# Green Light to Pollute in Texas: Proposed Buildout of Petrochemical Facilities Targets Most Vulnerable Communities, Again

## Executive Summary

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# About the Bullard Center

**The Robert D. Bullard Center for Environmental and Climate Justice at Texas Southern University** was launched to address long-standing issues of systemic inequality and structural racism that cause disproportionate pain, suffering, and death in Black communities and those of other people of color. Texas Southern University is a student-centered, comprehensive doctoral university committed to ensuring equality, offering innovative programs that are responsive to its urban setting, and transforming diverse students into lifelong learners, engaged citizens, and creative leaders in their local, national, and global communities.



*Cover image: ExxonMobil Baytown Olefins Unit, Houston area ©2024 N. Yoder, Bullard Center*

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# Preface

We began this study in 2024, when Joseph R. Biden Jr. was president, to examine the unprecedented petrochemical industry expansion underway in Texas, where new facilities are proposed and existing facilities are set to expand in locations that are already saturated with industrial plants, often described as environmental "sacrifice zones." The petrochemical industry in Texas has expanded rapidly over the past several decades—bringing jobs, but also bringing significant environmental and health burdens to fenceline communities while failing to provide substantial economic benefits (e.g., employment, enhanced property values, and improved residential amenities and infrastructure).

Our study sought to analyze the extent to which the current petrochemical industry expansion in Texas impacts marginalized communities and how this expansion aligns with historical patterns of environmental injustice in fenceline communities. The petrochemical industry's plan for more than 100 new facilities and expansions in Texas within the next few years evokes a pressing need to clearly document existing environmental inequities that predate this buildout, before more facilities are sited in communities already overburdened with industrial pollution.

The study employed a multidisciplinary approach using quantitative and qualitative analysis and data tools to examine the locations of 89 proposed new or expanding petrochemical facility sites across Texas. The study's primary goal is to shed light on the demographics of areas that surround these proposed petrochemical facilities and to provide information to residents in those communities about the existing conditions and potential harms that may accompany the new or expanded facilities. Study results show that proposed petrochemical expansion in Texas is planned for communities already facing elevated pollution and health threats.

Elections have consequences. Environmental protection principles and priorities changed dramatically in January 2025 with the second Donald. J. Trump administration—which shifted the regulatory landscape in the country during his first 100 days and continued shifting it through the first six months of his term. Using 142 executive orders and directives, President Trump tilted federal policies toward less protection, less federal regulatory oversight, less science-based decision-making, and more fast-tracked and streamlined permitting, more petrochemical facility siting, and more exemptions, waivers, and rollbacks—all giving the petrochemical industry a green light and a license to pollute. The new policies will likely accelerate the petrochemical buildout in Texas because environmental protections were eviscerated, clean air and clean water regulations and standards were weakened, and health standards and chemical safety safeguards were rolled back—collectively reshaping the federal approach to regulating the petrochemical industry in Texas, the Gulf Coast, and the United States.

# EXECUTIVE SUMMARY

## I. Introduction

Texas is at the epicenter of a rapidly expanding petrochemical industry that processes fossil fuels into thousands of chemical products, including plastics, fertilizers, and fuels (Petrochemicals Europe, 2023). The state leads the nation in refining capacity and petrochemical production, with Greater Houston alone accounting for over 42% of U.S. base petrochemical capacity (Economic Development & Tourism, 2015; U.S. Energy Information Administration, 2025). Fenceline communities—disproportionately low-income communities of color—bear the brunt of this industrial growth, facing heightened health and environmental risks (Amnesty International, 2024; Lerner, 2012; Robinson, 2024). Despite public resistance and evidence of environmental injustice, the Texas Commission for Environmental Quality continues to approve permits for facility expansions (Baddour et al., 2024; Sadasivam & Aldern, 2023).

This pattern of concentrated petrochemical expansion in already overburdened communities reflects the historical roots of the environmental justice movement, which challenges the unequal distribution of environmental harms and calls for policy that centers equity and accountability (Bullard, 2000; Bullard & Wright, 1986, 2023; Van Horne et al., 2023). The ongoing surge in plastics and petrochemical production, fueled in part by the fracking boom, exacerbates burdens on vulnerable communities and sustains industry profits while undermining decarbonization efforts (Center for International Environmental Law, 2019; Morello-Frosch & Obasogie, 2023; Shaykevich et al., 2024).

Texas, unlike several other states, lacks a state-level environmental justice screening tool or policy infrastructure to identify and address these inequities, leaving communities without critical data or regulatory support (Konisky et al., 2021). The recent removal of the Environmental Protection Agency's (EPA's) EJScreen tool further limits access to updated federal data (Quinn, 2025). In contrast, at least 11 states have developed their own EJ tools to evaluate and mitigate localized harms. The absence of such tools in Texas reflects a broader political unwillingness to engage environmental justice at the state level (Konisky et al., 2021).

Furthermore, petrochemical infrastructure is concentrated in both dense urban centers and semirural regions across Texas, including pipeline networks and fossil fuel extraction hubs in west Texas, the Panhandle, and near San Antonio (Berberian et al., 2024; Gonzalez et al., 2023; Railroad Commission of Texas, 2024a, 2024b). This pattern of development continues to reproduce environmental inequities, reinforcing the need for a comprehensive, justice-oriented response.

### A. Problem

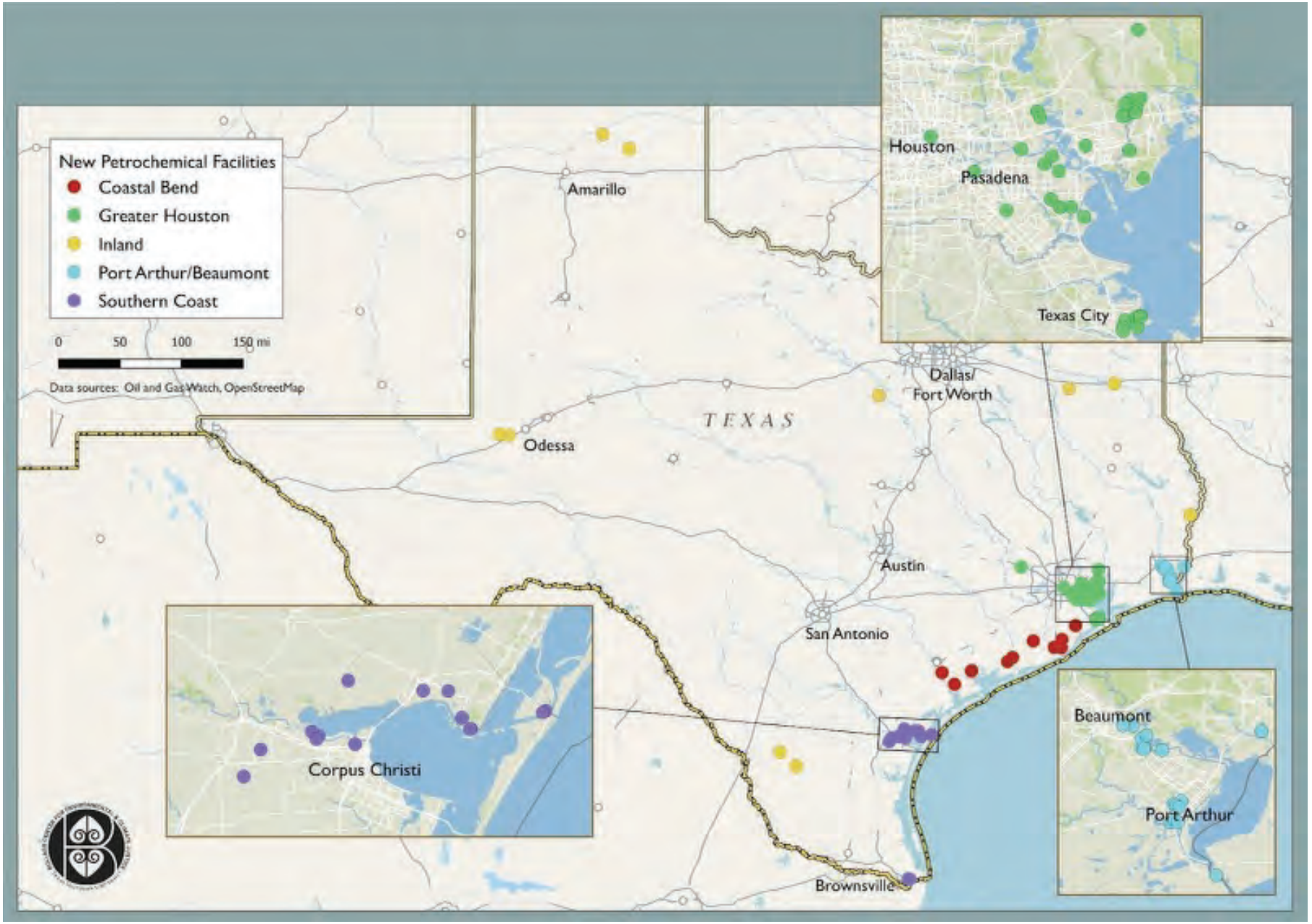
Today, there is an unprecedented petrochemical industry expansion underway in Texas, where new facilities are proposed, and existing facilities are set to expand, in at-risk fenceline and frontline

