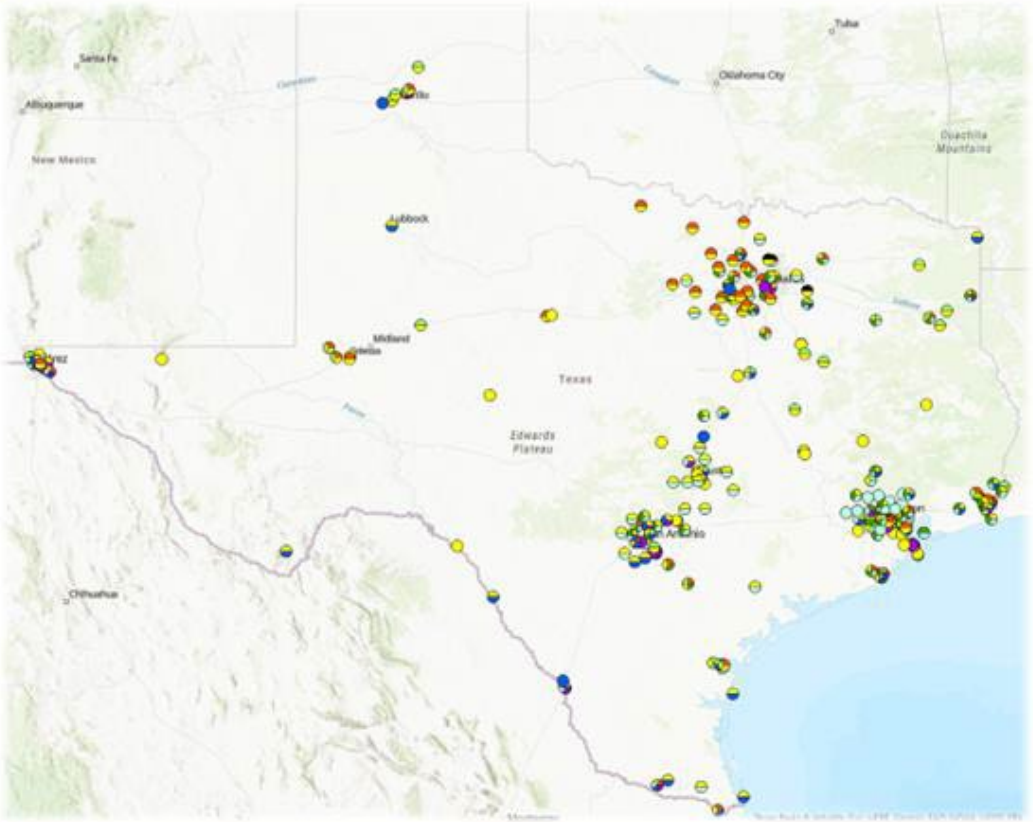
Texas Commission on Environmental Quality
Annual Monitoring Network Plan





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July 1, 2025

Texas Commission on Environmental Quality 2025 Annual Monitoring Network Plan

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List of Acronyms and Abbreviations

– number
% – percent
> – greater than
≥ – greater than or equal to
< – less than
µg/m^3 – micrograms per cubic meter
AADT – annual average daily traffic
AQS – air quality system
AMNP – annual monitoring network plan
autoGC – automated gas chromatograph
CBSA – core based statistical area
CFR – Code of Federal Regulations
CO – carbon monoxide
DFW – Dallas-Fort Worth
DRR – Data Requirements Rule
EI – emissions inventory
EPA – United States Environmental Protection Agency

FEM – federal equivalent method
FRM – federal reference method
LBJ – Lyndon B. Johnson
LLC – limited liability company
MSA – metropolitan statistical area
NA – not applicable
NAAQS – National Ambient Air Quality Standard
NCore – National Core Multipollutant Monitoring Stations
NEI – National Emissions Inventory
NO_2 – nitrogen dioxide
NO – nitrogen oxide
NO_x – oxides of nitrogen
NO_y – total reactive nitrogen compounds
O_3 – ozone
OMB – United States Office of Management and Budget
PAMS – Photochemical Assessment Monitoring Stations
Pb – lead
PM_{10} – particulate matter of 10 micrometers or less in diameter
$PM_{2.5}$ – particulate matter of 2.5 micrometers or less in diameter
$PM_{10-2.5}$ – coarse particulate matter
ppb – parts per billion
PWEI – population weighted emissions index
QC – quality control
RA-40 – Regional Administrator 40
SE – southeast
SETRPC – Southeast Texas Regional Planning Commission
SLAMS – State or Local Air Monitoring Stations
SO_2 – sulfur dioxide
SPM – special purpose monitor
TAD – technical assistance document
TCEQ – Texas Commission on Environmental Quality
TxDOT – Texas Department of Transportation
TEOM – tapered element oscillating microbalance
tpy – tons per year
TSP – total suspended particulate
U.S. – United States
UTEP – University of Texas at El Paso
VOC – volatile organic compound

Introduction

Title 40 Code of Federal Regulations (CFR) Section (§) 58.10 requires states to submit an annual monitoring network plan (AMNP) to the United States (U.S.) Environmental Protection Agency (EPA) by July 1 of each year. This monitoring plan is required to provide the implementation and maintenance framework for an air quality surveillance system, known commonly as the ambient air quality monitoring network.

Texas Commission on Environmental Quality (TCEQ) reviews its ambient air quality monitoring network annually and creates the AMNP to demonstrate how Texas meets or will meet federal air monitoring requirements specified in 40 CFR Part 58 and its appendices. The AMNP presents the current TCEQ federal monitoring network established for use in evaluations to determine compliance with the National Ambient Air Quality Standards (NAAQS) as well as other monitors that support federal initiatives and provide additional information on air quality and the weather. The monitoring plan includes proposed changes from the previous year and future proposed changes to the air quality monitoring network. Because the AMNP is focused on federally required monitoring, it does not include a review of state-initiated monitoring conducted in addition to federal requirements. This plan is limited to the portion of TCEQ's air monitoring network designed to comply with federal monitoring requirements and supported by federal funding.

TCEQ is federally required to operate between 133 and 160 air quality monitors. TCEQ's federal monitoring network includes 265 air quality monitors, approximately double the number of monitors required by federal rule. AMNP Appendix C summarizes the number of federally required and existing air quality monitors by MSA and criteria pollutant. The number, type, and location of monitors within TCEQ's federal monitoring network is sufficient to characterize air quality for all areas required within Texas.

TCEQ and its monitoring partners (city, county, private, and industry) operate an additional robust network of non-federal state-initiative monitors that support a variety of purposes, including potential health effects evaluation; however, these monitors are outside the scope of this document and are not included. The latest information regarding the entire Texas air monitoring network of federal and state-initiative monitors, monitoring data, and air quality forecast conditions for Texas' metropolitan areas is featured on TCEQ's webpage Air Quality and Monitoring - www.tceq.texas.gov.

Title 40 CFR Part 58, Appendix D provides the minimum design requirements for federal air monitoring networks including State or Local Air Monitoring Stations (SLAMS), Photochemical Assessment Monitoring Stations (PAMS), and National Core Multi-Pollutant Monitoring Stations (NCore). AMNP Appendix B lists the existing monitors established to meet federal monitoring requirements and objectives.

Public Comment Solicitation

TCEQ posts a draft AMNP to solicit public comment for at least 30 days prior to submission to the EPA. TCEQ submits the AMNP to the EPA for final review and approval with comments received during the 30-day inspection period, responses to the comments, and any appropriate changes based on the received comments. This plan includes the recommended federal monitoring network changes from July 1,

2024, through December 31, 2026, summarized in AMNP Appendix A. This plan also includes federal monitoring network changes recommended prior to July 1, 2024, that have been completed since that date or are still pending completion. Historical air monitoring network plans, associated public comments, and TCEQ responses are available on TCEQ's webpage TCEQ Air Monitoring Network Plans - www.tceq.texas.gov.

TCEQ continues to evaluate requests for ambient air monitoring submitted during previous AMNP public inspection and comment periods. Details regarding additional monitoring under consideration are included in this plan to solicit further public comment. Any future implementation of additional monitoring considerations may be included as part of TCEQ's federal ambient air monitoring network or as state-initiative monitoring. The proposals and implementation of proposals for monitoring under consideration are subject to change.

Statistical Areas and Population

TCEQ uses statistical-based definitions for core based statistical areas (CBSAs) or metropolitan statistical areas (MSAs), as defined and delineated by the U.S. Office of Management and Budget (OMB). The OMB defines a CBSA as a statistical geographic entity consisting of the county or counties associated with at least one urbanized area/urban cluster of at least 10,000 population, plus adjacent counties having a high degree of social and economic integration. MSAs (areas with populations greater than 50,000) and micropolitan statistical areas (areas with populations between 10,000 and 50,000) are the two categories of CBSAs.

The OMB delineated CBSAs and MSAs overlap in Texas, and the terms are used in this plan according to their usage in 40 CFR Part 58. The OMB updated the CBSA delineation list in July 2023 with several changes affecting Texas. The Houston-The Woodlands-Sugar Land CBSA title was updated to Houston-Pasadena-The Woodlands (Houston), and San Jacinto County was added to the CBSA. The Austin-Round Rock-Georgetown CBSA title was updated to Austin-Round Rock-San Marcos (Austin). The OMB added three counties to the Lubbock CBSA: Cochran, Garza, and Hockley Counties. The OMB upgraded Eagle Pass from a micropolitan statistical area to an MSA, containing Maverick County. The OMB added Bosque County to the Waco CBSA. The OMB removed Somervell County from the Dallas-Fort Worth-Arlington CBSA. The OMB created a new micropolitan statistical area, Granbury, for Hood County, previously in the Dallas-Fort Worth-Arlington MSA. The Marshall micropolitan statistical area was removed, and Harrison County was added to the Longview CBSA. The OMB removed Sterling County from the San Angelo CBSA. The updated titles and counties are used in this AMNP and its appendices.

The AMNP annual air monitoring network evaluation uses the current Texas CBSA (or MSAs) OMB designation with the most recently available population data at the time of AMNP draft development. The Census Bureau updates population estimates around mid-March, after the TCEQ drafts the AMNP. The most recent population estimates, including those used in the AMNP, are available at the U.S. Census Bureau population totals webpage. Each CBSA (or MSA) and associated population are evaluated by air pollutant based on requirements in 40 CFR Part 58 and 2021-2023 certified air monitoring data, as applicable. TCEQ uses these data to evaluate the networks and determine the required monitor counts as documented in the AMNP and its appendices. Based on annual assessments performed to date, all monitoring sites

supporting federal requirements and monitoring objectives are meeting the requirements defined in 40 CFR Part 58 and its Appendices A, C, D, E and G.

Waiver Requests

In 2020, the EPA approved TCEQ's request for a waiver under 40 CFR Part 58 Appendix E, Section 10.1.1 for the Austin Webberville air monitoring site. The Austin Webberville monitors are located less than ten meters from the roadway preventing the site from meeting siting criteria; however, air monitoring data are deemed representative of the neighborhood scale area due to the site deployment date, historical data, and low traffic count. TCEQ evaluated the Austin Webberville traffic counts and siting criteria as part of the 2025 Five-Year Assessment and determined that the waiver is still necessary unless the site is relocated.

TCEQ submitted a lead (Pb) modeling analysis for the Lower Colorado River Authority Fayette Power Plant in the 2020 TCEQ *Texas Five-Year Ambient Monitoring Network Assessment.* The EPA Region 6 approved TCEQ Pb waiver renewal request in a letter dated April 29, 2021. Based on the Lower Colorado River Authority Fayette Power Plant's most recent Pb point-source emission data shown in AMNP Table 4, the Pb waiver is no longer required.

New & Relocated Air Quality Monitoring Site Deployment Timeline

Deploying a new air quality monitoring site requires multiple steps that can require two to four years to complete due to the complexity of each step and reliance on partnerships with external parties such as property owners, permitting authorities, and utility providers. TCEQ air monitoring sites are generally located on private property, and TCEQ must find willing property owners who are amenable to allowing TCEQ to place an air monitoring site on their property. Additionally, the length of time needed to obtain construction permits and/or power connections has significantly increased and can take six to 12 months, or more, for each step.

A general overview of the steps required to deploy a new or relocated site is listed below. While some steps can occur concurrently, others are dependent on completion of the previous step and may rely heavily on external parties in order to make progress. However, TCEQ is committed to deploying and relocating sites as soon as practicable.

- Reconnaissance to identify potential sites (2-4 months)
- Confirmation of power availability with the electrical provider (2-6 months)
- Site access and property usage negotiation (4-12 months)
- Air monitoring equipment purchase (6-10 months)
- Site preparation/construction vendor solicitation (4-6 months)
- Site preparation permit approval and construction (6-12+ months)
- Power connection by electrical provider (1-6 months)
- Site deployment and equipment activation, weather dependent (1-2 months)

Regulatory Network Review

General Monitoring Requirements

Title 40 CFR Part 58, Appendix D, Section 1 describes the monitoring objectives and general criteria for the required SLAMS ambient air monitoring stations. Ambient air monitoring networks must be designed to meet the three basic monitoring objectives listed below, though each objective is to be considered independently:

- Provide air pollution data to the public in a timely manner;
- Support compliance with ambient air quality standards and emissions strategy development; and
- Support air pollution research studies (for example NCore network data).

Ambient air monitoring federal reference methods (FRM) and federal equivalent methods (FEM) are designated by the EPA and must be operated in accordance with the requirements of 40 CFR Part 53. FRM and FEM methods are acceptable for use in air quality surveillance systems under 40 CFR Part 58 and are used for comparing an area's air pollution levels against the NAAQS. These methods must be used in strict accordance with associated operation and/or instruction manuals and with applicable quality assurance procedures. The EPA reviews and approves FRM and FEM designated instrumentation. The list of EPA designated reference and equivalent methods is available at Air Monitoring Methods - Criteria Pollutants | US EPA.

National Core Multipollutant Monitoring Stations (NCore) Requirements

NCore multipollutant sites, approved by the EPA Administrator, were selected to measure multiple pollutants utilizing continuous methods as available. NCore sites are intended to be long-term sites useful for a variety of applications including air quality trends analyses, model evaluation, and tracking metropolitan area statistics. NCore guidance suggests monitoring instruments capable of measuring trace levels (high sensitivity), where needed. TCEQ's NCore monitoring network includes the following measurements in compliance with NCore monitoring guidance and federal requirements listed in 40 CFR Part 58, Appendix D, Section 3, as discussed further in this section:

- nitrogen oxide (NO), high sensitivity;
- total reactive nitrogen compounds (NO_y), high sensitivity;
- sulfur dioxide (SO_2), high sensitivity;
- ozone (O_3);
- carbon monoxide (CO), high sensitivity;
- filter-based particulate matter of 2.5 micrometers or less in diameter ($PM_{2.5}$);
- continuous $PM_{2.5}$;
- speciated $PM_{2.5}$;
- coarse particulate matter ($PM_{10-2.5}$); and
- meteorology (ambient temperature, wind speed, wind direction, and relative humidity).

Monitoring Requirements

Texas is required to operate two to three urban NCore sites, due to multiple air sheds and MSAs, and meets the requirements listed in 40 CFR Part 58, Appendix D, Section 3(b) with three urban NCore sites. NCore required air quality monitoring measurements are listed below in AMNP Table 1. Additional air monitoring information for these sites is detailed in AMNP Appendix B.

Table 1: National Core Multipollutant Monitoring Stations and Parameters

Core Based Statistical Area	Site Name	NO_y* and NO*	SO_2*	O_3	CO*	$PM_{2.5}$ mass filter-based	$PM_{2.5}$ mass continuous	$PM_{2.5}$ speciation	$PM_{10-2.5}$	Meteorology
Dallas-Fort Worth-Arlington	Dallas Hinton	√	√	√	√	√	√	√	√	√
Houston-Pasadena-The Woodlands	Houston Deer Park #2	√	√	√	√	√	√	√	√	√
El Paso	El Paso Chamizal	√	√	√	√	√	√	√	√	√

*instrument capable of measuring trace levels (high sensitivity)
- number
CO – carbon monoxide
NO_y – total reactive nitrogen compounds
NO – nitrogen oxide
SO_2 – sulfur dioxide
O_3 – ozone
$PM_{2.5}$ – particulate matter of 2.5 micrometers or less in diameter
$PM_{10-2.5}$ – coarse particulate matter
Meteorology – includes wind speed, wind direction, ambient temperature, and relative humidity

Photochemical Assessment Monitoring Stations (PAMS) Requirements

The PAMS network is an O_3 precursor monitoring network operated by state and local agencies that measures O_3, its precursors, and meteorological variables at NCore sites in metropolitan areas with a CBSA population of 1,000,000 or more persons. The main objective of the required PAMS sites is to develop a database of O_3 precursors and meteorological measurements to support O_3 model development and track trends of important O_3 precursor concentrations. TCEQ's PAMS network also includes enhanced O_3 monitoring in currently designated O_3 nonattainment areas, and areas with previous O_3 nonattainment designations that have not been formally redesignated to attainment.

The minimum PAMS measurements include the following:

- speciated volatile organic compounds (VOCs);
- carbonyl compounds, three eight-hour samples on a 1-in-3 day schedule during June, July, and August;
- O_3;
- true (direct-read) nitrogen dioxide (NO_2);
- NO and NO_y;
- ambient temperature;
- wind direction and wind speed;

- atmospheric pressure;
- relative humidity;
- precipitation;
- mixing-height;
- solar radiation; and
- ultraviolet radiation.

Monitoring Requirements

State monitoring agencies are required to measure and report PAMS measurements at each required NCore site located in CBSAs with populations greater than 1,000,000, based on the latest available census figures. Two of the three NCore sites in Texas are located in CBSAs with populations meeting this requirement. The El Paso CBSA, according to the most recent census figures, does not meet this requirement. The Texas 2023 U.S. Census Bureau population estimates are listed in AMNP Appendix C. TCEQ meets PAMS monitoring requirements listed in 40 CFR Part 58, Appendix D, Section 5(b) with the measurements at the two NCore/PAMS sites listed below in AMNP Table 2.

Table 2: Photochemical Assessment Monitoring Stations and Parameters

Core Based Statistical Area	Site Name	VOCs	Carbonyl compounds	O_3	True NO_2	NO_y and NO	Ambient Temperature	Wind Direction and Speed	Atmospheric Pressure	Relative Humidity	Precipitation	Mixing-Height*	Solar Radiation	Ultraviolet Radiation
Dallas-Fort Worth-Arlington	Dallas Hinton	√	√	√	√	√	√	√	√	√	√	√	√	√
Houston-Pasadena-The Woodlands	Houston Deer Park #2	√	√	√	√	√	√	√	√	√	√	√	√	√

*Mixing height requirement for the Houston-Pasadena-The Woodlands core based statistical area is met at the La Porte Airport site as approved by the Environmental Protection Agency in a letter dated October 19, 2018, approving the *2018 Annual Monitoring Network Plan.*
- number sign
VOCs – volatile organic compounds speciated
O_3 – ozone
NO_2 – nitrogen dioxide
NO_y – total reactive nitrogen compounds
NO – nitrogen oxide

TCEQ developed an Enhanced Monitoring Plan detailing enhanced O_3 and O_3 precursor monitoring activities in addition to the PAMS requirements. The Enhanced Monitoring Plan was provided as an appendix to the 2019 AMNP and approved by the EPA. The Enhanced Monitoring Plan includes details on additional O_3, NO_x and/or NO_y, speciated VOC, and meteorology monitoring at locations other than those required. Air monitoring information for these additional Enhanced Monitoring Plan monitors, identified as PAMS in the Network column, is listed in AMNP Appendix B.

Nitrogen Dioxide (NO_2)

TCEQ's NO_2 network includes measurements for NO, NO_2, true NO_2, and NO_y parameters sited in compliance with federal monitoring requirements, as discussed further in this section. TCEQ's NO_2 network is designed to meet area-wide, Regional Administrator 40 (RA-40), near-road, PAMS, and NCore monitoring requirements, as specified in 40 CFR Part 58. TCEQ is required to operate a total of 20 monitors that measure NO, NO_2, true NO_2, and NO_y and exceeds the requirements with 57 monitors that measure those parameters. AMNP Appendix D summarizes the monitoring requirements for NO, NO_2, true NO_2, and NO_y in each Texas CBSA. TCEQ utilizes a variety of instruments to measure these parameters; including an oxides of nitrogen (NO_x) instrument that reports NO_2, NO, and NO_x data; an instrument that measures NO_2 directly, and an NO_y instrument that reports NO_y and NO data. TCEQ air monitoring instrumentation for these measurements varies by site. The instrumentation measurement method is based on the specific federal monitoring objective. AMNP Appendix B lists the air monitoring sites and instrumentation measurement methods where NO_x, NO, NO_2, true NO_2, and NO_y are measured.

Monitoring Requirements

Area-Wide Monitoring Requirements

Title 40 CFR Part 58, Appendix D, Section 4.3.3 requires one area-wide ambient air quality monitoring site in each CBSA with a population of 1,000,000 or more persons. The requirements stipulate that these sites be located in areas with the highest expected NO_2 concentration that are also representative of a neighborhood or larger (urban) spatial scale. Title 40 CFR Part 58, Appendix D, Section 4.3.5 (3) and (4), define neighborhood scale monitoring as representative of ambient air concentrations in an area between 0.5 and 4.0 kilometers with relatively uniform land use. Urban scale monitoring is representative of ambient air concentrations over large portions of an urban area with dimensions between 4 and 50 kilometers.

Based on 2023 U.S. Census Bureau population estimates for Texas as noted in AMNP Appendix D, area-wide neighborhood or urban scale NO_2 monitoring is required in four Texas CBSAs. The EPA approved the sites listed below to meet these NO_2 area-wide requirements in the 2013 AMNP response letter dated May 28, 2014.

- Austin CBSA: Austin North Hills Drive
- Dallas-Fort Worth-Arlington (DFW) CBSA: Dallas Hinton
- Houston CBSA: Clinton
- San Antonio-New Braunfels (San Antonio) CBSA: San Antonio Northwest

Regional Administrator Monitoring Requirements

Title 40 CFR Part 58, Appendix D, Section 4.3.4 states that the EPA Regional Administrators collaborate with the states to designate a minimum of 40 NO_2 monitoring stations nationwide that are positioned to protect susceptible and vulnerable populations (referred to as RA-40 monitoring requirements). TCEQ collaborated with the EPA Regional Administrator to identify the four Texas RA-40 NO_2 monitoring sites (monitoring with NO_x instruments) listed below to meet the portion of this requirement attributed to Texas, approved by the EPA in the 2013 AMNP response letter dated May 28, 2014.

- Beaumont-Port Arthur (Beaumont) CBSA: Nederland 17th Street
- DFW CBSA: Arlington Municipal Airport
- El Paso CBSA: Ascarate Park Southeast (SE)
- Houston CBSA: Clinton

Near-Road Monitoring Requirements

Title 40 CFR Part 58, Appendix D, Section 4.3.2 requires one microscale near-road NO_2 monitor located near a major road with high annual average daily traffic (AADT) counts in each CBSA with a population of 1,000,000 or more persons. An additional near-road monitor is required in each CBSA with a population of 2,500,000 or more persons. TCEQ's near-road monitoring network meets these requirements with the seven current sites (monitoring with NO_x instruments) listed below.

- Austin CBSA: 1 site - Austin North Interstate 35
- DFW CBSA: 2 sites - Dallas LBJ Freeway and Fort Worth California Parkway North
- Houston CBSA: 2 sites - Houston Southwest Freeway and Houston North Loop
- San Antonio CBSA: 2 sites - San Antonio Interstate 35 and San Antonio Interstate 10 West (new site detailed in the section below)

Previously Recommended Changes

To meet near-road monitoring requirements in the San Antonio CBSA, the EPA approved a revised location for a second near-road site named San Antonio Interstate 10 West in a letter dated November 27, 2023. TCEQ experienced unexpected challenges in securing power to the site, including lengthy power provider delays and theft of electrical infrastructure. TCEQ deployed the San Antonio Interstate 10 West site and NO_x monitor on March 31, 2025.

Regulatory NO_2 Monitoring Network Changes

TCEQ evaluated the current NO_2 monitoring network with the changes described above and determined the existing NO_2 network, with the activation of the second San Antonio near-road NO_2 monitoring site, meets all federal monitoring requirements; therefore, no changes are recommended.

Sulfur Dioxide (SO_2)

TCEQ's SO_2 network includes monitors sited to meet federal SO_2 and high-sensitivity SO_2 monitoring requirements. TCEQ's SO_2 network is designed to meet the monitoring requirements based on the population weighted emissions index (PWEI) by CBSA, 2015 *Data Requirements Rule (DRR) for the 1-Hour Sulfur Dioxide Primary NAAQS*, and NCore monitoring requirements, as discussed above and further in this section. TCEQ is required to operate a total of 17 SO_2 monitors and exceeds the requirements with 31 monitors. A summary of the CBSA PWEI calculations, associated monitoring requirement evaluations, and current number of SO_2 monitors in each CBSA is shown in AMNP Appendix E. AMNP Appendix B lists the air monitoring sites where SO_2 is measured.

