA, *EPA Legal Tools to Advance Environmental Justice*, 21 (May 2022) (describing historical uses of this power and explaining that "on case-by-case bases, EPA could . . . require states to conduct ambient air quality modeling in areas where communities with environmental justice concerns may be disproportionately impacted by high ambient concentrations of NAAQS pollutants, and use responsive data to determine whether to issue SIP Calls"), <https://www.epa.gov/system/files/documents/2022-05/EJ%20Legal%20Tools%20May%202022%20FINAL.pdf>; *see also id.* at 22 ("EPA has recommended that states also conduct 'unmonitored area analyses' to consider air pollution impacts in areas that have no ambient air monitors, especially where the state or EPA has reason to believe that violations of the NAAQS may be occurring in unmonitored areas.").

¹⁹ *See* EPA, *Interim Env't'l Justice & Civil Rights in Permitting FAQs*, p. 6 (Aug. 2022) ("State, local, and other recipients of federal financial assistance have an independent obligation to comply with federal civil rights laws with respect to all of their programs and activities, including environmental permitting programs."), https://www.epa.gov/system/files/documents/2022-08/EJ%20and%20CR%20in%20PERMITTING%20FAQs%20508%20compliant_0.pdf.

²⁰ *Id.* at 4, 15.

cumulative impacts and disproportionate harm to those communities.²¹ This includes assessing the risks from existing sources of air pollution when data suggest these sources might already present a risk of harm.²² When state agencies falter, EPA should avail itself of the full array of tools available to it to ensure environmental justice and protect civil rights in air permitting.²³

The National Ambient Air Quality Standards are at the core of the Clean Air Act. The NAAQS put public health first. *See* 42 U.S.C. § 7409(b)(1) (requiring EPA to set NAAQS at levels “requisite to protect the public health,” with “an adequate margin of safety”). They are meant to ensure that everyone in the United States breathes air that at least meets health-based limits set by the EPA for six harmful “criteria” pollutants. 42 U.S.C. § 7409; *see* 40 C.F.R. pt. 50 (listing pollutants). As an additional measure to ensure the air stays within the NAAQS, EPA also sets “increments” that cap allowed growth in criteria air pollution from new industrial sources. 42 U.S.C. § 7473(b)(2). We refer to the NAAQS and increments collectively here as the “federal air standards.”

The Act’s Prevention of Significant Deterioration (“PSD”) permit program is designed to enforce these federal air standards against violations in individual permitting decisions in those areas of the country treated as in “attainment” for the NAAQS. 42 U.S.C. § 7475(a) (forbidding new major sources of air pollution from constructing without a PSD permit). Sources with potential pollutants emissions level above tons-per-year (*i.e.* total mass) thresholds set out in the law, called the “significant emissions” levels, trigger PSD review for those pollutants.²⁴ EPA delegated to Louisiana and Texas, as well as other States in Region 6, the authority to issue PSD permits. *See* 42 U.S.C. § 7410(a)(1)-(2) (allowing state agencies to administer program, with EPA approval and oversight); 40 C.F.R. § 52.970(c), 52.2270(c) (identifying EPA-approved PSD permit regulations for both states). Each state’s permitting program must meet or exceed the Act’s minimum requirements. *See* 42 U.S.C. § 7410(k)-(l); *Luminant Generation Co. v. EPA*, 714 F.3d 841, 846 (5th Cir. 2013).

The PSD permitting program achieves these ends by requiring each applicant to do an “Air Quality Analysis” for each pollutant above the mass-based “significant emissions” level.²⁵ (This is the only “significance” test written into the PSD regulations that applies directly to an Air Quality Analysis.) The “Air Quality Analysis” uses a computer model that, for an applicant

²¹ *See, e.g.*, EPA Office of Air and Radiation, Memorandum, *EJ in Air Permitting – Principles for Addressing Environmental Justice Concerns in Air Permitting*, 2–4 (Dec. 2022), <https://www.epa.gov/system/files/documents/2022-12/Attachment%20-%20EJ%20in%20Air%20Permitting%20Principles%20.pdf>; EPA, *EPA Legal Tools to Advance Environmental Justice*, *supra* note 18, pp. 45–47; EPA, *Interim Env’t Justice & Civil Rights in Permitting FAQs*, *supra* note 19, pp. 6, 8–22.

²² EPA, *Interim Env’t Justice & Civil Rights in Permitting FAQs*, *supra* note 19, at 9 (calling for assessing existing environmental data and noting that “[a]n area with an above average number of sources, especially if those sources are large or close to people in the area, is a sign of concern.”).

²³ *See generally* EPA, *EPA Legal Tools to Advance Environmental Justice*, *supra* note 18.

²⁴ 40 C.F.R. § 52.21(b)(23), (m).

²⁵ 40 C.F.R. § 52.21(m). The PSD permitting program also requires applicants to install the best available pollution control technology (“BACT”). The estimated emissions after installation of BACT serve as the basis for the Air Quality Analysis. Determination of BACT is not at issue for this Petition.

to proceed, must “demonstrate” that the project will not “*cause, or contribute to,*” violations of the NAAQS or increments when its emissions combine with other existing and proposed sources. 42 U.S.C. § 7475(a)(3); 40 C.F.R. § 52.21(m)(1)(3) (emphasis added). In other words, the law requires a cumulative impact air pollution analysis for each of those pollutants. Both Texas and Louisiana transpose the federal Act’s Air Quality Analysis requirement directly into their state regulations as part of their SIPs. *See* LAC 33:III.509.K–M; 30 TAC § 116.160.

If a source fails the Air Quality Analysis, it cannot receive a PSD permit. *See, e.g.,* LAC 33:III.519.C.5; 30 TAC § 116.161. This is in keeping with the statute’s purpose to defend the NAAQS and increments, as “the emphatic goal of the PSD provisions is to prevent those thresholds from being exceeded.” *Alabama Power Co. v. Costle*, 636 F.2d 323, 362 (D.C. Cir. 1979); H.R. REP. 95-294, 9, 1977 U.S.C.C.A.N. 1077, 1087 (articulating the same purpose for the Air Quality Analysis provisions). To move forward, the source must either cut its own emissions (or secure binding commitments from other sources to curtail theirs) enough “to eliminate the predicted exceedances of the NAAQS.” 30 TAC § 116.161. And if data show an area no longer meets the NAAQS, the Act charges either the state or EPA to redesignate the area as “non-attainment” for the standard in question. 42 U.S.C. § 7407(d)(3).

C. EPA’s Significant Impact Levels Guidance.

Over the years, EPA has provided non-binding guidance with an additional threshold for routine situations when there is little to no threat to the Act’s goal of maintaining federal air standards to simplify the Air Quality Analysis. Ironically (and confusingly), although the PSD Air Quality review is triggered by pollutants already at or above “significant emission” levels, EPA named this non-statutory threshold, based on airborne concentration of each criteria pollutant, “Significant Impact Levels,” or “SILs.”²⁶ SILs are expressed in parts per billion or micrograms per cubic meter of air. They are not health-based measures or indicative of relevant pollutant exposure levels.²⁷ Instead, SILs are based on the potential day-to-day variability in the pollution measured at air quality monitors due to factors like shifts wind.²⁸ They express a margin of error that may be acceptable where there is little or no threat of exceeding the NAAQS

²⁶ *See, e.g.,* SILs Guidance, *supra* note 1, at 1 nn.1–4, 5 (reissuing SILs guidance and citing to prior guidance documents).

²⁷ *United States v. Ameren Mo.*, 421 F. Supp. 3d 729, 817-18 (E.D. Mo. 2019), *aff’d in part, overruled in part* on other grounds, 9 F.4th 989 (8th Cir. 2021) (“[T]he SILs do not establish a level below which there is no risk of harm from a facility’s pollution.”). To the contrary, “EPA has emphasized *ad nauseum* that there is no known safe threshold below which incremental increases in PM_{2.5} exposure do not create incremental increases in risk to human health and welfare.” *Id.* at 817.

²⁸ SILs Guidance, *supra* note 1, at 10–13; *Ameren Mo.*, 421 F. Supp. at 787 (“SILs were derived from a statistical analysis of the limits of monitoring data, based on a finite network of variably-placed monitors.”) This discrepancy is heightened by the fact that the significance levels began as a tool to measure compliance with a different part of the Clean Air Act. *See* SILs Guidance, *supra* note 1, at 8–10. Further, the speculative nature of the SILs Guidance’s adopted “confidence intervals” and its acknowledged potential for “false negatives” confirm the inherent uncertainty of relying on the SILs. *See id.* at 13.

public health-based standards. SILs are not designed to protect against incremental harm from new air pollution.

The SILs Guidance indicates that if a permitting agency finds that a source's emissions of a criteria pollutant would result in airborne concentrations below the SIL, the agency might in its discretion conclude that the applying source is unlikely to cause or contribute to violations.²⁹ The benefit to the applicant is that it could avoid further modeling in such situations.³⁰ But the risk of unswerving reliance on the SILs in permitting is legally and practically significant. Sometimes, even small amounts of new pollution, less than a SIL, could bring an area to violate the federal air standards or aggravate existing violations, or would clash with Title VI and environmental justice. *Cf.* 42 U.S.C. § 7475(a)(3) (forbidding new sources from causing or contributing to these violations). For instance, when EPA tried to enshrine the SILs in binding regulations that Sierra Club challenged in court, the D.C. Circuit vacated the regulations. The court reasoned that requiring permitting agencies to use the SILs could circumvent “a cumulative air quality analysis for sources that are below the SIL, but could nevertheless cause a violation of the NAAQS or increment.” *Sierra Club v. EPA*, 705 F.3d 458, 465 (D.C. Cir. 2013) (*Sierra Club I*). And by the time of the court's ruling, EPA itself had conceded that using the SILs in such a situation could be unlawful. *Id.* at 464 (pointing to EPA statement that “notwithstanding the existence of a SIL, permitting authorities should determine when it may be appropriate to conclude that even a *de minimis* impact will ‘cause or contribute’ to an air quality problem and to seek remedial action from the proposed new source or modification.”).³¹ Despite EPA's concession, industry-intervenors who favored the SILs regulation persisted in mounting a full facial defense in the suit, even arguing for use of the SILs when the federal air standards could be under threat. *Sierra Club I*, 705 F.3d at 464–66. The court rejected these industry arguments, but LDEQ's and TCEQ's policy and approaches nonetheless now closely match industry's effort, as outlined below. *See id.*

Following the D.C. Circuit ruling, EPA during the Trump administration reissued the SILs Guidance, this time confining use of the SILs as modeling thresholds to non-binding memoranda: the 2018 SILs Guidance.³² Nothing in this SILs Guidance could alter the language of the Clean Air Act, of course, as enforced by the court in *Sierra Club I* and other decisions—a reality the Guidance itself acknowledges. Fundamentally, the Guidance presents itself not as a fully-formed rule, but more modestly as an experiment, meant to gather information about its own implementation:

²⁹ *See* SILs Guidance, *supra* note 1, at 17–18.

³⁰ SILs Guidance, *supra* note 1, at 1–5, 17–18.

³¹ EPA's statement is at *Prevention of Significant Deterioration (PSD) for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5})—Increments, Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC)*, 75 Fed. Reg. 64864, 64 892 (Oct. 20, 2010).

³² SILs Guidance, *supra* note 1, at 1.

[T]he EPA believes it should first obtain experience with the application of these values in the permitting program before establishing a generally applicable rule.

...

First, the **EPA is providing non-binding guidance so that we may gain valuable experience and information as permitting authorities use their discretion to apply and justify the application of the SIL values** identified below on a case-by-case basis in the context of individual permitting decisions.³³

And as the quote above references, EPA's guidance requires agencies to justify each use of any SIL on a "case-by-case" basis, "in the record for each permit."³⁴ Indeed, EPA instructs that, if a permitting authority "has a basis for concern" in an individual permitting case, then a demonstration of a proposed source's impact below the relevant SIL "is not sufficient to demonstrate that the proposed source will not cause or contribute to a violation."³⁵

The D.C. Circuit has concluded the same, stating: "The SILs Guidance is *not sufficient* to support a permitting decision—simply quoting the SILs Guidance is not enough to justify a permitting decision without more evidence in the record, including technical and legal documents."³⁶ Permitting agencies cannot simply rest on EPA's SIL values alone, without also considering "any additional information in the record that is relevant" to whether the SILs are appropriate for the context.³⁷ Indeed, while expressing openness to more expansive use as part of this regulatory experiment, EPA's 2018 SILs Guidance recalls its past warnings against applying the SILs when data show that the air around the source could be at risk of violating the NAAQS or increment in question.³⁸

V. ARGUMENT

"Experience and information," under the 2018 SILs Guidance now shows that Louisiana and Texas are abusing their discretion and misapplying the SILs Guidance by applying the SILs to authorize sources to cause or contribute to federal air quality standards violations, as a matter of routine. This is not what the SILs Guidance allows or could lawfully allow, because permitting NAAQS violations undermines a key purpose of the Act and can contribute to violations of Title VI of the Civil Rights Act, when done with discriminatory effect.

³³ SILs Guidance, *supra* note 1, at 2 (emphasis added, footnotes omitted).

³⁴ *Id.* at 19.

³⁵ *Id.* at 18.

³⁶ *Sierra Club v. EPA*, 955 F.3d 56, 63–64 (D.C. Cir. 2020) (*Sierra Club II*) (relying on express agency discretion requirement to find SILs Guidance not final decision reversible on its face).

³⁷ SILs Guidance, *supra* note 1, at 19.

³⁸ See SILs Guidance, *supra* note 1, at 10 ("To guard against the improper use of the 2010 SILs for PM_{2.5} in such circumstances, the EPA later recommended that permitting authorities use those SILs only where they could establish that the difference between background concentrations in a particular area and the NAAQS was greater than those SIL values. This approach was intended to guard against misuse of the SILs in situations where the existing air quality was already close to the NAAQS.").