communities often described as environmental "sacrifice zones" (Bullard, 2011; Lerner, 2012). Fossil fuels are a prime contributor to climate change and it is critical to address climate change and transition to a clean energy economy. Sacrifice zones are regions of chemical corridors where the environmental and public health ramifications of industrial activities fall disproportionately on people of color, poor people, and vulnerable populations (Bullard, 2011; Lerner, 2012). Vulnerable populations face elevated threats and social and environmental harms, especially where a social safety net is missing or insufficient (Robinson, 2024). These patterns of petrochemical expansion in Texas raise significant concerns, because they continue to place the greatest environmental and health burdens on existing overburdened sacrifice zones (Amnesty International, 2024; Mohai & Saha, 2007). This study examines the extent to which the current petrochemical industry expansion in Texas disproportionately impacts marginalized communities and how this expansion aligns with historical patterns of environmental injustice in fenceline communities.

## B. Scope of Report

The petrochemical industry's plans for more than 100 new facilities and expansions in Texas within the next few years evokes a pressing need to clearly document the existing environmental inequities produced by fossil fuels and petrochemical plants, before more facilities are built in communities already overburdened with industrial pollution (Environmental Integrity Project, 2024; Shaykevich et al., 2024).

This report examines the buildout of new, under-construction, and proposed petrochemical facilities (as of February 2024), including expansions, in Texas (Map ES-1), within the context of existing environmental degradation, pollution, and health burdens. It also explores the historical roots of the petrochemical industry, with a focus on Texas and the intersection with environmental injustice, paying particular attention to plastics production.




**Map ES-1. Overview** - Sites of new, proposed, and under-construction petrochemical facilities analyzed in this report. Facilities are color coded to the geographic region. The Greater Houston, Southern Coast, and Port Arthur/Beaumont regions are enlarged in the corners of the figure, as those regions have the highest numbers of clustered facilities examined by this study.

This report describes the research questions, methods, and analysis, then presents and discusses the results. The conclusion contextualizes the analysis and findings, highlighting patterns of environmental injustice and emphasizing how certain communities face a disproportionate burden of pollution and health risks compared with others. The primary goal of this report is to elucidate the demographics in areas surrounding the proposed new or expanding petrochemical facilities. The results will be used to further equip residents in communities that already live in the shadow of such facilities, or whose communities are threatened by new facilities coming in, with information about the existing conditions and what is being proposed for their communities.

## II. Environmental Justice and the Petrochemical Industry

The petrochemical industry in Texas has expanded rapidly over the past several decades, bringing significant environmental and health burdens to fenceline communities, in which people of color and low-income demographics are the majority population (Bullard & Wright, 2023; Morello-Frosch & Obasogie, 2023). These communities face disproportionate exposure to air toxics, hazardous waste, and chemical disasters due to the legacy of redlining, housing discrimination, and lax environmental enforcement (Mohai and Saha, 2007; Roberts et al., 2022). Nationally, Black Americans in particular are 79% more likely to live near heavy industrial pollution than are their White counterparts, while studies show that people of color in 46 states breathe more polluted air than White populations (Mikati et al., 2018; Ramirez, 2021).

For more than four decades, grassroots movements have sounded the alarm about environmental racism and industrial pollution, with pivotal moments like *Bean v. Southwestern Waste Management* and the 1982 Warren County protests, which drew national attention to the disproportionate siting of hazardous facilities in communities of color (Bullard, 1994, 2000). These early struggles laid the foundation for the environmental justice (EJ) movement, grounded in research that identifies race as the strongest predictor of exposure to toxic industry by-products (Bullard et al., 2007; Bullard & Wright, 1986). Despite federal action—such as President Clinton's 1994 Executive Order 12898 and President Biden's 2023 Executive Order 14096, which directed $60 billion toward EJ initiatives under the Inflation Reduction Act—implementation has lagged (Exec. Order No. 12898, 1994; Exec. Order No. 14096, 2023).

The same pattern of neglect persists today. Residents of Texas's petrochemical corridors face many of the same conditions fought by early EJ advocates: systemic pollution, regulatory failure, and exclusion from decision-making (Amnesty International, 2024; Bullard, 2000). Across the Gulf South, communities living on the front lines of petrochemical expansion continue to fight for basic protections, clean air and water, and a voice in their futures (Azhar, 2021; Bruggers, 2024).

Industrial development has historically prioritized corporate profits over community health. In Texas, petrochemical facilities cluster in areas like Port Arthur, Houston, and Corpus Christi, where communities of color are heavily impacted by pollution, poverty, and health disparities (Azhar, 2021; Genoways, 2014; Martinez & Perez, 2024). Fenceline communities in Texas also bear the brunt of chemical disasters and climate-related double disasters, such as Hurricane Harvey and

Winter Storm Uri, which led to massive industrial emissions (Chakraborty et al., 2019; Craft, 2021). Texas leads the United States in chemical incidents, with over 2,300 high-risk facilities regulated under EPA's Risk Management Program (EPA, 2024b; Nelms & Bernat, 2023).

Health impacts in these communities are profound. Residents experience higher rates of asthma, cancer, birth complications, mental health stressors, and premature death linked to petrochemical emissions (Di et al., 2017; Gillam, 2024; Woodruff, 2024). Children are especially vulnerable to pollutants, which are linked to obesity, development disorders, and psychological distress (Lopez-Moreno et al., 2024; Newbury et al., 2024).

Despite their proximity to industry, residents who live on the fence line rarely share in the economic benefits of industries located so close to their homes. People of color comprise 59% of the Texas population, but hold only 38% of high-paying chemical manufacturing jobs (Terrell et al., 2024). In places like Port Arthur, with a population that is two-thirds people of color, disparities are even more pronounced (Genoways, 2014; Jones, 2024). Meanwhile, between 2012 and 2024, Texas awarded $1.65 billion in tax subsidies to plastics facilities, many of which had a history of repeated pollution violations (Shaykevich et al., 2024).

The fossil fuel industry is starting to pivot toward increasing plastics production to sustain its profitability amid calls for decarbonization to save our climate. Disadvantaged communities that are already overburdened with petrochemical pollution and safety risks will likely bear the brunt of the new petrochemical expansion and plastics production (Amnesty International, 2024). According to a recent Environmental Integrity Project report, *Feeding the Plastics Industrial Complex*, companies have plans to build an additional 42 plastics plants, with 24 of them (over half) in Texas (Shaykevich et al., 2024).