Monitoring Requirements

Population Weighted Emissions Index Requirements

Title 40 CFR Part 58, Appendix D, Section 4.4.2 requires states to establish an SO_2 monitoring network based on the PWEI calculations for Texas CBSAs. These indices are calculated by multiplying the CBSA population by the emissions inventory (EI) data for counties within that CBSA, using an aggregate of the most recent EI data. The National Emissions Inventory (NEI) is released by the EPA every three years and combines emissions inventory estimates for point, nonpoint (area), on-road, non-road, and wildfire and prescribed burn event sources. TCEQ updates point-source emissions data annually from sources that meet the criteria in 30 Texas Administrative Code §101.10. Data from the most recent NEI with the most recent point-source EI aggregate calculated values are divided by one million to obtain the CBSA PWEI. The PWEI monitoring requirements include the following:

- one monitor in CBSAs with a PWEI equal to or greater than 5,000, but less than 100,000;
- two monitors in CBSAs with a PWEI equal to or greater than 100,000, but less than 1,000,000; and
- three monitors in CBSAs with a PWEI equal to or greater than 1,000,000.

TCEQ used the most recent quality assured data available – the 2023 U.S. Census Bureau population estimates and 2020 NEI data with 2023 TCEQ point-source EI data to calculate the PWEIs and determine the minimum monitoring requirements for each CBSA. AMNP Appendix E details this assessment by CBSA (with county level EI data) and lists the total number of required and existing SO_2 monitors per CBSA. Five SO_2 monitors are required based on the PWEI in four CBSAs. TCEQ exceeds this requirement as shown in AMNP Appendix E.

Data Requirements Rule (DRR) Requirements

Title 40 CFR § 51.1202 (the DRR) required air agencies to characterize air quality around applicable sources that emitted 2,000 tons per year (tpy) or more of SO_2 in the latest emissions inventory year. TCEQ evaluated the required 2014 emission inventory data to meet the July 1, 2016, notification deadline. TCEQ identified 24 sources for air quality characterization based on 2014 emissions inventory data, including 13 sources that were selected for air quality characterization by ambient air monitoring. To meet the DRR requirement for air quality characterization around those sources, 11 SO_2 source-oriented monitors, located near these 13 sources, were installed and operational by January 1, 2017. Details for TCEQ's DRR SO_2 source evaluation, modeling, and monitoring recommendations are in TCEQ 2017 AMNP, available upon request.

The Rockdale John D. Harper and San Antonio Gardner Road SO_2 source-oriented monitors were decommissioned based on design values less than 50% of the 2010 one-hour SO_2 NAAQS, as provided by 40 CFR § 51.1203(c)(3). TCEQ's Rockdale John D. Harper SO_2 monitor (and entire site), was decommissioned in 2020, partially due to the sale/lease of the property. This monitor was eligible for decommission based on a design value less than 50% of the 2010 one-hour SO_2 NAAQS from data collected during the first three-year period of operation. The source near the Rockdale John D. Harper site that required DRR SO_2 air quality characterization was shut down in 2017. The San Antonio Gardner Road SO_2 monitor (and entire site), was decommissioned in

March 2023. This monitor was eligible for decommission based on a design value less than 50% of the 2010 one-hour SO_2 NAAQS. The source near the San Antonio Gardner Road SO_2 site that required DRR SO_2 air quality characterization was shut down in late 2018. The remaining TCEQ SO_2 monitors fulfilling DRR monitoring requirements are listed in AMNP Table 3.

Table 3: Data Requirements Rule Required SO_2 Monitoring Sites

Core Based Statistical Area	County Name	Air Monitoring Site Name
Amarillo	Potter	Amarillo Xcel El Rancho
Beaumont-Port Arthur	Orange	Orange 1st Street
Beaumont-Port Arthur	Jefferson	Port Arthur West 7th Street Gate 2
Big Spring*	Howard	Big Spring Midway
Borger*	Hutchinson	Borger FM 1559
College Station-Bryan	Robertson	Franklin Oak Grove
Corsicana*	Navarro	Richland Southeast 1220 Road
Longview	Harrison	Hallsville Red Oak Road
Mount Pleasant*	Titus	Cookville FM 4855

* Micropolitan statistical area
FM – farm to market
SO_2 – sulfur dioxide

Title 40 CFR § 51.1205(b) requires TCEQ to submit an annual report for areas where modeling of actual SO_2 emissions served as the basis for designating such area as attainment. The report must document the annual SO_2 emissions of each applicable source, provide an assessment of the cause of any emissions increase from the previous year, and make a recommendation regarding further modeling needs. The DRR-required assessment and recommendation are provided in AMNP Appendix F. Where allowable SO_2 emissions served as the basis for designating the area as attainment, air agencies are not subject to ongoing data requirements, see 40 CFR § 51.1205(c).

Previously Recommended Changes

TCEQ 2024 AMNP recommended no changes to the SO_2 monitoring network.

Regulatory SO_2 Monitoring Network Changes

TCEQ recommends updating SO_2 monitor types from SLAMS to special purpose monitor (SPM) for monitors that are not used to show compliance with the minimum requirements under 40 CFR Part 58 or 40 CFR § 51.1202, as summarized in the AMNP SO_2 Monitoring Requirements section above. The following SO_2 monitors are not required to meet minimum requirements:

- Austin North Hills Drive – change SO_2 monitor from SLAMS to SPM;
- Corpus Christi Huisache – change SO_2 monitor from SLAMS to SPM;
- Corpus Christi Tuloso – change SO_2 monitor from SLAMS to SPM; and
- Waco Mazanec – change SO_2 monitor from SLAMS to SPM.

TCEQ recommends deactivating the Corpus Christi West and the Park Place SO_2 monitors designated as SPM by December 31, 2025. These SO_2 monitor data were evaluated during the TCEQ 2020 and 2025 Five-Year Assessments as providing low value air quality information in their respective areas. These SO_2 monitors are not required to meet federal minimum requirements and are eligible for deactivation with design values trending less than 17% of the 2010 one-hour SO_2 NAAQS. These operational resources will be reallocated to support the new air quality monitoring sites in these respective areas.

Lead (Pb)

TCEQ's Pb network includes total suspended particulate (TSP) monitors sited in compliance with federal source-oriented SLAMS requirements, as discussed further in this section. TCEQ is required to operate three TSP Pb monitors and meets this requirement. AMNP Appendix G lists the Pb network monitoring requirements and the total number of TSP Pb monitors. AMNP Appendix B lists the air monitoring sites with TSP Pb monitors.

Monitoring Requirements

TCEQ's Pb network meets 40 CFR Part 58, Appendix D, Section 4.5 monitoring requirements for Pb. TCEQ fulfills Pb monitoring requirements with TSP Pb monitors. This section requires state agencies to conduct ambient air Pb monitoring near Pb sources that have been shown or are expected to contribute to a maximum ambient air Pb concentration in excess of the standard. Title 40 CFR Part 58, Appendix D, Section 4.5(a) requires a minimum of one source-oriented ambient air Pb monitoring site to measure maximum concentrations near each non-airport facility emitting 0.50 tpy or more of Pb annually, based on either the most recent NEI data or annual EI data submitted to meet state reporting requirements.

TCEQ evaluated the 2021, 2022, and 2023 Pb point-source EI data. All Texas 2023 point-source emissions remain below the 0.50 tpy threshold that would trigger Pb monitoring requirements. AMNP Table 4 below includes information regarding historical data for sources that previously exceeded 0.50 tpy annual Pb point-source emissions, thus requiring source-oriented monitoring or a waiver in the last five years.

Table 4: 2021-2023 Lead Point-Source Emissions Inventory Data

Facility Name	County	2021 Pb Emissions (tpy)	2022 Pb Emissions (tpy)	2023 Pb Emissions (tpy)	TCEQ Comments
Lower Colorado River Authority	Fayette	0.1320	0.1423	0.1006	Pb waiver renewal approved April 29, 2021, see Pb Waivers section below for detail
Conecsus, LLC	Kaufman	0.2130	0.0833	0.097	Pb is monitored at Terrell Jamison Court*

*TCEQ Terrell Temtex site temporarily decommissioned on May 31, 2022, due to the property owner revocation of the lease agreement and was reactivated at Terrell Jamison Court on October 17, 2024. (see AMNP Table 12 for additional information)
LLC – limited liability company
Pb – lead
TCEQ – Texas Commission on Environmental Quality
tpy – tons per year

Pb Waivers

Under 40 CFR Part 58, Appendix D, Section 4.5(a)(ii), the EPA Regional Administrator may waive the requirement in 40 CFR Part 58, Appendix D, 4.5(a) for monitoring near specific Pb sources with sufficient demonstration that the Pb source will not contribute to a maximum concentration in ambient air greater than 50% of the NAAQS based on historical monitoring data, modeling, or other approved means. All approved waivers must be renewed every five years as part of the network assessment required under 40 CFR Part 58.10(d).

TCEQ submitted a Pb modeling analysis for the Lower Colorado River Authority Fayette Power Plant in the 2020 TCEQ *Texas Five-Year Ambient Monitoring Network Assessment.* The Pb modeling analysis demonstration, necessary to request a waiver from the source-oriented Pb monitoring requirement, indicated the predicted maximum ground level concentration for a rolling three-month average would be below 50% of the NAAQS. The EPA Region 6 approved TCEQ's Pb waiver renewal request in a letter dated April 29, 2021. Based on the Lower Colorado River Authority Fayette Power Plant 2021, 2022, and 2023 Pb point-source emission data shown above in AMNP Table 4, the Pb waiver is no longer required.

Collocation Requirements

Title 40 CFR Part 58, Appendix A, Section 3.4.4 requires a primary quality assurance organization to select 15% of the Pb monitoring sites within the network for collocated quality control (QC) monitoring. The first of these monitors should be the one measuring the highest Pb concentrations in the network. Based on the current network of primary Pb monitors, TCEQ is required to maintain one collocated QC Pb monitor. TCEQ exceeds this requirement with the operation of collocated QC Pb monitors at Frisco Eubanks and Terrell Jamison Court.

Previously Recommended Changes

TCEQ relocated the Terrell Temtex Pb monitor 0.2 mile south to Terrell Jamison Court on October 17, 2024, due to property owner revocation of the Terrell Temtex site usage agreement. EPA approved the site relocation in a letter dated January 9, 2024.

Regulatory Pb Monitoring Network Changes

TCEQ evaluated the current Pb monitoring network and determined the existing Pb network meets all federal monitoring requirements; therefore, no changes are recommended.

Ozone (O_3)

TCEQ's O_3 network is designed to meet SLAMS, PAMS, and NCore monitoring requirements, as discussed further in this section. TCEQ's O_3 monitoring network is required to operate a total of 28 O_3 monitors and will meet and exceed this requirement with 70 O_3 monitors in 15 MSAs and 2 micropolitan statistical areas and the addition of the Lubbock MSA recommendation discussed below. AMNP Appendix H lists the O_3 requirements and number of monitors in each MSA. AMNP Appendix B lists the air monitoring sites where O_3 is measured.

Monitoring Requirements

SLAMS Requirements

Title 40 CFR Part 58, Appendix D, Section 4.1 requires O_3 monitoring in each MSA with a population of 350,000 or more persons. Monitoring is also required in MSAs with lower populations if the design value for that MSA is equal to or greater than 85% of the NAAQS. Specific SLAMS O_3 minimum monitoring requirements are included below in AMNP Table 5, an excerpt of 40 CFR Part 58, Appendix D, Table D-2. TCEQ evaluated 2023 U.S. Census Bureau population estimates and 2021-2023 eight-hour O_3 design values for each Texas MSA. AMNP Appendix H details this assessment by MSA and lists the total number of required and existing SLAMS and NCore/PAMS O_3 monitors per MSA. TCEQ must operate a minimum of 25 SLAMS and three NCore/PAMS O_3 monitors in Texas MSAs to meet network requirements and will meet and exceed this requirement by operating 70 total O_3 monitors and the addition of one recommended Lubbock MSA O_3 monitor to meet new population level requirements described below.

Table 5: Ozone SLAMS Minimum Monitoring Requirements

MSA Population	Monitors required for MSAs with most recent 3-year design value concentrations ≥85% of any O_3 NAAQS[1]	Monitors required for MSAs with most recent 3-year design value concentrations <85% of any O_3 NAAQS[2, 3]
>10,000,000	4	2
4,000,000 to 10,000,000	3	1
350,000 to <4,000,000	2	1
50,000 to <350,000	1	0

[1]The ozone (O_3) National Ambient Air Quality Standards (NAAQS) levels are defined in 40 CFR Part 50.
[2]These minimum monitoring requirements apply in the absence of a design value.
[3]MSA must contain an urbanized area of 50,000 or more population and are designated by the United States Office of Management and Budget.
≥ - greater than or equal to
> - greater than
< - less than
% - percent
MSA – metropolitan statistical area
SLAMS – State or Local Air Monitoring Stations

Previously Recommended Changes

TCEQ 2024 AMNP recommended no changes to the O_3 monitoring network.

Regulatory O_3 Monitoring Network Changes

The OMB added three counties to the Lubbock MSA, subsequently increasing the 2023 U.S. Census Bureau population estimate to over 350,000. The 2023 Lubbock MSA estimated population requires the addition of an O_3 monitor. TCEQ is evaluating Lubbock MSA O_3 monitor placement options, including utilization of the existing Lubbock 12th Street air monitoring site. The Lubbock MSA O_3 monitor is expected to be deployed by December 31, 2026.

Carbon Monoxide (CO)

TCEQ's CO network includes CO and high sensitivity CO monitoring to meet federal monitoring requirements, as discussed here and in the NCore section above. TCEQ's

CO network is designed to meet NCore and near-road monitoring requirements. The agency is required to operate seven total CO monitors and exceeds the requirements with 11 monitors: seven CO monitors and four high sensitivity CO monitors measuring trace-level concentrations. AMNP Appendix I lists the required and current CO monitors in each CBSA. AMNP Appendix B lists the air monitoring sites where CO is measured.

Monitoring Requirements

Near-Road Requirements

Title 40 CFR Part 58, Appendix D, Section 4.2 requires collocating one CO monitor with one required near-road NO_2 monitor in CBSAs with populations of 1,000,000 or more persons. TCEQ meets this requirement with CO monitors at the near-road sites below.

- DFW CBSA: Fort Worth California Parkway North
- Houston CBSA: Houston North Loop
- San Antonio CBSA: San Antonio Interstate 35
- Austin CBSA: Austin North Interstate 35

Previously Recommended Changes

TCEQ 2024 AMNP recommended no changes to CO monitoring network.

Regulatory CO Monitoring Network Changes

TCEQ evaluated the current CO monitoring network and determined the existing CO network meets all federal monitoring requirements; therefore, no changes are recommended.

Particulate Matter of 10 Micrometers or Less (PM_{10})

TCEQ's particulate matter of 10 micrometers or less in diameter (PM_{10}) network is designed to meet SLAMS monitoring requirements based on MSA populations and 24-hour concentration data, as discussed further in this section. TCEQ is required to operate between 18 and 45 PM_{10} monitors, depending on the PM_{10} concentrations observed in each MSA, and will meet this requirement with 24 monitors and the Killeen-Temple MSA recommendation listed below. AMNP Appendix J lists the required and current PM_{10} monitors in each MSA. AMNP Appendix B lists the air monitoring sites where PM_{10} is measured.

Monitoring Requirements

TCEQ's PM_{10} network is designed to meet the SLAMS requirements under 40 CFR Part 58, Appendix D, Section 4.6, which provides the minimum number of PM_{10} monitors required in MSAs based on population and available 24-hour average concentrations. Specific PM_{10} monitoring requirements are listed in AMNP Table 6 below, an excerpt of 40 CFR Part 58, Appendix D, Table D-4. Modifications from these PM_{10} monitoring requirements must be approved by the EPA Regional Administrator. Compliance with the PM_{10} standard is based on the number of measured exceedances of the 24-hour 150 micrograms per cubic meter ($\mu g/m^3$) standard averaged over three years. TCEQ

evaluated 2023 U.S. Census Bureau population estimates and 2021-2023 PM_{10} available maximum 24-hour concentration data for each Texas MSA. AMNP Appendix J, Table 1, details this evaluation by MSA and lists the range of required and existing SLAMS PM_{10} monitors per MSA.

Table 6: Particulate Matter of 10 Micrometers or Less SLAMS Minimum Monitoring Requirements

MSA Population	PM_{10} monitors required for MSAs with high concentration[1]	PM_{10} monitors required for MSAs with medium concentration[2]	PM_{10} monitors required for MSAs with low concentration[3]
>1,000,000	6-10	4-8	2-4
500,000 to 1,000,000	4-8	2-4	1-2
250,000 to 500,000	3-4	1-2	0-1
100,000 to 250,000	1-2	0-1	0

> – greater than
[1]High Concentration areas are those for which ambient PM_{10} data show ambient concentrations exceeding the PM_{10} National Ambient Air Quality Standards (NAAQS) by 20 percent or more.
[2]Medium Concentration areas are those for which ambient PM_{10} data show ambient concentrations exceeding 80 percent of the PM_{10} NAAQS.
[3]Low Concentration areas are those for which ambient PM_{10} data show ambient concentrations less than 80 percent of the PM_{10} NAAQS.
MSA – metropolitan statistical area
PM_{10} – particulate matter of 10 micrometers or less in diameter
SLAMS – State or Local Air Monitoring Stations

Collocation Requirements

Title 40 CFR Part 58, Appendix A, Section 3.3.4 requires a primary quality assurance organization to select 15% of the PM_{10} manual filter-based monitors within the network for collocated QC sampling. Collocated QC sampling for PM_{10} is only required for manual monitors. At least 50% of the selected manual filter-based monitors should have an annual mean particulate matter concentration among the highest in the network. AMNP Appendix J, Table 2 lists the PM_{10} manual filter-based monitors' maximum 24-hour concentration measurements during the three-year period from 2021-2023 and includes the 2021, 2022, and 2023 annual mean concentrations. TCEQ evaluates the PM_{10} manual filter-based concentration data annually to ensure the PM_{10} collocated QC monitors continue to meet 40 CFR Part 58, Appendix A, Section 3.3.4.2. The Houston Monroe monitor measured PM_{10} annual mean concentrations among the highest in TCEQ's PM_{10} manual filter-based network from 2021 to 2023. Based on the current network of 14 PM_{10} manual monitors, TCEQ is currently required to operate two manual PM_{10} collocated QC monitors and exceeds this requirement with the three monitors listed below. As noted below, the number of required manual PM_{10} collocated QC monitors will change to one in the future with planned continuous monitor upgrades.

- Houston CBSA: Houston Monroe - PM_{10} FRM manual filter-based with collocated QC PM_{10} FRM manual filter-based
- DFW CBSA: Convention Center - PM_{10} FRM manual filter-based with collocated QC PM_{10} FRM manual filter-based
- El Paso CBSA: Ojo De Agua - PM_{10} FRM manual filter-based with collocated QC PM_{10} FRM manual filter-based

Previously Recommended Changes

As approved in the 2023 AMNP, TCEQ recommended replacing the Convention Center and Ojo De Agua PM_{10} FRM manual filter-based monitors with continuous PM_{10} FEM monitors. The Convention Center site is located on a building rooftop and may be temporarily deactivated during extensive roof replacement. The Convention Center continuous PM_{10} FEM replacement is expected after roof replacement by December 31, 2026. The Ojo De Agua upgrade to continuous PM_{10} FEM is pending and expected by December 31, 2025. TCEQ also recommended to discontinue the PM_{10} FRM manual collocated QC monitors at Convention Center and Ojo De Agua when the primary PM_{10} FRM manual monitors were replaced with a continuous PM_{10} FEM monitor. The Ojo De Agua and Convention Center PM_{10} FRM manual collocated QC monitors will continue to operate until the primary PM_{10} FRM manual monitors are replaced with continuous PM_{10} FEM monitors.

As approved in the 2024 AMNP, TCEQ recommended replacing and upgrading the Clinton, El Paso Mimosa, and Van Buren PM_{10} FRM manual filter-based monitors with continuous PM_{10} FEM monitors. A continuous PM_{10} FEM monitor was activated at Clinton on October 16, 2024. The Clinton primary and collocated QC manual PM_{10} monitors were deactivated on February 25, 2025, and the collocated QC PM_{10} FRM manual monitor was relocated to Houston Monroe on March 2, 2025. TCEQ continues to upgrade the PM_{10} network by replacing PM_{10} FRM manual filter-based monitors with PM_{10} FEM continuous monitors. The upgrade and deployment statuses are listed below in AMNP Table 7.

Table 7: Particulate Matter of 10 Micrometers or Less Monitor Upgrade Status

Metropolitan Statistical Area	Site Name	Existing Monitor	New Monitor	Status
Dallas-Fort Worth-Arlington	Convention Center (roof replacement pending)	PM_{10} FRM manual filter-based	PM_{10} FEM continuous	Expected after roof replacement by December 31, 2026
Dallas-Fort Worth-Arlington	Dallas Bexar	PM_{10} FRM manual filter-based	PM_{10} FEM continuous	Expected by December 31, 2025
El Paso	Ivanhoe	PM_{10} FRM manual filter-based	PM_{10} FEM continuous	Expected by December 31, 2025
El Paso	Ojo De Agua	PM_{10} FRM manual filter-based	PM_{10} FEM continuous	Expected by December 31, 2025
El Paso	El Paso Mimosa	PM_{10} FRM manual filter-based	PM_{10} FEM continuous	Expected by December 31, 2026
El Paso	Van Buren	PM_{10} FRM manual filter-based	PM_{10} FEM continuous	Expected by December 31, 2026
Houston-Pasadena-The Woodlands-	Clinton	PM_{10} FRM manual filter-based	PM_{10} FEM continuous	Completed October 16, 2024

Metropolitan Statistical Area	Site Name	Existing Monitor	New Monitor	Status
Houston-Pasadena-The Woodlands	Texas City Fire Station	PM_{10} FRM manual filter-based	PM_{10} FEM continuous	Expected by December 31, 2025
Houston-Pasadena-The Woodlands	New Site: Houston Finnigan Park, pending site deployment	None	PM_{10} FEM continuous	Expected by December 31, 2025

FEM – federal equivalent method
FRM – federal reference method designated for manual filter-based instruments
PM_{10} – particulate matter of 10 micrometers or less in diameter

Regulatory PM_{10} Monitoring Network Changes

TCEQ continues to evaluate PM_{10} FEM monitor technology and recommends replacing and upgrading the Austin Audubon Society, Earhart, Laredo Bridge, and Laredo College PM_{10} FRM manual filter-based monitors with continuous PM_{10} FEM monitors after the evaluation is completed. TCEQ also recommends relocating the Frank Wing Municipal Building PM_{10} FRM manual filter-based monitor approximately 4.5 miles west to the Old Highway 90 site, due to safety concerns, and upgrading to a continuous PM_{10} FEM monitor by December 31, 2025. The Frank Wing Municipal Building air monitoring site is located on a building roof and a relocation to the Old Highway 90 site would improve staff accessibility and safety. Frank Wing Municipal Building 2021-2023 PM_{10} data show ambient concentrations less than 65% percent of the PM_{10} NAAQS.

There is no federal requirement for continuous PM_{10} FEM method QC collocation and TCEQ recommends relocating or discontinuing the PM_{10} FRM manual filter-based collocated QC monitors when the primary monitor is replaced with a continuous PM_{10} FEM monitor. TCEQ will maintain 15% collocation of PM_{10} manual monitors to meet the collocation requirements described above. With the completion of these changes from PM_{10} FRM manual filter-based monitor upgrades to continuous, TCEQ will have two remaining PM_{10} FRM manual filter-based monitors requiring one manual PM_{10} collocated QC monitor.

Based on the most recent 2023 U.S. Census Bureau population estimates, TCEQ recommends activating a PM_{10} FEM continuous monitor at Temple Georgia in the Killeen-Temple MSA to meet federal monitoring requirements for MSAs with populations greater than 500,000 by December 31, 2026. TCEQ recommends adding the PM_{10} monitor to an existing site to maximize resources and expand the existing particulate monitoring at that site.

Particulate Matter of 2.5 Micrometers or Less ($PM_{2.5}$)

TCEQ's $PM_{2.5}$ monitoring network includes a combination of non-continuous FRM, continuous FEM, and non-NAAQS comparable monitors designed to meet SLAMS area, regional background, regional transport, NCore, and near-road network requirements, as discussed further in this section. $PM_{2.5}$ monitor types are detailed in Appendix B and Appendix K, Table 1 and Table 2. TCEQ is required to operate 40 FRM, FEM, $PM_{10-2.5}$, or speciated $PM_{2.5}$ monitors and exceeds the requirements with 69 monitors. An analysis of $PM_{2.5}$ monitoring requirements in each Texas MSA using the 2024 $PM_{2.5}$ NAAQS, 2023

U.S. Census Bureau population estimates, and 2021-2023 $PM_{2.5}$ design values is provided in AMNP Appendix K. Table 2 of this appendix details 2021-2023 design values and the total number of existing $PM_{2.5}$ monitors by site and MSA. AMNP Appendix B lists the air monitoring sites where $PM_{2.5}$ is measured.