In Part V.A., we first summarize the four kinds of legal violations that LDEQ's and TCEQ's policies and practices implicate when applying the SILs in their PSD permitting schemes: **1)** failure to perform case-specific review despite documented bases of concern when using SILs to avoid a full Air Quality Analysis; **2)** failure to withhold or condition PSD permits where modeling shows the source causes or contributes to NAAQS exceedances, violating the plain language of the Clean Air Act; **3)** failure to cure NAAQS and increment violations that appear in new sources' air quality modeling or even to collect data and maintain records of these and other potential cumulative violations; and **4)** failure to protect the frontline Black, Latino, Indigenous, and other communities of color, as well as low-income communities, from disproportionate harm in violation of environmental justice and civil rights mandates.

Part V.A. references specific case examples of these abuses, which we describe in detail in Part V.B.

A. Abuse of the SILs Guidance in Violation of the Act and Contrary to Environmental Justice.

If a State does not justify its application of SILs to forego a cumulative impacts modeling Air Quality Analysis, it violates its delegated responsibility under the Clean Air Act, as well as its administrative obligations to support its decisions on the record.³⁹ We have observed LDEQ and TCEQ abuse the SILs consistently, creating and preserving air pollution hotspots that exceed the NAAQS, like in Cancer Alley, Louisiana. As the examples below illustrate, the agencies accomplish this in four interrelated and unlawful ways.

First, in contrast to EPA's SILs Guidance's instruction, the States do not exercise case-specific discretion to justify their use of the SILs. Rather, they apply the SILs uniformly, even when there is a "basis for concern." This is not just their practice, as our examples show (*see all examples below*); the States have enshrined this practice as written or confirmed policy. For instance, take LDEQ's most recent Air Quality Modeling Procedures Manual.⁴⁰ Instead of calling for the case-by-case analysis and justification that EPA's SILs Guidance requires, LDEQ's manual equates compliance with the SIL as compliance with the Clean Air Act as follows, without mention of surrounding context:

³⁹ See, e.g., *Save Ourselves, Inc. v. La. Env't Control Comm'n*, 452 So. 2d 1152, 1159 (La. 1984)

("This court has held that for the purposes of judicial review, and in order to assure that the agency has acted reasonably in accordance with law, in a contested case involving complex issues, the agency is required to make basic findings supported by evidence and ultimate findings which flow rationally from the basic findings; and it must articulate a rational connection between the facts found and the order issued."); LAC 33:III.509.Q.2.g-h (requiring agency to consider all public comments and issue written final PSD permit decision).

⁴⁰ See LDEQ, Air Quality Modeling Procedures (Aug. 2006 ed.), <https://deq.louisiana.gov/assets/docs/Air/ModelingProcedures0806.pdf>, attached as **Exhibit 12**. While this 2006 manual is clearly outdated, and while for years LDEQ has said that the manual "is currently under review," nonetheless, the agency has not replaced it with updated air modeling guidance. LDEQ maintains the 2006 manual on its website, and permit-writers and -applicants continue to apply it in PSD permitting. See LDEQ, Air Modeling Resource, *Current Version Draft Modeling Protocol*, <https://www.deq.louisiana.gov/page/air-modeling-resource> (visited May 29, 2023).

If the modeled concentration is less than the significance level [i.e., the SIL], the project's impact *is insignificant* (i.e., the project increases *will not* cause or significantly contribute to an exceedance of the NAAQS or PSD Increment standards); therefore, *no further analysis is required.*"⁴¹

While LDEQ states it has been reviewing its Modeling Procedures Manual for years now, its permitting decisions remain consistent with this policy (*see examples below*). Indeed, the authors are unaware of any matter where LDEQ exercised discretion and chose *not* to rely on the SIL to abbreviate a proposed permit's impacts review.

Similarly, TCEQ's Air Quality Modeling Guidelines specify that if the new source will "not make a significant impact for a criteria pollutant of concern, the demonstration is complete."⁴² And TCEQ adheres to this approach in individual permitting cases. Under oath in a recent contested case hearing, a TCEQ permit writer confirmed that the agency uses the SIL "regardless" of surrounding air quality, and that the agency views compliance with the SIL as compliance with the Air Quality Analysis requirement "by definition."⁴³

The States' consistent failures to perform case-by-case reviews means they are not performing cumulative modeling or otherwise demonstrating that permitted facilities will not cause or contribute to violations of NAAQS and increments.

Second, these States issue major source permits even where the applicants' modeling demonstrates that they *will*, in fact, contribute to violations of NAAQS and increments. (*For examples, see Formosa Plastics, Plaquemines LNG, and all Louisiana facilities below in Part V.B.*) And, despite the SIL Guidance clarification that a "culpability analysis" may only be appropriate "in some cases," LDEQ, at least, applies it as if it is required or *per se* exculpatory (*see, e.g., Plaquemines LNG example below*). As we demonstrate below, LDEQ and TCEQ assert that the source's contribution is not significant enough to warrant analysis if it falls below the SIL. But these agencies fail to reconcile their assertion with the plain language of the law, which forbids a source from "contribut[ing]," without qualification as to whether the contribution is more or less "significant" standing alone. *See Sierra Club I*, 705 F.3d at 465–66; *Bluewater Network v. EPA*, 370 F.3d 1, 13 (D.C. Cir. 2004) (holding that the phrase, as used analogously in another part of the Clean Air Act, means either to cause, or "to have a part or share in producing," pollution in excess of the NAAQS and that "contribute," "has no inherent connotation as to the magnitude or importance of the relevant 'share' in the effect; certainly it does not incorporate any 'significance' requirement.").

⁴¹ LDEQ, Air Quality Modeling Procedures (Aug. 2006 ed.), p. 2–3 (emphasis added), <https://deq.louisiana.gov/assets/docs/Air/ModelingProcedures0806.pdf>, **Exhibit 12**.

⁴² TCEQ, Air Quality Modeling Guidelines, APDG 6232, p. 20, App'x A (Nov. 2019), <https://www.tceq.texas.gov/assets/public/permitting/air/Modeling/guidance/airquality-mod-guidelines6232.pdf>, attached as **Exhibit 13**.

⁴³ Transcript of Hearing on Merits, Feb. 8, 2021, Texas State Office of Administrative Hearings, Application of Jupiter Brownsville, LLC for PSD Permit (hereinafter "Jupiter Hearing Transcript"), pp. 244:4-245:10 [REDACTED] excerpt attached as **Exhibit 14**.

Not only are such agency interpretations contrary to the plain language of the statute, a SIL is not a measure of what is “small,” or “insignificant” in terms of the Act’s public-health-protective aim. The SILs are a device for permitting convenience that “do not establish a level below which there is no risk of harm from a facility’s pollution,” and that “are not a valid means of determining the significance of downwind health effects.” *United States v. Ameren Mo.*, 421 F. Supp. 3d 729, 817 (E.D. Mo. 2019). Moreover, the purpose of the PSD permitting provisions is to protect against the aggregation of such increases in air pollution that could collectively endanger public health when air quality fails to meet the NAAQS. *See Ala. Power Co. v. Costle*, 636 F.2d at 362.

If Congress had meant to limit prohibited contributions under the Air Quality Analysis test to significant contributions, it easily could have. Elsewhere in the Clean Air Act, the law uses a version of the phrase, “significantly contribute.” *See Bluewater Network*, 370 F.3d at 13–14 (noting same); *see e.g.*, 42 U.S.C. §§ 7506a(a), 7492(c)(1), 7426(a)(1)(B), 7547(a)(1), (4) (explicitly requiring significant contributions). The Act’s PSD provisions do not. The SILs Guidance might make permitting more efficient when there is no concern for causing or contributing to NAAQS violations, but it cannot function in circumstances where federal air standards could be under threat.

Third, despite being on notice of modeled NAAQS exceedances from an Air Quality Analysis, the States fail to take other legally available—sometimes required—measures to mitigate the impact of these exceedances on surrounding populations and the environment. For instance, LDEQ and TCEQ have an obligation to require the applicant and other sources in the area to lower their emissions to eliminate any modeled increment violation.⁴⁴ And the agencies have an obligation to determine whether to declare areas where these violations occur as non-attainment for the NAAQS, adopting SIP revisions to bring the area into compliance and for existing and proposed sources to meet more stringent permitting requirements. 42 U.S.C. § 7407(a), (d)(3) (giving states primary responsibility to assure compliance with NAAQS by submitting and updating designations and implementation plans); *see also id.* § (d)(3)(A), (C) (stating that EPA Administrator may, “on basis of air quality data” and other considerations, “at any time notify the Governor of any State that available information indicates that the designation of any area or portion of an area within the State or interstate area should be revised,” and empowering EPA to redesignate on its own if state fails to do so). But LDEQ and TCEQ do nothing to protect against the public health standard exceedances that they acknowledge and permit under their application of the SILs.

Further, the States fail to account for the cumulative impacts that result from their repeated reliance on SILs—both at the prescreening and cumulative modeling stages (*see Commonwealth LNG example and footnote 118, below in Part V.B.*). There is no apparent record keeping of how many times a State relies on the SILs or of the cumulative emissions they have discounted through that process. Rather than address contributions or recognized exceedances,

⁴⁴ *See, e.g.*, EPA, 1990 Draft New Source Review Manual: Prevention of Significant Deterioration and Nonattainment Area Permitting, pp. C.2 to C.53, <https://www.epa.gov/sites/default/files/2015-07/documents/1990wman.pdf> (“In situations where a proposed source would cause or contribute to a PSD increment violation, a PSD permit cannot be issued until the increment violation is entirely corrected,” by obtaining emissions reductions sufficient to avoid the violation.).

the States’ effectively wipe their slate clean as if starting from zero each time. This is especially problematic in areas where there is no ambient monitoring.

This failure to account interferes with collecting the “experience and information” that the SILs Guidance states is its goal to be able to evaluate whether the SILs are even appropriate.⁴⁵ Moreover, the failure to account compounds the harm of using SILs without case specific review and exacerbates a main error highlighted in President Biden’s executive order on environmental justice: “[G]aps in environmental and human health data ... conceal these harms [like poor health outcomes and lower life expectancies] from public view, and, in doing so, are themselves a persistent and pernicious driver of environmental injustice.” Exec. Order 14096, 88 Fed. Reg. 25251, 25252 (Apr. 26, 2023).

Worse still, the States’ casting a blind eye to the emissions and impacts they permit not only means cumulative pollutant emissions that exceed SILs and cause or contribute to violations of federal standards and law, it also means other new sources can build in the same area and worsen these violations even further (*for examples, see Formosa Plastics, Commonwealth LNG below in Part V.B.*), all while disingenuously treating the air as “unclassifiable” or in attainment with the NAAQS.

Fourth, and finally, the States’ routine abuse of SILs and misapplication of the SILs Guidance result in an insidious and enduring set of environmental injustices and civil rights violations that demand a Title VI compliance review and EPA’s investigation of LDEQ’s abuses, including its most recent permitting decisions concerning Formosa Plastics and Commonwealth LNG.

EPA recently expressed concern that LDEQ lacks any procedure or policy for evaluating environmental justice.⁴⁶ Similarly, EPA is currently assessing several Title VI complaints related to TCEQ’s air permitting decisions, in which the complainants cite TCEQ’s repeated refusal to conduct any environmental justice review in its air permitting decisions.⁴⁷ Moreover, a recent

⁴⁵ SILs Guidance, *supra* note 1, at 2–3.

⁴⁶ EPA Oct. 2022 Title VI Letter of Concern, *supra* note 5, at 51 (“EPA was unable to find any published policies, guidance, criteria, or procedures regarding when and how LDEQ conducts EJ analyses or its Title VI analyses nor did LDEQ provide any.”).

⁴⁷ See, e.g., *Petition for Action Regarding Deficiencies in the Texas Air Permitting Program Related to Environmental Justice and Public Participation*, 12 (June 28, 2022) (“In response to concerns raised by Texas residents from Port Arthur to Manchester to Brownsville to El Paso that the TCEQ’s permitting practices are disproportionately harming environmental justice communities across Texas, TCEQ repeatedly asserts that environmental justice concerns have no place in its permit reviews.”), attached as **Exhibit 15**; Title VI Complaint, *Complaint against the Texas Commission on Environmental Quality for Actions Related to Rulemaking Amendment to the Concrete Batch Plant Standard Permit*, EPA No. 06RNO-22-R6, https://www.epa.gov/system/files/documents/2022-06/06RNO-22-R6%20Complaint_Redacted.pdf; Title VI Complaint, *Complaint regarding the Texas Commission on Environmental Quality’s Issuance of Federal Operating Permit No. 01493 to Oxbow Calcining LLC*, EPA No. 02R-21-R6 (Aug. 2021), https://www.epa.gov/system/files/documents/2022-06/02R-21-R6%20Complaint_Redacted.pdf.

scientific study demonstrates both that industrial air pollution disproportionately burdens communities of color in Louisiana and that LDEQ permitting decisions drive that disparity:

We found that the Louisiana Department of Environmental Quality (LDEQ) has permitted a pattern of industrialization wherein reported emissions of common industrial pollutants are 7 to 21-fold higher among industrialized communities of Color compared to industrialized White communities This disparity can be primarily attributed to the Chemical Manufacturing Industry, which represents more LDEQ-reporting facilities and more emissions in predominantly Black communities - and in Louisiana overall - than any other industry subsector.⁴⁸

Almost all of the examples described in Part V.B. below, directly affect environmental justice communities—and disproportionately so. The Formosa facility that LDEQ permitted, for example, is in an area of St. James Parish that EPA’s October 2022 Letter of Concerns highlights for its history of environmental racism. Similarly, in the case of Plaquemines LNG, LDEQ permitted emissions of nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and fine particulate matter (PM_{2.5}) despite modeling that showed NAAQS exceedances for those pollutants in an area where six of the seven surrounding communities are majority people-of-color, low-income, or both. What is clear from the examples that follow is that the abuse of the SILs Guidance occurs near or at the fence-line of people-of-color and low-income communities, as well as in areas already disproportionately burdened by industrial pollution.

Notably, examples below demonstrate *prima facie* cases of disparate impact discrimination, including because they allow EPA to (1) identify the specific policy or practice at issue; (2) establish adversity/harm; (3) establish disparity; and (4) establish causation.⁴⁹ (*For examples, see Formosa Plastics and Commonwealth LNG (within the last 180 days), as well as Plaquemines LNG, and Jupiter Brownsville below in Part V.B.*) This creates an unfair and dual system: regions of the country where the NAAQS and increments are enforced, compared to industrial “sacrifice zones” that jeopardize the health and well-being of people historically and continuously marginalized by American society and government at all levels.