## III. Methodology

This study analyzed 89 proposed or expanding petrochemical facility sites across Texas using the U.S. EPA's EJScreen tool, version 2.2 (EPA, 2023). Each site was evaluated at the Census block group level and within a three-mile buffer, following best practices for fenceline analysis (Bullard et al., 2007; Mohai and Saha, 2007). Facility locations were sourced from the Environmental Integrity Project's Oil & Gas Watch database and represent major petrochemical proposals planned for construction or expansion statewide (Environmental Integrity Project, 2024).

Five EJScreen indicators were selected (see Table ES-1): exposure to fine particulate matter (PM2.5), toxic releases to air, risk management program (RMP) facility proximity, demographic index (DI), and supplemental demographic index (SDI). These indicators assess exposure to harmful air pollutants and proximity to hazardous facilities, while capturing social vulnerability based on race, income, language, and education level (EPA, 2023, 2024b, 2024c).

**Table ES-1. EJScreen Categories Used in the Study**

| EJScreen Categories Used | Alias in the Report |
|---|---|
| Demographic Index | DI |
| Supplemental Demographic Index | SDI |
| Particulate Matter 2.5 Indicator | PM2.5 |
| RMP Proximity Indicator | Proximity to Major Polluting Facility |
| Toxic Releases to Air Indicator | Tox Air |

Using five geographic clusters or regions, the analysis examined a three-mile area surrounding each petrochemical facility proposed for demographic and environmental stressors and vulnerabilities.[1] The five clusters are

- the **Golden Triangle** (Port Arthur, Beaumont, and Orange);
- **Greater Houston** including Galveston;
- the **Coastal Bend** from Freeport to San Patricio County;
- the **Southern Coast** from Nueces County to Brownsville; and
- **Inland** areas encompassing sites near McAllen, Lubbock, Tyler, Longview, and Odessa.

The facility database was derived from 114 proposed projects, consolidated into 89 sites to avoid duplication at colocated industrial areas. The study identified fenceline communities with index scores above the 75th and 90th percentiles, reflecting the most severe pollution and vulnerability burdens nationwide (EPA, 2023). Findings are intended to inform advocates, researchers, and policymakers about disproportionate environmental risks from petrochemical expansion in Texas.

# IV. Results

This section outlines the results of the study in the context of existing communities and petrochemical facilities in Texas. State-level results are presented first, followed by county-level results, then geographic region or cluster results.

## A. Statewide Results

The study revealed that most of the 89 Texas sites are located in areas already facing significant environmental and demographic burdens. Some 92% of the sites rank above the 66th percentile in at least one of the five environmental justice indices used in this study, indicating they are more burdened than two-thirds of U.S. communities (EPA, 2023). This finding indicates that nine of 10 proposed facilities are in fenceline communities where residents already experience higher environmental and health risks from industrial pollution compared with the national average.

1 - Three-mile areas were calculated from a point location that had been previously assigned to each site, rather than using the three-mile buffer of a polygon, which would have encompassed a larger area of analysis for some sites.

## 1. EJScreen Results

**Particulate Air Pollution.** Most proposed petrochemical facilities in Texas are located in areas facing elevated air pollution burdens. In this analysis, 85 of 89 facilities (95%) ranked above the 50th percentile for particulate matter exposure, indicating disproportionate facility siting in already overburdened areas. Notably, 78% of facilities ranked at or above the 66th percentile, and 63% were above the 75th percentile. Nearly one in five facilities (19%) were located in areas at or above the 90th percentile. These high air pollution exposure levels were found across all geographic clusters, except for the Coastal Bend, which has no facilities in the top 10% for PM2.5 risk (EPA, 2023).

**Toxic Releases to Air.** The EJScreen toxic releases to air index revealed particularly high pollution burdens across petrochemical facilities in Texas. Of the 89 facilities analyzed, 84% ranked at or above the 66th percentile, and nearly half (46%) ranked above the 90th percentile. Three facilities in the Port Arthur/Beaumont area ranked at the 99th percentile, and 10 others were at the 98th percentile. These findings are especially significant because the toxic releases to air index is based on the EPA's risk-screening environmental indicators model, which incorporates the toxic release inventory's pollutant volume, toxicity, environmental fate, and potential human exposure factors (EPA, 2023).

Across the state, results from both EJScreen air pollution indicators (PM2.5 and toxic releases to air) suggest that nearly three-fourths (74%) of proposed petrochemical facilities are in areas at higher risk of exposure to air pollution than the rest of the country.

**Proximity to Polluters.** The proposed petrochemical facilities in Texas show a clear pattern of clustering near other polluting industries, especially in Houston, where the absence of zoning laws has historically enabled the concentration of industrial land uses in communities of color along the Houston Ship Channel (Bullard, 1987; Leffler et al., 2023; Martinez and Perez, 2024; Pacheco et al., 2024). With or without zoning, this pattern continues in the current petrochemical expansion across the state. According to the EJScreen proximity to major polluters indicator, 83% of the 89 analyzed facilities ranked above the 66th percentile, and 42% ranked above the 90th percentile, indicating a potential for elevated exposure risks due to facility clustering. Only six sites were below the 50th percentile, while 93% were in areas with higher-than-average proximity to other polluters, such as the proposed Diamond Green Diesel facility in Port Arthur, which ranks in the 99th percentile for proximity to major polluters (EPA, 2023).

**Demographic Indexes.** The EJScreen demographic indexes measure similar factors. The SDI includes five indicators (low income, disability, limited English language ability, low education, and low life expectancy) but excludes race; the DI includes two indicators, low income and people of color. Each index suggests something slightly different about an area. The SDI includes more social indicators of vulnerability; the DI includes the powerful indicators described by race and income. For both indexes, the majority of facilities are in areas above the 66th percentile for SDI (50 of 89, 56%) and DI (57 of 89, 64%), in all geographic clusters.

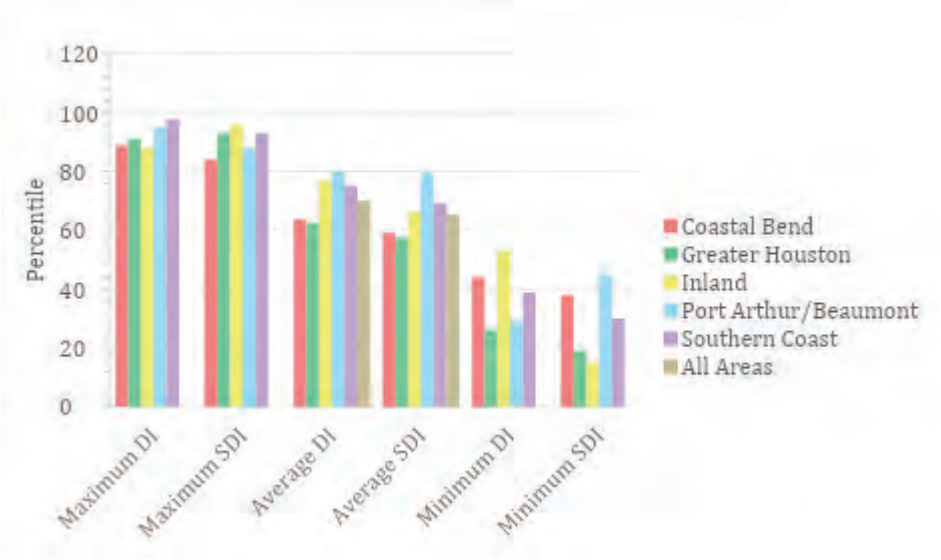



**Figure ES-1** - Demographic and Supplemental Demographic Index Values

As shown in Figure ES-1, EJScreen's two demographic indexes show that the petrochemical facilities planned for Texas are most often proposed in areas with a larger percentage of people of demographic vulnerability, compared with the rest of the nation.