Monitoring Requirements

General and Continuous Requirements

Title 40 CFR Part 58, Appendix D, Section 4.7 requires SLAMS $PM_{2.5}$ monitoring in MSAs with populations of 500,000 or more persons and in MSAs with lower populations if measured $PM_{2.5}$ design values for an MSA equal or exceed 85% of the NAAQS. Specific $PM_{2.5}$ monitoring requirements are listed in AMNP Table 8 below, with an excerpt of 40 CFR Part 58, Appendix D, Table D-5. Under 40 CFR Part 58, Appendix D, Section 4.7.2, TCEQ must operate continuous $PM_{2.5}$ monitors equal to at least one-half the required number of SLAMS-required sites in each MSA. TCEQ meets and/or exceeds this requirement by operating continuous $PM_{2.5}$ monitors in all Texas MSAs, shown in AMNP Appendix K, Table 2. Additionally, 40 CFR Part 58, Appendix D, Section 4.7.3 requires each state to install and operate at least one $PM_{2.5}$ site to monitor for regional background and at least one $PM_{2.5}$ site to monitor regional transport. AMNP Appendix B lists monitors meeting the regional background and transport requirements, with a monitoring objective of Upwind Background or Regional Transport, as prescribed by Air Quality System (AQS) transaction formats. Individual $PM_{2.5}$ monitors that are non-FEM/FRM and non-NAAQS comparable but considered acceptable for Air Quality Index use are noted in the AMNP Appendix B site list and in AMNP Appendix K, Table 2. Design criteria, under 40 CFR Part 58, Appendix D, Section 4.7.1(b) requires these $PM_{2.5}$ monitors to be sited to represent area-wide air quality. These monitoring sites are typically found in large, urban homogeneous areas, supporting neighborhood scale.

Table 8: Particulate Matter of 2.5 Micrometers or Less SLAMS Minimum Monitoring Requirements

MSA population	$PM_{2.5}$ monitors required for MSAs with most recent 3-year design value ≥85% of any $PM_{2.5}$ NAAQS	$PM_{2.5}$ monitors required for MSAs with most recent 3-year design value <85% of any $PM_{2.5}$ NAAQS
>1,000,000	3	2
500,000 to 1,000,000	2	1
50,000 to <500,000	1	0

> – greater than
≥ – greater than or equal to
< – less than
% - percent
MSA – metropolitan statistical area
NAAQS – National Ambient Air Quality Standards
$PM_{2.5}$ – particulate matter of 2.5 micrometers or less in diameter
SLAMS – State or Local Air Monitoring Stations

Near-Road $PM_{2.5}$ Requirements

Title 40 CFR Part 58, Appendix D, Section 4.7.1(b)(2) requires collocating one FRM or FEM $PM_{2.5}$ monitor with one required near-road NO_2 monitor in CBSAs with populations of 1,000,000 or more persons. TCEQ meets this requirement with $PM_{2.5}$ monitors at the near-road sites listed below, discussed further in this section, and listed in AMNP

Appendix K, Table 2. These sites are for high traffic corridors where the general public could be exposed to maximum concentrations from mobile sources, creating localized hot spots. The measurements are representative of the air quality in the area immediately around the sites as the traffic counts outside of those high traffic corridors drop off drastically on the surrounding streets. As such, these sites are appropriately designated as micro-scale as they are representative of air quality in a small area from several meters up to 100 meters around the sites.

- DFW CBSA: Fort Worth California Parkway North
- Houston CBSA: Houston North Loop
- San Antonio CBSA: San Antonio Interstate 35
- Austin CBSA: Austin North Interstate 35

Special Considerations for NAAQS Data Comparisons

$PM_{2.5}$ measurement data from all eligible monitors are comparable to the 24-hour $PM_{2.5}$ NAAQS. $PM_{2.5}$ measurement data from all eligible monitors that are representative of area-wide air quality are comparable to the annual $PM_{2.5}$ NAAQS. When $PM_{2.5}$ monitoring sites collectively identify a larger region of localized high ambient $PM_{2.5}$ concentrations, such sites would be considered representative of an area-wide location and, therefore, eligible for comparison to the annual $PM_{2.5}$ NAAQS. However, according to 40 CFR § 58.30, $PM_{2.5}$ measurement data from monitors that are not representative of area-wide air quality but rather of relatively unique micro-scale, localized hot spot, or unique middle-scale impact sites are not eligible for comparison to the annual $PM_{2.5}$ NAAQS but would remain eligible for comparison to the 24-hour $PM_{2.5}$ NAAQS. For example, if a micro- or middle-scale $PM_{2.5}$ monitoring site is adjacent to a unique dominating local $PM_{2.5}$ source, then the $PM_{2.5}$ measurement data from such a site would only be eligible for comparison to the 24-hour $PM_{2.5}$ NAAQS.

Collocation Requirements

Title 40 CFR Part 58, Appendix A, Section 3.2.3 requires a primary quality assurance organization to select 15% of the $PM_{2.5}$ primary monitors of each method designation (FRM or FEM) for collocated QC sampling. Based on the current network of five primary $PM_{2.5}$ FRM monitors, TCEQ is required to operate one collocated QC $PM_{2.5}$ FRM (FRM/FRM collocation) monitor and exceeds this requirement with the two monitors listed below.

- Houston CBSA: Clinton $PM_{2.5}$ FRM with collocated QC $PM_{2.5}$ FRM, method 145
- DFW CBSA: Dallas Hinton $PM_{2.5}$ FRM with collocated QC $PM_{2.5}$ FRM, method 145

For each primary monitor designated as an FEM, 50% of the monitors designated for collocation shall be collocated with an FRM (FRM/FEM) and 50% shall be collocated with a monitor having the same method designation as the FEM primary monitor (FEM/FEM). Fifty percent of the collocated QC monitors must be deployed at sites with annual average or daily concentrations estimated to be within plus or minus 20% of either the annual or 24-hour standard.

Based on the current $PM_{2.5}$ network of 43 FEM monitors designated with method code 209, TCEQ is required to operate six collocated QC monitors pursuant to 40 CFR Part 58, Appendix A, Section 3.2.3.2(b). AMNP Appendix B and Appendix K, Table 2 identify site placement of BAM-1022 method code 209 monitors. TCEQ meets the $PM_{2.5}$ method code 209 requirement with three same-method collocated (FEM/FEM collocation)

monitors and four different-method collocated (FEM/FRM collocation) monitors at the sites listed below in AMNP Table 9.

Table 9: Method Code 209 Particulate Matter of 2.5 Micrometers or Less FEM Collocated Quality Control Monitor Types and Sites

$PM_{2.5}$ FEM Primary Monitor Method Code	Collocated QC Monitor Type and Method Code	Site Name
209	$PM_{2.5}$ FRM manual filter-based, method 145	Midlothian North Ward Road (pending site relocation)
209	$PM_{2.5}$ FEM, method 209	Corpus Christi Huisache
209	$PM_{2.5}$ FRM manual filter-based, method 145	San Antonio Northwest
209	$PM_{2.5}$ FEM, method 209	Fort Worth California Parkway North
209	$PM_{2.5}$ FRM manual filter-based, method 145	Houston Aldine
209	$PM_{2.5}$ FEM, method 209	Port Arthur Memorial School
209	$PM_{2.5}$ FRM manual filter-based, method 145	Ascarate Park Southeast (Deployed May 9, 2024)

FEM – federal equivalent method
FRM – federal reference method
$PM_{2.5}$ – particulate matter of 2.5 micrometers in diameter or less
QC – quality control

In 2023, TCEQ deployed a new $PM_{2.5}$ FEM monitor designated by method code 638 to replace aging equipment. Based on the current $PM_{2.5}$ network of nine $PM_{2.5}$ FEM monitors designated with method code 638, TCEQ is required to operate one collocated QC monitor. AMNP Appendix B and Appendix K, Table 2 identify site placement of T640x method code 638 monitors. TCEQ exceeds the $PM_{2.5}$ method code 638 collocated QC requirement with two different-method collocated QC (FEM/FRM collocation) monitors and one same-method collocated QC (FEM/FEM collocation) monitor at the sites listed below in AMNP Table 10.

Additional information regarding TCEQ $PM_{2.5}$ collocation QC designations are listed in AMNP Appendix B.

Table 10: Method Code 638 Particulate Matter of 2.5 Micrometers or Less FEM Collocated Quality Control Monitor Types and Sites

$PM_{2.5}$ FEM Primary Monitor Method Code	Collocated QC Monitor Type and Method Code	Site Name
638	$PM_{2.5}$ FRM manual filter-based, method 145	Dallas Hinton
638	$PM_{2.5}$ FEM, method 638	Socorro Hueco

$PM_{2.5}$ FEM Primary Monitor Method Code	Collocated QC Monitor Type and Method Code	Site Name
638	$PM_{2.5}$ FRM manual filter-based, method 145	El Paso Chamizal

FEM – federal equivalent method
FRM – federal reference method
$PM_{2.5}$ – particulate matter of 2.5 micrometers in diameter or less
QC – quality control

Previously Recommended Changes

TCEQ 2022 AMNP recommended $PM_{2.5}$ monitoring at new sites in the Houston Fifth Ward, Houston Pleasantville neighborhood, and in the Gregory-Portland area in San Patricio County. In a letter dated March 3, 2023, the EPA acknowledged the new site additions and noted that the air monitoring sites were not federally required and were thus at the discretion of TCEQ. TCEQ utilized input from community groups to evaluate areas for the establishment of new ambient air monitoring sites at Finnigan Park in the Houston Fifth Ward and at Pleasantville Elementary School in the Houston Pleasantville area. Construction permits for the Houston Finnigan Park site are pending issuance by the City of Houston. Site construction is ongoing for the Houston Pleasantville Elementary site. TCEQ expects to activate these special purpose monitors by December 31, 2025, shortly after the site construction is completed. TCEQ is evaluating site options for the establishment of a new ambient air monitoring site in the Gregory-Portland area. TCEQ continues to work with property owners to establish site usage agreements and to deploy these special purpose monitors by December 31, 2026.

As approved in the 2024 AMNP, TCEQ upgraded the $PM_{2.5}$ non-NAAQS comparable monitor at Clinton to a $PM_{2.5}$ FEM continuous monitor on October 16, 2024 (listed in AMNP Table 11 above). As approved in an EPA letter dated February 13, 2025, TCEQ decreased the Clinton $PM_{2.5}$ FRM filter-based manual monitor sampling frequency from daily to once every six days, effective March 8, 2025.

TCEQ continues to complete previously recommended changes including the replacement of $PM_{2.5}$ FRM non-continuous monitors and non-NAAQS comparable $PM_{2.5}$ continuous monitors ($PM_{2.5}$ TEOMs) with $PM_{2.5}$ FEM continuous monitors. The status of previously approved $PM_{2.5}$ recommendations are listed in AMNP Table 11.

Table 11: Previously Approved Particulate Matter of 2.5 Micrometers or Less Summary of Changes

Site Name	Monitor(s) Replaced	New Monitor	Action	Status
Clinton	$PM_{2.5}$ TEOM	$PM_{2.5}$ FEM continuous	Method code change	Completed October 16, 2024
Dallas Bexar Street	$PM_{2.5}$ TEOM	$PM_{2.5}$ FEM continuous	Method code change	Expected to be completed by December 31, 2025

Site Name	Monitor(s) Replaced	New Monitor	Action	Status
El Paso UTEP	$PM_{2.5}$ TEOM	$PM_{2.5}$ FEM continuous	Method code change	Pending site relocation
Houston Finnigan Park (new site in Fifth Ward)	None – new monitor	$PM_{2.5}$ FEM continuous	Deploy	Expected to be completed by December 31, 2025
Houston Pleasantville Elementary (new site in Pleasantville neighborhood)	None – new monitor	$PM_{2.5}$ FEM continuous	Deploy	Expected to be completed by December 31, 2025
Midlothian North Ward Road	$PM_{2.5}$ TEOM	$PM_{2.5}$ FEM continuous	Method code change	Pending site relocation, expected to be completed by December 31, 2026
New site – Gregory-Portland area	None – new monitor	$PM_{2.5}$ FEM continuous	Deploy	Expected to be completed by December 31, 2026
Old Highway 90	$PM_{2.5}$ TEOM	$PM_{2.5}$ FEM continuous	Deploy	Completed July 10, 2024
Skyline Park	None – new monitor	$PM_{2.5}$ FEM continuous	Deploy	Expected to be completed by August 31, 2025

FEM – federal equivalent method
$PM_{2.5}$ – particulate matter of 2.5 micrometers or less in diameter
TEOM – tapered element oscillating microbalance
UTEP – University of Texas at El Paso

Reclassification of $PM_{2.5}$ Micro-scale Near-Road Monitors

TCEQ established near-road monitoring sites in accordance with 40 CFR Part 58, Appendices D and E and the *Near-Road NO_2 Technical Assistance Document* guidelines. The major roadways in each applicable CBSA were ranked by the highest AADT counts available at the time of the assessment. Space that met logistical and siting criteria for each required near-road site was identified within 50 meters of the highest ranked road segments. TCEQ's near-road site selection process is detailed in the TCEQ 2014 AMNP. TCEQ collocated a $PM_{2.5}$ monitor with the required near-road NO_2 monitor in all CBSAs with populations of 1,000,000 or more, including the CBSAs of Austin, DFW, Houston, and San Antonio, as required under 40 CFR Part 58, Appendix D, Section 4.7.1(b)(2). AMNP Table 12 details the TCEQ $PM_{2.5}$ micro-scale near-road monitors and activation dates.

Table 12: TCEQ $PM_{2.5}$ Micro-Scale Near-Road Monitor Details

Area	Site Name	Activation	AADT Ranking*	Distance to Nearest Traffic Lane (meters)	2023 AADT Count and Ranking
Austin CBSA	Austin North Interstate 35	January 7, 2017	7	27 to frontage road (45 to interstate)	145,079 (25th highest)
DFW CBSA	Fort Worth California Parkway North	March 12, 2015	36	15 to frontage road (35 to interstate)	157,398 (39th highest)
Houston CBSA	Houston North Loop	April 13, 2015	46	15 to interstate	196,933 (52nd highest)
San Antonio CBSA	San Antonio Interstate 35	January 1, 2017	21	20 to frontage road (48 to interstate)	201,612 (10th highest)

*at the time of the original assessment
AADT – annual average daily traffic
CBSA – core based statistical area
$PM_{2.5}$ - particulate matter of 2.5 micrometers or less

The traffic counts at the near-road monitoring sites are not representative across a CBSA as the counts on the roadway being monitored is generally 10 to 30 times greater than the surrounding area roadways. The $PM_{2.5}$ concentrations measured at the near-road sites are impacted by particulate matter from the nearby localized traffic and are not representative of area-wide air quality. $PM_{2.5}$ measurement data from all eligible monitors that are representative of area-wide air quality are comparable to the annual and 24-hour $PM_{2.5}$ NAAQS. However, according to 40 CFR § 58.30, $PM_{2.5}$ measurement data from monitors that are not representative of area-wide air quality but rather of relatively unique micro-scale, localized hot spot, or unique middle-scale impact sites are not eligible for comparison to the annual $PM_{2.5}$ NAAQS but would remain eligible for comparison to the 24-hour $PM_{2.5}$ NAAQS.

The following micro-scale near-road $PM_{2.5}$ monitoring site data are adjacent to a unique dominating local $PM_{2.5}$ source, and as such, the micro-scale $PM_{2.5}$ measurement data from these sites should only be eligible for comparison to the 24-hour $PM_{2.5}$ NAAQS. $PM_{2.5}$ monitors deployed to meet near-road monitoring requirements provide measurements of localized microenvironments near highly trafficked roadways that are not representative of a broader airshed. EPA noted in the response letter to the TCEQ's 2024 AMNP, dated January 15, 2025, that information on monitors that are not suitable for comparison against the annual $PM_{2.5}$ NAAQS, as described in 40 CFR § 58.30, should be identified in the AMNP. TCEQ requests approval to designate the micro-scale near-road site $PM_{2.5}$ monitor data as not suitable for comparison with the annual $PM_{2.5}$ NAAQS.

Austin North Interstate 35 Site Description

The Austin North Interstate 35 near-road site was approved north of the Interstate-35 frontage lane between Rundberg Lane and Barwood Park by the EPA in the 2013 AMNP approval letter dated May 28, 2014. Overview and street view cardinal direction images of the Austin North Interstate 35 site (shown with a green pin) are shown in Figure 1, Figure 2, and Figure 3. At the time of the 2013 AMNP assessment, the Austin North Interstate 35 near-road site was ranked as the seventh highest AADT in the Austin

CBSA. Figure 4 shows the most recent publicly available annual 2023 Texas Department of Transportation (TxDOT) traffic counts in yellow and the available five-year traffic counts in orange around the Austin North Interstate 35 site (shown with a green pin). TxDOT provided information that road construction along this Interstate 35 corridor has been ongoing since 2022. The ongoing road construction project includes adding additional north and southbound lanes, reconstructing ramps, and adding frontage road and mainline auxiliary lanes and has significantly increased the amount of localized particulate matter.

Other Austin CBSA $PM_{2.5}$ monitors have 2021-2023 annual $PM_{2.5}$ design values ranging between 8.7 to 9.3 µg/m^3. The Austin North Interstate 35 $PM_{2.5}$ annual design value is between 0.3 to 0.9 µg/m^3 higher than all other $PM_{2.5}$ monitors in the Austin CBSA during this time period, which is indicative of the amount of increased particulate matter due to the vehicle daily traffic count and ongoing construction. The Austin North Interstate 35 site is not representative of most other interstate areas since that location was selected near one of the highest Austin CBSA AADTs, making it adjacent to a unique dominating local $PM_{2.5}$ source. It is clear that micro-scale near-road air monitoring site data is not representative of area-wide air quality in the Ausitn CBSA; therefore, it should not be eligible for comparison to the annual $PM_{2.5}$ NAAQS.

The TCEQ recommends designating the Austin North Interstate 35 micro-scale $PM_{2.5}$ data as not comparable to the annual $PM_{2.5}$ NAAQS, effective from the date of activation, January 7, 2017. The Austin North Interstate 35 micro-scale $PM_{2.5}$ data will continue to be comparable to the 24-hour $PM_{2.5}$ NAAQS. The annual and 24-hour data will continue to be measured and reported to the EPA's AQS database and certified annually by the TCEQ. The Austin North Interstate 35 micro-scale $PM_{2.5}$ data is also reported publicly in near real-time on TCEQ's TAMIS, on the TCEQ's Air Quality Index Report webpage, and on EPA's AirNow website.

Title 40 CFR Part 58, Appendix D, Section 4.7 requires three $PM_{2.5}$ monitors in the Austin MSA based on the population and most recent design value. The TCEQ has two neighborhood Scale $PM_{2.5}$ monitors at the Austin Northwest Hills Drive and Austin Webberville Road sites and one micro-scale monitor at Austin Interstate 35 North. The TCEQ activated a state-initiative $PM_{2.5}$monitor at Austin Audubon Society on January 7, 2025. The TCEQ recommends adding the Austin Audubon Society $PM_{2.5}$monitor to the federal network discussed in this AMNP if the request to exclude the Austin North Interstate 35 micro-scale $PM_{2.5}$ data as not comparable to the annual $PM_{2.5}$ NAAQS is approved.