B. Examples of State Abuses of the SILs Guidance.

In this section, we document prominent examples of LDEQ’s and TCEQ’s failures. While we lack the capacity in this Petition to survey every single permitting decision of LDEQ and TCEQ that implicates the SILs, the examples below are typical of undersigned counsel’s practice in front of these two agencies.

We begin with lengthier descriptions of two cases that exemplify the States’ abuse of the SILs, Formosa Plastics, in St. James Parish, Louisiana, and Plaquemines LNG, in Plaquemines Parish, Louisiana. We follow these with less detailed summaries of other recent examples,

⁴⁸ Kimberly A. Terrell & Gianna St. Julien, *Discriminatory outcomes of industrial air permitting in Louisiana*, Journal of Environmental Challenges (vol. 10, Jan. 2023), <https://doi.org/10.1016/j.envc.2022.100672>, attached as **Exhibit 2**.

⁴⁹ EPA, *Interim Env’t Justice & Civil Rights in Permitting FAQs*, *supra* note 19, at 12–13 (laying out factors for disparate impact analysis).

providing what we hope is enough information for context and to grasp the pervasiveness of the problem in both States—but without undue repetition. In addition, we provide a table summarizing these examples at Figure 1.

Figure 1, Table of Examples

Facility	State Applied SILs w/o Case by Case Review?	Basis of Concern: No In-Zone Monitoring for Pollutant Above PSD Significance Level & Below SILs (at Prescreening)?	Basis of Concern: Existing Modeling Shows NAAQS / Increment Exceedance or Less than SIL to Exceedance?	Basis of Concern: Environmental Justice Communities Impacted?	Where Pollutant Emissions Above SILs, State Applied SILs to Allow Despite Data Showing Contribution to NAAQS Exceedance?	State Required Mitigation to Offset Contribution to Exceedance?
Formosa Plastics	Yes	Yes	Yes	Yes	Yes	No
Plaquemines LNG	Yes	Yes	--	Yes	Yes	No
Calcasieu Pass LNG	Yes	Yes	--	Yes	Yes	No
CP2 LNG	Yes*	Yes	Yes	Yes	Yes	No
Commonwealth LNG	Yes	Yes	Yes	Yes	Yes	No
Cameron LNG	Yes	Yes	--	Yes	Yes	No
Lake Charles Methanol	Yes	Yes	Yes	--	Yes	No
Mitsubishi Chemical**	Yes	Yes	Yes***	--	Yes	No
Jupiter Brownsville LLC	Yes	No	Yes	Yes	No	No

*Based on Venture Global application to LDEQ and FERC DEIS; LDEQ proposed permit not yet published.

**Based on Mitsubishi Chemical's permit application to LDEQ; LDEQ proposed permit not yet published.

***Ascension Parish had been in nonattainment for ozone until 2016, and is still in maintenance status.⁵⁰

Our examples focus on newly proposed petrochemical and LNG facilities. This is no coincidence. These are some of the largest sources recently permitted and a regular focus of our work. These buildouts often overlap with existing industry and impact the same frontline communities over and over again. This focus on new facilities should not diminish the importance of reviewing SILs abuses relating to existing and re-permitting major source facilities of all types, in all areas of the States. Because other agencies, including federal licensing agencies like Federal Energy Regulatory Commission (“FERC”), rely on LDEQ and TCEQ air permitting to satisfy their separate environmental reviews of the same projects, these same diseased decisions can spread to infect other permitting processes, as we note below.

⁵⁰ See EPA website, at https://www3.epa.gov/airquality/greenbook/anayo_la.html.

1. Formosa Plastics, St. James Parish, Louisiana.

The Formosa Plastics case illustrates all four sets of failures to meet the law when implementing the SILs Guidance described above: *a)* LDEQ failed to perform a case-specific review before relying on the SILs in a compromised airshed that presented bases for concern; *b)* LDEQ invoked the SILs to issue air permits despite modeling showing the applicant would worsen ongoing violations of the NAAQS and increments; *c)* LDEQ has not taken any other action to address the violations of the federal air standards in St. James Parish that Formosa Plastics' modeling revealed; and *d)* LDEQ's decision will disproportionately harm Black and low-income communities.

In 2020, LDEQ granted a PSD Permit and fourteen Title V/Part 70 Air Operating Permits to FG LA LLC ("Formosa Plastics")⁵¹ to construct and operate a mega-complex of chemical plants in St. James Parish, Louisiana.⁵² For the PSD Permit, LDEQ first allowed Formosa Plastics to avoid cumulative modeling altogether for four federal air standards based solely on preliminary screening that showed those emissions below the SILs.⁵³ Had LDEQ conducted the necessary case-specific review, it would have had to account for the bases of concern described below, any one of which should have triggered cumulative impact modeling to gauge the full impacts of Formosa Plastics' air pollution on top of existing sources'.

One basis of concern is the absence of air monitors in highly industrialized St. James Parish for any pollutant, other than ozone.⁵⁴ LDEQ nonetheless treats the Parish as if it is in attainment of all NAAQS, resting on the assertion that the air quality is "unclassifiable" due to the agency's own decision not to locate air monitors there.⁵⁵ This lack of data means LDEQ cannot say with certainty whether the air in the Parish in fact meets federal air standards, let alone whether it would if Formosa Plastics operates.

Existing modeling in the area, by the nearby Nucor Steel plant, established a second basis of concern because it showed that the air in the Parish actually failed to meet the NAAQS for

⁵¹ FG LA LLC, the entity to which LDEQ issued the Permits, is part of Formosa Plastics Group, a Taiwanese-based conglomerate.

⁵² Jan. 6, 2020, LDEQ Basis for Decision and Response to Public Comments on FG LA, LLC PSD and Title V Air Permits, AI No.198351, EDMS Doc. No. 11998452, <https://edms.deq.louisiana.gov/app/doc/view?doc=11998452> (hereinafter "Formosa Basis for Decision"), excerpt attached as **Exhibit 16**.

⁵³ *Id.* at 12–13, 45–47. LDEQ's summary dismissal of further review included 1-hour SO₂, where Formosa Plastics' emissions came within a small fraction of the SIL (7.49 v. 7.8 µ/m³); Jan. 6, 2020, Formosa Plastics PSD Permit No. PSD-LA-812, 69 of 126, AI No.198351, EDMS Doc. No. 11998450, <https://edms.deq.louisiana.gov/app/doc/view?doc=11998450>, excerpt attached as **Exhibit 17**.

⁵⁴ See LDEQ, Current Monitoring Data & AQI in the New Orleans Area (May 22, 2023), <https://airquality.deq.louisiana.gov/Current/Region/NewOrleansArea>, attached as **Exhibit 18**.

⁵⁵ *Id.* LDEQ treats the Parish as "unclassifiable" for the NAAQS, a status which under the Clean Air Act allows LDEQ to apply attainment-area permitting rules for new sources. See 42 U.S.C. § 7407(d)(1)(A)(iii) (defining unclassifiable area as one in "cannot be classified on the basis of available information as meeting or not meeting" the federal air standard); 40 C.F.R. § 81.319 (listing designations for St. James Parish).

PM_{2.5}, PM₁₀, NO₂, and SO₂ standards.⁵⁶ Indeed, EPA Region 6 has critiqued LDEQ's failure to address the NAAQS violations evidenced in Nucor's modeling.⁵⁷ But LDEQ has failed to take action since. LDEQ should have, at a minimum, required Formosa Plastics to model each of these pollutants' standards to ensure the chemical complex would not worsen the violations further.

A third basis of concern is the facility's impact on environmental justice communities. St. James Parish is at the heart of the region from Baton Rouge to New Orleans, often called "Cancer Alley" or "Death Alley,"⁵⁸ known for the disproportionate environmental harm its residents face from the petrochemical industry.⁵⁹ Formosa Plastics aims to build in an area where more than 90 percent of the nearest residents identify as Black⁶⁰ and where residents are disproportionately low-income.⁶¹ Those residents are already overburdened with pollution, because nearly all existing, large industrial emitters in St. James Parish are in majority-Black census tracts like theirs, despite the fact that parish's population is 50 percent white.⁶² These existing, industrial emissions place residents in the area closest to Formosa Plastics' site at greater risk of developing cancer from air toxics than 99.6 percent of people living in the United States, according to EPA screening data.⁶³ EPA's October 2022 Letter of Concern explained that "LDEQ's methods of administering its air permitting program" may be a major contributor to this harm, and confirmed that the "risks appear to be borne disproportionately by the Black residents in St. James Parish, especially those who live closest the proposed Formosa facility."⁶⁴ Additionally, EPA's EJScreen tool shows that, among other hazards, the nearby community

⁵⁶ Jan. 7, 2011, EPA Comments submitted to LDEQ re: Nucor Steel Louisiana, 10 of 11, AI No. 157847, EDMS Doc. No. 7830225, <https://edms.deq.louisiana.gov/app/doc/view?doc=7830225>, attached as **Exhibit 19**.

⁵⁷ *Id.*

⁵⁸ EPA Oct. 2022 Title VI Letter of Concern, *supra* note 5, at 8–9 (explaining that what LDEQ terms the "Industrial Corridor" along the Mississippi River in the state is "sometimes referred to as Cancer Alley" and collecting reports that describe the "Cancer Alley"/ "Death Alley" region in more detail).

⁵⁹ Tristan Baurick, *et al.*, *Welcome to "Cancer Alley," Where Toxic Air Is About to Get Worse*, ProPublica (Oct. 2019), <https://www.propublica.org/article/welcome-to-cancer-alley-where-toxic-air-is-about-to-get-worse>, attached as **Exhibit 20**.

⁶⁰ EPA Oct. 2022 Title VI Letter of Concern, *supra* note 5, at 53.

⁶¹ EJSCREEN results for Welcome, La., 1-mile radius (Population: 849), <https://ejscreen.epa.gov/mapper/>, attached as **Exhibit 21**.

⁶² Deep South Center for Environmental Justice, *The More Things Change, the More they Remain the Same: Living and Dying in Cancer Alley (1990 to 2023)*, 13, 28 (2023) (hereinafter "DSCEJ Report"), https://fluxconsole.com/files/item/211/171496/DSCEJ-CancerAlley_Report.pdf, attached as **Exhibit 22**.

⁶³ Lylla Younes, *What Could Happen if a \$9.4 Billion Chemical Plant Comes to "Cancer Alley,"* ProPublica (Nov. 18, 2019), <https://www.propublica.org/article/what-could-happen-if-a-9.4-billion-chemical-plant-comes-to-cancer-alley>, attached as **Exhibit 23**.

⁶⁴ EPA Oct. 2022 Title VI Letter of Concern, *supra* note 5, at 5.

ranks nationally in the 93rd percentile for environmental justice burden from particulate matter generally and 98th percentile from respiratory hazards.⁶⁵

LDEQ failed to address any of this crucial context before allowing Formosa Plastics to exploit the SILs to forego cumulative air quality modeling for nearly every standard. Instead, LDEQ required cumulative-source modeling only for those standards where Formosa Plastics modeled emission concentrations above the SILs.⁶⁶ This modeling, perhaps unsurprisingly, showed Formosa Plastics would add to violations of federal air standards for 24-hour PM_{2.5} and 1-hour NO₂, as depicted in Figure 2 below. For instance, maximum concentrations of NO₂ would be *more than double* the NAAQS 1-hour standard (422.53 µg/m³ versus 188 µg/m³).⁶⁷ But LDEQ ignored the additional burden on public health and, instead, invoked the SILs a second time, relying on them—despite the Clean Air Act’s prohibition—to argue that Formosa Plastics’ emissions “insignificant” contributions to the NAAQS and increment violations.⁶⁸

Figure 2⁶⁹

	Formosa Plastics’ Max Modeled Contribution (µg/m ³)	Total (µg/m ³)*	Standard (NAAQS/ increment) (µg/m ³)
PM _{2.5} (24-hour NAAQS)	8.94	51.16	35
NO ₂ (1-hour NAAQS)	74.05	422.53	188
PM _{2.5} (24-hour increment)	7.97 ⁷⁰	12.96	9

*Sum of Formosa Plastics’ contribution, plus assumed background concentration, plus all industrial sources’ modeled concentration.

These violations have real-world implications for human health and the people living, working, or visiting nearby. According to LDEQ’s map, several of the PM_{2.5} violations would take place in or around the historic, Black, [REDACTED] neighborhood of St. James Parish, which

⁶⁵ EJSCREEN results for Welcome, La., *supra* note 61. EJSCREEN shows that the Welcome census tract is in the 89th percentile nationally for low-income, meaning only 11 percent of U.S. census tracts have residents with lower incomes on average than Welcome. *Id.*

⁶⁶ Formosa Basis for Decision, *supra* note 52, at 13.

⁶⁷ *Id.*

⁶⁸ *United States v. Ameren Mo.*, 421 F. Supp. 3d 729, 817 (E.D. Mo. 2019) (“[T]he SILs do not establish a level below which there is no risk of harm from a facility’s pollution.”).

⁶⁹ Formosa Basis for Decision, *supra*, note 52, at 13; Formosa Plastics Final PSD Permit, *supra* note 53, at 69.