## 2. Results by County and Project

New petrochemical facilities are proposed for 22 counties within Texas. Only two of the 22 counties have people of color or poverty population rates that are below state or national rates (Table ES-2). These counties account for nine of the 89 facilities in the study (Table ES-3). In other words, 90% of new petrochemical facilities proposed for Texas are in counties with higher demographic vulnerability (in the form of higher numbers of people of color, or higher numbers of people in poverty, or both) than other areas of the state or the nation.

**Table ES-2. County Demographics**

| County | County Poverty % | County People of Color % | TX | USA | Above TX Poverty | Above USA Poverty | Above TX POC | Above USA POC |
|---|---|---|---|---|---|---|---|---|
| Brazoria | 9.4 | 58.5 | | | | | | x |
| Calhoun | 14.6 | 58.3 | | | x | x | | x |
| Cameron | 23.5 | 91 | | | x | x | x | x |
| Chambers | 8.6 | 39.2 | | | | | | |
| Duval | 29.1 | 85.5 | | | x | x | x | x |
| Ector | 11.7 | 71.9 | | | | x | x | x |
| Galveston | 11.5 | 45.2 | | | | x | | x |
| Gray | 17.3 | 40.4 | | | x | x | | |
| Harris | 16 | 73 | | | x | x | x | x |
| Harrison | 17.2 | 38.6 | | | x | x | | |
| Hutchinson | 14.3 | 31.6 | | | x | x | | |
| Jefferson | 20.1 | 63.5 | | | x | x | x | x |
| Liberty | 14.5 | 52 | | | x | x | | x |
| Matagorda | 17.9 | 57.6 | | | x | x | | x |
| Newton | 18.5 | 24.2 | | | x | x | | |
| Nueces | 17.3 | 70.4 | | | x | x | x | x |
| Orange | 14.5 | 22.3 | | | x | x | | |
| San Patricio | 17.2 | 60.9 | | | x | x | x | x |
| Smith | 13.2 | 42 | | | | x | | x |
| Somervell | 8.8 | 22.6 | | | | | | |
| Victoria | 14.1 | 56.9 | | | x | x | | x |
| Webb | 22.5 | 96.1 | | | x | x | x | X |
| Totals | | | Sum | | 16 | 19 | 8 | 15 |
| | | | % | | 73% | 86% | 36% | 68% |
| | | | | TX Both | 7 | | | |
| | | | | USA Both | 14 | | | |

Note: = exceeds people of color; = exceeds poverty rate; = exceeds both people of color and poverty rate; x = county percentages exceed the comparison group percentages.

According to the U.S. Census American Community Survey 2020–2024 (U.S. Census Bureau, 2024), 13.7% of Texas residents are people living in poverty and 11.1% of U.S. residents are people living in poverty. The proportion of people of color in Texas is 60.4%, and that of the United States is 41.6%. This table compares these rates with the rates by county for the 22 Texas counties with new petrochemical facilities proposed.

Given the state's large size, the findings suggest that the proposed sites are clustered. County-level data show that the 89 proposed petrochemical projects in this study are located in only 22 (9%) of 254 Texas counties. Eight (3%) of the new proposed facility counties have more than two facilities proposed (Table ES-3), and these eight counties already host existing petrochemical facilities; thus, statewide facilities' siting focuses on locations that already have elevated historical pollution burdens.

**Harris and Jefferson Counties.** The county results are calculated for "projects," of which there are sometimes more than one per facility (Table ES-3).[2] Harris and Jefferson Counties dominate, with the highest numbers of project categories across the board (Table ES-3), along with the highest existing vulnerability and cumulative burden. Harris and Jefferson Counties also have the most projects proposed (22 and 20, respectively), and the highest numbers of projects that exceed every percentile threshold. Note that the 89 facilities analyzed in this study comprised 114 projects, since some facility sites had multiple projects or facility phases proposed. In Jefferson County, 90 of 100 (90%) EJScreen project categories exceeded the 75th percentile. Harris County's levels were a bit lower, but still a majority, with 65 of 110 project categories (59%) exceeding the 75th percentile.

Harris County, population 4,800,000, is home to Houston (U.S. Census Bureau, 2023a). Jefferson County, population 250,000, is home to Beaumont, Port Arthur, and the Golden Triangle chemical corridor (U.S. Census Bureau, 2023b). Given this dramatic difference in population, yet with similar numbers of projects per category exceeding each threshold, Jefferson County has an extremely high burden per capita, compared with the rest of the state.

2 - It is important to discuss projects at the county level because two projects are more likely to add more pollution than one project; this effect would not have been captured if we limited the calculation to facilities, without including counties.