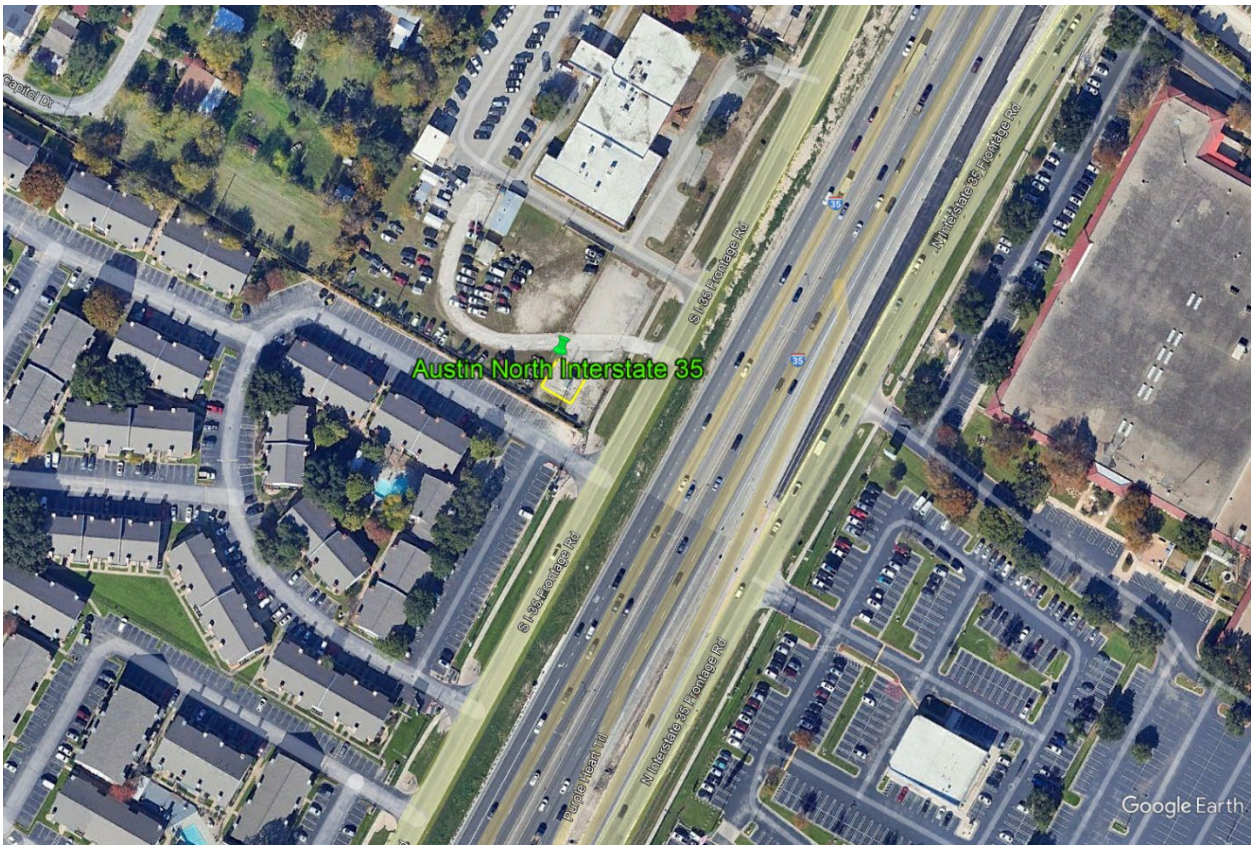


Figure 1: Austin North Interstate 35 Overview

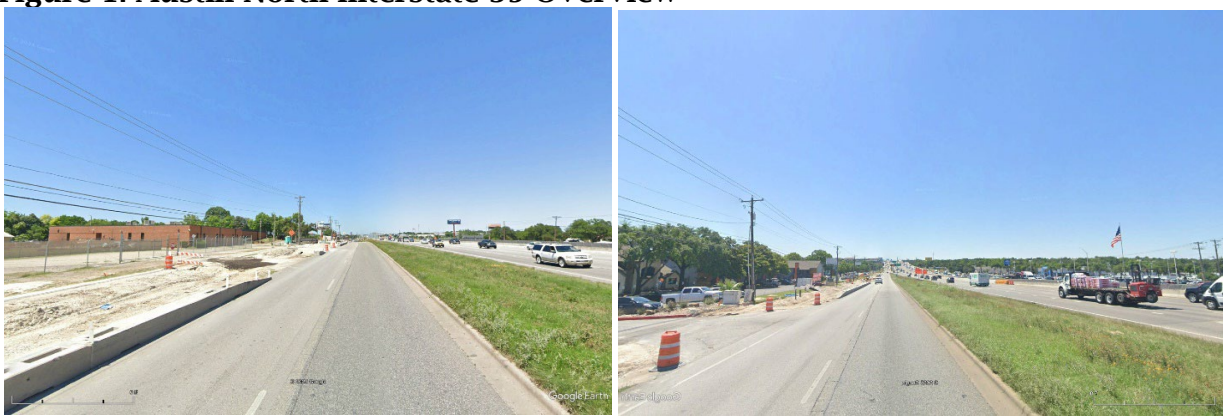


Figure 2: Austin North Interstate 35 - North and South Street Views



Figure 3: Austin North Interstate 35 - East and West Street Views

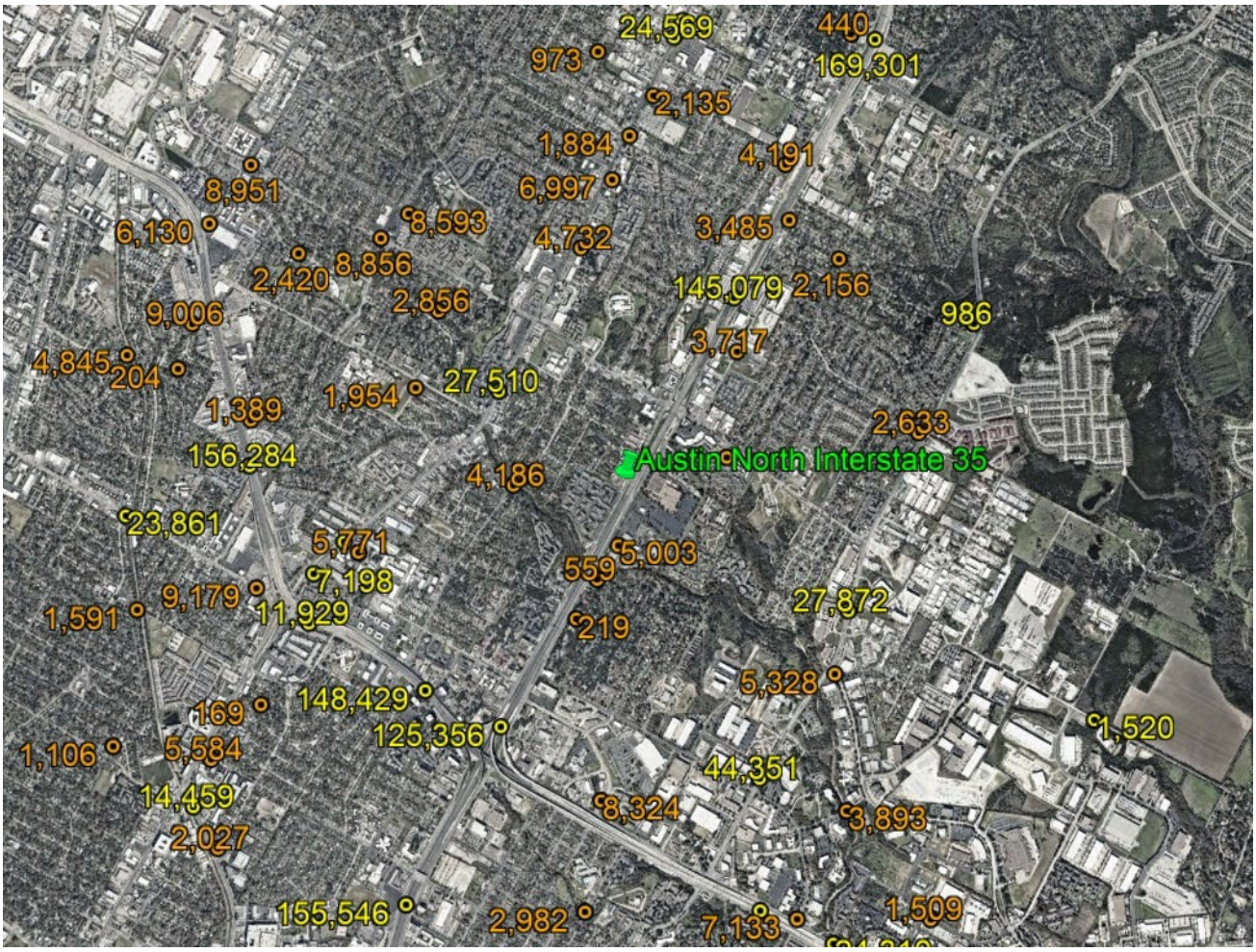


Figure 4: Austin North Interstate 35 and Surrounding Area With Annual and Five-Year Traffic Counts

Fort Worth California Parkway North Site Description

The Fort Worth California Parkway North near-road site was approved north of the Interstate-20 frontage lane between Crowley Road and Interstate 35 West by the EPA in an email dated December 3, 2014. Overview and roadway street view cardinal direction images of the Fort Worth California Parkway North site (shown with a green pin) are shown in Figure 5, Figure 6, and Figure 7. At the time of the assessment, the Fort Worth California Parkway North near-road site was ranked as the 36th highest AADT in the DFW CBSA. Figure 8 shows the most recently available annual 2023 TxDOT traffic counts in yellow and the available five-year traffic counts in orange around the Fort Worth California Parkway North site (shown with a green pin). TxDOT confirmed road construction along the Interstate 20 corridor has been ongoing since 2023. The ongoing road construction project includes texturing pavement, barrier upgrades, and concrete repairs and has increased the amount of localized particulate matter.

DFW CBSA $PM_{2.5}$ monitors have 2021-2023 annual $PM_{2.5}$ design values ranging between 7.7 to 9.9 µg/m³. While the Fort Worth California Parkway North $PM_{2.5}$ annual design value is 8.7 µg/m³, the monitor is exposed to higher amounts of particulate matter due to the vehicle daily traffic count and ongoing construction. The Fort Worth California Parkway North site is not representative of most other interstate areas since that location was chosen near one of the highest AADTs, making it adjacent to a unique

dominating local $PM_{2.5}$ source. It is clear that micro-scale near-road air monitoring site data is not representative of area-wide air quality in the DFW CBSA; therefore, it should not be eligible for comparison to the annual $PM_{2.5}$ NAAQS. The TCEQ recommends designating the Fort Worth California Parkway North micro-scale $PM_{2.5}$ data as not comparable to the annual $PM_{2.5}$ NAAQS, effective from the date of activation, March 12, 2015. The Fort Worth California Parkway North micro-scale $PM_{2.5}$ data will continue to be comparable to the 24-hour $PM_{2.5}$ NAAQS. The annual and 24-hour data will continue to be measured and reported to the EPA's AQS database and certified annually by the TCEQ. The Fort Worth California Parkway North micro-scale $PM_{2.5}$ data is also reported publicly in near real-time on TCEQ's TAMIS, on the TCEQ's Air Quality Index Report webpage, and on EPA's AirNow website.



Figure 5: Fort Worth California Parkway North Overview



Figure 6: Fort Worth California Parkway North – North and South Street Views



Figure 7: Fort Worth California Parkway North – East and West Street Views

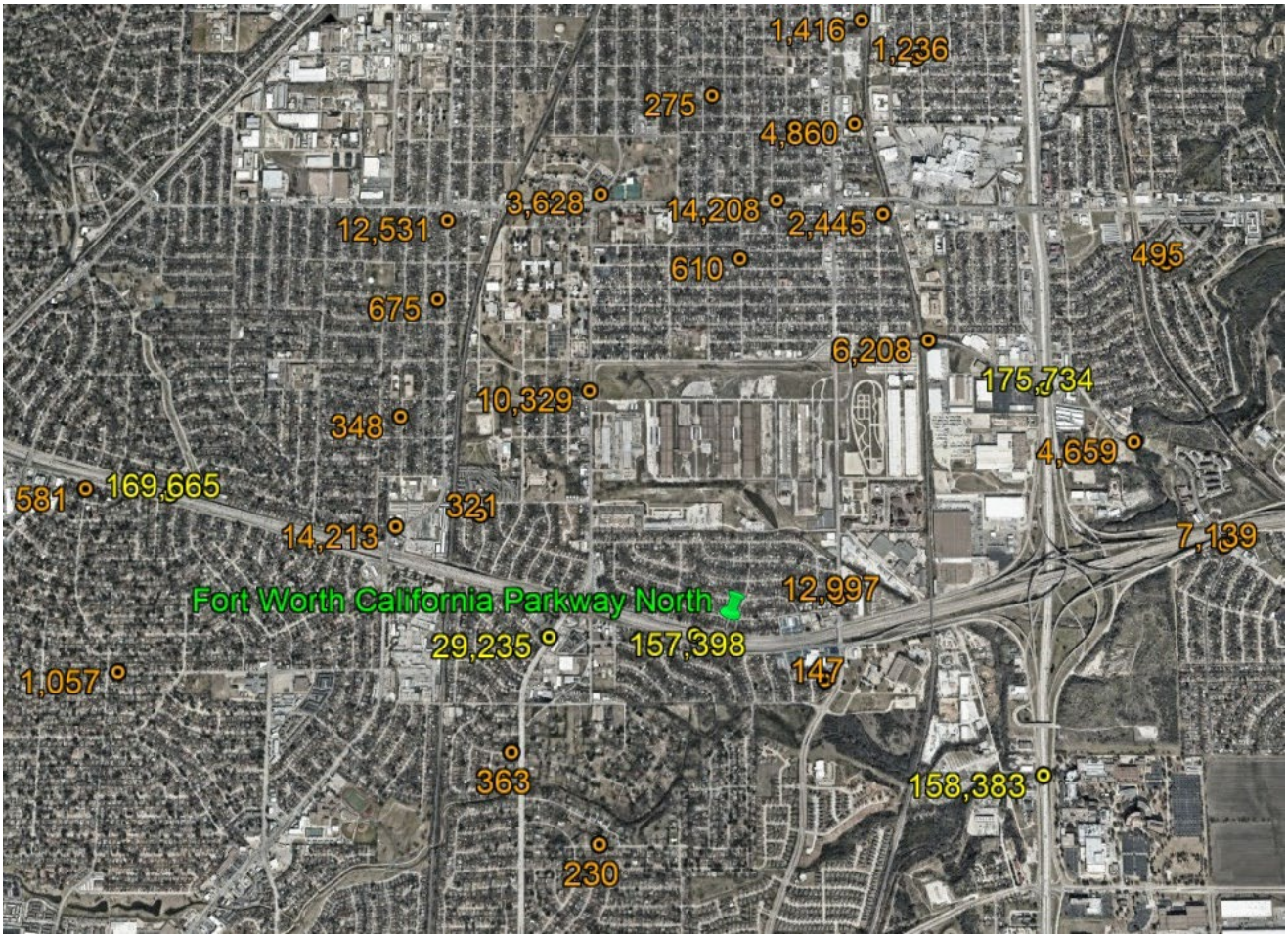


Figure 8: Fort Worth California Parkway North and Surrounding Area Annual and Five-Year Traffic Counts

Houston North Loop Site Description

The Houston North Loop near-road site was approved north of Interstate-610 between North Main Street and Interstate 45 by the EPA in an email dated December 3, 2014. Overview and street view cardinal direction images of the Houston North Loop site (shown with a green pin) are shown in Figure 9, Figure 10, and Figure 11. At the time of the assessment, the Houston North Loop near-road site was ranked as the 46th highest AADT in the Houston CBSA. Figure 12 shows the most recently available annual 2023

TxDOT traffic counts in yellow and the available five-year traffic counts in orange around the Houston North Loop site (shown with a green pin).

Houston CBSA $PM_{2.5}$ monitors have 2021-2023 annual $PM_{2.5}$ design values ranging between 8.3 to 12.5 µg/m³. The Houston North Loop $PM_{2.5}$ annual design value is the second highest $PM_{2.5}$ monitor in the Houston CBSA during this time period which is indicative of the amount of increased particulate matter due to the vehicle daily traffic count. The Houston North Loop site is not representative of most other interstate areas since that location was chosen near one of the highest AADTs, making it adjacent to a unique dominating local $PM_{2.5}$ source. It is clear that micro-scale near-road air monitoring site data is not representative of area-wide air quality in the Houston CBSA; therefore, it should not be eligible for comparison to the annual $PM_{2.5}$ NAAQS. The TCEQ recommends designating the Houston North Loop micro-scale $PM_{2.5}$ data as not comparable to the annual $PM_{2.5}$ NAAQS, effective from the date of activation, April 13, 2015. The Houston North Loop micro-scale $PM_{2.5}$ data will continue to be comparable to the 24-hour $PM_{2.5}$ NAAQS. The annual and 24-hour data will continue to be measured and reported to the EPA's AQS database and certified annually by the TCEQ. The Houston North Loop micro-scale $PM_{2.5}$ data is also reported publicly in near real-time on TCEQ's TAMIS, on the TCEQ's Air Quality Index Report webpage, and on EPA's AirNow website.



Figure 9: Houston North Loop Overview



Figure 10: Houston North Loop – North and South Street Views



Figure 11: Houston North Loop – East and West Street Views

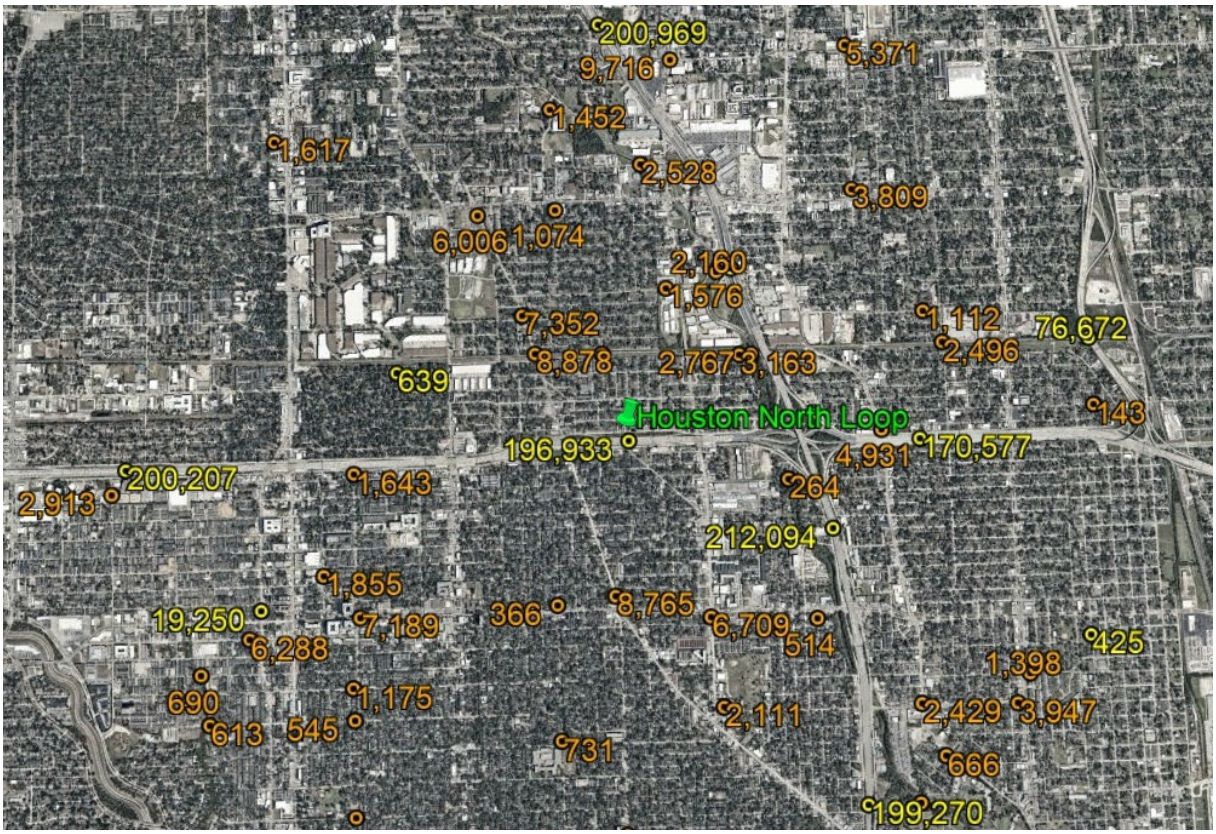


Figure 12: Houston North Loop and Surrounding Area Annual and Five-Year Traffic Counts

San Antonio Interstate 35 Site Description

The San Antonio Interstate 35 near-road site was approved east of the Interstate-35 frontage lane between Thousand Oaks Drive and Crestway Drive by the EPA during separate discussions and acknowledged in the approval letter of the TCEQ's 2014 AMNP received January 14, 2015. Overview and street view cardinal direction images of the San Antonio Interstate 35 site (shown with a green pin) are shown in Figure 13, Figure 14, and Figure 15. At the time of the assessment, the San Antonio Interstate 35 near-road site was ranked as the 21st highest AADT in the San Antonio CBSA and is ranked the 10th highest according to 2023 AADT. Figure 16 shows the most recently available annual 2023 TxDOT traffic counts in yellow and the available five-year traffic counts in orange around the San Antonio Interstate 35 site (shown with a green pin). Additionally, TxDOT confirmed road construction along this Interstate 35 corridor has been ongoing since 2021. The ongoing road construction project includes converting the existing eight main lanes to 14 main lanes and has significantly increased the amount of localized particulate matter.

Other San Antonio CBSA $PM_{2.5}$ monitors have 2021-2023 annual $PM_{2.5}$ design values ranging between 7.1 to 9.0 µg/m^3. The San Antonio Interstate 35 is the second highest $PM_{2.5}$ monitor in the San Antonio CBSA during this time period which is indicative of the amount of increased particulate matter due to the vehicle daily traffic count and ongoing construction. The San Antonio Interstate 35 site is not representative of most other interstate areas since that location was chosen near one of the highest AADTs, making it adjacent to a unique dominating local $PM_{2.5}$ source. It is clear that micro-scale near-road air monitoring site data is not representative of area-wide air quality in the San Antonio CBSA; therefore, it should not be eligible for comparison to the annual $PM_{2.5}$ NAAQS. TCEQ recommends designating the San Antonio Interstate 35 micro-scale $PM_{2.5}$ data as not comparable to the annual $PM_{2.5}$ NAAQS, effective from the date of activation, January 1, 2017. The San Antonio Interstate 35 -scale $PM_{2.5}$ data will continue to be comparable to the 24-hour $PM_{2.5}$ NAAQS. The annual and 24-hour data will continue to be measured and reported to the EPA's AQS database and certified annually by the TCEQ. The San Antonio Interstate 35 micro-scale $PM_{2.5}$ data is also reported publicly in near real-time on TCEQ's TAMIS, on the TCEQ's Air Quality Index Report webpage, and on EPA's AirNow website.

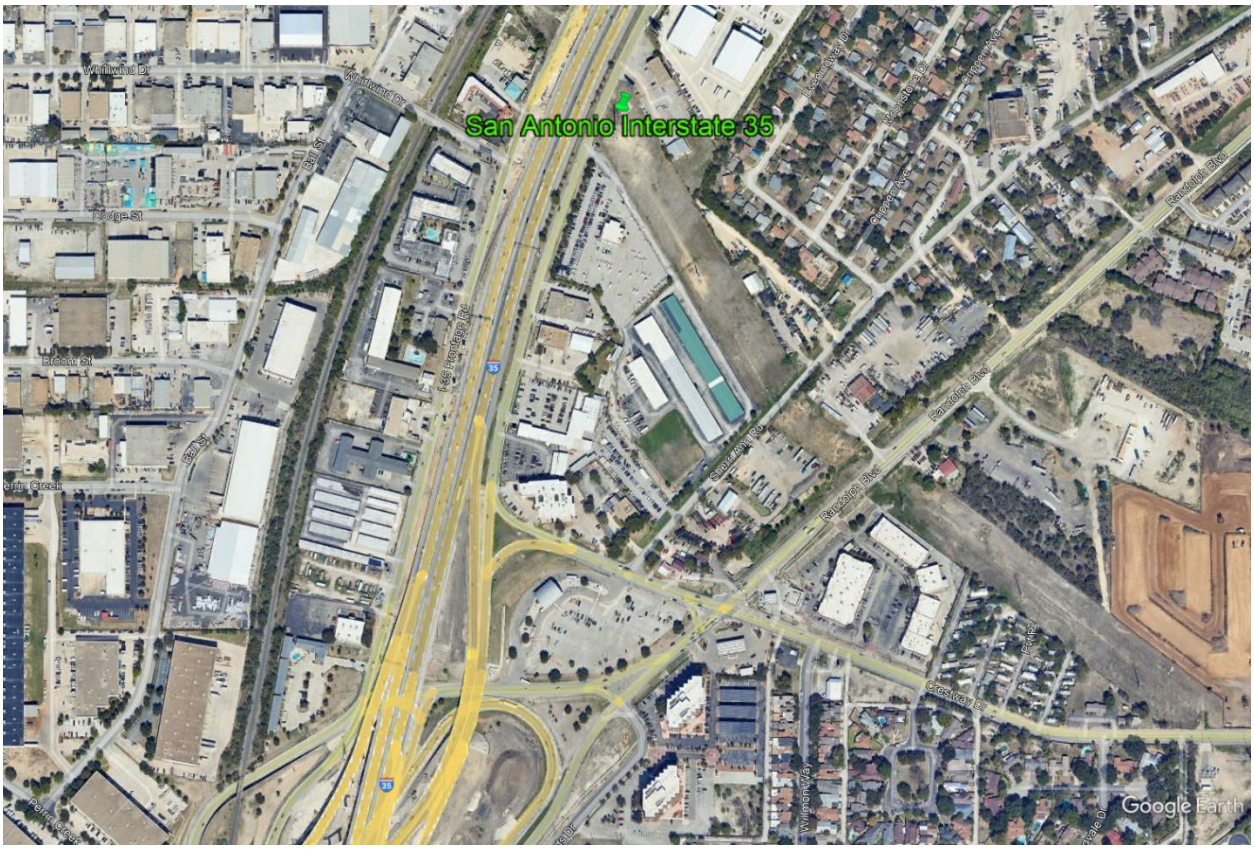


Figure 13: San Antonio Interstate 35 Overview



Figure 14: San Antonio Interstate 35 – North and South Street Views



Figure 15: San Antonio Interstate 35 – East and West Street Views



Figure 16: San Antonio Interstate 35 and Surrounding Area Annual and Five-Year Traffic Counts

Regulatory $PM_{2.5}$ Monitoring Network Changes

TCEQ activated a state-initiative $PM_{2.5}$ FEM monitor at Austin Audubon Society on January 7, 2025, and recommends adding this monitor to the TCEQ federal air monitoring network if EPA Region 6 approves the reclassification of $PM_{2.5}$ microscale near-road monitors as non-NAAQS comparable to the annual $PM_{2.5}$ NAAQS.

TCEQ's Amarillo A&M $PM_{2.5}$ monitor was activated in 2005 at 6500 Amarillo Boulevard West, Amarillo, Texas, in Potter County. TCEQ was notified of the pending property sale and recommended relocating the $PM_{2.5}$ FEM continuous monitor and air monitoring site to the existing Amarillo 24th Avenue air monitoring site to EPA in a letter dated August 7, 2024. The Amarillo 24th Avenue site is located approximately 7.25 miles north-northeast from the Amarillo A&M air monitoring site and meets the same monitoring objective and spatial scale as the Amarillo A&M site. The Amarillo A&M $PM_{2.5}$ annual and 24-hour 2020-2022 design values were 5.9 micrograms per cubic meter (ug/m^3) and 15 ug/m^3, respectively. Since the Amarillo A&M $PM_{2.5}$ monitor data were less than 67% of both the annual and 24-hour $PM_{2.5}$ standards, the monitor was eligible for relocation. Relocating the Amarillo A&M $PM_{2.5}$ monitor to an existing TCEQ air monitoring site maximizes limited resources and allows the TCEQ to continue monitoring without data interruptions that may impact design value calculations. Also, relocating the Amarillo A&M $PM_{2.5}$ continuous monitor to the Amarillo 24th Avenue site

benefits data users, since the Amarillo 24th Avenue site measures meteorological parameters of wind and outdoor temperature not measured at the Amarillo A&M site. The EPA approved the Amarillo A&M $PM_{2.5}$ monitor relocation in a letter dated October 10, 2024. The Amarillo A&M $PM_{2.5}$ monitor was relocated to the Amarillo 24th Street air monitoring site and activated on December 10, 2014.

Volatile Organic Compounds (VOC)

TCEQ's VOC network is designed to meet PAMS requirements, as discussed further in this section. TCEQ is required to operate two VOC monitors and exceeds this requirement with 12 monitors. For purposes of meeting federal PAMS requirements, TCEQ's VOC network includes eight automated gas chromatograph (autoGC) continuous monitors and four non-continuous canister monitors. AMNP Appendix L, Table 1 lists the number of required and current VOC monitors in each Texas CBSA. AMNP Appendix B lists the air monitoring sites where VOCs are measured.

Monitoring Requirements

Title 40 CFR Part 58, Appendix D, Section 5 requires state agencies to collect speciated VOC hourly-averaged measurements at NCore sites located in CBSAs with a population of 1,000,000 or more persons as part of the PAMS network requirements. TCEQ exceeds PAMS required VOC monitoring requirements with autoGCs at the two PAMS sites listed in AMNP Table 2 and at six other sites as listed in AMNP Appendix B.