⁷⁰ Formosa Plastics Air Quality Analysis (July 2018), at 42 of 424, AI No. 198351, EDMS Doc. No. 11246153, <https://edms.deq.louisiana.gov/app/doc/view?doc=11246153>, excerpt attached as **Exhibit 24**.

is already surrounded by oil-terminal tank farms.⁷¹ But LDEQ arbitrarily concluded that because Formosa Plastics' emissions would be below the SILs in some areas where it modeled NAAQS exceedances, the company could receive a PSD permit stating: "the modeled exceedances exist irrespective of the FG LA Complex, and LDEQ has determined that the FG LA Complex's contribution to these exceedances will be insignificant."⁷² LDEQ cited to EPA's SILs Guidance as legal justification in to conclude that Formosa Plastics could increase these NAAQS exceedances.⁷³

When (b)(6) Privacy, (b)(7)(C) Enf. Privacy, Sierra Club, and several other groups challenged LDEQ's permit decision in state district court, including on the grounds of LDEQ's abuse of the SILs,⁷⁴ LDEQ vigorously defended its blanket use of the SILs in briefing.⁷⁵ Far from attempting to argue that it uses case-specific discretion that the SILs Guidance requires, LDEQ argued that the complex's emissions below the SILs, either in preliminary screening or at the point of a NAAQS- or increment-violating receptor, mean that "FG LA will not cause or contribute to a violation."⁷⁶ The district court rejected LDEQ's argument, ruling in favor of petitioners, (b)(6) Privacy, (b)(7)(C) Enf. Privacy *et al.*, and holding that LDEQ violated the Clean Air Act and Louisiana law in abusing the SILs.⁷⁷ The district court issued an order vacating Formosa Plastics' air permits, including the PSD permit that relied on the SILs.⁷⁸ But LDEQ appealed the district court's ruling "suspensively," staying the effect of district court's determination during the still-pending appeal.⁷⁹

While the state court's decision is a positive step, it is far from sufficient. EPA has correctly recognized that the state court's ruling in Formosa Plastics on the SILs has not yet changed LDEQ's conduct.⁸⁰ After staying the district court's vacatur of Formosa Plastics' PSD

⁷¹ Reasons for Judgment at 15, (b)(6) Privacy, (b)(7)(C) Enf. Privacy, *v. LDEQ*, 19th Judicial District Court Parish of East Baton Rouge ("La. 19th JDC") Docket No. (b)(6) Privacy, (b)(7)(C) Enf. Privacy Sept. 8, 2022 ("Sept. 8, 2022, Reasons for Judgment"), attached as **Exhibit 25**; Formosa Basis for Decision, *supra* note 52, at 16.

⁷² Formosa Basis for Decision, *supra* note 52, at 16.

⁷³ *Id.* at 45–47.

⁷⁴ See Sept. 8, 2022, Reasons for Judgment, *supra* note 71.

⁷⁵ See LDEQ Opp. Br. at 46, (b)(6) Privacy, (b)(7)(C) Enf. Privacy

Exhibit 26.

⁷⁶ *Id.* at 46.

⁷⁷ Sept. 8, 2022, Reasons for Judgment, *supra* note 71, at 5, 14, 16.

⁷⁸ Judgment, (b)(6) Privacy, (b)(7)(C) Enf. Privacy **Exhibit 27.**

⁷⁹ See FG LA, LLC, Suspensive Appeal Bond, (b)(6) Privacy, (b)(7)(C) Enf. Privacy, *v. LDEQ*, Docket No. (b)(6) Privacy, (b)(7)(C) Sec. 27, La. 19th JDC (filed Sept. 29, 2022) (explaining that court signed order of appeal) attached as **Exhibit 28**; LDEQ, Mot. for a Suspensive Appeal, (b)(6) Privacy, (b)(7)(C) Enf. Privacy *v. LDEQ*, La. 19th JDC, Docket No. (b)(6) Privacy (filed September 27, 2022), attached as **Exhibit 29**; La. Code Civ. Proc. art. 2123(A) (authorizing suspensive appeals in certain cases); La. R.S. 13:4581 (authorizing state agencies to take suspensive appeals without providing bond).

⁸⁰ EPA Oct. 2022 Title VI Letter of Concern, *supra* note 5, at 42 (stating as to Title VI complaint relating to the Formosa Plastics matter, "EPA has continued to investigate this matter as it relates to the Formosa permits since the lower court's decision—which EPA has reviewed carefully and taken into account for

permit through its appeal, on December 5, 2022, LDEQ extended that permit's deadline to construct and reasserted its view—ruled unlawful by the district court—that Formosa Plastics' Air Quality Analysis complied with the Clean Air Act.⁸¹ Meanwhile, residents in St. James continue to face an industrial buildout with air that the modeling shows fails to meet federal public-health-based air standards.

2. Plaquemines LNG, Plaquemines Parish, Louisiana.

Another example set of LDEQ's abuse of the SILs Guidance to allow massive emissions that contribute to NAAQS exceedances in communities already suffering environmental injustices is LDEQ's 2019 air permit decisions for the Plaquemines LNG liquefied "natural" gas methane export terminal, as well as its 2021 permit modifications. For both decisions, LDEQ failed to meet SILs Guidance requirements and abused its discretion by permitting criteria pollutant emissions below SILs without any case-by-case review (and despite bases of concern indicating that that modeling was warranted). The agency similarly unlawfully permitted criteria pollutant emissions above SILs—like NO_x, SO₂, and PM_{2.5} where predictive modeling showed NAAQS exceedances. Moreover, since FERC relied on LDEQ's permitting decision to meet its federal National Environmental Policy Act ("NEPA") review, Plaquemines LNG also demonstrates how a State's unlawful use of SILs can be incorporated into federal agency decision making—and highlights the broad scope of abuse that EPA can relieve with action on this Petition.

First, LDEQ failed to use case-specific discretion and summarily relied on SILs to avoid any modeling for emissions levels not strictly at or above SILs, despite having ample bases for concern that doing so could frustrate the Act's requirements.⁸² For example, LDEQ did not perform a case-by-case review for Annual and 24-hour PM₁₀, Annual PM_{2.5}, 24-hour and Annual SO₂. Instead, it merely pointed to the SILs levels for its basis not to model or perform further review:⁸³

preconstruction monitoring is required for these pollutants. Screening analysis indicated that annual and 24-hour PM₁₀, annual PM_{2.5}, 24-hour and annual SO₂, and 1-hour and 8-hour CO are below their significant impact levels. Therefore, no increment analysis or refined modeling is required for these pollutants.

But this "individual case" included more than one "basis for concern," so that a demonstration of the proposed source's impact below the relevant SIL "is not sufficient to demonstrate that the

purposes of this Letter—did not finally resolve the concerns related to the issuance of the Formosa permits.").

⁸¹ Dec. 5, 2022, Letter from LDEQ Granting Extension of Deadline to Commence Construction, AI No. 198351, EDMS Doc. No. 13579554, <https://edms.deq.louisiana.gov/app/doc/view?doc=13579554>, attached as **Exhibit 30**. In the letter, LDEQ notes that the court's "Judgment remains suspended," and asserts that "a substantive reanalysis of air quality impacts is not warranted at this time." *Id.* at 3–4.

⁸² See April 25, 2019, Plaquemines LNG PSD Permit, PSD-LA-808, pages 6–7 of 226, AI No. 197379 EDMS Doc. No. 11624911 (hereinafter "Plaquemines LNG 2019 PSD Permit"), <https://edms.deq.louisiana.gov/app/doc/view?doc=11624911>, attached as **Exhibit 31**.

⁸³ *Id.* at 7 of 226.

proposed source will not cause or contribute to a violation.”⁸⁴ Instead, “the permitting authority should require additional information from the permit applicant to make the required air quality impact demonstration.”⁸⁵

A patent basis of concern for this major source is the lack of air monitoring. Plaquemines LNG is currently under construction in Plaquemines Parish, on the Mississippi River about 30 miles southeast of New Orleans. LDEQ designates Plaquemines Parish “attainment/unclassifiable” because, despite the Parish having two oil refineries, large grain and coal export terminals, extensive oil production, and other air polluting facilities, LDEQ has chosen to place *none* of its ambient air quality monitoring network stations in Plaquemines Parish.⁸⁶

Another basis of concern: the terminal site is located near several communities that suffered catastrophic damage in Hurricane Ida, in August 2021, and that are still struggling to recover, such as the historic Black communities of Ironton and West Pointe à la Hache.⁸⁷ A recent FERC “environmental justice” review for a proposed capacity expansion of the Plaquemines LNG terminal recognized that 6 out of 7 communities in the area it deemed “impacted” by the terminal’s air pollutant emissions qualify as environmental justice communities.⁸⁸ Notably, FERC chose a 17.92-kilometer “radius of impacts” from the terminal for its environmental justice review because that “is the distance from the center of the facility to the furthest [point] ... that is equal or greater than the Significant Impact Level” for the 1-hour NO₂ NAAQS.⁸⁹

So, when LDEQ found that Plaquemines LNG’s “predicted modeled concentrations exceeded the 24-hour PM_{2.5}, 1-hour SO₂, and 1-hour NO₂ NAAQS,”⁹⁰ yet still permitted it to

⁸⁴ See SILs Guidance, *supra* note 1, at 18.

⁸⁵ *Id.*

⁸⁶ See 40 C.F.R. § 81.319; LDEQ Air Monitoring Sites map, <https://experience.arcgis.com/experience/1bc3c0ad43be455ab7224f0324aabaf2/>, attached (with excerpt of relevant area) at **Exhibit 32**.

⁸⁷ See, e.g., Stacey Plaisance, *Hurricane Ida Devastation Lingers in Louisiana 1 Month Later*, AP News (Sept. 29, 2021), <https://apnews.com/article/hurricane-ida-environment-and-nature-louisiana-storms-hurricanes-9f305dd811e9d8fea248b5e514c9aaf1>, attached as **Exhibit 33**.

⁸⁸ FERC Jan. 6, 2023, Environmental Assessment for proposed Plaquemines LNG uprate amendment, Docket No. CP22-92-000, Accession No. 20231006-3019, https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230106-3019 (“FERC Plaquemines LNG EA”), attached as **Exhibit 34**.

⁸⁹ See FERC Plaquemines LNG EA, *supra* note 88, at 20, n.13 (“[The] Terminal is within ... an environmental justice community. An additional six block groups are within the 17.92-kilometer radius [environmental justice review area] for the Terminal site. Out of seven total block groups within this radius, six are identified as environmental justice communities One of the block groups is identified as an environmental justice population based on the minority threshold alone ...; two are based on the low-income threshold alone ...; and three are identified as an environmental justice population based on both the minority and low-income thresholds”).

⁹⁰ See Plaquemines LNG 2019 PSD Permit, page 8 of 226, <https://edms.deq.louisiana.gov/app/doc/view?doc=11624911>, **Exhibit 31**.

emit 966.02 tons per year (tpy) of NO_x, 371.86 tpy of PM_{2.5}, 114.86 tpy of SO₂, along with other pollutants,⁹¹ it did so in an area surrounded by (and disproportionately affecting) communities that are predominantly minority, low-income, or both. And LDEQ did the same again in 2021, when it modified the air permits, increasing allowed NO_x emissions to 1,103.47 tpy.⁹²

Further, finding NAAQS exceedances for 24-hour PM_{2.5}, 1-hour SO₂, and 1-hour NO₂, created another basis of concern warranting modeling for the remaining federal standards for those pollutants. Moreover, for two of the pollutants where LDEQ found NAAQS violations (24-hour PM_{2.5} and 1-hour SO₂), the reported screening level was just barely below SILs. Preliminary screening for Annual PM_{2.5} was 0.29 and the SIL is 0.3 and preliminary screening for 24-hour SO₂ was 4.99 and the SIL is 5.0, as this chart from the permit shows:⁹³

Pollutant	Averaging Period	Preliminary Screening Concentration (µg/m ³)	Level of Significant Impact (µg/m ³)	Significant Monitoring Concentration (µg/m ³)	Preconstruction Monitoring Required?	Refined Modeling Required?
PM ₁₀	24-hour	3.3	5	10	No	No
	Annual	0.4	1	-	No	No
PM _{2.5}	24-hour	2.8	1.2	4	No	Yes
	Annual	0.29	0.3	-	No	No
SO ₂	1-hour	8.9	7.8	-	No	Yes
	3-hour	75.4	25	-	No	Yes
	24-hour	4.99	5	13	No	No
	Annual	0.1	1	-	No	No
NO ₂	1-hour	21.2	7.5	-	No	Yes
	Annual	1.5	1	14	No	Yes
CO	1-hour	1,709.2	2,000	-	No	No
	8-hour	156.2	500	575	No	No

Second, LDEQ abused the SILs Guidance by permitting the facility despite modeling that showed NAAQS exceedances for 24-hour PM_{2.5}, 1-hour SO₂, and 1-hour NO₂. When issuing the permit, LDEQ acknowledged it found these exceedances and that Plaquemines LNG's emissions would contribute to them, if at levels below SILs:⁹⁴

Refined modeling indicates compliance with the 3-hour SO₂ and annual NO₂ NAAQS. Although the predicted modeled concentrations exceeded the 24-hour PM_{2.5}, 1-hour SO₂, and 1-hour NO₂ NAAQS, the required culpability analyses demonstrate that when and where a modeled exceedance occurs, Plaquemines LNG's maximum contribution is insignificant (i.e., below the respective pollutant's significant impact level).

LDEQ's claim that it is merely applying the "required culpability analyses" to excuse these contributions to violations is audacious and incorrect. Far from "required," the SILs Guidance,

⁹¹ See *id.* at 6 of 226. Additional permitted pollutants include as well as 133.88 tpy of VOCs and 8,144,463 tpy of CO₂e. See *id.*

⁹² See May 28, 2021, Plaquemines LNG Modified PSD Permit No. PSD-LA-808(M-2), page 13, 17 of 43, AI No. 197379, EDMS Doc. No. 12738653 ("Plaquemines LNG 2021 Modified PSD Permit"), <https://edms.deq.louisiana.gov/app/doc/view?doc=12738653>, attached as **Exhibit 35**.

⁹³ Plaquemines LNG 2019 PSD Permit, at 7 of 226, <https://edms.deq.louisiana.gov/app/doc/view?doc=11624911>, **Exhibit 31** (screening model table).

⁹⁴ See *id.* at 8 of 226.

which includes a so-called culpability analysis, cautions agencies to exercise discretion in each case, and—in any event—cannot overcome the Clean Air Act’s prohibition on any new major source contributing to a NAAQS violation.⁹⁵ In short, contrary to the Clean Air Act, LDEQ permitted the Plaquemines LNG facility to contribute to three known public health standard violations based on EPA’s SILs Guidance to do so.