**Table ES-3. Threshold EJ by County**

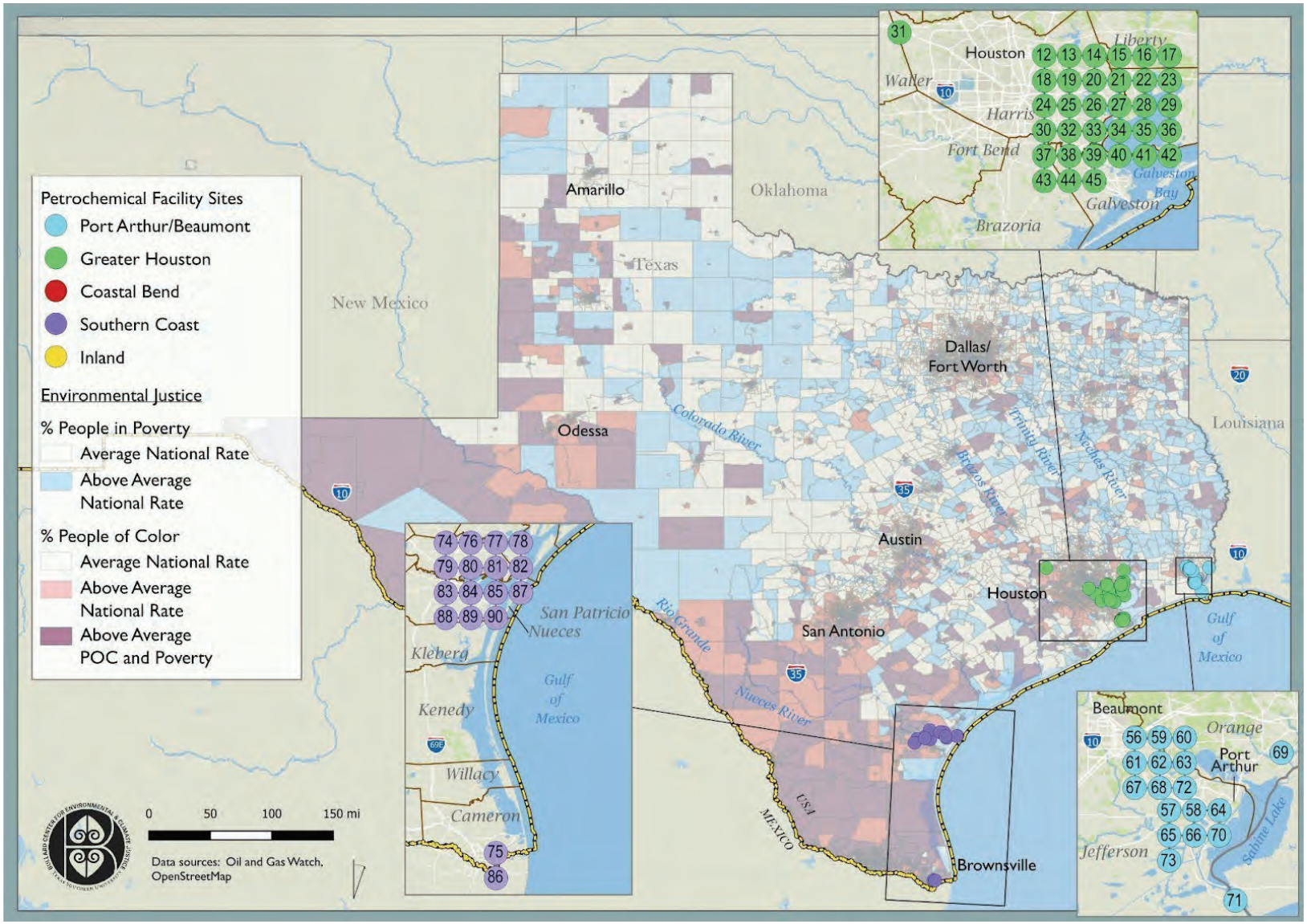
| | Facilities | Projects | Total Possible | Above 66th %ile | Above 75th %ile | Above 90th %ile |
|---|---|---|---|---|---|---|
| | | | EJS (Proj. * 5) | EJS | EJS | EJS |
| **Brazoria** | **5** | **7** | 35 | 20 | 12 | 4 |
| **Calhoun** | **3** | **4** | 20 | 7 | 6 | 0 |
| **Cameron** | **2** | **2** | 10 | 8 | 8 | 8 |
| **Chambers** | **8** | **12** | 60 | 14 | 6 | 1 |
| **Duval** | **1** | **1** | 5 | 3 | 2 | 0 |
| **Ector** | **2** | **2** | 10 | 2 | 2 | 1 |
| **Galveston** | **8** | **12** | 60 | 60 | 54 | 22 |
| **Gray** | **1** | **1** | 5 | 3 | 2 | 0 |
| **Harris** | **17** | **22** | 110 | 85 | 65 | 30 |
| **Harrison** | **1** | **1** | 5 | 5 | 5 | 2 |
| **Hutchinson** | **1** | **1** | 5 | 4 | 3 | 0 |
| **Jefferson** | **17** | **20** | 100 | 92 | 90 | 48 |
| **Liberty** | **1** | **1** | 5 | 3 | 2 | 0 |
| **Matagorda** | **2** | **2** | 10 | 4 | 2 | 0 |
| **Newton** | **1** | **2** | 10 | 6 | 6 | 0 |
| **Nueces** | **9** | **12** | 60 | 49 | 45 | 24 |
| **Orange** | **1** | **1** | 5 | 2 | 1 | 0 |
| **San Patricio** | **6** | **7** | 35 | 26 | 19 | 0 |
| **Smith** | **1** | **1** | 5 | 5 | 5 | 1 |
| **Somervell** | **1** | **1** | 5 | 0 | 0 | 0 |
| **Victoria** | **1** | **1** | 5 | 5 | 5 | 1 |
| **Webb** | **1** | **1** | 5 | 3 | 2 | 0 |
| **Totals** | **90** | **114** | | | | |

Note: EJS = EJScreen

The 89 facilities analyzed in this study comprised 114 projects, since some facility sites had multiple proposed projects or facility phases. Of the 114 projects, the number of categories above a given threshold were tallied. The total possible number of categories comprised the number of total projects in the county multiplied by the number of possible categories (EJScreen has five categories).

## 3. Race and Poverty

Map ES-2 shows that much of south, and Gulf Coast Texas are coded either blue or purple, indicating that those areas have higher rates of people living in poverty than the rest of the nation. Twenty-seven of 89 (30%) proposed petrochemical sites are in areas with a higher percentage of people living below the federal poverty line than the national average, and 24 of 89 (27%) for the state average (Table ES-3). However, expanding the analysis from a single point location to the area inside a three-mile buffer from the point location, the numbers skyrocket to 84 facility sites (93%) exceeding national poverty rates and 82 sites (91%) exceeding state poverty rates. The three-mile buffer areas offer a more accurate demographic description of the fenceline communities surrounding the facilities, since the point location itself does not necessarily capture the demographics of the communities nearby.




**Map ES-2 New and Under-Construction Petrochemical Facilities Proposed in Texas** - Texas petrochemical facility locations analyzed in this report, with areas shown that exceed the national rates of poverty and people of color populations. For rankings and data, see Table ES-4. U.S. Census block group areas show areas in Texas where the people of color population rates exceed the national average, and the people in poverty population rates exceed the national average. When both averages exceed the national rate, a darker color is displayed. Inset map point locations do not correspond to the exact site locations.

Forty-six sites (51%) exceed the average people of color population rates compared with the national average, and 33 sites (37%) exceed the state average (Table ES-4). Including the fence line dramatically increases the number of sites exceeding national and state averages: 84 fenceline communities (93%) exceed the average people of color population rate at the national level, and 76 fenceline communities (84%) exceed the state rate.

**Table ES-4. Sites Exceeding Low-Income and People of Color Percentiles**

| **Sites** | Higher Than **National Poverty** | Higher Than **State Poverty** | Higher Than **National People of Color** | Higher Than **State People of Color** |
|---|---|---|---|---|
| Number of Sites | 27 | 24 | 46 | 33 |
| *Percent Sites* | *30%* | *27%* | *51%* | *37%* |
| Number of Fenceline Three-Mile Buffers | 84 | 82 | 84 | 76 |
| *Percent Fencelines* | *93%* | *91%* | *93%* | *84%* |

Number and percent of the 89 petrochemical sites exceeding national and state average rates of poverty and people of color. Fenceline communities within a three-mile buffer of a facility's point location are also displayed. Numbers are calculated from EJScreen 2.2 "low-income" and "people of color" data of block groups in the U.S. Census American Community Survey 2017–2021 (U.S. Census Bureau, 2022). Where three-mile buffers contained multiple block groups, the buffer was considered higher if any block group having a higher rate overlapped with the buffer.

These results show that race continues to be a potent predictor for polluting industry and chemical exposure locations (Johnston et al., 2020), which is consistent with other studies showing that residents who live on the fence line with petrochemical plants and other polluting industries are disproportionately people of color. In Texas communities, people of color are often segregated and in close proximity to polluting industries with which they have historically lived. This pattern is also evident at the national level—where America is segregated, so is pollution (Bullard, 2000)—but the study results show that this is worse in Texas, where race and poverty combine to create a double whammy that places fenceline communities at special risk from petrochemical facilities and their operations (Gillam, 2024). New petrochemical plants and expansions are being proposed in a state that currently has a disproportionately large proportion of people of color and high poverty rates compared with the nation as a whole (EPA, 2023).

## B. Regional Results

The study confirms that proposed petrochemical development in Texas follows a long-standing historical pattern of disproportionately locating in areas already facing elevated pollution burdens and demographic vulnerability (Bullard & Wright, 2023; Mohai & Saha, 2015). Across all five geographic regions, EJScreen index averages in at least two clusters exceeded statewide values, reflecting cumulative impacts on marginalized communities (EPA, 2023).

Several geographic cluster areas emerged as particularly concerning, as already evidenced by the county results. The **Golden Triangle** area (Port Arthur, Beaumont, and surrounding communities), and the **Greater Houston** area have the highest numbers of facilities where the fenceline demographic and existing pollution burden are highest. **Greater Houston** has the greatest number of facility sites in the study (34).[3]

**Port Arthur/Beaumont**. This region ranks among the most heavily burdened in Texas. Of 18 facility sites, 94% are in communities with high percentages of people of color and/or low-income populations. All EJScreen indicators averaged above the 75th percentile. Sites such as Valero Port Arthur and Diamond Green Diesel rank in the 99th percentile for air toxics and proximity to major polluters. Port Arthur, where 83% of residents are people of color and nearly 28% live in poverty, exemplifies an environmental sacrifice zone suffering from high poverty, asthma, cancer rates, and overexposure to industrial pollution (Kreider, 2023; Saha et al., 2024).