Previously Recommended Changes

TCEQ's 2022 and 2023 AMNPs recommended adding non-regulatory, state-initiative VOC monitoring at the new sites in the Houston Fifth Ward, Houston Pleasantville neighborhood, and in the Gregory-Portland area in San Patricio County. TCEQ utilized input from community groups to evaluate areas for the establishment of a new ambient air monitoring site at Finnigan Park in the Houston Fifth Ward area and at Pleasantville Elementary School in the Houston Pleasantville area. The Houston Finnigan Park construction permit is pending issuance by the City of Houston, and the Houston Pleasantville Elementary site is pending construction completion. TCEQ expects to deploy the non-regulatory, state-initiative VOC monitors by December 31, 2025, shortly after the site construction is completed.

TCEQ is evaluating site options for the establishment of a new ambient air monitoring site in the Gregory-Portland area. TCEQ continues to work with the property owners to establish site usage agreements and to deploy the state-initiative, special purpose VOC monitor by December 31, 2026.

Regulatory and Non-Regulatory VOC Monitoring Network Changes

TCEQ evaluated the current regulatory VOC monitoring network and determined the existing VOC network meets all federal monitoring requirements; therefore, no additional changes are recommended.

Carbonyls

TCEQ's carbonyl monitoring network is designed to meet PAMS requirements, as discussed further in this section. TCEQ is required to operate two carbonyl monitors and exceeds this requirement with four monitors. AMNP Appendix L, Table 2 lists the number of required and current carbonyl monitors in each Texas CBSA. AMNP Appendix B lists the air monitoring sites where carbonyls are measured.

Monitoring Requirements

Title 40 CFR Part 58, Appendix D, Section 5 requires state agencies to collect PAMS carbonyl measurements with three eight-hour averaged samples taken every third day at each NCore site located in CBSAs with a population of 1,000,000 or more persons. TCEQ exceeds carbonyl monitoring requirements with carbonyl monitors at the two required PAMS sites listed in AMNP Table 2 and at two other sites listed in AMNP Appendix B.

Previously Recommended Changes

TCEQ's 2024 AMNP recommended no changes to the carbonyl monitoring network.

Regulatory Carbonyl Monitoring Network Changes

TCEQ evaluated the current carbonyl monitoring network and determined the existing carbonyl network meets all federal monitoring requirements; therefore, no changes are recommended.

Meteorology

TCEQ's meteorology monitoring network includes surface meteorology parameters (solar radiation, wind speed, wind direction, and temperature), upper air measurements (mixing height), and other meteorological parameters, as discussed further in this section. Surface meteorology is measured at most air monitoring stations and additional meteorology parameters are required at PAMS monitoring stations. All meteorology monitors in TCEQ's network are included in AMNP Appendix B.

Monitoring Requirements

Title 40 CFR Part 58, Appendix D, Section 5 requires state agencies to collect PAMS surface and upper air meteorology measurements at all NCore sites in CBSAs with a population of 1,000,000 or more persons. Meteorological PAMS measurements at the required PAMS sites (or alternatively approved waiver locations) include measurements of wind speed, wind direction, outdoor temperature, atmospheric pressure, relative humidity, precipitation, hourly averaged mixing-height, solar radiation, and ultraviolet radiation. TCEQ meets these meteorological monitoring requirements with measurements collected at the Dallas Hinton, Houston Deer Park #2, and La Porte Airport sites.

Previously Recommended Changes

To meet near-road monitoring requirements in the San Antonio CBSA, the EPA approved a revised location for a second near-road site named San Antonio Interstate 10 West in a letter dated November 27, 2023. TCEQ experienced ongoing unexpected challenges in securing power to the site, including delays from the power provider and theft of electrical infrastructure. TCEQ deployed the San Antonio Interstate 10 West site and wind speed, wind direction, and outdoor temperature on March 31, 2025.

TCEQ redesignated the wind speed, wind direction, and outdoor temperature monitors at the Old Highway 90 site as federal special purpose monitors to support the federal $PM_{2.5}$ special purpose monitor at the site on January 1, 2025.

TCEQ recommended deploying wind speed, wind direction, and outdoor temperature monitors to the new air monitoring sites in the Houston Fifth Ward, the Houston Pleasantville neighborhood, and the Gregory-Portland area. The Houston Finnigan Park construction permit is pending issuance by the City of Houston, and the Houston Pleasantville Elementary site is pending construction completion. The Houston Fifth Ward and the Houston Pleasantville neighborhood monitors are expected to be operational by December 31, 2025. The Gregory-Portland area monitor is expected to be operational by August 31, 2026.

Regulatory Meteorology Monitoring Network Changes

TCEQ is upgrading older meteorology technology to new all-in-one sonic weather sensors as equipment becomes available. The new sensor provides measurements of wind speed, wind direction, and ambient air temperature, with options to report relative humidity and barometric pressure.

TCEQ recommends adding wind speed, wind direction, and outdoor temperature monitors at the Earhart site as federal special purpose monitors to support the proposed federal PM_{10} FEM continuous monitor by December 31, 2026.

Air Monitoring Site Relocations

TCEQ establishes property site usage agreements as a contractual means to locate and operate air quality monitoring stations on public or privately owned land. Property owners retain the right to revoke the usage agreement at any time. When possible, TCEQ works with the existing property owner to identify another suitable air monitoring site location. In some circumstances, a new location must be identified, and a new site usage agreement implemented. TCEQ is relocating the air monitoring sites listed in AMNP Table 13. The existing site and monitoring equipment remain operational unless noted. Existing site and air monitoring details are provided in Appendix B.

Table 13: Air Monitoring Site Relocations

Site Name	New Site Name	New Site Address	Reason for Relocation	Status
Dallas Hinton	Dallas Hinton	1505 Record Crossing Road, Dallas Texas	Relocation less than 0.15 mile south-southeast of existing site due to property owner revocation of lease agreement, approved by the EPA in a letter dated December 20, 2024	Site temporarily deactivated February 24, 2025, relocation expected by December 2025
Earhart	Pending site selection	Pending site selection	Relocation due to property owner revocation of usage agreement	Site remains active, relocation expected by December 2025
El Paso UTEP	Pending site selection	Pending site selection	Relocation pending due to property owner revocation of usage agreement (building expansion over site location)	Site temporarily deactivated November 2021, relocation expected by December 2026
Houston Deer Park #2	None	4413 Glenwood Avenue, Deer Park, Texas	Relocation less than 0.1 mile west of existing site due to property owner revocation of usage agreement (park expansion), approved by the EPA in a letter dated May 18, 2022	Relocation completed May 2025
Midlothian OFW	Midlothian North Ward Road	891 North Ward Road, Midlothian, Texas (pending permit approval by the City of Midlothian Development Review Committee)	Relocation approximately 0.7 mile southwest on current property due to property owner revocation of site access (new property owners), approved by the EPA in a letter dated November 17, 2023.Site construction permit denied, site logistical updates to meet city Development Review Committee requirements and local ordinances under continued negotiation with City of Midlothian.	Site temporarily deactivated April 22, 2022, relocation expected by December 2026
Terrell Temtex	Terrell Jamison Court	8 Jamison Court, Terrell, Texas	Relocation approximately 0.2 mile south due to property owner revocation of usage agreement, approved by the EPA in a letter dated January 9, 2024	Relocation completed October 17, 2024

- number sign
EPA – United States Environmental Protection Agency
OFW – Old Fort Worth
UTEP – University of Texas at El Paso

Conclusion

As discussed in this report, TCEQ has evaluated the ambient air quality monitoring network against all related federal air monitoring requirements. After consideration of the federal regulations, 2023 U.S. Census Bureau population estimate data, EI data, and 2021-2023 design values, TCEQ has determined that it will meet or exceed all monitoring requirements with the above-mentioned recommendations for the next calendar year.

Appendix A

2025 Summary of Proposed Network Changes

Texas Commission on Environmental Quality
2025 Annual Monitoring Network Plan

Appendix A: 2025
Summary of Proposed Network Changes

Metropolitan Statistical Area	Air Monitoring Site Name	Parameter(s)	Proposed Action	Estimated Completion Date
Austin-Round Rock-San Marcos	Austin North Hills Drive	sulfur dioxide	Change monitor type from SLAMS to SPM	December 31, 2025
Corpus Christi	Corpus Christi Huisache	sulfur dioxide	Change monitor type from SLAMS to SPM	December 31, 2025
Corpus Christi	Corpus Christi Tuloso	sulfur dioxide	Change monitor type from SLAMS to SPM	December 31, 2025
Corpus Christi	Corpus Christi West	sulfur dioxide	Deactivate SPM monitor, TCEQ 2020 and 2025 Five Year Assessment evaluated monitor as low value	December 31, 2025
Houston-Pasadena-The Woodlands	Park Place	sulfur dioxide	Deactivate SPM monitor, TCEQ 2020 and 2025 Five Year Assessment evaluated monitor as low value	December 31, 2025
Waco	Waco Mazanec	sulfur dioxide	Change monitor type from SLAMS to SPM	December 31, 2025
Lubbock	Lubbock 12th Street	ozone	Add monitor to meet federal requirements due to increased population estimates from addition of three counties to the MSA	December 31, 2026
San Antonio-New Braunfels	Frank Wing Municipal Building (rooftop)	site and PM10	Deactivate site and relocate 4.5 miles west to Old Highway 90, improving staff accessibility and safety	December 31, 2025
San Antonio-New Braunfels	Old Highway 90	PM10	Add continuous FEM monitor (relocated from Frank Wing Municipal Building)	December 31, 2025
Killeen-Temple	Temple Georgia	PM10	Add to meet federal requirements due to increased population estimates	December 31, 2026
Austin-Round Rock-San Marcos	Austin Audubon Society	PM10	Replace manual filter-based monitor with continuous FEM monitor	December 31, 2026

Appendix A: 2025
Summary of Proposed Network Changes

Metropolitan Statistical Area	Air Monitoring Site Name	Parameter(s)	Proposed Action	Estimated Completion Date
Dallas-Fort Worth-Arlington	Earhart	PM10	Replace manual filter-based monitor with continuous FEM monitor	December 31, 2026
Laredo	Laredo Bridge	PM10	Replace manual filter-based monitor with continuous FEM monitor	December 31, 2026
Laredo	Laredo College	PM10	Replace manual filter-based monitor with continuous FEM monitor	December 31, 2026
Austin-Round Rock-San Marcos	Austin North Interstate 35	PM2.5	Micro-scale near-road monitoring data ineligible for comparison to the annual PM2.5 NAAQS	January 1, 2025
Dallas-Fort Worth-Arlington	Fort Worth California Parkway North	PM2.5	Micro-scale near-road monitoring data ineligible for comparison to the annual PM2.5 NAAQS	January 1, 2025
Houston-Pasadena-The Woodlands	Houston North Loop	PM2.5	Micro-scale near-road monitoring data ineligible for comparison to the annual PM2.5 NAAQS	January 1, 2025
San Antonio-New Braunfels	San Antonio Interstate 35	PM2.5	Micro-scale near-road monitoring data ineligible for comparison to the annual PM2.5 NAAQS	January 1, 2025
Austin-Round Rock-San Marcos	Austin Audubon Society	PM2.5	Add state-initiative monitor to federal network if PM2.5 data exclusion request is approved.	January 1, 2025

FEM - federal equivalent method
NAAQS - National Ambient Air Quality Standard
PM10 - particulate matter of 10 micrometers or less in diameter
PM2.5 - particulate matter of 2.5 micrometers or less in diameter
SLAMS - State or Local Air Monitoring Station
SPM - Special Purpose Monitor
TCEQ - Texas Commission on Environmental Quality

Appendix B

Ambient Air Monitoring Network Site List

Texas Commission on Environmental Quality
2025 Annual Monitoring Network Plan

Appendix B: Ambient Air Monitoring Network Site List

MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Amarillo	Amarillo 24th Avenue	483751025	4205 NE 24th Avenue, Amarillo	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Urban Scale	Urban and Center City	35.2015954	-101.909266
Amarillo	Amarillo 24th Avenue	483751025	4205 NE 24th Avenue, Amarillo	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood	Suburban	35.2367458	-101.787396
Amarillo	Amarillo 24th Avenue	483751025	4205 NE 24th Avenue, Amarillo	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	35.2367458	-101.787396
Amarillo	Amarillo 24th Avenue	483751025	4205 NE 24th Avenue, Amarillo	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	35.2367458	-101.787396
Amarillo	Amarillo Xcel El Rancho	483751077	Folsom Rd. & El Rancho Rd., Amarillo	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood	Rural	35.3164801	-101.741754
Amarillo	Amarillo Xcel El Rancho	483751077	Folsom Rd. & El Rancho Rd., Amarillo	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	35.3164801	-101.741754
Amarillo	Amarillo Xcel El Rancho	483751077	Folsom Rd. & El Rancho Rd., Amarillo	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	35.3164801	-101.741754
Austin-Round Rock-San Marcos	Austin Audubon Society	484530020	12200 Lime Creek Rd, Leander	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Rural	30.4831602	-97.8723279
Austin-Round Rock-San Marcos	Austin Audubon Society	484530020	12200 Lime Creek Rd, Leander	PM10 (FRM)	SLAMS	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Population Exposure	Neighborhood	Rural	30.4831602	-97.8723279
Austin-Round Rock-San Marcos	Austin Audubon Society	484530020	12200 Lime Creek Rd, Leander	Solar Radiation	SPM	Photovoltaic	Continuous	Population Exposure	Urban Scale	Rural	30.4831602	-97.8723279
Austin-Round Rock-San Marcos	Austin Audubon Society	484530020	12200 Lime Creek Rd, Leander	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Urban Scale	Rural	30.4831602	-97.8723279
Austin-Round Rock-San Marcos	Austin Audubon Society	484530020	12200 Lime Creek Rd, Leander	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Urban Scale	Rural	30.4831602	-97.8723279
Austin-Round Rock-San Marcos	Austin North Hills Drive	484530014	3824 North Hills Drive, Austin	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Population Exposure	Urban Scale	Suburban	30.3549187	-97.7617452
Austin-Round Rock-San Marcos	Austin North Hills Drive	484530014	3824 North Hills Drive, Austin	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	30.3549187	-97.7617452
Austin-Round Rock-San Marcos	Austin North Hills Drive	484530014	3824 North Hills Drive, Austin	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Suburban	30.3549187	-97.7617452

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Austin-Round Rock-San Marcos	Austin North Hills Drive	484530014	3824 North Hills Drive, Austin	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Urban Scale	Suburban	30.3549187	-97.7617452
Austin-Round Rock-San Marcos	Austin North Hills Drive	484530014	3824 North Hills Drive, Austin	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	30.3549187	-97.7617452
Austin-Round Rock-San Marcos	Austin North Hills Drive	484530014	3824 North Hills Drive, Austin	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	30.3549187	-97.7617452
Austin-Round Rock-San Marcos	Austin North Interstate 35	484531068	8912 N IH 35 SVRD SB, Austin	CO	Near Road, SLAMS	Gas Filter Correlation	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	30.3538473	-97.6915732
Austin-Round Rock-San Marcos	Austin North Interstate 35	484531068	8912 N IH 35 SVRD SB, Austin	NO/NO2/NOx	Near Road, SLAMS	Chemiluminescence	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	30.3538473	-97.6915732
Austin-Round Rock-San Marcos	Austin North Interstate 35	484531068	8912 N IH 35 SVRD SB, Austin	PM2.5 FEM	Near Road, SLAMS	Beta Attenuation, 209	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	30.3538473	-97.6915732
Austin-Round Rock-San Marcos	Austin North Interstate 35	484531068	8912 N IH 35 SVRD SB, Austin	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	30.3538473	-97.6915732
Austin-Round Rock-San Marcos	Austin North Interstate 35	484531068	8912 N IH 35 SVRD SB, Austin	Wind	SPM	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	30.3538473	-97.6915732
Austin-Round Rock-San Marcos	Austin Webberville Rd	484530021	2600B Webberville Rd, Austin	PM10 FEM	SLAMS	Broadband spectroscopy, 639	Continuous	Population Exposure	Neighborhood	Urban and Center City	30.2632109	-97.7128865
Austin-Round Rock-San Marcos	Austin Webberville Rd	484530021	2600B Webberville Rd, Austin	PM2.5 FEM	SLAMS	Broadband spectroscopy, 638	Continuous	Population Exposure	Neighborhood	Urban and Center City	30.2632109	-97.7128865
Austin-Round Rock-San Marcos	Austin Webberville Rd	484530021	2600B Webberville Rd, Austin	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Urban and Center City	30.2632109	-97.7128865
Austin-Round Rock-San Marcos	Austin Webberville Rd	484530021	2600B Webberville Rd, Austin	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Urban and Center City	30.2632109	-97.7128865
Beaumont-Port Arthur	Beaumont Downtown	482450009	1086 Vermont Avenue, Beaumont	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Population Exposure	Neighborhood	Suburban	30.0364453	-94.0710918
Beaumont-Port Arthur	Beaumont Downtown	482450009	1086 Vermont Avenue, Beaumont	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Suburban	30.0364453	-94.0710918
Beaumont-Port Arthur	Beaumont Downtown	482450009	1086 Vermont Avenue, Beaumont	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood	Suburban	30.0364453	-94.0710918

Appendix B: Ambient Air Monitoring Network Site List

MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Beaumont-Port Arthur	Beaumont Downtown	482450009	1086 Vermont Avenue, Beaumont	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood	Suburban	30.0364453	-94.0710918
Beaumont-Port Arthur	Beaumont Downtown	482450009	1086 Vermont Avenue, Beaumont	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Suburban	30.0364453	-94.0710918
Beaumont-Port Arthur	Beaumont Downtown	482450009	1086 Vermont Avenue, Beaumont	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Suburban	30.0364453	-94.0710918
Beaumont-Port Arthur	Beaumont Downtown	482450009	1086 Vermont Avenue, Beaumont	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Suburban	30.0364453	-94.0710918
Beaumont-Port Arthur	Hamshire	482450022	12552 Second St, Not In A City	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	General, Background; Regional Transport	Neighborhood / Urban Scale	Suburban	29.8639616	-94.3178022
Beaumont-Port Arthur	Hamshire	482450022	12552 Second St, Not In A City	O3	SLAMS	UV Photometric	Continuous	General, Background; Regional Transport	Urban Scale	Suburban	29.8639616	-94.3178022
Beaumont-Port Arthur	Hamshire	482450022	12552 Second St, Not In A City	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Suburban	29.8639616	-94.3178022
Beaumont-Port Arthur	Hamshire	482450022	12552 Second St, Not In A City	Solar Radiation	SPM	Photovoltaic	Continuous	General, Background	Neighborhood	Suburban	29.8639616	-94.3178022
Beaumont-Port Arthur	Hamshire	482450022	12552 Second St, Not In A City	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	29.8639616	-94.3178022
Beaumont-Port Arthur	Hamshire	482450022	12552 Second St, Not In A City	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	29.8639616	-94.3178022
Beaumont-Port Arthur	Jefferson County Airport	482450018	End of 90th Street @ Jefferson County Airport, Port Arthur	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	General, Background	Neighborhood	Suburban	29.9428198	-94.0007959
Beaumont-Port Arthur	Jefferson County Airport	482450018	End of 90th Street @ Jefferson County Airport, Port Arthur	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	29.9428198	-94.0007959
Beaumont-Port Arthur	Jefferson County Airport	482450018	End of 90th Street @ Jefferson County Airport, Port Arthur	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	29.9428198	-94.0007959
Beaumont-Port Arthur	Nederland 17th Street	482451035	1516 17th Street, Nederland	Barometric Pressure	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Suburban	29.9799952	-94.0047669
Beaumont-Port Arthur	Nederland 17th Street	482451035	1516 17th Street, Nederland	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Neighborhood	Suburban	29.9799952	-94.0047669

Appendix B: Ambient Air Monitoring Network Site List

MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Beaumont-Port Arthur	Nederland 17th Street	482451035	1516 17th Street, Nederland	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Suburban	29.9799952	-94.0047669
Beaumont-Port Arthur	Nederland 17th Street	482451035	1516 17th Street, Nederland	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Suburban	29.9799952	-94.0047669
Beaumont-Port Arthur	Nederland 17th Street	482451035	1516 17th Street, Nederland	Relative Humidity	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Suburban	29.9799952	-94.0047669
Beaumont-Port Arthur	Nederland 17th Street	482451035	1516 17th Street, Nederland	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood	Suburban	29.9799952	-94.0047669
Beaumont-Port Arthur	Nederland 17th Street	482451035	1516 17th Street, Nederland	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Suburban	29.9799952	-94.0047669
Beaumont-Port Arthur	Nederland 17th Street	482451035	1516 17th Street, Nederland	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Suburban	29.9799952	-94.0047669
Beaumont-Port Arthur	Nederland 17th Street	482451035	1516 17th Street, Nederland	UV Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood	Suburban	29.9799952	-94.0047669
Beaumont-Port Arthur	Nederland 17th Street	482451035	1516 17th Street, Nederland	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Suburban	29.9799952	-94.0047669
Beaumont-Port Arthur	Orange 1st Street	483611083	2239 1st Street, Orange	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood	Urban and Center City	30.1537808	-93.7259766
Beaumont-Port Arthur	Orange 1st Street	483611083	2239 1st Street, Orange	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Urban and Center City	30.1537808	-93.7259766
Beaumont-Port Arthur	Orange 1st Street	483611083	2239 1st Street, Orange	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Urban and Center City	30.1537808	-93.7259766
Beaumont-Port Arthur	Port Arthur Memorial School	482450021	2200 Jefferson Drive, Port Arthur	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Suburban	29.9229228	-93.9089999
Beaumont-Port Arthur	Port Arthur Memorial School	482450021	2200 Jefferson Drive, Port Arthur	PM2.5 FEM	QA Collocated, SLAMS	Beta Attenuation, 209	Continuous	Quality Assurance	Neighborhood	Suburban	29.9229228	-93.9089999
Beaumont-Port Arthur	Port Arthur West	482450011	623 Ellias Street, Port Arthur	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.897523	-93.9910809
Beaumont-Port Arthur	Port Arthur West	482450011	623 Ellias Street, Port Arthur	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood	Urban and Center City	29.897523	-93.9910809

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Beaumont-Port Arthur	Port Arthur West	482450011	623 Ellias Street, Port Arthur	Solar Radiation	SPM	Photovoltaic	Continuous	Population Exposure; Source Oriented	Neighborhood	Urban and Center City	29.897523	-93.9910809
Beaumont-Port Arthur	Port Arthur West	482450011	623 Ellias Street, Port Arthur	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Source Oriented	Neighborhood	Urban and Center City	29.897523	-93.9910809
Beaumont-Port Arthur	Port Arthur West	482450011	623 Ellias Street, Port Arthur	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure; Source Oriented	Neighborhood	Urban and Center City	29.897523	-93.9910809
Beaumont-Port Arthur	Port Arthur West 7th Street Gate 2	482451071	West 7th Street, Valero Port Arthur Gate 2, Port Arthur	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood	Rural	29.8441175	-93.9652274
Beaumont-Port Arthur	Port Arthur West 7th Street Gate 2	482451071	West 7th Street, Valero Port Arthur Gate 2, Port Arthur	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	29.8441175	-93.9652274
Beaumont-Port Arthur	Port Arthur West 7th Street Gate 2	482451071	West 7th Street, Valero Port Arthur Gate 2, Port Arthur	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	29.8441175	-93.9652274
Beaumont-Port Arthur	SETRPC 40 Sabine Pass	482450101	5200 Mechanic, Not In A City	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration	Neighborhood	Rural	29.7279404	-93.8940883
Beaumont-Port Arthur	SETRPC 42 Mauriceville	483611100	Intersection of TX Hwys 62 & 12, Port Arthur	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Regional Transport; Upwind Background	Regional Scale	Suburban	30.1942921	-93.8671774
Beaumont-Port Arthur	SETRPC 43 Jefferson Co Airport	482450102	Jefferson County Airport, Port Arthur	O3	SPM	UV Photometric	Continuous	Max Precursor Emissions Impact	Middle Scale	Suburban	29.9427366	-94.000673
Beaumont-Port Arthur	West Orange	483611001	2700 Austin Ave, West Orange	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Population Exposure	Neighborhood	Urban and Center City	30.0852641	-93.7613464
Beaumont-Port Arthur	West Orange	483611001	2700 Austin Ave, West Orange	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Urban and Center City	30.0852641	-93.7613464
Beaumont-Port Arthur	West Orange	483611001	2700 Austin Ave, West Orange	Solar Radiation	SPM	Photovoltaic	Continuous	Source Oriented	Neighborhood	Urban and Center City	30.0852641	-93.7613464
Beaumont-Port Arthur	West Orange	483611001	2700 Austin Ave, West Orange	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Source Oriented	Neighborhood	Urban and Center City	30.0852641	-93.7613464
Beaumont-Port Arthur	West Orange	483611001	2700 Austin Ave, West Orange	Wind	SPM	AIO2 sonic weather sensor	Continuous	Source Oriented	Neighborhood	Urban and Center City	30.0852641	-93.7613464
Big Spring*	Big Spring Midway	482271072	1218 N. Midway Rd, Big Spring	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood	Rural	32.2804529	-101.407117