In 2021, LDEQ doubled down on these abuses when it allowed Plaquemines LNG to modify its permit to increase emissions of NO_x, SO₂, and PM_{2.5} even further, despite modeling that again showed the facility would add to violations of the NAAQS. Although the Clean Air Act prohibits any contribution to a NAAQS exceedance, and LDEQ acknowledged that “predicted modeled concentrations exceeded the 24-hour PM_{2.5}, 1-hour SO₂, and 1-hour NO₂ NAAQS,” the agency nevertheless approved the increase, asserting that “Plaquemines LNG’s maximum contribution [for each pollutant] is significant (i.e., below the respective pollutant’s significant impact level).”⁹⁶

Among other things, Plaquemines LNG exemplifies how LDEQ’s unlawful use of SILs can snowball and disproportionately impact already overburdened communities: In 2019, FERC first allowed Plaquemines LNG to be built and to contribute to NAAQS violations based on LDEQ’s unlawful reliance on SILs. Since then, in 2021, LDEQ allowed Plaquemines LNG to increase emissions of pollutants already exceeding NAAQS.

3. Other Louisiana LNG Terminals.

The impact of these LDEQ’s abuse of the SILs Guidance is particularly problematic for LNG facilities, not just because of their enormous physical size, massive pollutant emissions, and disproportionate impact on environmental justice communities, but also because FERC’s reliance on LDEQ’s permitting decisions means the federal government is effectively adopting a position contrary to the Clean Air Act and EPA’s guidance on point. FERC has exclusive jurisdiction to approve the terminal’s location, among other things. But the States still issue underlying permits, including for air pollutant emissions, and FERC looks to those permits and their applications for its NEPA environmental review. Louisiana is the primary site for much of the recent LNG terminal buildout, accounting for hundreds of millions of tons per year of permitted greenhouse gas (“GHG”) and other pollutant emissions in Louisiana. (Most of the other half is happening in Texas.) And FERC appears to simply adopt LDEQ’s unlawful SILs application for its own.

⁹⁵ SILs Guidance, *supra* note 1, at 18 (noting it believed the culpability analysis could be sufficient in “most,” but not all cases).

⁹⁶ Plaquemines LNG 2021 Modified PSD Permit, 17 of 43, <https://edms.deq.louisiana.gov/app/doc/view?doc=11624911>, **Exhibit 35**; *see also* May 28, 2021 Plaquemines LNG Part 70 Permit, page 21–22 of 100 (note 3 to chart), AI No. 197379, EDMS Doc. No. 12738655, <https://edms.deq.louisiana.gov/app/doc/view?doc=12738655>, excerpt attached as **Exhibit 36** (“The Project did not significantly contribute to any of the modeled [NAAQS] exceedances because none of the Project contributions to modeled NAAQS exceedances were above the relevant SIL. Hence, for all pollutant and averaging periods requiring full modeling, the Project was shown to be in compliance with the NAAQS.”).

With LDEQ’s support, LNG terminals are consistently relying on abuse of the SILS Guidance to circumvent the Clean Air Act and push through a huge build out of LNG export terminals and related infrastructure in areas of Louisiana already exceeding the NAAQS public health-based standards. Unsurprisingly, this build out is having a disproportionately large impact on environmental justice communities. For example, no less than six of the eight census block groups within 15 miles of three terminals at the mouth of the Calcasieu River (Calcasieu Pass) in Cameron Parish—including the existing Calcasieu Pass LNG, the recently approved Commonwealth LNG, and the proposed CP2 LNG—are majority-minority and/or low income communities.⁹⁷ Those same communities are also near other approved and proposed LNG export terminals in the Lake Charles area, like Cameron LNG among others. Importantly, LDEQ’s regular and unchecked reliance on SILs to avoid full review of emissions and to allow contributions to existing NAAQS exceedances from individual sources also means there are cumulative contributions to NAAQS exceedances that are not being accounted for—emissions from more than one facility where prescreening or modeling shows each facility’s levels is below SILs for a pollutant, but together they exceed SILS and NAAQS. In other words, the agency is also allowing Clean Air Act violations through cumulative contributions. This is particularly so in Cameron Parish, as well as in adjacent Calcasieu Parish, where LDEQ is permitting in or near the same “attainment” areas, as the examples below show:

- *Calcasieu Pass LNG in Cameron Parish.* Venture Global, the same company that owns Plaquemines LNG, is currently constructing and operating a 12 million tonnes per annum (MTPA) capacity LNG terminal in southwest Louisiana, south of Lake Charles—and with increasing NAAQS and Clean Air Act violations. LDEQ relied on SILs to permit this facility in 2018, skipping a full air quality analysis for all PM₁₀, for 1-hour, 24-hour, and Annual SO₂, and for 8-hour carbon monoxide (CO) NAAQS solely on the basis that emission levels would be below SILs and, further, allowing NO_x emissions despite modeling that showed exceedances of the 1-hour NO_x NAAQS.⁹⁸ The original 2018 PSD permit allowed 680.52 tpy of NO_x and provided only a one-sentence “culpability analysis” to justify the expected 1-hour NO_x exceedance contributions: “when and where a modeled exceedance occurs, Venture Global’s maximum contribution is 5.58 µg/m³ which is insignificant [or] below the level of significant impact of 7.5 µg/m³.”⁹⁹

In February 2021, LDEQ approved a permit modification with NO_x emissions at 707.93 tpy, such that modeling showed 1-hour NO_x emissions at 878.36 µg/m³, *i.e.* more than 4

⁹⁷ See FERC Jan. 19, 2023, CP2 LNG Draft Environmental Impact Statement (“CP2 LNG DEIS”), p. 4–202, Docket Nos. CP22-21-000 & CP22-22-000, Accession No. 20230119-3072, https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230119-3072, excerpt attached as **Exhibit 37**; see also *id.* at 4-393 (map of potential cumulative impacts), *infra* Figure 3.

⁹⁸ See Sept. 21, 2018, Calcasieu Pass LNG PSD Permit No. PSD-LA-805, 7–8 of 235, AI No. 194203, EDMS Doc. No. 11322607 (“Calcasieu Pass 2018 LNG PSD Permit”), <https://edms.deq.louisiana.gov/app/doc/view?doc=11322607>, attached as **Exhibit 38**.

⁹⁹ See *id.* at 7 of 235 (LDEQ’s 2021 permit modification included the “or,” clarifying the sentence, *infra* note 100).

times the 188 $\mu\text{g}/\text{m}^3$ NAAQS limit.¹⁰⁰ Remarkably, LDEQ took the position that approval was required, asserting in response to comments that “a major source *shall not* be considered to cause or contribute to a violation of a NAAQS unless such source would, at a minimum, exceed a significance level (i.e., SIL).”¹⁰¹ LDEQ’s “culpability analysis” to allow these exceedances was, again, only one sentence, stating: “when and where a modeled exceedance occurs, Venture Global’s maximum contribution is 4.41 $\mu\text{g}/\text{m}^3$, which is insignificant or below the level of significant impact of 7.5 $\mu\text{g}/\text{m}^3$.”¹⁰² LDEQ did not explain how, while allowing NOx emissions to *increase* from 680.52 tpy to 707.93 tpy since the 2018 permit, it also calculated that Venture Global’s Calcasieu Pass LNG contribution to the modeled NAAQS exceedance had *decreased* from 5.58 $\mu\text{g}/\text{m}^3$ to 4.41 $\mu\text{g}/\text{m}^3$.¹⁰³

- *CP2 LNG in Cameron Parish.* Venture Global is proposing a third LNG terminal, CP2 LNG, with 20 – 28 MTPA capacity immediately adjacent to its Calcasieu Pass LNG terminal. Venture Global’s application indicates all criteria pollutants exceeding PSD

¹⁰⁰ See Feb. 2, 2021, Calcasieu Pass LNG Modified PSD Permit No. PSD-LA-805 (M-3), 6, 8 of 254, AI No. 194203, EDMS Doc. No. 12563559 (“Calcasieu Pass LNG 2021 Modified PSD Permit”), <https://edms.deq.louisiana.gov/app/doc/view?doc=12563559>, excerpt attached as **Exhibit 39**.

¹⁰¹ Feb. 2, 2021, LDEQ Response to Public Comments and Notification of Final Permit Action, 13 of 14, AI No. 194203, EDMS Doc. No. 12563557 (emphasis added), <https://edms.deq.louisiana.gov/app/doc/view?doc=12563557>, attached as **Exhibit 40** (responding to comment on air pollution adverse health impacts by, among other things, incorporating SILs Guidance)

¹⁰² See Calcasieu Pass LNG 2021 Modified PSD Permit, 8 of 254, <https://edms.deq.louisiana.gov/app/doc/view?doc=12563559>, excerpt at **Exhibit 39**.

¹⁰³ More recently, Venture Global applied to further increase NOx emissions without additional modeling, stating “[a]ir dispersion modeling was determined not to be necessary due to the minimal increase in NOx emissions (+0.14 tpy).” See May 13, 2021, Calcasieu Pass LNG Application to Modify Title V Permit No. 0560-00987-V3 and PSD Permit No. PSD-LA-805 (M-3), 9 of 69, AI No. 194203, EDMS Doc. No. 12718901, <https://edms.deq.louisiana.gov/app/doc/view?doc=12718901>, attached as **Exhibit 41**. Notably, LDEQ approved this May 13, 2021, request for a NOx increase in July 2021, but its permit failed to acknowledge that it required no additional modeling and instead re-adopted the 2020 modeling and 4.41 $\mu\text{g}/\text{m}^3$ NOx contribution culpability analysis as if it were up to date. See July 1, 2021, Calcasieu Pass LNG Modified PSD Permit, PSD-LA-805 (M-4), AI No. 194203, EDMS Doc. No. 12782238, <https://edms.deq.louisiana.gov/app/doc/view?doc=12782238>, excerpt attached as **Exhibit 42**.

review levels and NO_x emissions as high as 1,152.87 tpy, *i.e.* more than 160% higher than the Calcasieu Pass LNG’s NO_x emissions next door:¹⁰⁴

Table 1-3. Facility-Wide Emissions Summary for All Scenarios, tpy

Pollutant	Phase 1 Scenario 1	Phase 1 Scenario 2	Phase 2 Scenario 3	Phase 2 Scenario 4 ^[1]
PM ₁₀	168.80	194.91	342.77	368.88
PM _{2.5}	168.80	194.91	342.77	368.88
SO ₂	109.16	127.64	235.81	254.29
NO _x	710.93	460.28	1,152.87	908.10
CO	1,201.91	738.78	1,844.50	1,428.66
VOC	82.81	96.85	159.97	175.14
Carbon dioxide equivalent (CO ₂ e)	3,217,036	4,274,682	7,556,201	8,528,260
Total HAPs ^[2]	16.18	20.59	35.03	39.45
Total TAPs ^[2]	33.21	190.06	213.54	370.40

^[1] The facility-wide PTE emissions are based on Phase 2 Scenario 4 (All permanent sources in operation).

^[2] Refer to Appendix B for detailed calculations, including speciation of individual HAPs/TAPs.

Although LDEQ has not yet published a proposed permit, FERC is moving forward with its permitting process and environmental review—and appears to be adopting LDEQ’s bad practices on the SILs Guidance. For example, like LDEQ permits, FERC summarily dismissed modeling or other review for any criteria pollutant below SILs, stating: “For all other pollutants and averaging periods evaluated, the maximum model-predicted impacts were below the associated SILs; therefore, NAAQS compliance was demonstrated for those pollutants and averaging periods and no further analyses are required for the Terminal Facilities.”¹⁰⁵

Similarly, FERC pinned EPA and the SILs Guidance with responsibility for Venture Global’s Clean Air Act violation when it accepted Venture Global’s “culpability analysis.” FERC stated the analysis “showed that the contribution by the Terminal Facilities sources to each exceedance concentration at the same point in space and time is not significant (*i.e.*, the contribution is less than the EPA-designated SIL of 7.5 µg/m³). ***Therefore, the Terminal Facilities are not considered, by the EPA, to cause or contribute to this exceedance.***”¹⁰⁶

Moreover, CP2 LNG emissions combined with its sister terminal, the adjacent Calcasieu Pass LNG, CP2’s emissions would more than double Venture Global’s contribution to the area’s NAAQS violations, far exceeding the 7.5 µg/m³ SILs—not only at LDEQ’s previously determined point of exceedance, but likely in the more immediate area as well. And this is without considering the addition of the FERC-approved Commonwealth LNG terminal immediately across the Calcasieu River, discussed below. It is notable, too, that FERC’s Draft Environmental Impact Statement (“DEIS”) also considers separately

¹⁰⁴ July 29, 2022, CP2 LNG Modified Title V Permit and PSD Permit Application – Vol. 1, page 1–6, AI No. 232172, EDMS Doc. No. 13411196, <https://edms.deq.louisiana.gov/app/doc/view?doc=13411196>, excerpt attached as **Exhibit 43**.

¹⁰⁵ CP2 LNG DEIS, *supra* note 97, at 4–261.

¹⁰⁶ *Id.* at 4–262 (emphasis added).

the NO_x emissions from a related compressor station north of Lake Charles, such that it does not consider what their combined modeling would show at any point of exceedance.

- *Commonwealth LNG in Cameron Parish.* In March 2023, LDEQ approved air pollutant emissions permits for another LNG terminal in Cameron Parish, across the River from Calcasieu Pass LNG and the proposed CP2 LNG terminals and, again, impacting environmental justice communities.¹⁰⁷ Here again, LDEQ first avoided a full impacts review for pollutant emissions above PSD review standards, but that preliminary screenings indicated would be below SILs.¹⁰⁸ LDEQ did not consider bases of concern, like the lack of monitoring in the Cameron Parish attainment zone, existing modeling showing a NAAQS exceedance in the zone,¹⁰⁹ and the disproportionate impacts to environmental justice communities when choosing to forego further review.¹¹⁰ Instead, contrary to the SILs Guidance’s terms, LDEQ avoided reviewing whether emissions would cause or contribute to an exceedance of NAAQS solely based on prescreening levels compared to SILs.¹¹¹

¹⁰⁷ See March 28, 2023, Commonwealth LNG PSD Permit No. PSD-LA-841 (the “Commonwealth LNG 2023 PSD Permit”), AI No. 221642, EDMS Doc. No. 13750537, <https://edms.deq.louisiana.gov/app/doc/view?doc=13750537>, excerpt attached as **Exhibit 44**; see Oct. 14, 2022, EPA Letter to FERC re: Commonwealth LNG, Accession No. 20221014-5139, Docket No. CP19-502-000 & CP19-502-001 (commenting on need for increased review and mitigation of Commonwealth LNG’s adverse and disproportionate impacts on environmental justice communities), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20221014-5139, attached as **Exhibit 45**.