**Greater Houston.** With 22 facility sites, this region has the largest concentration of proposed developments. All are located in fenceline communities where poverty and people of color percentages exceed national averages. The TPC Houston site ranks above the 90th percentile in nearly all EJScreen categories and has a history of Clean Air Act violations (Amnesty International, 2024; EPA, 2024a). Industrial expansion in Galveston, LaMarque, and Texas City are planned for areas long affected by catastrophic accidents, redlining, and petrochemical pollution (Pacheco et al., 2024; Stephens, 1997).

**Coastal Bend.** Although sites here show slightly lower EJScreen scores overall, 91% of facilities are in vulnerable communities. Dow Freeport ranks at or near the 90th percentile in every EJScreen index. The East End of Freeport, a historically Black community, was displaced but endured cumulative harm due to industrial encroachment (Ahmed, 2020; Environmental Integrity Project, 2024).

**Southern Coast.** Fifteen of the 17 sites are in areas with high pollution and demographic risk. The Jupiter Brownsville Condensate Splitter ranks in the 98th percentile nationally for PM2.5 and demographic indicators. In Corpus Christi, the Inner Harbor Desalination Plant is sited in the historically Black Hillcrest neighborhood, compounding displacement and exposure to adjacent petrochemical facilities (Beeler et al., 2015; Davies, 2024).

**Inland.** This non-clustered region includes sites across east, west, and south Texas. All 10 sites are in or near communities with high EJScreen demographic index scores. Chemical recycling facilities in Tyler and Longview rank high for air toxics and proximity to other polluters, and are sited near historically segregated Black and Latino neighborhoods (Guevara, 2016; Shaw & Green, 2023). In the Permian Basin, oil and gas activity add cumulative pollution risks to rural, underserved communities facing regulatory neglect (Johnston et al., 2020; McDonald & Wilson, 2021, p. 33).

3 - Note that "sites" are not the same as "projects" as there can be multiple projects at the same site.

## C. Summary of Key Findings

**1. Facility Siting Reflects Historic Pattern of Environmental Injustice**

Petrochemical facility siting in Texas reflects a legacy of racialized land use, redlining and exclusionary zoning, and locating in environmentally and economically vulnerable communities:

- 92% of the proposed facility sites rank above the 66th percentile in at least one EJScreen index, meaning they are more environmentally or socially vulnerable than two-thirds of the United States.
- The vast majority of new petrochemical sites are located in Texas counties with high percentages of people of color and people living below the federal poverty line, perpetuating patterns rooted in redlining, segregation, and discriminatory land use.

**2. Fenceline Communities Are Already Overburdened**

Petrochemical development is intensifying existing environmental and health burdens in already overexposed communities:

- 96% of sites exceed the 50th percentile nationally for either PM2.5 or toxic release to air indexes.
- 84% of facilities rank above the 66th percentile for toxic air releases, and 78% for PM2.5.
- Nearly 46% of all sites are in the top 10% nationally for toxic air pollution.
- 93% of sites are closer to other industrial polluters than the national average; 42% are in the top 10% for proximity to hazardous facilities.

**3. Intersecting Inequities: Race and Poverty at the Petrochemical Fence Line**

Petrochemical development in Texas continues to locate in communities where both race and poverty intersect to create compounded risk:

- 93% of fenceline communities have a higher percentage of people living below the federal poverty line.
- 91% of fenceline communities exceed the Texas poverty rate.
- 93% of fenceline communities exceed the national average for people of color.
- 84% of fenceline communities exceed the state average for people of color.

The dual exposure—being both low income and predominantly people of color—creates what advocates call "double jeopardy" for fenceline neighborhoods. These communities are already overburdened by decades of disinvestment, racial segregation, and poor infrastructure, and are also being disproportionately targeted for new toxic industrial development.

**4. Race Versus Poverty in Predicting Industrial Siting Patterns**

- Race remains a more consistent predictor than poverty in determining petrochemical facility locations:
- Only 30% of proposed facility sites are located in areas with poverty rates above the national average.
- Yet 51% of sites exceed the national average for percentage of people of color, even when considering just the facility's point location.

In surrounding fenceline communities, poverty and race factors both spike—yet race factors continue to be slightly more prevalent in proximity to polluting sites.

**5. Regional and County-Level Concentration**

Petrochemical development is concentrated in just 22 (9%) of Texas's 254 counties, with eight counties hosting multiple facilities or projects:

- Jefferson County (Port Arthur/Beaumont) and Harris County (Houston) dominate, with the highest number of projects, and the highest concentration of environmental and demographic risk.
- In Jefferson County, 90% of all project index values exceeded the 75th percentile.
- Jefferson County, with only 250,000 residents, bears a greater per capita industrial burden than Harris County, home to over 4.8 million.

**6. Environmental Justice Facility Siting Concerns Occur in All Texas Regions**

All regions analyzed in this study demonstrate consistent patterns of overburden and environmental injustice:

- Port Arthur/Beaumont: Every index category averaged above the 75th percentile, with communities such as the South End and Charlton-Pollard facing some of the nation's highest pollution levels.
- Greater Houston: This area hosts the largest number of proposed sites (34), with many located near predominantly Black and Latino neighborhoods and within already-saturated chemical corridors.
- Coastal Bend: Despite slightly lower EJScreen rankings, areas such as Freeport's East End face extreme burdens. The Dow Freeport complex alone ranks in the 97th percentile for toxic releases to air.

- Southern Coast: This area includes historically Black and Latino neighborhoods in Corpus Christi and Brownsville. Facilities here scored among the highest in the state for PM2.5 and demographic vulnerability.
- Inland Texas: Though more dispersed, inland sites such as those in Tyler and Longview are located in racially segregated areas, as are inland fracking-related facilities.

# V. Assessing Early Impacts of the Second Trump Administration

We began this study in 2024 when Joseph R. Biden Jr. was president. The federal environmental protection and regulatory landscape changed dramatically with the election of Donald J. Trump as the 47th President of the United States. This section provides a summary of major changes made by the second Trump administration and their implications for underserved and disadvantaged communities in the Gulf Coast region. The second election of President Trump ushered in a wave of policy shifts that removed environmental safeguards, reversed regulatory policy, and implemented administrative decisions that collectively reshaped the federal approach to environmental protection and public health and safety in the United States (Gomez & Bryson, 2025).

## 1. Signed Record Number of Executive Orders

In the first 100 days of his second term, President Trump issued executive orders—more than any other president—to aggressively reshape federal environmental, climate, energy, public health and safety, and civil rights policies through executive authority (Gomez & Bryson, 2025; Popli, 2025):

- He used executive power to reshape federal policy and funding by redirecting departments' and agencies' missions, embedding new priorities, and altering regulatory frameworks that will be difficult to fully reverse (Lowande & Poznansky, 2024; Popli, 2025).
- He overhauled environmental, climate, energy, public health and safety, and civil rights policies with 142 executive orders that eviscerated environmental and public health and safety protections, and weakened clean air, water, wildlife, and environmental justice protections (Popli, 2025; Southern Environmental Law Center, 2025).

## 2. Assaulted Environmental Protection

The Trump administration launched a sweeping attack on environmental protections, targeting foundational laws for rollbacks and weakening, such as the National Environmental Protection Act (McGrath et al., 2025) , the Clean Air Act, and the Clean Water Act (Bense et al., 2025). These actions

- eliminated limits on toxic air pollutants, including lead and mercury (Daly, 2025a);
- delayed rules on methane and hazardous air emissions (Conley, 2025; Daly, 2025a);
- used regulatory process generally reserved for emergencies to suspend methane limits without public input (Chemnick, 2025);

- terminated the Hazardous Organic National Emission Standards for Hazardous Air Pollutants Rule issued by the Biden administration to target carcinogens (Jouppi, 2025a); and
- rolled back limits on toxic PFAS (forever chemicals) in drinking water (Gustin, 2025).