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Big Spring	Big Spring Midway	482271072	1218 N. Midway Rd, Big Spring	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Neighborhood	Rural	32.2804529	-101.407117
Big Spring	Big Spring Midway	482271072	1218 N. Midway Rd, Big Spring	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Neighborhood	Rural	32.2804529	-101.407117
Borger*	Borger FM 1559	482331073	19440 FM 1559, Borger	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood	Rural	35.6760264	-101.440043
Borger	Borger FM 1559	482331073	19440 FM 1559, Borger	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	35.6760264	-101.440043
Borger	Borger FM 1559	482331073	19440 FM 1559, Borger	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	35.6760264	-101.440043
Brownsville-Harlingen	Brownsville East 6th Street	480611098	85 East 6th Street, Brownsville	PM2.5 FEM	SLAMS	Beta Attenuation, 209	Continuous	Population Exposure	Regional Scale	Urban and Center City	25.900951	-97.5077924
Brownsville-Harlingen	Brownsville East 6th Street	480611098	85 East 6th Street, Brownsville	Solar Radiation	SPM	Photovoltaic	Continuous	General, Background	Neighborhood	Urban and Center City	25.900951	-97.5077924
Brownsville-Harlingen	Brownsville East 6th Street	480611098	85 East 6th Street, Brownsville	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Urban Scale	Urban and Center City	25.900951	-97.5077924
Brownsville-Harlingen	Brownsville East 6th Street	480611098	85 East 6th Street, Brownsville	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Urban and Center City	25.900951	-97.5077924
Brownsville-Harlingen	Harlingen Teege	480611023	1602 W Teege Avenue, Harlingen	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	26.2003477	-97.7126985
Brownsville-Harlingen	Harlingen Teege	480611023	1602 W Teege Avenue, Harlingen	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	26.2003477	-97.7126985
Brownsville-Harlingen	Harlingen Teege	480611023	1602 W Teege Avenue, Harlingen	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	26.2003477	-97.7126985
Brownsville-Harlingen	Isla Blanca State Park Road	480612004	33174 State Park Road 100, South Padre Island	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Regional Transport	Urban Scale	Rural	26.0711132	-97.1577302
Brownsville-Harlingen	Isla Blanca State Park Road	480612004	33174 State Park Road 100, South Padre Island	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Regional Transport	Regional Scale	Rural	26.0711132	-97.1577302
Brownsville-Harlingen	Isla Blanca State Park Road	480612004	33174 State Park Road 100, South Padre Island	Wind (3m)	SPM	AIO2 sonic weather sensor	Continuous	Regional Transport	Regional Scale	Rural	26.0711132	-97.1577302

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
College Station-Bryan	Bryan Finfeather Road	480411086	3670 Finfeather Road, Bryan	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure; Regional Transport	Neighborhood	Rural	30.6283338	-96.3628341
College Station-Bryan	Bryan Finfeather Road	480411086	3670 Finfeather Road, Bryan	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	30.6283338	-96.3628341
College Station-Bryan	Bryan Finfeather Road	480411086	3670 Finfeather Road, Bryan	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	30.6283338	-96.3628341
College Station-Bryan	Franklin Oak Grove	483951076	8127 Oak Grove Road, Franklin	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood	Rural	31.1689547	-96.4819935
College Station-Bryan	Franklin Oak Grove	483951076	8127 Oak Grove Road, Franklin	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	31.1689547	-96.4819935
College Station-Bryan	Franklin Oak Grove	483951076	8127 Oak Grove Road, Franklin	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	31.1689547	-96.4819935
Corpus Christi	Corpus Christi Huisache	483550032	3810 Huisache Street, Corpus Christi	PM2.5 FEM	SLAMS	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Urban and Center City	27.8044885	-97.4315277
Corpus Christi	Corpus Christi Huisache	483550032	3810 Huisache Street, Corpus Christi	PM2.5 FEM	QA Collocated, SLAMS	Beta Attenuation, 209	Continuous	Quality Assurance	Neighborhood	Urban and Center City	27.8044885	-97.4315277
Corpus Christi	Corpus Christi Huisache	483550032	3810 Huisache Street, Corpus Christi	SO2	SLAMS	Pulsed Fluorescence	Continuous	Highest Concentration; Population Exposure	Neighborhood	Urban and Center City	27.8044885	-97.4315277
Corpus Christi	Corpus Christi Huisache	483550032	3810 Huisache Street, Corpus Christi	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Middle Scale	Urban and Center City	27.8044885	-97.4315277
Corpus Christi	Corpus Christi Huisache	483550032	3810 Huisache Street, Corpus Christi	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Middle Scale	Urban and Center City	27.8044885	-97.4315277
Corpus Christi	Corpus Christi Tuloso	483550026	9860 La Branch, Corpus Christi	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	27.8324346	-97.5554299
Corpus Christi	Corpus Christi Tuloso	483550026	9860 La Branch, Corpus Christi	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood	Suburban	27.8324346	-97.5554299
Corpus Christi	Corpus Christi Tuloso	483550026	9860 La Branch, Corpus Christi	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Neighborhood	Suburban	27.8324346	-97.5554299
Corpus Christi	Corpus Christi Tuloso	483550026	9860 La Branch, Corpus Christi	Wind	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Neighborhood	Suburban	27.8324346	-97.5554299

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Corpus Christi	Corpus Christi West	483550025	902 Airport Road, Corpus Christi	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	27.7653368	-97.4342747
Corpus Christi	Corpus Christi West	483550025	902 Airport Road, Corpus Christi	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood	Suburban	27.7653368	-97.4342747
Corpus Christi	Corpus Christi West	483550025	902 Airport Road, Corpus Christi	Solar Radiation	SPM	Photovoltaic	Continuous	Population Exposure	Neighborhood	Suburban	27.7653368	-97.4342747
Corpus Christi	Corpus Christi West	483550025	902 Airport Road, Corpus Christi	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	27.7653368	-97.4342747
Corpus Christi	Corpus Christi West	483550025	902 Airport Road, Corpus Christi	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	27.7653368	-97.4342747
Corpus Christi	Dona Park	483550034	5707 Up River Rd, Corpus Christi	PM10 FEM	SLAMS	Broadband spectroscopy, 639	Continuous	Population Exposure	Neighborhood	Urban and Center City	27.8118332	-97.4657062
Corpus Christi	Dona Park	483550034	5707 Up River Rd, Corpus Christi	PM2.5 FEM	SLAMS	Broadband spectroscopy, 638	Continuous	Population Exposure	Neighborhood	Urban and Center City	27.8118332	-97.4657062
Corpus Christi	Dona Park	483550034	5707 Up River Rd, Corpus Christi	PM2.5 (Speciation)	SLAMS	Carbons, Elements, Ions, 2025, URG	24 Hours; 1/6 Days	Population Exposure; Unknown	Neighborhood	Urban and Center City	27.8118332	-97.4657062
Corpus Christi	Dona Park	483550034	5707 Up River Rd, Corpus Christi	PM2.5 (FRM)	QA Collocated, SPM	Sequential FRM Gravimetric, 145	24 Hours; 1/6 Days	Population Exposure	Neighborhood	Urban and Center City	27.8118332	-97.4657062
Corpus Christi	Dona Park	483550034	5707 Up River Rd, Corpus Christi	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Regional Scale	Urban and Center City	27.8118332	-97.4657062
Corpus Christi	Dona Park	483550034	5707 Up River Rd, Corpus Christi	Wind	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Regional Scale	Urban and Center City	27.8118332	-97.4657062
Corsicana	Corsicana Airport	483491051	Corsicana Airport, Corsicana	Dew Point	SPM	Derived at site	Continuous	General, Background		Rural	32.0319609	-96.3991408
Corsicana	Corsicana Airport	483491051	Corsicana Airport, Corsicana	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	General, Background; Max Precursor Emissions Impact	Urban Scale	Rural	32.0319609	-96.3991408
Corsicana	Corsicana Airport	483491051	Corsicana Airport, Corsicana	O3	SPM	UV Photometric	Continuous	General, Background; Max Ozone Concentration	Urban Scale	Rural	32.0319609	-96.3991408
Corsicana	Corsicana Airport	483491051	Corsicana Airport, Corsicana	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Source Oriented	Neighborhood	Rural	32.0319609	-96.3991408

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Corsicana	Corsicana Airport	483491051	Corsicana Airport, Corsicana	Relative Humidity	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Urban Scale	Rural	32.0319609	-96.3991408
Corsicana	Corsicana Airport	483491051	Corsicana Airport, Corsicana	SO2	SPM	Pulsed Fluorescence	Continuous	Source Oriented	Urban Scale	Rural	32.0319609	-96.3991408
Corsicana	Corsicana Airport	483491051	Corsicana Airport, Corsicana	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Urban Scale	Rural	32.0319609	-96.3991408
Corsicana	Corsicana Airport	483491051	Corsicana Airport, Corsicana	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Urban Scale	Rural	32.0319609	-96.3991408
Corsicana	Richland Southeast 1220 Road	483491081	Southeast 1220 Road, Richland	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood	Rural	31.904101	-96.3518731
Corsicana	Richland Southeast 1220 Road	483491081	Southeast 1220 Road, Richland	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Neighborhood	Rural	31.904101	-96.3518731
Corsicana	Richland Southeast 1220 Road	483491081	Southeast 1220 Road, Richland	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Neighborhood	Rural	31.904101	-96.3518731
Dallas-Fort Worth-Arlington	Arlington Municipal Airport	484393011	5504 South Collins Street, Arlington	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Population Exposure	Neighborhood	Suburban	32.656415	-97.0885713
Dallas-Fort Worth-Arlington	Arlington Municipal Airport	484393011	5504 South Collins Street, Arlington	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	32.656415	-97.0885713
Dallas-Fort Worth-Arlington	Arlington Municipal Airport	484393011	5504 South Collins Street, Arlington	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Neighborhood	Suburban	32.656415	-97.0885713
Dallas-Fort Worth-Arlington	Arlington Municipal Airport	484393011	5504 South Collins Street, Arlington	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Neighborhood	Suburban	32.656415	-97.0885713
Dallas-Fort Worth-Arlington	Arlington Municipal Airport	484393011	5504 South Collins Street, Arlington	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Neighborhood	Suburban	32.656415	-97.0885713
Dallas-Fort Worth-Arlington	Cleburne Airport	482510003	1650 Airport Drive, Cleburne	O3	PAMS, SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale	Suburban	32.3535894	-97.4367486
Dallas-Fort Worth-Arlington	Cleburne Airport	482510003	1650 Airport Drive, Cleburne	Radar Profiler	SPM	Radar Profiler	Continuous	Regional Transport	Regional Scale	Suburban	32.3535894	-97.4367486
Dallas-Fort Worth-Arlington	Cleburne Airport	482510003	1650 Airport Drive, Cleburne	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	General, Background	Neighborhood	Suburban	32.3535894	-97.4367486

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Dallas-Fort Worth-Arlington	Cleburne Airport	482510003	1650 Airport Drive, Cleburne	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	32.3535894	-97.4367486
Dallas-Fort Worth-Arlington	Cleburne Airport	482510003	1650 Airport Drive, Cleburne	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	32.3535894	-97.4367486
Dallas-Fort Worth-Arlington	Convention Center	481130050	717 South Akard, Dallas	PM10 (FRM)	SLAMS	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Population Exposure	Neighborhood	Urban and Center City	32.7742637	-96.7976938
Dallas-Fort Worth-Arlington	Convention Center	481130050	717 South Akard, Dallas	PM10 (FRM)	QA Collocated, SLAMS	HiVol Gravimetric, 141	24 Hours; 1/12 Days	Population Exposure	Neighborhood	Urban and Center City	32.7742637	-96.7976938
Dallas-Fort Worth-Arlington	Convention Center	481130050	717 South Akard, Dallas	PM2.5 FEM	SLAMS	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Urban and Center City	32.7742637	-96.7976938
Dallas-Fort Worth-Arlington	Convention Center	481130050	717 South Akard, Dallas	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Urban and Center City	32.7742637	-96.7976938
Dallas-Fort Worth-Arlington	Convention Center	481130050	717 South Akard, Dallas	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Urban and Center City	32.7742637	-96.7976938
Dallas-Fort Worth-Arlington	Dallas Bexar Street	481131096	5800 Bexar Street, Dallas	PM10 (FRM)	SPM	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Population Exposure	Neighborhood	Urban and Center City	32.5649693	-96.3176709
Dallas-Fort Worth-Arlington	Dallas Bexar Street	481131096	5800 Bexar Street, Dallas	PM2.5 (TEOM)^{N}	SPM	TEOM Gravimetric, 702	Continuous	Population Exposure	Neighborhood	Urban and Center City	32.5649693	-96.3176709
Dallas-Fort Worth-Arlington	Dallas Bexar Street	481131096	5800 Bexar Street, Dallas	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Neighborhood	Urban and Center City	32.5649693	-96.3176709
Dallas-Fort Worth-Arlington	Dallas Bexar Street	481131096	5800 Bexar Street, Dallas	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Neighborhood	Urban and Center City	32.5649693	-96.3176709
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	Carbonyl	PAMS, SLAMS	DNPH Silica HPLC	24 Hours; Seasonal, 8 Hour; Seasonal	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	CO (High Sensitivity)	NCORE, SLAMS	Gas Filter Correlation	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Neighborhood	Urban and Center City	32.8198122	-96.8601547

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	NO2 (Direct)	PAMS, SLAMS	Direct-Read NO2	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	NOy (High Sensitivity)	NCORE, PAMS, SLAMS	Chemiluminescence	Continuous	Highest Concentration	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	O3	NCORE, PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	PM10 FEM	NCORE, SLAMS	Broadband spectroscopy, 639	Continuous	Population Exposure	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	PM10-2.5	NCORE, SLAMS	Broadband spectroscopy, 640	Continuous	Population Exposure	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	PM2.5 FEM	NCORE, SLAMS	Broadband spectroscopy, 638	Continuous	Population Exposure	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	PM2.5 (FRM)	NCORE, SLAMS	Sequential FRM Gravimetric, 145	24 Hours; 1/3 Days	Population Exposure	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	PM2.5 (FRM)	QA Collocated, SLAMS	Sequential FRM Gravimetric, 145	24 Hours; 1/12 Days	Population Exposure	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	PM2.5 (Speciation)	CSN STN, NCORE, SLAMS	Carbons, Elements, Ions, SASS, URG	24 Hours; 1/3 Days	Population Exposure	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	Relative Humidity	NCORE, PAMS, SLAMS	Humidity Sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	SO2 (High Sensitivity)	NCORE, SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Highest Concentration; Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8198122	-96.8601547

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	UV Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	Visibility	SPM	Visibility Sensor	Continuous	Population Exposure	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas Hinton	481130069	1415 Hinton Street, Dallas	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8198122	-96.8601547
Dallas-Fort Worth-Arlington	Dallas LBJ Freeway	481131067	8652 LBJ Freeway, Dallas	NO/NO2/NOx	Near Road, SLAMS	Chemiluminescence	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	32.9211603	-96.7535256
Dallas-Fort Worth-Arlington	Dallas LBJ Freeway	481131067	8652 LBJ Freeway, Dallas	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	32.9211603	-96.7535256
Dallas-Fort Worth-Arlington	Dallas LBJ Freeway	481131067	8652 LBJ Freeway, Dallas	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	32.9211603	-96.7535256
Dallas-Fort Worth-Arlington	Dallas North #2	481130075	12532 1/2 Nuestra Drive, Dallas	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Population Exposure	Neighborhood	Suburban	32.9192141	-96.8084864
Dallas-Fort Worth-Arlington	Dallas North #2	481130075	12532 1/2 Nuestra Drive, Dallas	O3	PAMS, SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale	Suburban	32.9192141	-96.8084864
Dallas-Fort Worth-Arlington	Dallas North #2	481130075	12532 1/2 Nuestra Drive, Dallas	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	General, Background	Neighborhood	Suburban	32.9192141	-96.8084864
Dallas-Fort Worth-Arlington	Dallas North #2	481130075	12532 1/2 Nuestra Drive, Dallas	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	General, Background	Neighborhood	Suburban	32.9192141	-96.8084864
Dallas-Fort Worth-Arlington	Dallas North #2	481130075	12532 1/2 Nuestra Drive, Dallas	Wind	PAMS, SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Neighborhood	Suburban	32.9192141	-96.8084864
Dallas-Fort Worth-Arlington	Dallas Redbird Airport Executive	481130087	3277 W Redbird Lane, Dallas	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Population Exposure	Neighborhood	Suburban	32.6764526	-96.872045
Dallas-Fort Worth-Arlington	Dallas Redbird Airport Executive	481130087	3277 W Redbird Lane, Dallas	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale	Suburban	32.6764526	-96.872045
Dallas-Fort Worth-Arlington	Dallas Redbird Airport Executive	481130087	3277 W Redbird Lane, Dallas	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Neighborhood	Suburban	32.6764526	-96.872045
Dallas-Fort Worth-Arlington	Dallas Redbird Airport Executive	481130087	3277 W Redbird Lane, Dallas	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Neighborhood	Suburban	32.6764526	-96.872045

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Dallas-Fort Worth-Arlington	Denton Airport South	481210034	Denton Airport South, Denton	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Urban Scale	Rural	33.2190828	-97.1962872
Dallas-Fort Worth-Arlington	Denton Airport South	481210034	Denton Airport South, Denton	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Max Ozone Concentration; Population Exposure	Urban Scale	Rural	33.2190828	-97.1962872
Dallas-Fort Worth-Arlington	Denton Airport South	481210034	Denton Airport South, Denton	NOy (High Sensitivity)	PAMS, SLAMS	Chemiluminescence	Continuous	Max Ozone Concentration; Population Exposure	Urban Scale	Rural	33.2190828	-97.1962872
Dallas-Fort Worth-Arlington	Denton Airport South	481210034	Denton Airport South, Denton	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Population Exposure	Urban Scale	Rural	33.2190828	-97.1962872
Dallas-Fort Worth-Arlington	Denton Airport South	481210034	Denton Airport South, Denton	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Urban Scale	Rural	33.2190828	-97.1962872
Dallas-Fort Worth-Arlington	Denton Airport South	481210034	Denton Airport South, Denton	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	Max Ozone Concentration	Urban Scale	Rural	33.2190828	-97.1962872
Dallas-Fort Worth-Arlington	Denton Airport South	481210034	Denton Airport South, Denton	Relative Humidity	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Ozone Concentration	Urban Scale	Rural	33.2190828	-97.1962872
Dallas-Fort Worth-Arlington	Denton Airport South	481210034	Denton Airport South, Denton	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Ozone Concentration	Urban Scale	Rural	33.2190828	-97.1962872
Dallas-Fort Worth-Arlington	Denton Airport South	481210034	Denton Airport South, Denton	Speciated VOC (Canister)	PAMS, SLAMS	Canister GC-MS	24 Hours; 1/6 Days	Max Ozone Concentration; Population Exposure	Urban Scale	Rural	33.2190828	-97.1962872
Dallas-Fort Worth-Arlington	Denton Airport South	481210034	Denton Airport South, Denton	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Ozone Concentration	Urban Scale	Rural	33.2190828	-97.1962872
Dallas-Fort Worth-Arlington	Denton Airport South	481210034	Denton Airport South, Denton	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Ozone Concentration	Urban Scale	Rural	33.2190828	-97.1962872
Dallas-Fort Worth-Arlington	Eagle Mountain Lake	484390075	14290 Morris Dido Newark Rd, Eagle Mountain	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Max Precursor Emissions Impact	Urban Scale	Rural	32.9878868	-97.4771536
Dallas-Fort Worth-Arlington	Eagle Mountain Lake	484390075	14290 Morris Dido Newark Rd, Eagle Mountain	O3	SLAMS	UV Photometric	Continuous	Max Ozone Concentration	Neighborhood	Rural	32.9878868	-97.4771536
Dallas-Fort Worth-Arlington	Eagle Mountain Lake	484390075	14290 Morris Dido Newark Rd, Eagle Mountain	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Middle Scale	Rural	32.9878868	-97.4771536
Dallas-Fort Worth-Arlington	Eagle Mountain Lake	484390075	14290 Morris Dido Newark Rd, Eagle Mountain	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Highest Concentration	Middle Scale	Rural	32.9878868	-97.4771536

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Dallas-Fort Worth-Arlington	Eagle Mountain Lake	484390075	14290 Morris Dido Newark Rd, Eagle Mountain	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Highest Concentration	Middle Scale	Rural	32.9878868	-97.4771536
Dallas-Fort Worth-Arlington	Earhart	481130061	3434 Bickers (Earhart Elem School), Dallas	PM10 (FRM)	SLAMS	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Population Exposure	Neighborhood	Urban and Center City	32.7853694	-96.8765568
Dallas-Fort Worth-Arlington	Fort Worth California Parkway North	484391053	1198 California Parkway North, Fort Worth	CO	Near Road, SLAMS	Gas Filter Correlation	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	32.6647562	-97.3378966
Dallas-Fort Worth-Arlington	Fort Worth California Parkway North	484391053	1198 California Parkway North, Fort Worth	NO/NO2/NOx	Near Road, SLAMS	Chemiluminescence	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	32.6647562	-97.3378966
Dallas-Fort Worth-Arlington	Fort Worth California Parkway North	484391053	1198 California Parkway North, Fort Worth	PM2.5 FEM	Near Road, SLAMS	Beta Attenuation, 209	Continuous	Population Exposure	Microscale	Urban and Center City	32.6647562	-97.3378966
Dallas-Fort Worth-Arlington	Fort Worth California Parkway North	484391053	1198 California Parkway North, Fort Worth	PM2.5 FEM	QA Collocated, SLAMS	Beta Attenuation, 209	Continuous	Quality Assurance	Microscale	Urban and Center City	32.6647562	-97.3378966
Dallas-Fort Worth-Arlington	Fort Worth California Parkway North	484391053	1198 California Parkway North, Fort Worth	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	32.6647562	-97.3378966
Dallas-Fort Worth-Arlington	Fort Worth California Parkway North	484391053	1198 California Parkway North, Fort Worth	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	32.6647562	-97.3378966
Dallas-Fort Worth-Arlington	Fort Worth Northwest	484391002	3317 Ross Ave, Fort Worth	Carbonyl	PAMS, SLAMS	DNPH Silica HPLC	24 Hours; Seasonal	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8058061	-97.3565215
Dallas-Fort Worth-Arlington	Fort Worth Northwest	484391002	3317 Ross Ave, Fort Worth	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Middle Scale	Urban and Center City	32.8058061	-97.3565215
Dallas-Fort Worth-Arlington	Fort Worth Northwest	484391002	3317 Ross Ave, Fort Worth	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Urban and Center City	32.8058061	-97.3565215
Dallas-Fort Worth-Arlington	Fort Worth Northwest	484391002	3317 Ross Ave, Fort Worth	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Urban and Center City	32.8058061	-97.3565215
Dallas-Fort Worth-Arlington	Fort Worth Northwest	484391002	3317 Ross Ave, Fort Worth	PM2.5 FEM	SLAMS	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Urban and Center City	32.8058061	-97.3565215
Dallas-Fort Worth-Arlington	Fort Worth Northwest	484391002	3317 Ross Ave, Fort Worth	Relative Humidity	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8058061	-97.3565215
Dallas-Fort Worth-Arlington	Fort Worth Northwest	484391002	3317 Ross Ave, Fort Worth	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8058061	-97.3565215