¹⁰⁸ See March 28, 2023, Commonwealth LNG 2023 PSD Permit, page 35 of 46, <https://edms.deq.louisiana.gov/app/doc/view?doc=13750537>, excerpt at **Exhibit 44** (refined modeling “was required” for only 4 pollutant concentrations (24-hour PM 2.5, 1-hour SO₂, annual NO_x, and 1-hour NO_x) and “not required”—and in fact omitted—for other pollutant concentrations solely because they did not “exceed respective significant impact levels (SILs)”).

¹⁰⁹ In addition to the modeling for Calcasieu Pass LNG that showed existing NAAQS exceedances of the 1-hour NO_x standard, Sierra Club submitted comments with modeling for Commonwealth LNG that showed NAAQS exceedances of 1-hour NO_x standard for the facility. See April 12, 2022, Sierra Club Amended Comments to LDEQ with Modeling Report at exhibit B, attached at **Exhibit 46**; April 12, 2022, Sierra Club email, AI No. 221642, EDMS Doc No. 13222977, <https://edms.deq.louisiana.gov/app/doc/view?doc=13222977> (submitting comments with the documents at Exhibit 46).

¹¹⁰ See, e.g., March 28, 2023, LDEQ Basis of Decision for Commonwealth LNG Permits, page 11–13 of 191, AI No. 221642, EDMS Doc. No. 13750539 (“LDEQ Commonwealth LNG Basis of Decision”), <https://edms.deq.louisiana.gov/app/doc/view?doc=13750539>, excerpt attached as **Exhibit 47**.

¹¹¹ See, e.g., *id.* at 11–13, n. 44 of 191. It is notably backwards that, where LDEQ included an “environmental justice review,” the agency pointed to its air quality analysis that relied on SILs to find no adverse impact to environmental justice communities instead of pointing to the presence of environmental justice communities (and other bases of concern) to inform whether it should apply the SILs at all. *Id.* at 25 of 191 (“potential emissions of PM₁₀, PM_{2.5}, SO₂, NO_x, CO, and TAPs from the LNG facility will not cause or contribute to a violation of a NAAQS or AAS based on modeling conducted using AERMOD, EPA’s required dispersion model. Accordingly, the LNG facility will not result in ‘adverse’ impacts in the surrounding area.”).

LDEQ also then allowed emissions to contribute to an acknowledged 1-hour NO_x NAAQS exceedance on the finding that Commonwealth's contribution to that exceedance would be less than SILs at the point where its modeling shows a NAAQS violation:

1-Hour concentrations of NO₂ will exceed the NAAQS. However, the contribution of NO₂ emissions from the proposed facility to the exceedance will be no more than 0.07 µg/m³, which is less than the SIL of 7.5 µg/m³.¹¹²

It is not clear how LDEQ can conclude that Commonwealth LNG, with NO_x emissions at more than 50% of the neighboring Calcasieu Pass LNG's NO_x emissions,¹¹³ would contribute only 0.07 µg/m³ to the 1-hour NO_x NAAQS exceedance when Calcasieu Pass would contribute at least 4.41 µg/m³.¹¹⁴ Similarly, LDEQ's conclusion appears contrary to its record that shows the facility's 37.7 µg/m³ 1-hour NO_x emissions contribute a large portion of the 1-hour NAAQS violation in the attainment zone:

Pollutant	Averaging Period	Background (µg/m ³)	Modeling Results (µg/m ³)	Total (µg/m ³)	NAAQS (µg/m ³)
PM _{2.5}	24-hour	19.8	2.18	21.98	35
SO ₂	1-hour	57.1	8.14	65.24	195
NO ₂	1-hour	46.7	182	228.7	189
	Annual	6.6	4.36	10.96	100

Specifically, preliminary screening showed Commonwealth LNG's 1-hour NO_x emissions would contribute 37.7 µg/m³ and the modeled cumulative contribution (including Calcasieu Pass LNG) would be 182 µg/m³ in an airshed with 46.7 µg/m³ background for a total of 228.7 µg/m³ 1-hour NO_x. In other words, Commonwealth LNG would contribute nearly a quarter of the modeled cumulative contribution to the exceedance (37.7 µg/m³ of 182 µg/m³) and almost the whole measure of the exceedance itself (37.7 µg/m³ of the 39.7 µg/m³ above the 189 µg/m³ NAAQS).

Importantly, LDEQ relies on its abuse of the SILs Guidance—as well as its exclusion of more than a thirty-mile radius of impacted communities—to evade consideration of expected air pollutant impacts on existing, disproportionately impacted communities. There is a lot wrong with LDEQ's purported environmental justice review, including its omission of more than 100 impacted census block groups: Where FERC considered air

¹¹² Commonwealth LNG PSD Permit, 36 of 46, <https://edms.deq.louisiana.gov/app/doc/view?doc=13750537>, excerpt attached as **Exhibit 44**.

¹¹³ Commonwealth LNG's permit allows 375.63 tpy of NO_x emissions where Calcasieu Pass LNG's current permit allows 707.93 tpy of NO_x emissions. *Compare id.* at 5 of 46 with discussion of Calcasieu Pass LNG *supra* page 26–27.

¹¹⁴ See Commonwealth LNG PSD Permit, 36 of 46, <https://edms.deq.louisiana.gov/app/doc/view?doc=13750537>, excerpt at **Exhibit 44**; Discussion on LDEQ's Calcasieu Pass LNG permitting, *supra* at page 26–27.

impacts within a 54-kilometer radius from the terminal (about 33.5 miles), LDEQ considered only a three-mile radius for its review (and offered no explanation for that limited scope).¹¹⁵ So, LDEQ ignored almost all of the 91 census tract block groups (out of 148) that FERC “identified as environmental justice communities,” including 24 “based on poverty levels, 18 based on the minority threshold, and 49 based both on both the poverty and minority thresholds.”¹¹⁶

But LDEQ’s reliance on SILs to reject any environmental justice impact on the assertion that “the air quality analysis demonstrates that the LNG facility will not cause or contribute to a violation of NAAQS or AAS”¹¹⁷ is a failure to consider that there will be some impact—*i.e.* the terminal will put additional pollutants into these communities and the air that people live in and breathe. It is also a failure to consider that, in many areas, those additional pollutants will be piled onto an airshed that already violates the NAAQS and so already exceeds federal public health standards. Whether or not the additional pollutant load is over SILs at the place and time of any existing NAAQS exceedance not the same to whether these pollutants will add to the disproportionate burden on these communities. In short, LDEQ is further abusing the SILs to allow additional and unlawful impacts on the communities it is charged to protect under the Civil Rights Act of 1964.

- *Cameron LNG in Cameron Parish near the border of Calcasieu Parish.* For years, LDEQ has allowed Cameron LNG’s emissions in an area whose residents are predominately people of color and/or with low-income.¹¹⁸ And it has done so despite modeling that both established NOx NAAQS exceedances and confirmed Cameron LNG would contribute to those NAAQS exceedances, if at levels below SILs.¹¹⁹ Currently, LDEQ is processing

¹¹⁵ Compare FERC Sept. 9, 2022, Commonwealth LNG Final Environmental Impact Statement (“Commonwealth LNG FEIS”), Docket No. CP19-502-000 & CP19-502-001, Accession No. 20220909-3017, page 4–190, map at page 4–193, https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20220909-3017, excerpt attached as **Exhibit 48**, with March 28, 2023, LDEQ Basis of Decision for Commonwealth LNG Permits, <https://edms.deq.louisiana.gov/app/doc/view?doc=13750539>, excerpt **Exhibit 47**.

¹¹⁶ Commonwealth LNG FEIS, page 4–191, https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20220909-3017&optimized=false, excerpt at **Exhibit 48**.

¹¹⁷ March 28, 2023, Basis of Decision for Commonwealth LNG Permits, 28 of 191, <https://edms.deq.louisiana.gov/app/doc/view?doc=13750539>, excerpt at **Exhibit 47**.

¹¹⁸ See, e.g., Affidavit of (b)(6) Privacy, (b)(7)(C) Enf. Privacy, attached as exhibit B to October 15, 2021, Comments of Sierra Club (b)(6) Privacy, (b)(7)(C) Enf. Privacy re: Cameron LNG Part 70 Renewal. Permit No. 0560-00184-V10/PSD Permit PSD-LA-766 (M3), AI 99407, EDMS Doc. No. (b)(6) Privacy, (b)(7)(C) Enf. Privacy (“October 15, 2021 Comments on Cameron LNG”), <https://edms.deq.louisiana.gov> (b)(6) Privacy, (b)(7)(C) Enf. Privacy, excerpt attached as **Exhibit 49** Map at Figure 3, *infra* page 31, CP2 LNG DEIS, dated Jan. 19, 2023, page 4–393, Figure 4.14.1–1 (“Projects with Potential to Contribute to Cumulative Impacts”).

¹¹⁹ See Dec. 12, 2019, Cameron LNG Title V Permit Modification, 0560-00184-V10, 5 of 49, AI No. 99407, EDMS Doc. No. 11978646 <https://edms.deq.louisiana.gov/app/doc/view?doc=11978646>, excerpt attached as **Exhibit 50** (modifying to allow switch from LNG import to LNG export and increase

Cameron LNG's permit renewal request. The proposed permit overlooks bases of concern, like the existing modeling that shows NAAQS exceedances and the overburdened communities nearby. Instead, it summarily relies on SILs to avoid any modeling or other review of pollutants such as NO₂, PM_{2.5}, PM₁₀, and CO that screening models showed exceeded PSD significance levels, asserting: "Preliminary screening indicates that the impacts of PM₁₀, PM_{2.5}, and NO_x, and CO emissions ... will be below their respective SILs. Refined modeling is not required."¹²⁰

Notably, Cameron LNG has a history of failing to meet its emissions limitations and reporting requirements, at least some of which LDEQ acknowledged in 2020,¹²¹ 2021,¹²² 2022¹²³ and 2023.¹²⁴ Also, at least one expert report describes that its permits underestimated emissions.¹²⁵ As a result, Cameron LNG's contributions to NAAQS exceedances are likely much higher and above SILs.

Other LNG terminals are operating, under construction or proposed in the immediate Lake Charles area,¹²⁶ as well as nearby offshore and in Louisiana near the Sabine Pass. FERC's

permitted NO_x emissions in area exceeding NO₂ 1-hour NAAQS, with rationale in footnote only: "Project's maximum contribution to an exceedance of the NAAQS is 3.68 µg/m³. Project's maximum contribution to the maximum concentration of 3,113 µg/m³ is 0.00014 µg/m³."; *see also* Wingra Engineering Report Air Modeling for Cameron LNG, AI No. 99407, EDMS Doc. No. 12947537, <https://edms.deq.louisiana.gov/app/doc/view?doc=12947537>, attached as **Exhibit 51** (submitted to LDEQ as exhibit J of October 15, 2021 Comments on Cameron LNG, excerpt at **Exhibit 49**, <https://edms.deq.louisiana.gov/app/doc/view?doc=12947536>).

¹²⁰ *See* Feb. 1, 2023, LDEQ Material associated with proposed Cameron LNG Permit for Public Review, 0560-00184-V11; PSD-LA-766 (M4), page 8 of 580, AI No. 99407, EDMS Doc. No. 13650143, <https://edms.deq.louisiana.gov/app/doc/view?doc=13650143>, excerpt attached as **Exhibit 52**.

¹²¹ March 26, 2020, LDEQ Warning Letter to Cameron LNG (regarding 2019 violations), AI No. 99407, EDMS Doc. No. 12121119, <https://edms.deq.louisiana.gov/app/doc/view?doc=12121119>, attached as **Exhibit 53**.

¹²² Feb. 22, 2021, two (2) LDEQ Warning Letters to Cameron LNG (regarding 2020 violations), AI No. 99407, EDMS Doc. Nos. 12585627 & 12585621, respectively <https://edms.deq.louisiana.gov/app/doc/view?doc=12585621> and <https://edms.deq.louisiana.gov/app/doc/view?doc=12585627>, attached as **Exhibit 54**.

¹²³ July 18, 2022 LDEQ Warning Letter to Cameron LNG (regarding 2019 and 2020 violations), AI No. 99407, EDMS Doc. No. 13385903, <https://edms.deq.louisiana.gov/app/doc/view?doc=13385903>, attached as **Exhibit 55**.

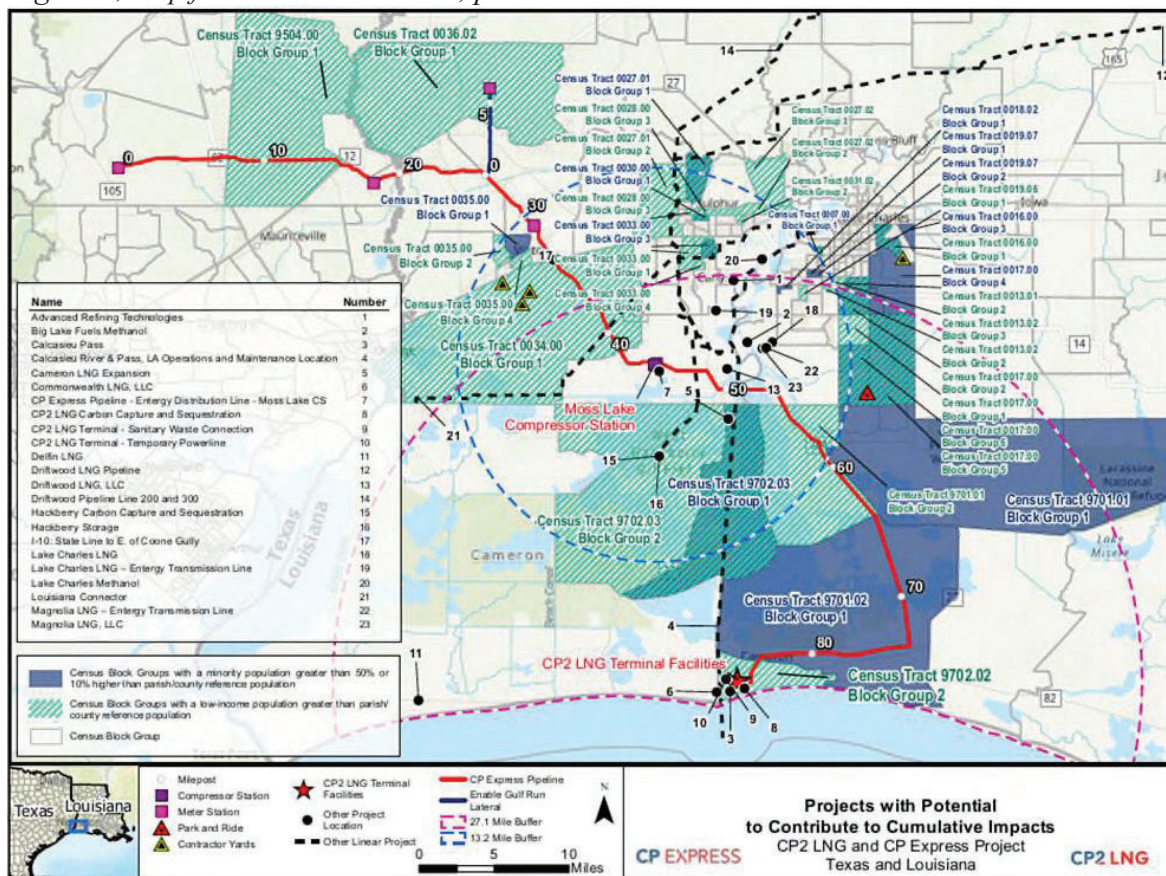
¹²⁴ Feb. 24, 2023, LDEQ Warning Letter to Cameron LNG (regarding 2020 violations), AI No. 99407, EDMS Doc. No. 13702093, <https://edms.deq.louisiana.gov/app/doc/view?doc=13702093>, attached as **Exhibit 56**.