## 3. Dismantled Environmental Justice and Civil Rights

Decades of environmental justice and civil rights protections were stripped away through executive orders, budget cuts, and the closure of key federal offices (Frank & Chemnick, 2025), which severely limits the federal government's ability to address disproportionate harm in frontline communities and undermines tools to fight environmental racism (Strott, 2025). The dismantling

- revoked Environmental Justice Executive Order 12898 and closed Environmental Justice offices for the EPA and Department of Justice (Frank & Chemnick, 2025; Strott, 2025);
- banned the use of disparate impact analysis across federal policy via Executive Order 14281 (Bellware, 2025);
- dropped the landmark environmental justice lawsuit in Louisiana's "Cancer Alley" that the Biden administration filed to curb emissions of the cancer-causing chloroprene at the Denka synthetic rubber plant formerly owned by DuPont (Laughland, 2025); and
- terminated programs for disadvantaged communities and equity, air monitoring, clean water, and climate resilience in overburdened communities (Volcovici et al., 2025).

## 4. Rolled Back Climate Policies and Climate Progress

Amid intensifying climate disasters, the Trump administration systematically reversed the nation's core climate policies and removed critical assessment tools (Gelles & Brown, 2025). These reversals narrowed the scope of environmental reviews and halted climate science efforts that supported planning and preparedness (Daly & Borenstein, 2025; Friedman, 2025b). The rollbacks

- withdrew the United States from the Paris Agreement for a second time (Daly & Borenstein, 2025);
- drafted plans to repeal the "endangerment finding," which determined that greenhouse gas emissions endanger public health and welfare (Brady, 2025; Friedman, 2025a);
- halted the Methane Emissions Reduction Program (Conley, 2025);
- revoked the National Environmental Policy Act's climate reviews and greenhouse gas assessment requirements (Brady, 2025; McGrath et al., 2025);
- halted publication of the National Climate Assessment reports (Borenstein, 2025a, 2025b); and
- proposed phasing out and eliminating FEMA after the 2025 hurricane season and shifting responsibility for disasters onto state governments (Angueira, 2025; Scripps News Group, 2025).

## 5. Prioritized Fossil Energy Development and Expansion

The administration made fossil energy development a national priority, using emergency authorities to dismantle environmental safeguards (Cunningham, 2025; Gibbs et al., 2025). These measures expanded leasing, slashed oversight, and promoted fossil fuel exports, accelerating long-term emissions and community health risks (Meiburg & McCabe, 2025; Shapiro & Walker, 2018). The emergency authority actions

- declared a "national energy emergency" with Executive Order 14156 to override environmental laws and regulations (Cunningham, 2025);
- issued a series of proclamations that grant two years of regulatory relief to coal-fired power plants, chemical manufacturers, and other polluting industries (Daly, 2025c);
- invoked emergency powers to fast-track fossil energy infrastructure, and offered step-by-step instructions for companies to apply for exemptions (Cunningham, 2025; Jouppi, 2025b);
- opened 625 million acres of federal waters and 19 million acres of public land to leasing (Edwards, 2025); and
- rolled back methane oversight and imposed "10-to-1" deregulatory rule (Conley, 2025; Medicherla, 2025; Washko, 2025).

## 6. Slowed Clean Energy Transition

In contrast to fossil energy support, the administration used executive orders, directives, and the One Big Beautiful Bill Act (OBBA) to slow and obstruct clean energy deployment through project freezes, funding and grant cancellations, and legislative repeals (Eisenson, 2025). These actions

- targeted provisions of the Inflation Reduction Act that addressed climate risks and included tax credits and subsidies for wind and solar (Cavanaugh et al., 2025; Krawczyk, 2025);
- slashed tax credits that will cut annual clean energy installations by 41% after 2027 (Adams, 2025; Chediak, 2025);
- stalled clean energy investments, risking job losses and higher utility bills (Copley, 2025; Orvis et al., 2025); and
- froze permits for solar, wind, geothermal, and battery storage (Eisenson, 2025; Strupp, 2025).

## 7. Endangered Public Health and Safety

The mission of the EPA has always been to "protect the environment and public health" (EPA, 2025). Experts caution that straying from this core mission and abandoning its enforcement norms could lead to more disasters, petrochemical incidents, oil spills, and toxic chemical

discharges, especially as EPA's regulatory staff and oversight mechanisms are rapidly downsized (Cunningham, 2025). Public health and safety are endangered by these new policies, which

- propose weaker standards for hazardous pollutants and eliminate oversight mechanisms, exposing communities to more toxic emissions (Baurick, 2025; Jouppi, 2025b);
- suspend protections against carcinogens and air toxics (Drugmand, 2025; Jouppi, 2025b);
- propose weaker mercury and particulate matter standards from coal plants (Daly, 2025b; Zhao et al., 2025);
- exempt more than 100 chemical manufacturers, oil refineries, coal plants, medical device sterilizers, and other industrial polluters from Clean Air Act rules (Frazin, 2025b);
- implement policies that allow industrial polluters to avoid clean air rules under the Clean Air Act (Banks & Marquez, 2025; Daly, 2025a; Tabuchi, 2025b);
- exempt over 200 chemical plants from fenceline monitoring for hazardous pollutants (Borenstein et al., 2025);
- roll back safeguards against catastrophic explosions and toxic releases and reconsider safety rules for chemical facilities (Strott, 2025); and
- move to close the U.S. Chemical Safety and Hazards Investigation Board and early-warning systems (Baurick, 2025; Tabuchi, 2025a).

## 8. Attacked Science and Research Infrastructure

The administration offered sweeping policy directives that targeted core programs supporting science, resilience planning, pollution prevention, and public health and safety, and slated them for termination. Antiscience rhetoric has sidelined experts and evidence, gutted weather science, dismantled the research infrastructure, and reduced our nation's ability to prepare for, respond to, and recover from catastrophic disasters (Friedman et al., 2025; Jacobo, 2025). This core program targeting has

- developed an artificial intelligence tool to target 100,000 federal regulations, including those that tackle the climate crisis, with a stated goal of eliminating 50% of these federal rules by the first anniversary of President Trump's second inauguration (Castro, 2025);
- allowed science to be politicized by granting political appointees power to define scientific integrity and control what evidence federal agencies use in policymaking (Michaels & Wagner, 2025);
- shifted focus away from science-based environmental governance in favor of deregulation, industry accommodation, and reduced federal accountability (Drugmand, 2025);

- closed the EPA Office of Research and Development and fired its staff (Friedman & Joselow, 2025); and
- deleted over 2,000 datasets on environmental and climate-related resources from federal agency websites (Santarsiero, 2025).

## 9. Slashed Budgets and Fired Federal Workers

Cutting the federal budget and shrinking the federal workforce were two top priorities, and both were implemented through executive orders and passage of the OBBA, signed by President Trump on July 4, 2025—laying waste to federal budgets, safety net programs, and environmental, health, and safety protections (Lavelle & Aldhous, 2025). These cuts to the budget and federal workforce have

- reduced EPA's budget to $7 billion and decreased its workforce by 23%, from 16,155 in January to 12,448 in July (Frazin, 2025a; Meiburg & McCabe, 2025; Stimson, 2025);
- targeted environmental justice, climate science research, and environmental monitoring by slashing budgets, closing offices, and firing staff (Bense et al., 2025); and
- reduced the number of federal workers in the first six months of the second Trump administration by 134,856 (Canon et al., 2025; Dance, 2025; Grist, 2025; Shao & Wu, 2025).