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Dallas-Fort Worth-Arlington	Fort Worth Northwest	484391002	3317 Ross Ave, Fort Worth	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Urban and Center City	32.8058061	-97.3565215
Dallas-Fort Worth-Arlington	Fort Worth Northwest	484391002	3317 Ross Ave, Fort Worth	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8058061	-97.3565215
Dallas-Fort Worth-Arlington	Fort Worth Northwest	484391002	3317 Ross Ave, Fort Worth	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	32.8058061	-97.3565215
Dallas-Fort Worth-Arlington	Frisco	480850005	6590 Hillcrest Road, Frisco	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale	Suburban	33.1323982	-96.7864381
Dallas-Fort Worth-Arlington	Frisco	480850005	6590 Hillcrest Road, Frisco	Solar Radiation	SPM	Photovoltaic	Continuous	General, Background	Urban Scale	Suburban	33.1323982	-96.7864381
Dallas-Fort Worth-Arlington	Frisco	480850005	6590 Hillcrest Road, Frisco	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Urban Scale	Suburban	33.1323982	-96.7864381
Dallas-Fort Worth-Arlington	Frisco	480850005	6590 Hillcrest Road, Frisco	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Urban Scale	Suburban	33.1323982	-96.7864381
Dallas-Fort Worth-Arlington	Frisco Eubanks	480850009	6601 Eubanks, Frisco	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure; Source Oriented	Neighborhood	Suburban	33.1446692	-96.8288093
Dallas-Fort Worth-Arlington	Frisco Eubanks	480850009	6601 Eubanks, Frisco	TSP (Pb)	SLAMS	HiVol ICP-MS	24 Hours; 1/6 Days	Population Exposure; Source Oriented	Neighborhood	Suburban	33.1446692	-96.8288093
Dallas-Fort Worth-Arlington	Frisco Eubanks	480850009	6601 Eubanks, Frisco	TSP (Pb)	QA Collocated, SLAMS	HiVol ICP-MS	24 Hours; 1/12 Days	Population Exposure; Source Oriented	Neighborhood	Suburban	33.1446692	-96.8288093
Dallas-Fort Worth-Arlington	Frisco Eubanks	480850009	6601 Eubanks, Frisco	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood	Suburban	33.1446692	-96.8288093
Dallas-Fort Worth-Arlington	Frisco Stonebrook	480850029	7202 Stonebrook Parkway, Frisco	TSP (Pb)	SPM	HiVol ICP-MS	24 Hours; 1/6 Days	Population Exposure; Source Oriented	Neighborhood	Suburban	33.1360535	-96.824481
Dallas-Fort Worth-Arlington	Grapevine Fairway	484393009	4100 Fairway Dr, Grapevine	Barometric Pressure	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Ozone Concentration	Neighborhood	Suburban	32.984288	-97.0637058
Dallas-Fort Worth-Arlington	Grapevine Fairway	484393009	4100 Fairway Dr, Grapevine	Dew Point	SPM	Derived at site	Continuous	Highest Concentration; Max Ozone Concentration	Neighborhood	Suburban	32.984288	-97.0637058
Dallas-Fort Worth-Arlington	Grapevine Fairway	484393009	4100 Fairway Dr, Grapevine	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood	Suburban	32.984288	-97.0637058

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Dallas-Fort Worth-Arlington	Grapevine Fairway	484393009	4100 Fairway Dr, Grapevine	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood	Suburban	32.984288	-97.0637058
Dallas-Fort Worth-Arlington	Grapevine Fairway	484393009	4100 Fairway Dr, Grapevine	Relative Humidity	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Ozone Concentration	Neighborhood	Suburban	32.984288	-97.0637058
Dallas-Fort Worth-Arlington	Grapevine Fairway	484393009	4100 Fairway Dr, Grapevine	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Ozone Concentration	Neighborhood	Suburban	32.984288	-97.0637058
Dallas-Fort Worth-Arlington	Grapevine Fairway	484393009	4100 Fairway Dr, Grapevine	Speciated VOC (Canister)	PAMS, SLAMS	Canister GC-MS	24 Hours; 1/6 Days	Max Ozone Concentration; Population Exposure	Neighborhood	Suburban	32.984288	-97.0637058
Dallas-Fort Worth-Arlington	Grapevine Fairway	484393009	4100 Fairway Dr, Grapevine	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Ozone Concentration	Neighborhood	Suburban	32.984288	-97.0637058
Dallas-Fort Worth-Arlington	Grapevine Fairway	484393009	4100 Fairway Dr, Grapevine	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Ozone Concentration	Neighborhood	Suburban	32.984288	-97.0637058
Dallas-Fort Worth-Arlington	Greenville	482311006	824 Sayle Street, Greenville	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Population Exposure; Upwind Background	Neighborhood	Suburban	33.1530947	-96.1155723
Dallas-Fort Worth-Arlington	Greenville	482311006	824 Sayle Street, Greenville	O3	SLAMS	UV Photometric	Continuous	Population Exposure; Upwind Background	Neighborhood	Suburban	33.1530947	-96.1155723
Dallas-Fort Worth-Arlington	Greenville	482311006	824 Sayle Street, Greenville	Solar Radiation	SPM	Photovoltaic	Continuous	General, Background	Neighborhood	Suburban	33.1530947	-96.1155723
Dallas-Fort Worth-Arlington	Greenville	482311006	824 Sayle Street, Greenville	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Neighborhood	Suburban	33.1530947	-96.1155723
Dallas-Fort Worth-Arlington	Greenville	482311006	824 Sayle Street, Greenville	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Neighborhood	Suburban	33.1530947	-96.1155723
Dallas-Fort Worth-Arlington	Haws Athletic Center	484391006	600 1/2 Congress St, Fort Worth	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Urban and Center City	32.7591555	-97.342298
Dallas-Fort Worth-Arlington	Italy	481391044	900 FM 667 Ellis County, Italy	Dew Point	SPM	Derived at site	Continuous	Upwind Background	Urban Scale	Rural	32.1754716	-96.870167
Dallas-Fort Worth-Arlington	Italy	481391044	900 FM 667 Ellis County, Italy	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Upwind Background	Urban Scale	Rural	32.1754716	-96.870167
Dallas-Fort Worth-Arlington	Italy	481391044	900 FM 667 Ellis County, Italy	O3	PAMS, SLAMS	UV Photometric	Continuous	Upwind Background	Urban Scale	Rural	32.1754716	-96.870167

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Dallas-Fort Worth-Arlington	Italy	481391044	900 FM 667 Ellis County, Italy	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Upwind Background	Urban Scale	Rural	32.1754716	-96.870167
Dallas-Fort Worth-Arlington	Italy	481391044	900 FM 667 Ellis County, Italy	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Upwind Background	Urban Scale	Rural	32.1754716	-96.870167
Dallas-Fort Worth-Arlington	Italy	481391044	900 FM 667 Ellis County, Italy	Speciated VOC (Canister)	PAMS, SLAMS	Canister GC-MS	24 Hours; 1/6 Days	Upwind Background	Urban Scale	Rural	32.1754716	-96.870167
Dallas-Fort Worth-Arlington	Italy	481391044	900 FM 667 Ellis County, Italy	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Upwind Background	Urban Scale	Rural	32.1754716	-96.870167
Dallas-Fort Worth-Arlington	Italy	481391044	900 FM 667 Ellis County, Italy	UV Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Upwind Background	Urban Scale	Rural	32.1754716	-96.870167
Dallas-Fort Worth-Arlington	Italy	481391044	900 FM 667 Ellis County, Italy	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Upwind Background	Urban Scale	Rural	32.1754716	-96.870167
Dallas-Fort Worth-Arlington	Kaufman	482570005	3790 S Houston St, Kaufman	Dew Point	SPM	Derived at site	Continuous	Highest Concentration	Neighborhood	Suburban	32.5649693	-96.3176709
Dallas-Fort Worth-Arlington	Kaufman	482570005	3790 S Houston St, Kaufman	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Population Exposure; Upwind Background	Neighborhood / Urban Scale	Suburban	32.5649693	-96.3176709
Dallas-Fort Worth-Arlington	Kaufman	482570005	3790 S Houston St, Kaufman	O3	PAMS, SLAMS	UV Photometric	Continuous	Population Exposure; Upwind Background	Urban Scale	Suburban	32.5649693	-96.3176709
Dallas-Fort Worth-Arlington	Kaufman	482570005	3790 S Houston St, Kaufman	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Upwind Background	Urban Scale	Suburban	32.5649693	-96.3176709
Dallas-Fort Worth-Arlington	Kaufman	482570005	3790 S Houston St, Kaufman	Relative Humidity	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Upwind Background	Urban Scale	Suburban	32.5649693	-96.3176709
Dallas-Fort Worth-Arlington	Kaufman	482570005	3790 S Houston St, Kaufman	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure; Upwind Background	Neighborhood	Suburban	32.5649693	-96.3176709
Dallas-Fort Worth-Arlington	Kaufman	482570005	3790 S Houston St, Kaufman	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Upwind Background	Urban Scale	Suburban	32.5649693	-96.3176709
Dallas-Fort Worth-Arlington	Kaufman	482570005	3790 S Houston St, Kaufman	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Upwind Background	Urban Scale	Suburban	32.5649693	-96.3176709
Dallas-Fort Worth-Arlington	Kaufman	482570005	3790 S Houston St, Kaufman	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Upwind Background	Urban Scale	Suburban	32.5649693	-96.3176709

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Dallas-Fort Worth-Arlington	Keller	484392003	FAA Site off Alta Vista Road, Fort Worth	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Max Precursor Emissions Impact	Urban Scale	Suburban	32.9224893	-97.2821031
Dallas-Fort Worth-Arlington	Keller	484392003	FAA Site off Alta Vista Road, Fort Worth	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood	Suburban	32.9224893	-97.2821031
Dallas-Fort Worth-Arlington	Keller	484392003	FAA Site off Alta Vista Road, Fort Worth	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	General, Background	Urban Scale	Suburban	32.9224893	-97.2821031
Dallas-Fort Worth-Arlington	Keller	484392003	FAA Site off Alta Vista Road, Fort Worth	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	General, Background	Urban Scale	Suburban	32.9224893	-97.2821031
Dallas-Fort Worth-Arlington	Keller	484392003	FAA Site off Alta Vista Road, Fort Worth	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	General, Background	Urban Scale	Suburban	32.9224893	-97.2821031
Dallas-Fort Worth-Arlington	Parker County	483670081	3033 New Authon Rd, Weatherford	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale	Rural	32.8687891	-97.9059299
Dallas-Fort Worth-Arlington	Parker County	483670081	3033 New Authon Rd, Weatherford	Solar Radiation	SPM	Photovoltaic	Continuous	Source Oriented	Neighborhood	Rural	32.8687891	-97.9059299
Dallas-Fort Worth-Arlington	Parker County	483670081	3033 New Authon Rd, Weatherford	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Source Oriented	Neighborhood	Rural	32.8687891	-97.9059299
Dallas-Fort Worth-Arlington	Parker County	483670081	3033 New Authon Rd, Weatherford	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Source Oriented	Neighborhood	Rural	32.8687891	-97.9059299
Dallas-Fort Worth-Arlington	Pilot Point	481211032	792 E Northside Dr, Pilot Point	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Regional Scale	Suburban	33.4106492	-96.9445946
Dallas-Fort Worth-Arlington	Pilot Point	481211032	792 E Northside Dr, Pilot Point	Solar Radiation	SPM	Photovoltaic	Continuous	Upwind Background	Regional Scale	Suburban	33.4106492	-96.9445946
Dallas-Fort Worth-Arlington	Pilot Point	481211032	792 E Northside Dr, Pilot Point	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Upwind Background	Regional Scale	Suburban	33.4106492	-96.9445946
Dallas-Fort Worth-Arlington	Pilot Point	481211032	792 E Northside Dr, Pilot Point	Wind	SPM	AIO2 sonic weather sensor	Continuous	Upwind Background	Regional Scale	Suburban	33.4106492	-96.9445946
Dallas-Fort Worth-Arlington	Rockwall Heath	483970001	100 E Heath St, Rockwall	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	32.936524	-96.4592018
Dallas-Fort Worth-Arlington	Rockwall Heath	483970001	100 E Heath St, Rockwall	Solar Radiation	SPM	Photovoltaic	Continuous	Population Exposure	Neighborhood	Suburban	32.936524	-96.4592018

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Dallas-Fort Worth-Arlington	Rockwall Heath	483970001	100 E Heath St, Rockwall	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood	Suburban	32.936524	-96.4592018
Dallas-Fort Worth-Arlington	Rockwall Heath	483970001	100 E Heath St, Rockwall	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood	Suburban	32.936524	-96.4592018
Dallas-Fort Worth-Arlington	Terrell Jamison Court	482570020	8 Jamison Ct, Terrell	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	32.728561	-96.318552
Dallas-Fort Worth-Arlington	Terrell Jamison Court	482570020	8 Jamison Ct, Terrell	TSP (Pb)	SLAMS	HiVol ICP-MS	24 Hours; 1/6 Days	Population Exposure; Source Oriented	Neighborhood	Suburban	32.728561	-96.318552
Dallas-Fort Worth-Arlington	Terrell Jamison Court	482570020	8 Jamison Ct, Terrell	TSP (Pb)	QA Collocated, SLAMS	HiVol ICP-MS	24 Hours; 1/12 Days	Quality Assurance; Source Oriented	Neighborhood	Suburban	32.728561	-96.318552
Dallas-Fort Worth-Arlington	Terrell Jamison Court	482570020	8 Jamison Ct, Terrell	Wind (3m)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	32.728561	-96.318552
Eagle Pass	Eagle Pass	483230004	265 Foster Maldonado, Eagle Pass	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Regional Transport	Regional Scale	Urban and Center City	28.7046287	-100.451154
Eagle Pass	Eagle Pass	483230004	265 Foster Maldonado, Eagle Pass	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Regional Transport	Regional Scale	Urban and Center City	28.7046287	-100.451154
Eagle Pass	Eagle Pass	483230004	265 Foster Maldonado, Eagle Pass	Visibility	SPM	Visibility Sensor	Continuous	Regional Transport	Regional Scale	Urban and Center City	28.7046287	-100.451154
Eagle Pass	Eagle Pass	483230004	265 Foster Maldonado, Eagle Pass	Wind	SPM	AIO2 sonic weather sensor	Continuous	Regional Transport	Regional Scale	Urban and Center City	28.7046287	-100.451154
El Paso	Ascarate Park SE	481410055	650 R E Thomason Loop, El Paso	Barometric Pressure	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	31.7467473	-106.402795
El Paso	Ascarate Park SE	481410055	650 R E Thomason Loop, El Paso	Dew Point	SPM	Derived at site	Continuous	General, Background	Urban Scale	Suburban	31.7467473	-106.402795
El Paso	Ascarate Park SE	481410055	650 R E Thomason Loop, El Paso	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Highest Concentration; Upwind Background	Neighborhood / Urban Scale	Suburban	31.7467473	-106.402795
El Paso	Ascarate Park SE	481410055	650 R E Thomason Loop, El Paso	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Upwind Background	Neighborhood	Suburban	31.7467473	-106.402795
El Paso	Ascarate Park SE	481410055	650 R E Thomason Loop, El Paso	PM2.5 (FRM)	QA Collocated, SPM	Sequential FRM Gravimetric, 145	24 Hours; 1/12 Days	Quality Assurance	Neighborhood	Suburban	31.7467473	-106.402795

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
El Paso	Ascarate Park SE	481410055	650 R E Thomason Loop, El Paso	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Suburban	31.7467473	-106.402795
El Paso	Ascarate Park SE	481410055	650 R E Thomason Loop, El Paso	Relative Humidity	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	31.7467473	-106.402795
El Paso	Ascarate Park SE	481410055	650 R E Thomason Loop, El Paso	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Ozone Concentration; Upwind Background	Neighborhood	Suburban	31.7467473	-106.402795
El Paso	Ascarate Park SE	481410055	650 R E Thomason Loop, El Paso	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	31.7467473	-106.402795
El Paso	Ascarate Park SE	481410055	650 R E Thomason Loop, El Paso	Visibility	SPM	Visibility Sensor	Continuous	Highest Concentration; Population Exposure	Urban Scale	Suburban	31.7467473	-106.402795
El Paso	Ascarate Park SE	481410055	650 R E Thomason Loop, El Paso	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background; Max Ozone Concentration;	Neighborhood	Suburban	31.7467473	-106.402795
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	CO (High Sensitivity)	NCORE, SLAMS	Gas Filter Correlation	Continuous	Highest Concentration	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	Dew Point	SPM	Derived at site	Continuous	General, Background	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Highest Concentration; Max Precursor Emissions Impact	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	NOy (High Sensitivity)	NCORE, SLAMS	Chemiluminescence	Continuous	Highest Concentration	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	O3	NCORE, PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	PM10 FEM	SLAMS	Broadband spectroscopy, 639	Continuous	Population Exposure	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	PM10-2.5	NCORE, SLAMS	Broadband spectroscopy, 640	Continuous	Population Exposure	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	PM2.5 FEM	NCORE, SLAMS	Broadband spectroscopy, 638	Continuous	Population Exposure	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	PM2.5 (FRM)	NCORE, and QA Collocated for method 638, SLAMS	Sequential FRM Gravimetric, 145	24 Hours; 1/3 Days	Highest Concentration; Population Exposure	Neighborhood	Urban and Center City	31.7657056	-106.455242

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	PM2.5 (Speciation)	CSN STN, NCORE, SLAMS	Carbons, Elements, Ions, SASS, URG	24 Hours; 1/3 Days	Highest Concentration	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	Relative Humidity	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	SO2 (High Sensitivity)	NCORE, SLAMS	Pulsed Fluorescence	Continuous	Highest Concentration	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Highest Concentration; Max Precursor Emissions Impact	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Chamizal	481410044	800 S San Marcial Street, El Paso	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background; Max Precursor Emissions Impact	Neighborhood	Urban and Center City	31.7657056	-106.455242
El Paso	El Paso Mimosa	481410038	7501 Mimosa Avenue, El Paso	PM10 (FRM)	SLAMS	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Population Exposure	Neighborhood	Suburban	31.7358796	-106.377925
El Paso	Ivanhoe	481410029	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	O3	SPM	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	31.7857542	-106.323631
El Paso	Ivanhoe	481410029	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	PM10 (FRM)	SLAMS	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Population Exposure	Neighborhood	Suburban	31.7857542	-106.323631
El Paso	Ivanhoe	481410029	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	Relative Humidity	Border Grant, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	31.7857542	-106.323631
El Paso	Ivanhoe	481410029	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	31.7857542	-106.323631
El Paso	Ivanhoe	481410029	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	Wind	Border Grant, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	31.7857542	-106.323631
El Paso	Ojo De Agua	481411021	6767 Ojo De Agua, El Paso	CO	SLAMS	Gas Filter Correlation	Continuous	Population Exposure	Neighborhood	Suburban	31.8624965	-106.547327
El Paso	Ojo De Agua	481411021	6767 Ojo De Agua, El Paso	O3	SPM	UV Photometric	Continuous	General, Background	Neighborhood	Suburban	31.8624965	-106.547327

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
El Paso	Ojo De Agua	481411021	6767 Ojo De Agua, El Paso	PM10 (FRM)	SLAMS	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Population Exposure	Neighborhood	Suburban	31.8624965	-106.547327
El Paso	Ojo De Agua	481411021	6767 Ojo De Agua, El Paso	PM10 (FRM)	QA Collocated, SLAMS	HiVol Gravimetric, 141	24 Hours; 1/12 Days	Population Exposure	Neighborhood	Suburban	31.8624965	-106.547327
El Paso	Ojo De Agua	481411021	6767 Ojo De Agua, El Paso	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	31.8624965	-106.547327
El Paso	Ojo De Agua	481411021	6767 Ojo De Agua, El Paso	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	31.8624965	-106.547327
El Paso	Skyline Park	481410058	5050A Yvette Drive, El Paso	O3	Border Grant, SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	31.8939186	-106.425836
El Paso	Skyline Park	481410058	5050A Yvette Drive, El Paso	Temperature (Outdoor)	Border Grant, SLAMS	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	31.8939186	-106.425836
El Paso	Skyline Park	481410058	5050A Yvette Drive, El Paso	Wind	Border Grant, SLAMS	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	31.8939186	-106.425836
El Paso	Socorro Hueco	481410057	320 Old Hueco Tanks Road, El Paso	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	31.6675435	-106.287975
El Paso	Socorro Hueco	481410057	320 Old Hueco Tanks Road, El Paso	PM10 FEM	SLAMS	Broadband spectroscopy, 639	Continuous	Population Exposure	Neighborhood	Suburban	31.6675435	-106.287975
El Paso	Socorro Hueco	481410057	320 Old Hueco Tanks Road, El Paso	PM2.5 FEM	SLAMS	Broadband spectroscopy, 638	Continuous	Population Exposure	Neighborhood	Suburban	31.6675435	-106.287975
El Paso	Socorro Hueco	481410057	320 Old Hueco Tanks Road, El Paso	PM2.5	QA Collocated, SLAMS	Broadband spectroscopy, 638	Continuous	Quality Assurance	Neighborhood	Suburban	31.6675435	-106.287975
El Paso	Socorro Hueco	481410057	320 Old Hueco Tanks Road, El Paso	Radar Profiler	SPM	Radar Profiler	Continuous	Regional Transport	Regional Scale	Suburban	31.6675435	-106.287975
El Paso	Socorro Hueco	481410057	320 Old Hueco Tanks Road, El Paso	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	31.6675435	-106.287975
El Paso	Socorro Hueco	481410057	320 Old Hueco Tanks Road, El Paso	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	31.6675435	-106.287975
El Paso	Van Buren	481410693	2700 Harrison Avenue, El Paso	PM10 (FRM)	SPM	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Population Exposure	Neighborhood	Urban and Center City	31.8133479	-106.464537

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
El Paso	Van Buren	481410693	2700 Harrison Avenue, El Paso	Relative Humidity	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Urban and Center City	31.8133479	-106.464537
El Paso	Van Buren	481410693	2700 Harrison Avenue, El Paso	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Urban and Center City	31.8133479	-106.464537
El Paso	Van Buren	481410693	2700 Harrison Avenue, El Paso	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Urban and Center City	31.8133479	-106.464537
Granbury	Granbury	482210001	200 N Gordon Street, Granbury	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	32.442322	-97.8035558
Granbury	Granbury	482210001	200 N Gordon Street, Granbury	Solar Radiation	SPM	Photovoltaic	Continuous	General, Background	Middle Scale	Suburban	32.442322	-97.8035558
Granbury	Granbury	482210001	200 N Gordon Street, Granbury	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Middle Scale	Suburban	32.442322	-97.8035558
Granbury	Granbury	482210001	200 N Gordon Street, Granbury	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Middle Scale	Suburban	32.442322	-97.8035558
Houston-Pasadena-The Woodlands	Baytown	482010058	7210 1/2 Bayway Drive, Baytown	PM2.5 FEM	SLAMS	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Suburban	29.770689	-95.0312263
Houston-Pasadena-The Woodlands	Baytown	482010058	7210 1/2 Bayway Drive, Baytown	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Neighborhood	Suburban	29.770689	-95.0312263
Houston-Pasadena-The Woodlands	Baytown	482010058	7210 1/2 Bayway Drive, Baytown	Wind	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Neighborhood	Suburban	29.770689	-95.0312263
Houston-Pasadena-The Woodlands	Baytown Garth	482011017	4898 Ashbel Cove Drive, Trailer A, Baytown	O3	SLAMS	UV Photometric	Continuous	Max Ozone Concentration	Neighborhood	Suburban	29.8271903	-94.9882896
Houston-Pasadena-The Woodlands	Baytown Garth	482011017	4898 Ashbel Cove Drive, Trailer A, Baytown	Solar Radiation	SPM	Photovoltaic	Continuous	Population Exposure	Neighborhood	Suburban	29.8271903	-94.9882896
Houston-Pasadena-The Woodlands	Baytown Garth	482011017	4898 Ashbel Cove Drive, Trailer A, Baytown	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	29.8271903	-94.9882896
Houston-Pasadena-The Woodlands	Baytown Garth	482011017	4898 Ashbel Cove Drive, Trailer A, Baytown	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	29.8271903	-94.9882896
Houston-Pasadena-The Woodlands	Channelview	482010026	1405 Sheldon Road, Channelview	Dew Point	SPM	Derived at site	Continuous	Highest Concentration	Neighborhood	Suburban	29.8027231	-95.1254893

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Houston-Pasadena-The Woodlands	Channelview	482010026	1405 Sheldon Road, Channelview	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Population Exposure	Middle Scale / Neighborhood	Suburban	29.8027231	-95.1254893
Houston-Pasadena-The Woodlands	Channelview	482010026	1405 Sheldon Road, Channelview	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Suburban	29.8027231	-95.1254893
Houston-Pasadena-The Woodlands	Channelview	482010026	1405 Sheldon Road, Channelview	Relative Humidity	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Suburban	29.8027231	-95.1254893
Houston-Pasadena-The Woodlands	Channelview	482010026	1405 Sheldon Road, Channelview	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood	Suburban	29.8027231	-95.1254893
Houston-Pasadena-The Woodlands	Channelview	482010026	1405 Sheldon Road, Channelview	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Population Exposure	Neighborhood	Suburban	29.8027231	-95.1254893
Houston-Pasadena-The Woodlands	Channelview	482010026	1405 Sheldon Road, Channelview	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Suburban	29.8027231	-95.1254893
Houston-Pasadena-The Woodlands	Channelview	482010026	1405 Sheldon Road, Channelview	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Suburban	29.8027231	-95.1254893
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	Barometric Pressure	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	Carbonyl	PAMS, SLAMS	DNPH Silica HPLC	24 Hours; Seasonal	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	CO (High Sensitivity)	SPM	Gas Filter Correlation	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Houston Monroe	482010062	9726 1/2 Monroe, Houston	PM10 (FRM)	QA Collocated, SLAMS	HiVol Gravimetric, 141	24 Hours; 1/12 Days	Highest Concentration; Population Exposure	Neighborhood	Suburban	29.625622	-95.267065
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	PM10 FEM	SLAMS	Broadband spectroscopy, 639	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.7337367	-95.2576045