¹²⁵ *See* October 15, 2021, Comments on Cameron LNG, page 47 of 175, <https://edms.deq.louisiana.gov/> (b)(6) Privacy, (b)(7)(C) Enf. Privacy (with report of (b)(6) Privacy, (b)(7)(C) Enf. Privacy) excerpt at **Exhibit 49**; EDMS Doc. No. [REDACTED]

¹²⁶ *See, e.g.*, Mar. 21, 2016, Magnolia LNG, PSD Permit PSD-LA-792, AI No. 185639, EDMS Doc. No. 185639, <https://edms.deq.louisiana.gov/app/doc/view?doc=10127848>.

recent map in its DEIS for CP2 LNG documents some of those LNG facilities, as well as some of the impacted environmental justice communities:

Figure 3, Map from CP2 LNG DEIS, p. 4-393¹²⁷



Upon information and belief, most or all of these LNG facilities rely on an abuse of EPA's SILs Guidance for their permits. The result is a demonstration of Louisiana's systematic failure to apply the Clean Air Act's Prevention of Significant Deterioration provisions and the public health protections of the NAAQS.

Further, the accumulated burden of SILs abuses on air quality and the people—so patent in the rapid LNG build out LDEQ is permitting in Cameron and Calcasieu Parishes—demands EPA's attention. LDEQ accepted modeling protocol appears to aim to avoid finding NAAQS violations and, once emissions are below SILs somewhere, treats them as if they do not exist at all cumulatively, as the proposed permit for Commonwealth LNG admits:

The objective of cumulative modeling is to show that the Project does not cause or contribute to violations of the NAAQS. Therefore, receptors from the significant modeling analysis that are shown to be below the SIL will not be

¹²⁷ CP2 LNG DEIS, *supra* note 97, page 4-393, Figure 4.14.1-1 ("Projects with Potential to Contribute to Cumulative Impacts").

included in the cumulative analysis because it has already been shown that the Project does not cause or contribute to a violation at those receptor locations.¹²⁸

Notably, the “objective” for cumulative modeling should not be to exonerate major sources from causing or contributing to NAAQS violations. Instead, its objective should be to avoid and remedy potential NAAQS violations when modeling indicates an area is in or near such a violation. The upshot is that LDEQ systematically allows NAAQS violations and, further, fails to account for the extent of those violations when it declines to require modeling for emissions below SILs or consider multiple “less than significant” contributions to NAAQS violations. As the LNG terminals in Louisiana demonstrate, the result is permitted violations of the Clean Air Act and unsafe air for the public and, especially, vulnerable communities.

4. Other Louisiana Petrochemical Plants.

As with LNG terminals, LDEQ has used SILs systematically to greenlight enormous emissions from the buildout of petrochemical plants in overburdened communities. Formosa Plastics, above, is just one example. Below are two more pending cases:

- *Lake Charles Methanol, Calcasieu Parish, Louisiana*. In January 2022, LDEQ again improperly relied on the SILs Guidance to allow increased NAAQS violations, this time while attempting to renew Lake Charles Methanol’s PSD permit.¹²⁹ Lake Charles Methanol proposed to construct a petcoke-to-methanol plant in heavily industrialized Sulphur and Westlake, an area of refineries, chemical plants and other large emitters near the city of Lake Charles. LDEQ, once again, had ample basis for concern before using the SILs. For example, the area within three miles of the site is in the 95th percentile in the nation for risk from respiratory-harming air toxic pollution.¹³⁰ Moreover, the data we describe above for Cameron LNG, located south of the site in Calcasieu Parish, showed LDEQ that the area’s air could be far above the NAAQS for at least NO₂. Ignoring this case-specific data, the agency erred first by using the SILs to avoid cumulative modeling for the majority of the facility’s pollution.¹³¹ Lake Charles Methanol exceeded the Air Quality Analysis’ preliminary screening thresholds for five criteria pollutants, PM_{2.5},

¹²⁸ Feb. 1, 2023, LDEQ Material associated with proposed permit for Public Review; 0560-0097-V0; PSD-LA-841, page 322 of 851 (“Commonwealth LNG Proposed Permit”), AI No. 221642, EDMS Doc. No. 13105777, <https://edms.deq.louisiana.gov/app/doc/view?doc=13105777>, excerpt attached as **Exhibit 57**.

¹²⁹ Jan. 20, 2022, LDEQ Materials Associated with Lake Charles Methanol, Permit No. 0520-00492-V2, AI No. 196978, EDMS Doc. No. 13083217 (hereinafter “Lake Charles Methanol Draft Permit Package”), <https://edms.deq.louisiana.gov/app/doc/view?doc=13083217>, excerpt attached as **Exhibit 58**; *see generally* (b)(6) Privacy, (b)(7)(C) Ent. Privacy, Comment Letter re Lake Charles Methanol’s Title V and PSD Air Permits, AI No. 196978, EDMS Doc. No. (b)(6) Privacy, (b)(7)(C) Ent. Privacy (Feb. 25, 2022), attached as **Exhibit 59**.

¹³⁰ *See* EPA, EJSCREEN Risk from Respiratory-Harming Air Toxic Pollution Report for Lake Charles Methanol Site (b)(6) Privacy, (b)(7)(C) Ent. Privacy Sulphur, LA), <https://ejscreen.epa.gov/mapper/>, attached as **Exhibit 60**.

¹³¹ Lake Charles Methanol Draft Permit Package, 67 of 350, <https://edms.deq.louisiana.gov/app/doc/view?doc=13083217>, excerpt at **Exhibit 58** (Draft Statement of Basis).

PM₁₀, CO, SO₂, and NO₂.¹³² But in violation of the Clean Air Act's requirement to perform a full Air Quality Analysis, the company only performed the required cumulative source modeling for just two of those pollutants, SO₂ and NO₂, and only for those standards where Lake Charles Methanol's contribution was greater than the SIL.¹³³

Figure 4. Air Quality Analysis Table¹³⁴

TABLE II: AIR QUALITY ANALYSIS SUMMARY (µg/m³)

Pollutant	Averaging Period	Preliminary Screening	Significant Monitoring	Level of Significant Impact	Background	Maximum Modeled	Modeled + Background	NAAQS	Modeled PSD Increment Consumption	Allowable Class II PSD Increment
PM ₁₀	24-hour	0.60	10	5				150		30
PM _{2.5}	24-hour	0.39	4	1.2				35		-
	Annual	0.07		0.3				15		-
SO ₂	1-hour	17.6		7.8	49.7	859.5	(a) 909.2	196		-
	3-hour	11.97		25				1300		512
	24-hour	7.03	13	5	50.2	(c) 564.65	614.85	365	(c) 567.89	91
	Annual	0.73		1				80		20
NO ₂	1-hour	19.67		7.5	70.9	328.70	(b) 399.60	188		-
	Annual	0.83	14	1				100		25
CO	1-hour	188.80		2000				40,000		-
	8-hour	28.04	575	500				10,000		-

NAAQS = National Ambient Air Quality Standards

(a) Lake Charles Methanol contributes 6.69 µg/m³
(b) Lake Charles Methanol contributes 5.11 µg/m³
(c) Lake Charles Methanol contributes 5.26 µg/m³ (2015).

Where Lake Charles Methanol performed the required cumulative model, circled in Figure 4 above, the company found that the new plant would contribute to large air quality violations for each federal air standard. In other words, Lake Charles Methanol failed the regulatory test.¹³⁵ As Figure 4 above shows, 1-hour SO₂ concentrations (under the column "Modeled + Background") could be more than quadruple their NAAQS.¹³⁶ 24-hour SO₂ would greatly exceed both the NAAQS and increment, and 1-hour NO₂ would be more than double the NAAQS.

But contrary to the requirement to perform an Air Quality Analysis, LDEQ issued a draft PSD permit anyway. (b)(6) Privacy, (b)(7)(C) Enf. Privacy Sierra Club and a local resident in their individual capacity, commented on the draft PSD permit, outlining LDEQ's failure properly apply the SILs Guidance or adhere to the Clean Air Act, among

¹³² See *id.*; LAC 33:III.509.B (setting out the modeling thresholds in defining "Significant").

¹³³ See Lake Charles Methanol Draft Permit Package, 68 of 350, <https://edms.deq.louisiana.gov/app/doc/view?doc=13083217>, excerpt at **Exhibit 58** (Draft Statement of Basis).

¹³⁴ *Id.* at 53 of 350 (red circles added for emphasis).

¹³⁵ See LAC 33:III.509.K.

¹³⁶ See Lake Charles Methanol Draft Permit Package, 68 of 350, <https://edms.deq.louisiana.gov/app/doc/view?doc=13083217>, excerpt at **Exhibit 58** (Draft Statement of Basis).

other things.¹³⁷ LDEQ still has not responded concerning its abuse of the SILs. Although we understand that Lake Charles Methanol now intends to submit a new permit application to account for changes to its production process, LDEQ's conduct indicates that it will continue to invoke the SILs to permit this plant, without performing cumulative air quality modeling and without addressing the large NAAQS and increment violations.

- *Mitsubishi Chemical, Ascension Parish, Louisiana*. In June 2022, LDEQ repeated the same abuses of the SILs Guidance in approving the Air Quality Analysis submitted by Mitsubishi Chemical America, Inc. (“Mitsubishi”), which plans to build a new major-source petrochemical plant in Ascension Parish, Louisiana to make methyl methacrylate monomer and other toxic products.¹³⁸ Mitsubishi would emit five criteria pollutants beyond the law’s “significant emission rate” modeling thresholds.¹³⁹ But LDEQ approved Mitsubishi’s decision not to perform a cumulative air quality model for any NAAQS or increment, other than the 1-hour NO₂ NAAQS, claiming that the plant’s emissions were below the SIL for all other pollutants.¹⁴⁰ LDEQ’s decision to approve this abbreviated Air Quality Analysis failed to take into account any case-specific factors giving basis for concern.¹⁴¹ For instance, the Geismar area of Ascension Parish already is packed with heavy emitting industry,¹⁴² and the Parish previously spent years as part of the East Baton Rouge nonattainment area for ozone and remains in “maintenance” status—illustrating basis for air quality concerns, especially for an ozone-forming pollutant like NO₂.¹⁴³ In addition, the Parish is experiencing a rapid industrial buildout, with nine proposed or under-construction petrochemical plants.¹⁴⁴ Moreover, Mitsubishi’s offsite pollution comes within a rounding error of the SIL for several standards that Mitsubishi did not

¹³⁷ (b)(6) Privacy, (b)(7)(C) Enf. Privacy Comment Letter re Lake Charles Methanol’s Title V and PSD Air Permits, AI No. 196978, EDMS Doc. No. (b)(6) Privacy, (b)(7)(C) Enf. Privacy <https://edms.deq.louisiana.gov/> (b)(6) Privacy, (b)(7)(C) Enf. Privacy **Exhibit 59**.

¹³⁸ June 24, 2022, LDEQ Approval of Mitsubishi Air Quality Modeling Protocol, AI No. 234532, EDMS Doc. No. 13355920, <https://edms.deq.louisiana.gov/app/doc/view?doc=13355920>, attached as **Exhibit 61**.

¹³⁹ Oct. 2022, Mitsubishi Air Permit Application, App’x H, Mitsubishi Air Quality Dispersion Modeling Report, 3, AI No. 234532, EDMS Doc. No. 13517255, (hereinafter “Mitsubishi 2022 Air Modeling Report”), <https://edms.deq.louisiana.gov/app/doc/view?doc=13517255>, excerpt attached as **Exhibit 62**.

¹⁴⁰ *Id.* at 22–25.

¹⁴¹ *See id.*; June 24, 2022, LDEQ Approval of Mitsubishi Air Quality Modeling Protocol, AI No. 234532, EDMS Doc. No. 13355920, <https://edms.deq.louisiana.gov/app/doc/view?doc=13355920>, **Exhibit 61**.

¹⁴² Mitsubishi 2022 Air Modeling Report at 1, <https://edms.deq.louisiana.gov/app/doc/view?doc=13517255>, excerpt at **Exhibit 62** (listing the industrial air pollution sources near the facility); *see also* DSCEJ Report, *supra* note 62, at 5 (explaining that Ascension Parish has twice the volume of toxic air pollution emissions reported in the Toxic Release Inventory as the next highest parish in the Cancer Alley area).

¹⁴³ *See* EPA Green Book on National Ambient Air Quality Attainment Status, Louisiana https://www3.epa.gov/airquality/greenbook/anayo_la.html.