## 10. Canceled Federal Grants

One of the administration's most far-reaching impacts came through the systematic freezing and cancellation of federal grants for environmental protection, climate and resilience planning, clean energy, and public health and safety—many of which had been made possible by Congress passing, and President Biden signing, the historic $369 billion Inflation Reduction Act, the largest climate program in history, and the $1.2 trillion Bipartisan Infrastructure Law. These actions

- canceled hundreds of grants in the Gulf Coast regions—grants that would have supported solar installations on homes, schools, churches, and community centers, flood resilience upgrades, and community-based monitoring of oil and gas and petrochemical emissions (Lavelle & Aldhous, 2025; Strott, 2025);
- terminated billions in federal grants critical for climate, energy, health, and environmental justice (Lavelle & Aldhous, 2025);
- cut NASA and NOAA climate science funding (Borenstein, 2025b; Dance, 2025; Temple, 2025);
- targeted more than 4,000 grants for cancellation at more than 600 universities, valued between $6.9 billion and $8.2 billion, with Texas among the top 15 states losing the most federal funding based on population (Center for American Progress, 2025);

- revoked or froze over $23 billion in grants across energy, health, climate, and research sectors (Lavelle & Aldhous, 2025; Lea, 2025);
- canceled congressionally appropriated PFAS research grants, then reversed a few terminations while leaving others in limbo (Clark, 2025); and
- eliminated 1,600 NSF and 2,500 NIH grants—many of which focused on equity and health (Reardon, 2025; Temple, 2025).

## VI. Conclusions

Across the six Texas regions, the study results reflect persistent environmental justice challenges: the overwhelming majority of 89 petrochemical facilities are proposed to be sited in communities already burdened by pollution, poverty, and racial inequity. This geographic concentration of risk reinforces the need for stronger petrochemical siting protections, meaningful public engagement, and environmental justice accountability in Texas.

Petrochemical facilities in Texas are being proposed and planned that, if built, will disproportionately and adversely impact the most vulnerable people and places in communities that are already overburdened with industrial pollution and environmental hazards (Amnesty International, 2024; Shaykevich et al., 2024). Many of the existing environmental, social, and health burdens stem from decades of discriminatory land use, biased planning, racial redlining, and rubber-stamp facility permitting by the state government (Baddour et al., 2024; Bullard et al., 2007; Roberts et al., 2022).

The buildout and expansion of petrochemical facilities in Texas follows a pattern set in motion decades ago, targeting fenceline communities where incomes are lower, poverty rates are higher, and the proportion of people of color is higher than that of the state and nation overall (Bullard, 2000; Bullard et al., 2007). This mirrors decades-old patterns of environmental racism and sacrifice zone creation (Bullard, 2000; Lerner, 2012). These fenceline communities face cumulative threats from chemical emissions, explosions, flaring, and climate disasters (Flores et al., 2021; Robinson, 2024). They receive few direct economic benefits, but bear the brunt of long-term environmental and health costs (Morello-Frosch & Obasogie, 2023; Terrell et al., 2024). Without intervention, the proposed petrochemical buildout will reinforce and deepen existing environmental, economic, and health disparities and vulnerabilities. Mitigating harm in these communities requires more than pollution controls—it requires dismantling systems and structures that allow and encourage low-income and people of color communities to bear the burden of polluting industries, while allowing the economic benefits to accrue elsewhere (Amnesty International, 2024; Malin, 2020).

The study clearly shows that having a petrochemical plant as a next door neighbor does not create an economic renaissance or bring economic prosperity to the residents who live on the fence line

with these polluting facilities. Conversely, residents who live closest to these facilities face elevated health threats from both pollution and poverty, compared with the general population.

The federal environmental protection and regulatory landscape has clearly shifted dramatically under the second Trump administration. Using rapid-fire executive orders and directives, the administration tilted federal policies toward less protection, less federal regulatory oversight, less environmental and health impact assessment, less science-based decision-making, less clean energy, and more fast-tracking, more streamlined permitting, more oil, gas, and petrochemical facility siting, more exemptions and licenses to pollute, and more fossil energy. Nowhere are these dynamics clearer than in Texas, where the petrochemical buildout has concentrated in already overburdened and economically marginalized communities (Amnesty International, 2024; Saha et al., 2024; Shaykevich et al., 2024).

Many of the administration's executive orders and policy changes have placed people and places at risk from human-made and natural disasters (Bense et al., 2025; Canon et al., 2025). Public health and safety goals are not enhanced when vital federal programs like EPA, NOAA, FEMA, OSHA, and NIH are weakened, gutted, and dismantled, with budgets cut and staff fired. Slashing protections and providing waivers that allow petrochemical, fossil energy, and vehicles manufacturers to ignore the federal Clean Air Act rules will not make Americans healthier, safer, or more economically secure. Ignoring the "endangerment finding" and decades of science and facts will not wipe away the known causes and harmful impacts of climate change. Returning to a sense of normalcy will require sustained action by people who care about building a just, healthy, livable, and sustainable future for all. It is imperative that the federal government live up to its responsibility to protect the environment along with public health and safety.

**Climate Justice**. The proposed buildout of new petrochemical plants in Texas has impacts beyond state boundaries. This proliferation will increase emissions and lessen any U.S. ability to meet Paris Agreement climate goals. Climate change alleviation must prioritize environmental justice in Texas and beyond (Saha et al., 2024; Tilsted et al., 2023).

**Protection for Fenceline Communities.** The continued buildout of petrochemical facilities disproportionately harms low-income people and communities of color living near polluting industries. These fenceline communities—long treated as sacrifice zones—are calling on all levels of government to reject new petrochemical and plastics plants (Bruggers, 2024; Food and Water Watch, 2018). Community leaders emphasize that a just transition must go beyond job replacement to address broader goals of health, racial equity, and economic and environmental justice (Azhar, 2021; Genoways, 2014; Gilio-Whitaker, 2019; Robinson, 2024). Because petrochemical production is deeply tied to fossil fuels, its expansion worsens the global crises of plastics, toxic emissions, and climate change—requiring urgent action to phase out unsustainable production and drastically cut emissions (Center for International Environmental Law, 2019; Shaykevich et al., 2024).

**Transition to Clean Energy.** Texas must accelerate a just transition away from petrochemicals and fossil fuel dependency. This includes ending subsidies for polluting industries and investing in clean energy jobs and infrastructure (Center for International Environmental Law, 2019; Tilsted et al., 2023).

**Public Health Protections.** Proposed projects must be evaluated for cumulative health impacts. Communities already facing elevated asthma, cancer, and chronic disease from petrochemical exposure should not face additional burdens (Flores et al., 2021; Randolph, 2021).

**Economic Justice and Accountability.** Fenceline residents deserve not only environmental protection, but also equitable access to economic opportunity. Job creation and investment must be transparent and accountable, and must benefit those most affected by the petrochemical industry (Jones, 2024; Tomaskovic-Devey, 2016).

Policymakers, regulators, and industry leaders must consider the public health, safety, and environmental consequences of petrochemical and fossil energy projects, and work together to create solutions that prioritize the well-being of all Texans. This analysis and its findings summarize an array of issues surrounding petrochemical development in overburdened communities. The impact to local fenceline communities in Texas also has ripple effects around the world. Globally, the inequity of the Texas petrochemical buildout is present for poor people, people of color, and people in the Global South, who are disproportionately affected by pollution and the climate crisis (Dauvergne, 2023; Geyer et al., 2017).

Texas has a social responsibility and a moral imperative to do more to protect people's health and well-being—both in Texas and beyond. Addressing these issues requires urgent attention to the environmental and social factors contributing to vulnerability, and a concerted effort to prevent further environmental injustice and threats to public health (Bullard, 1994, 2000; Bullard & Wright, 2023; Gonzalez et al., 2023).

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