¹⁴⁴ DSCEJ Report, *supra* note 62, at 6.

model cumulatively: 24-hour PM_{2.5} (1.15 µ/m³ versus 1.2 µ/m³) and annual PM_{2.5} (0.18 µ/m³ versus 0.2 µ/m³), and close to 8-hour CO (457 µ/m³ versus 500 µ/m³).¹⁴⁵

Remarkably, the one cumulative air quality model Mitsubishi submitted, for 1-hour NO₂, showed disturbing results. The model shows that 28 different receptors in the area recorded NAAQS violations, with maximum concentrations nearing double the NAAQS (345 µ/m³ versus 188 µ/m³).¹⁴⁶ But Mitsubishi, with LDEQ's apparent blessing, claims it is entitled to a permit anyway because "the contribution of the project sources does not exceed the SILs."¹⁴⁷

5. Texas Petrochemical and LNG Plants.

Texas' abuse of EPA's SILs Guidance is exemplified by its permitting in Brownsville, Texas, an area along the border with Mexico of almost entirely Latino and Indigenous population and, at least until recently, with high-quality, low-pollution ambient air. Brownsville is 94 percent Hispanic or Latino, with high rates of people below the federal poverty line and existing health disparities.¹⁴⁸ There, TCEQ is facilitating an industrial buildout on sites sacred to the (b)(6) Privacy, (b)(7)(C) Enf. Privacy Tribe,¹⁴⁹ and on sensitive undeveloped coastal wetlands,¹⁵⁰ using unjustified applications of SILs to allow deterioration of the air quality at or over the brink of NAAQS public-health standards, including for ozone.

First, TCEQ's permitting of the Jupiter Brownsville, LLC ("Jupiter") oil refinery illustrates Texas' systematic failure to engage in any case-by-case review when relying on SILs to avoid a full air quality analysis.¹⁵¹ TCEQ gave no justification or review of the past the

¹⁴⁵ Mitsubishi 2022 Air Modeling Report at 22, <https://edms.deq.louisiana.gov/app/doc/view?doc=13517255>, excerpt at **Exhibit 62**.

¹⁴⁶ *Id.* at 27.

¹⁴⁷ *Id.*

¹⁴⁸ See (b)(6) Privacy, (b)(7)(C) Enf. Privacy, et al., *Rio Grande Valley: At Risk from Fracked-Gas Export Terminals*, 8 (2019 Update), (b)(6) Privacy, (b)(7)(C) Enf. Privacy attached as **Exhibit 63**.

¹⁴⁹ See *id.* at 7; Dylan Baddour, *Indigenous Leaders Fight to Keep Natural Gas Pipelines Off Sacred Lands*, Texas Observer (Oct. 18, 2022), [https://www.texasobserver.org/\(b\)\(6\) Privacy, \(b\)\(7\)\(C\) Enf. Privacy](https://www.texasobserver.org/(b)(6) Privacy, (b)(7)(C) Enf. Privacy) attached as **Exhibit 64**.

¹⁵⁰ See Gus Bova, *Bridge to Nowhere*, Texas Observer (Sept. 16, 2019), <https://www.texasobserver.org/liquefied-natural-gas-rio-grande-valley-endangered-pollution/>, attached as **Exhibit 10**.

¹⁵¹ TCEQ generally uses the term "de minimis values" whereas EPA uses the term "significant impact levels" (SILs), but TCEQ agrees these are interchangeable terms. See Jupiter Hearing Transcript, *supra* note 43, at 243:1-13 ("In our guidance we actually specify that SILs and de minimis levels are the same.").

conclusions of Jupiter itself that its emissions were below the SIL, when it summarily declined further analysis for PM₁₀ and CO:¹⁵²

38. Jupiter conducted an air quality analysis (AQA) for NO_x, CO, SO₂, PM₁₀, PM_{2.5}, and ozone. De minimis analysis modeling indicated that PM₁₀ (24-Hr and 1-Hr) and CO (8-Hr) did not exceed the de minimis concentrations and therefore did not require PSD increment analysis.

Indeed, TCEQ has admitted that this unauthorized application of SILs, *i.e.* omission of any case-by-case review, is part of its practice and policy.¹⁵³ When asked at an administrative hearing on Jupiter's air permit to confirm, if "emissions are below the relevant SIL, then the applicant never needs to do the full impacts analysis," a TCEQ representative responded "Correct."¹⁵⁴ This means that TCEQ systematically does not consider background pollutant levels if the proposed emission is below the SILs threshold because, as the TCEQ representative explained: "if it's below that threshold, it will not contribute to any background degradation."¹⁵⁵ When asked to clarify whether Texas applies SILs without consideration of background even where "the background levels are getting very close to the NAAQ Standards," the representative responded: "I mean, it -- yeah, it's true regardless. That's by definition."¹⁵⁶

TCEQ's inflexible approach was particularly objectionable in Jupiter because of the recent permitting history in the area. TCEQ had also summarily allowed Jupiter to avoid a full Air Quality Analysis for ozone where preliminary screening showed levels below SILs.¹⁵⁷

In the years leading up to the Jupiter decision, TCEQ had granted air permits to three LNG export terminals along the Brownsville Ship Channel near where Jupiter intends to construct – Rio Grande LNG, Annova LNG, and Texas LNG.¹⁵⁸ Relying on TCEQ's air permitting, FERC found that, collectively, the ozone impacts for those three LNG terminals would be 12.76 parts per billion (ppb). Because background ozone levels in the area were 56.7 ppb, this meant total ozone concentrations could be 69.48 ppb when the LNG terminals were operating.¹⁵⁹ This is only a hair's breadth less than the NAAQS for ozone, which is 70 ppb.¹⁶⁰ And it meant that projected ozone levels in the region were already closer to the NAAQS than

¹⁵² See Oct. 19, 2021, TCEQ Order Granting the Application by Jupiter Brownsville, LLC for Proposed Air Quality Permit Nos. 147681, PSDTX1522, and GHGPSDTX172; TCEQ Docket No. 2020-1080-AIR; SOAH Docket No. 582-21-011, at p. 5 (hereinafter "TCEQ Oct. 19, 2021, Order Approving Jupiter"), excerpt attached as **Exhibit 65**.

¹⁵³ Jupiter Hearing Transcript, *supra* note 43, at 244:14-245:10 (admitting that so long as the predicted impacts are below the ozone SIL of 1 ppb, TCEQ never requires a full impacts analysis.).

¹⁵⁴ *Id.*

¹⁵⁵ *Id.* at 245:13.

¹⁵⁶ *Id.* at 245:4-7.

¹⁵⁷ See TCEQ Oct. 19, 2021, Order Approving Jupiter, *supra* note 157, at 5.

¹⁵⁸ FERC, Order on Rehearing and Stay, Rio Grande LNG and Rio Bravo Pipeline Company, 170 FERC P 61046, 2020 WL 408934 at *16 (January 23, 2020), excerpt attached as **Exhibit 66**.

¹⁵⁹ *Id.*

¹⁶⁰ EPA, Review of the Ozone Natural Ambient Air Quality Standards, 85 Fed. Reg. 87256-01 (Dec. 31, 2020).

the SIL, separated by 0.52 ppb when the SIL is 1 ppb. Worse still, when FERC included the mobile source emissions from LNG tanker vessels associated with the projects, the air did exceed the NAAQS for ozone.¹⁶¹

In other words, TCEQ's permitting of the three LNG terminals had already brought the Brownsville region to the brink of ozone NAAQS violations, if not past that point. And the fact that the air may be closer to the NAAQS than the SIL value of 1 ppb is exactly the scenario that EPA has warned provides "basis for concern" against using the SILs at all. Nonetheless, TCEQ ignored that warning sign and discounted additional ozone pollution based on the SILs again with Jupiter anyway.

Second, TCEQ permitting of Jupiter also demonstrates the agency's maneuvering of data to hide behind SILs and so avoid finding exceedances on paper rather than to find whether there are NAAQS exceedances in fact. Jupiter's initial analysis estimated that the refinery could contribute as much as 3.3 ppb of ozone on its own, over three times the SIL and mandating a cumulative air quality analysis.¹⁶² But TCEQ instead allowed Jupiter to revise downward its estimate of the refinery's ozone contribution to just 0.58 ppb,¹⁶³ *i.e.* less than the 1 ppb SIL, and so found Jupiter need not perform cumulative modeling (called a "full impacts analysis" by TCEQ).¹⁶⁴ TCEQ did not require Jupiter to use a source- and site-specific air quality model to determine either Jupiter's or cumulative ozone concentrations. It instead allowed Jupiter to rely on a tool to estimate ozone formation based on the volume of Jupiter's emissions of NO_x and VOC compared to a source near Houston, TX.

On its face, TCEQ appears to have erred on the side of not protecting public health when it relied on the second analysis. But even if we were to assume the second, ozone emissions estimate was legitimate, the initial 3.9 ppb finding served as a "basis of concern" (on top of the LNG terminals' ozone levels showing near-exceedance of the NAAQS) such that TCEQ abused any discretion when it allowed Jupiter to avoid cumulative modeling. Rather than act out of conservatism to protect public health and ask Jupiter to model using or considering the higher-end estimate, TCEQ shielded the company in relying on a low-end estimate of ozone emissions.

Remarkably, even if Jupiter's 0.58 ppb ozone contribution were accurate and appropriate, Jupiter would still cause or contribute to a NAAQS violation. Added to the background readings

¹⁶¹ FERC, Order on Rehearing and Stay, Rio Grande LNG and Rio Bravo Pipeline Company, 170 FERC P 61046, 2020 WL 408934 at *16 (January 23, 2020), excerpt at **Exhibit 66**.

¹⁶² Excerpt from Jupiter's Air Dispersion Modeling Protocol, 1724 (Oct. 2017); attached as **Exhibit 67** (formerly known as Centurion Brownsville project).

¹⁶³ TCEQ Interoffice Memo on Air Quality Analysis Audit – Jupiter Brownsville, LLC, 3 (0113) (Feb. 27, 2019), attached as **Exhibit 68**.

¹⁶⁴ *See id.*; Transcript of Hearing on the Merits, filed Jan. 20, 2021, Texas State Office of Administrative Hearings, Application of Jupiter Brownsville, LLC, Excerpt of (b)(6) Privacy, (b)(7)(C) Ent. Privacy Pre-Filed Testimony on Jupiter Brownsville LLC Permit, 21:34-22:5, attached as **Exhibit 69** ("the applicant did not need to evaluate off-property emissions (*i.e.*, Rio Grande LNG) in the 8-hr ozone analysis as the project emissions were below the de minimis value and a full impacts analysis was not required.").

and the LNG terminals' contributions, total concentrations could still exceed the 70 ppb NAAQS:

$$\begin{array}{ccccccc} 56.7 \text{ ppb} & + & 12.78 \text{ ppb} & + & 0.58 \text{ ppb} & = & \mathbf{70.04 \text{ ppb}} \\ \text{(background} & & \text{(three LNG} & & \text{(Jupiter)} & & \\ \text{d levels)} & & \text{terminals)} & & & & \end{array}$$

Thus, in this situation, even where TCEQ found Jupiter might have “met” the SIL, the company failed to “demonstrate” that it would not “cause or contribute” to a NAAQS violation as the Clean Air Act demands. Here, the evidence actually showed the opposite. This perverse outcome threatens predominately Latino and Indigenous communities, who would lose recently pristine air quality and suffer air that may no longer meet the NAAQS—all in the span of a few short years from consecutive TCEQ air permitting decisions including the new LNG terminals and Jupiter.

VI. CONCLUSION

EPA must take action to halt the abuse of its SILs Guidance now that “experience and information” show that LDEQ and TCEQ are consistently misapplying it to allow violations of the Clean Air Act’s plain language. EPA wrote the SILs Guidance in the wake of *Sierra Club I*, where the D.C. Circuit vacated regulations that would have applied the SILs as a compulsory exemption from performing a full Air Quality Analysis. But despite EPA’s call for case-by-case reviews and its warning that SILs do not apply in areas where there is a “basis for concern,” we see now that LDEQ and TCEQ are using the SILs in the same way that the petitioners in *Sierra Club I* feared and the court aimed to avoid. Specifically, Louisiana and Texas are limiting their PSD review to compliance with a SILs threshold in areas close to or exceeding the NAAQS and avoiding their obligation to assess whether a new major source could “cause or contribute to” violations of the federal public health-based air standards—an outcome EPA has acknowledged can result from adding pollution even less than the SILs. *See* 705 F.3d at 463–66 (noting EPA had conceded the same flaw with the SILs by the time the litigation reached the D.C. Circuit). Indeed, these permitting agencies have shown that they will use the SILs to permit new facilities even where the data show the added pollution *will* cause or contribute to such a violation in the airshed.

Moreover, these abuses of the SILs Guidance have disproportionate and detrimental impacts on communities that these agencies are obligated to consider and protect under Title VI of the Civil Rights Act. The States have transformed the SILs from a tool to streamline uncontroversial permitting scenarios into an all-purpose shield against Air Quality Analysis compliance for new sources entering areas where air quality has already deteriorated to near or exceeding the NAAQS. They do not keep track of, let alone correct, the NAAQS and increment violations that applicants’ Air Quality Analysis modeling reveal. The result is disproportionate harm to Black, Indigenous, and Latino communities, and low-income communities, near industrial corridors in Louisiana and Texas. Put simply, state agency abuse of the SILs helps enable “sacrifice zones” for air quality in our region.

It is time for EPA to curb Louisiana and Texas’ abuses and to protect frontline and other impacted communities, using the array of legal tools and the oversight mandate Congress gave it

under the Clean Act and Title VI of the Civil Rights Act. *See* Section II. We strongly urge EPA to follow through on its charge and to make use of its ample authority. We look forward to discussing this Petition and the States' abuses described here and to assisting in a resolution.

Sincerely,



Michael L. Brown, LA Bar No. 35444, TX Bar No. 24118170
mlbrown@earthjustice.org



Elizabeth Livingston de Calderon, LA Bar No. 31443
ecalderon@earthjustice.org

Earthjustice
900 Camp Street, Suite 303
New Orleans, LA 70130

Erin Gaines, TX Bar No. 24093462
egaines@earthjustice.org

Counsel for Petitioners,

(b)(8) Privacy, (b)(7)(C) Enf. Privacy

and Sierra Club