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	PM2.5 FEM	SLAMS	Broadband spectroscopy, 638	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	PM2.5 (FRM)	SLAMS	Sequential FRM Gravimetric, 145	24 Hours; 1/6 Days	Highest Concentration; Population Exposure; Source Oriented	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	PM2.5 (FRM)	QA Collocated, SLAMS	Sequential FRM Gravimetric, 145	24 Hours; 1/12 Days	Highest Concentration; Population Exposure	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	PM2.5 (Speciation)	SPM	Carbons, Elements, Ions, 2025, 2025	24 Hours; 1/6 Days	Population Exposure	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	Precipitation	SPM	Continuous	Continuous	General, Background	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Highest Concentration; Population Exposure; Source Oriented	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	UV Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Clinton	482011035	9525 1/2 Clinton Dr, Houston	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	29.7337367	-95.2576045
Houston-Pasadena-The Woodlands	Conroe Relocated	483390078	9472A Hwy 1484, Conroe	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	General, Background; Population Exposure	Urban Scale	Suburban	30.350355	-95.4251242
Houston-Pasadena-The Woodlands	Conroe Relocated	483390078	9472A Hwy 1484, Conroe	O3	PAMS, SLAMS	UV Photometric	Continuous	General, Background; Population Exposure	Urban Scale	Suburban	30.350355	-95.4251242
Houston-Pasadena-The Woodlands	Conroe Relocated	483390078	9472A Hwy 1484, Conroe	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	General, Background	Neighborhood	Suburban	30.350355	-95.4251242

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Houston-Pasadena-The Woodlands	Conroe Relocated	483390078	9472A Hwy 1484, Conroe	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Highest Concentration	Neighborhood	Suburban	30.350355	-95.4251242
Houston-Pasadena-The Woodlands	Conroe Relocated	483390078	9472A Hwy 1484, Conroe	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Highest Concentration	Neighborhood	Suburban	30.350355	-95.4251242
Houston-Pasadena-The Woodlands	Conroe Relocated	483390078	9472A Hwy 1484, Conroe	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Highest Concentration	Neighborhood	Suburban	30.350355	-95.4251242
Houston-Pasadena-The Woodlands	Freeport South Avenue I	480391012	207 South Avenue I, Freeport	PM2.5 (FRM)	SPM	Sequential FRM Gravimetric, 145	24 Hours; 1/6 Days	Source Oriented	Middle Scale	Suburban	28.9644069	-95.3549703
Houston-Pasadena-The Woodlands	Freeport South Avenue I	480391012	207 South Avenue I, Freeport	PM2.5 (Speciation)	SPM	Elements	24 Hours; 1/6 Days	Source Oriented	Middle Scale	Suburban	28.9644069	-95.3549703
Houston-Pasadena-The Woodlands	Freeport South Avenue I	480391012	207 South Avenue I, Freeport	SO2	SPM	Pulsed Fluorescence	Continuous	Source Oriented	Middle Scale	Suburban	28.9644069	-95.3549703
Houston-Pasadena-The Woodlands	Freeport South Avenue I	480391012	207 South Avenue I, Freeport	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Middle Scale	Suburban	28.9644069	-95.3549703
Houston-Pasadena-The Woodlands	Freeport South Avenue I	480391012	207 South Avenue I, Freeport	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Middle Scale	Suburban	28.9644069	-95.3549703
Houston-Pasadena-The Woodlands	Galveston 99th Street	481671034	9511 Avenue V 1/2, Galveston	Dew Point	SPM	Derived at site	Continuous	General, Background; Upwind Background	Middle Scale	Suburban	29.2544674	-94.8612829
Houston-Pasadena-The Woodlands	Galveston 99th Street	481671034	9511 Avenue V 1/2, Galveston	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	General, Background; Upwind Background	Middle Scale / Urban Scale	Suburban	29.2544674	-94.8612829
Houston-Pasadena-The Woodlands	Galveston 99th Street	481671034	9511 Avenue V 1/2, Galveston	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Upwind Background	Urban Scale	Suburban	29.2544674	-94.8612829
Houston-Pasadena-The Woodlands	Galveston 99th Street	481671034	9511 Avenue V 1/2, Galveston	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Regional Transport	Regional Scale	Suburban	29.2544674	-94.8612829
Houston-Pasadena-The Woodlands	Galveston 99th Street	481671034	9511 Avenue V 1/2, Galveston	Relative Humidity	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Urban Scale	Suburban	29.2544674	-94.8612829
Houston-Pasadena-The Woodlands	Galveston 99th Street	481671034	9511 Avenue V 1/2, Galveston	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Ozone Concentration; Upwind Background	Urban Scale	Suburban	29.2544674	-94.8612829
Houston-Pasadena-The Woodlands	Galveston 99th Street	481671034	9511 Avenue V 1/2, Galveston	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Urban Scale	Suburban	29.2544674	-94.8612829

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Houston-Pasadena-The Woodlands	Galveston 99th Street	481671034	9511 Avenue V 1/2, Galveston	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background; Max Ozone Concentration;	Urban Scale	Suburban	29.2544674	-94.8612829
Houston-Pasadena-The Woodlands	Houston Aldine	482010024	4510 1/2 Aldine Mail Rd, Houston	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous	Max Ozone Concentration	Neighborhood	Suburban	29.9010271	-95.3261393
Houston-Pasadena-The Woodlands	Houston Aldine	482010024	4510 1/2 Aldine Mail Rd, Houston	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Urban Scale	Suburban	29.9010271	-95.3261393
Houston-Pasadena-The Woodlands	Houston Aldine	482010024	4510 1/2 Aldine Mail Rd, Houston	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood	Suburban	29.9010271	-95.3261393
Houston-Pasadena-The Woodlands	Houston Aldine	482010024	4510 1/2 Aldine Mail Rd, Houston	NOy (High Sensitivity)	PAMS, SLAMS	Chemiluminescence	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood	Suburban	29.9010271	-95.3261393
Houston-Pasadena-The Woodlands	Houston Aldine	482010024	4510 1/2 Aldine Mail Rd, Houston	O3	PAMS, SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Population Exposure	Neighborhood	Suburban	29.9010271	-95.3261393
Houston-Pasadena-The Woodlands	Houston Aldine	482010024	4510 1/2 Aldine Mail Rd, Houston	PM2.5 (FRM)	QA Collocated, SLAMS	Sequential FRM Gravimetric, 145	24 Hours; 1/12 Days	Population Exposure	Neighborhood	Suburban	29.9010271	-95.3261393
Houston-Pasadena-The Woodlands	Houston Aldine	482010024	4510 1/2 Aldine Mail Rd, Houston	PM2.5 FEM	SLAMS	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Suburban	29.9010271	-95.3261393
Houston-Pasadena-The Woodlands	Houston Aldine	482010024	4510 1/2 Aldine Mail Rd, Houston	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Max Ozone Concentration	Neighborhood	Suburban	29.9010271	-95.3261393
Houston-Pasadena-The Woodlands	Houston Aldine	482010024	4510 1/2 Aldine Mail Rd, Houston	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Ozone Concentration	Neighborhood	Suburban	29.9010271	-95.3261393
Houston-Pasadena-The Woodlands	Houston Aldine	482010024	4510 1/2 Aldine Mail Rd, Houston	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Ozone Concentration	Neighborhood	Suburban	29.9010271	-95.3261393
Houston-Pasadena-The Woodlands	Houston Aldine	482010024	4510 1/2 Aldine Mail Rd, Houston	Wind	Other, PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background; Max Ozone Concentration	Middle Scale / Neighborhood	Suburban	29.9010271	-95.3261393
Houston-Pasadena-The Woodlands	Houston Bayland Park	482010055	6400 Bissonnet Street, Houston	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Population Exposure	Middle Scale / Neighborhood	Suburban	29.6957433	-95.4992418
Houston-Pasadena-The Woodlands	Houston Bayland Park	482010055	6400 Bissonnet Street, Houston	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Middle Scale	Suburban	29.6957433	-95.4992418
Houston-Pasadena-The Woodlands	Houston Bayland Park	482010055	6400 Bissonnet Street, Houston	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Suburban	29.6957433	-95.4992418

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Houston-Pasadena-The Woodlands	Houston Bayland Park	482010055	6400 Bissonnet Street, Houston	Solar Radiation	SPM	Photovoltaic	Continuous	General, Background; Max Precursor Emissions Impact	Middle Scale	Suburban	29.6957433	-95.4992418
Houston-Pasadena-The Woodlands	Houston Bayland Park	482010055	6400 Bissonnet Street, Houston	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background; Max Precursor Emissions Impact	Middle Scale	Suburban	29.6957433	-95.4992418
Houston-Pasadena-The Woodlands	Houston Bayland Park	482010055	6400 Bissonnet Street, Houston	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background; Max Precursor Emissions Impact	Middle Scale	Suburban	29.6957433	-95.4992418
Houston-Pasadena-The Woodlands	Houston Croquet	482010051	13826 1/2 Croquet, Houston	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	29.6239579	-95.4743419
Houston-Pasadena-The Woodlands	Houston Croquet	482010051	13826 1/2 Croquet, Houston	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood	Suburban	29.6239579	-95.4743419
Houston-Pasadena-The Woodlands	Houston Croquet	482010051	13826 1/2 Croquet, Houston	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood	Suburban	29.6239579	-95.4743419
Houston-Pasadena-The Woodlands	Houston Croquet	482010051	13826 1/2 Croquet, Houston	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood	Suburban	29.6239579	-95.4743419
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	Barometric Pressure	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	Carbonyl	PAMS, SLAMS	DNPH Silica HPLC	8 Hour, Seasonal, 24 Hours; Seasonal	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	CO (High Sensitivity)	NCORE, SLAMS	Gas Filter Correlation	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	Dew Point	SPM	Derived at site	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	NO2 (Direct)	PAMS, SLAMS	Direct-Read NO2	Continuous	Population Exposure; Source Oriented	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	NOy (High Sensitivity)	NCORE, PAMS, SLAMS	Chemiluminescence	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	O3	NCORE, PAMS, SLAMS	UV Photometric	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	PM10 FEM	SLAMS	Broadband spectroscopy, 639	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.6700343	-95.1285059

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	PM10-2.5	NCORE, SLAMS	Broadband spectroscopy, 640	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	PM2.5 FEM	NCORE, SLAMS	Broadband spectroscopy, 638	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	PM2.5 (FRM)	NCORE, SLAMS	Sequential FRM Gravimetric, 145	24 Hours; 1/3 Days	Population Exposure	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	PM2.5 (Speciation)	CSN STN, CSN Supplemental, SLAMS	Carbons, Elements, Ions, SASS, URG	24 Hours; 1/3 Days	Population Exposure	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	PM2.5 (Speciation)	CSN STN, QA Collocated, SLAMS	Carbons, Elements, Ions, SASS, URG	24 Hours; 1/6 Days, 24 Hours; 1/3 Days	Population Exposure	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	General, Background	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	Relative Humidity	NCORE, PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	SO2 (High Sensitivity)	NCORE, SLAMS	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Max Precursor Emissions Impact; Population Exposure	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	Temperature (Outdoor)	NCORE, PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	UV Radiation	PAMS, SLAMS	Photovoltaic	Continuous	General, Background	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston Deer Park #2	482011039	4413 Glenwood Avenue, Deer Park	Wind	NCORE, PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Neighborhood	Urban and Center City	29.6700343	-95.1285059
Houston-Pasadena-The Woodlands	Houston East	482011034	1262 1/2 Mae Drive, Houston	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Highest Concentration; Population Exposure	Middle Scale / Neighborhood	Suburban	29.7680329	-95.2205736
Houston-Pasadena-The Woodlands	Houston East	482011034	1262 1/2 Mae Drive, Houston	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	29.7680329	-95.2205736

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Houston-Pasadena-The Woodlands	Houston East	482011034	1262 1/2 Mae Drive, Houston	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Suburban	29.7680329	-95.2205736
Houston-Pasadena-The Woodlands	Houston East	482011034	1262 1/2 Mae Drive, Houston	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Urban Scale	Suburban	29.7680329	-95.2205736
Houston-Pasadena-The Woodlands	Houston East	482011034	1262 1/2 Mae Drive, Houston	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	29.7680329	-95.2205736
Houston-Pasadena-The Woodlands	Houston Harvard Street	482010417	160 Harvard Street, Houston	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.7728616	-95.395874
Houston-Pasadena-The Woodlands	Houston Harvard Street	482010417	160 Harvard Street, Houston	O3	SPM	UV Photometric	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.7728616	-95.395874
Houston-Pasadena-The Woodlands	Houston Harvard Street	482010417	160 Harvard Street, Houston	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Urban and Center City	29.7728616	-95.395874
Houston-Pasadena-The Woodlands	Houston Harvard Street	482010417	160 Harvard Street, Houston	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Urban and Center City	29.7728616	-95.395874
Houston-Pasadena-The Woodlands	Houston Monroe	482010062	9726 1/2 Monroe, Houston	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	29.625622	-95.267065
Houston-Pasadena-The Woodlands	Houston Monroe	482010062	9726 1/2 Monroe, Houston	PM10 (FRM)	SLAMS	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Population Exposure	Neighborhood	Suburban	29.625622	-95.267065
Houston-Pasadena-The Woodlands	Houston Monroe	482010062	9726 1/2 Monroe, Houston	Precipitation	SPM	Continuous	Continuous	General, Background	Neighborhood	Suburban	29.625622	-95.267065
Houston-Pasadena-The Woodlands	Houston North Loop	482011052	822 North Loop, Houston	CO	Near Road, SLAMS	Gas Filter Correlation	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.8143921	-95.3878182
Houston-Pasadena-The Woodlands	Houston North Loop	482011052	822 North Loop, Houston	NO/NO2/NOx	Near Road, SLAMS	Chemiluminescence	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.8143921	-95.3878182
Houston-Pasadena-The Woodlands	Houston North Loop	482011052	822 North Loop, Houston	PM2.5 FEM	Near Road, SLAMS	Beta Attenuation, 209	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.8143921	-95.3878182
Houston-Pasadena-The Woodlands	Houston North Loop	482011052	822 North Loop, Houston	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.8143921	-95.3878182
Houston-Pasadena-The Woodlands	Houston North Loop	482011052	822 North Loop, Houston	Wind	SPM	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.8143921	-95.3878182

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Houston-Pasadena-The Woodlands	Houston North Wayside	482010046	7330 1/2 North Wayside, Houston	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	29.8285155	-95.283981
Houston-Pasadena-The Woodlands	Houston North Wayside	482010046	7330 1/2 North Wayside, Houston	PM10 (TEOM)	SPM	TEOM Gravimetric with modification, 879	Continuous	Population Exposure	Neighborhood	Suburban	29.8285155	-95.283981
Houston-Pasadena-The Woodlands	Houston North Wayside	482010046	7330 1/2 North Wayside, Houston	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Suburban	29.8285155	-95.283981
Houston-Pasadena-The Woodlands	Houston North Wayside	482010046	7330 1/2 North Wayside, Houston	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	29.8285155	-95.283981
Houston-Pasadena-The Woodlands	Houston North Wayside	482010046	7330 1/2 North Wayside, Houston	Wind (3m)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	29.8285155	-95.283981
Houston-Pasadena-The Woodlands	Houston Southwest Freeway	482011066	5617 Westward Avenue, Houston	NO/NO2/NOx	Near Road, SLAMS	Chemiluminescence	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.7216274	-95.4926626
Houston-Pasadena-The Woodlands	Houston Southwest Freeway	482011066	5617 Westward Avenue, Houston	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.7216274	-95.4926626
Houston-Pasadena-The Woodlands	Houston Southwest Freeway	482011066	5617 Westward Avenue, Houston	Wind	SPM	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.7216274	-95.4926626
Houston-Pasadena-The Woodlands	Houston Westhollow	482010066	3333 1/2 Hwy 6 South, Houston	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	29.7233161	-95.6359248
Houston-Pasadena-The Woodlands	Houston Westhollow	482010066	3333 1/2 Hwy 6 South, Houston	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Suburban	29.7233161	-95.6359248
Houston-Pasadena-The Woodlands	Houston Westhollow	482010066	3333 1/2 Hwy 6 South, Houston	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood	Suburban	29.7233161	-95.6359248
Houston-Pasadena-The Woodlands	Houston Westhollow	482010066	3333 1/2 Hwy 6 South, Houston	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood	Suburban	29.7233161	-95.6359248
Houston-Pasadena-The Woodlands	La Porte Airport C243	482011043	La Porte Airport, 2434 Buchanan Street, La Porte	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	General, Background	Neighborhood	Suburban	29.6720413	-95.0646873
Houston-Pasadena-The Woodlands	La Porte Airport C243	482011043	La Porte Airport, 2434 Buchanan Street, La Porte	Radar Profiler	SPM	Radar Profiler	Continuous	Regional Transport	Regional Scale	Suburban	29.6720413	-95.0646873
Houston-Pasadena-The Woodlands	La Porte Airport C243	482011043	La Porte Airport, 2434 Buchanan Street, La Porte	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	29.6720413	-95.0646873

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Houston-Pasadena-The Woodlands	La Porte Airport C243	482011043	La Porte Airport, 2434 Buchanan Street, La Porte	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	29.6720413	-95.0646873
Houston-Pasadena-The Woodlands	Lake Jackson	480391016	109B Brazoria Hwy 332 West, Lake Jackson	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Population Exposure; Source Oriented	Middle Scale / Neighborhood	Suburban	29.0437516	-95.4729592
Houston-Pasadena-The Woodlands	Lake Jackson	480391016	109B Brazoria Hwy 332 West, Lake Jackson	O3	SLAMS	UV Photometric	Continuous	Population Exposure; Source Oriented	Neighborhood	Suburban	29.0437516	-95.4729592
Houston-Pasadena-The Woodlands	Lake Jackson	480391016	109B Brazoria Hwy 332 West, Lake Jackson	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Middle Scale	Suburban	29.0437516	-95.4729592
Houston-Pasadena-The Woodlands	Lake Jackson	480391016	109B Brazoria Hwy 332 West, Lake Jackson	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Middle Scale	Suburban	29.0437516	-95.4729592
Houston-Pasadena-The Woodlands	Lake Jackson	480391016	109B Brazoria Hwy 332 West, Lake Jackson	Wind	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Middle Scale / Regional Scale	Suburban	29.0437516	-95.4729592
Houston-Pasadena-The Woodlands	Lang	482010047	4401 1/2 Lang Rd, Houston	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Population Exposure	Middle Scale / Urban Scale	Suburban	29.834214	-95.489122
Houston-Pasadena-The Woodlands	Lang	482010047	4401 1/2 Lang Rd, Houston	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale	Suburban	29.834214	-95.489122
Houston-Pasadena-The Woodlands	Lang	482010047	4401 1/2 Lang Rd, Houston	PM10 (FRM)	SLAMS	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Population Exposure	Neighborhood	Suburban	29.834214	-95.489122
Houston-Pasadena-The Woodlands	Lynchburg Ferry	482011015	4364 Independence Parkway South, Baytown	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Source Oriented	Middle Scale / Neighborhood	Suburban	29.7589325	-95.0793377
Houston-Pasadena-The Woodlands	Lynchburg Ferry	482011015	4364 Independence Parkway South, Baytown	O3	SLAMS	UV Photometric	Continuous	Source Oriented	Middle Scale	Suburban	29.7589325	-95.0793377
Houston-Pasadena-The Woodlands	Lynchburg Ferry	482011015	4364 Independence Parkway South, Baytown	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Neighborhood	Suburban	29.7589325	-95.0793377
Houston-Pasadena-The Woodlands	Lynchburg Ferry	482011015	4364 Independence Parkway South, Baytown	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Neighborhood	Suburban	29.7589325	-95.0793377
Houston-Pasadena-The Woodlands	Lynchburg Ferry	482011015	4364 Independence Parkway South, Baytown	Wind	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Neighborhood	Suburban	29.7589325	-95.0793377
Houston-Pasadena-The Woodlands	Manvel Croix Park	480391004	4503 Croix Pkwy, Manvel	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Population Exposure	Urban Scale	Suburban	29.5204449	-95.3925322

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Houston-Pasadena-The Woodlands	Manvel Croix Park	480391004	4503 Croix Pkwy, Manvel	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale	Suburban	29.5204449	-95.3925322
Houston-Pasadena-The Woodlands	Manvel Croix Park	480391004	4503 Croix Pkwy, Manvel	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	29.5204449	-95.3925322
Houston-Pasadena-The Woodlands	Manvel Croix Park	480391004	4503 Croix Pkwy, Manvel	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Suburban	29.5204449	-95.3925322
Houston-Pasadena-The Woodlands	Northwest Harris County	482010029	16822 Kitzman, Tomball	Dew Point	SPM	Derived at site	Continuous	General, Background	Microscale	Rural	30.0395333	-95.673909
Houston-Pasadena-The Woodlands	Northwest Harris County	482010029	16822 Kitzman, Tomball	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Extreme Downwind; Population Exposure	Urban Scale	Rural	30.0395333	-95.673909
Houston-Pasadena-The Woodlands	Northwest Harris County	482010029	16822 Kitzman, Tomball	O3	PAMS, SLAMS	UV Photometric	Continuous	Extreme Downwind; Population Exposure	Urban Scale	Rural	30.0395333	-95.673909
Houston-Pasadena-The Woodlands	Northwest Harris County	482010029	16822 Kitzman, Tomball	Relative Humidity	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Urban Scale	Rural	30.0395333	-95.673909
Houston-Pasadena-The Woodlands	Northwest Harris County	482010029	16822 Kitzman, Tomball	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	General, Background	Urban Scale	Rural	30.0395333	-95.673909
Houston-Pasadena-The Woodlands	Northwest Harris County	482010029	16822 Kitzman, Tomball	Temperature (Outdoor)	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	General, Background	Urban Scale	Rural	30.0395333	-95.673909
Houston-Pasadena-The Woodlands	Northwest Harris County	482010029	16822 Kitzman, Tomball	Wind	PAMS, SLAMS	AIO2 sonic weather sensor	Continuous	Extreme Downwind; General, Background; Upwind Background	Urban Scale	Rural	30.0395333	-95.673909
Houston-Pasadena-The Woodlands	Park Place	482010416	7421 Park Place Blvd, Houston	Barometric Pressure	SPM	Barometric pressure transducer	Continuous	General, Background	Neighborhood	Urban and Center City	29.6863013	-95.2947349
Houston-Pasadena-The Woodlands	Park Place	482010416	7421 Park Place Blvd, Houston	Dew Point	SPM	Derived at site	Continuous	General, Background	Neighborhood	Urban and Center City	29.6863013	-95.2947349
Houston-Pasadena-The Woodlands	Park Place	482010416	7421 Park Place Blvd, Houston	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.6863013	-95.2947349
Houston-Pasadena-The Woodlands	Park Place	482010416	7421 Park Place Blvd, Houston	O3	SPM	UV Photometric	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.6863013	-95.2947349
Houston-Pasadena-The Woodlands	Park Place	482010416	7421 Park Place Blvd, Houston	Precipitation	SPM	Continuous	Continuous	General, Background	Neighborhood	Urban and Center City	29.6863013	-95.2947349

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Houston-Pasadena-The Woodlands	Park Place	482010416	7421 Park Place Blvd, Houston	Relative Humidity	SPM	Humidity Sensor	Continuous	General, Background	Neighborhood	Urban and Center City	29.6863013	-95.2947349
Houston-Pasadena-The Woodlands	Park Place	482010416	7421 Park Place Blvd, Houston	SO2	SPM	Pulsed Fluorescence	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.6863013	-95.2947349
Houston-Pasadena-The Woodlands	Park Place	482010416	7421 Park Place Blvd, Houston	Solar Radiation	SPM	Photovoltaic	Continuous	General, Background	Neighborhood	Urban and Center City	29.6863013	-95.2947349
Houston-Pasadena-The Woodlands	Park Place	482010416	7421 Park Place Blvd, Houston	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Neighborhood	Urban and Center City	29.6863013	-95.2947349
Houston-Pasadena-The Woodlands	Park Place	482010416	7421 Park Place Blvd, Houston	UV Radiation	SPM	Photovoltaic	Continuous	General, Background	Neighborhood	Urban and Center City	29.6863013	-95.2947349
Houston-Pasadena-The Woodlands	Park Place	482010416	7421 Park Place Blvd, Houston	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Neighborhood	Urban and Center City	29.6863013	-95.2947349
Houston-Pasadena-The Woodlands	Seabrook Friendship Park	482011050	4522 Park Rd, Seabrook	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Population Exposure	Middle Scale / Neighborhood	Suburban	29.5830619	-95.0155477
Houston-Pasadena-The Woodlands	Seabrook Friendship Park	482011050	4522 Park Rd, Seabrook	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Suburban	29.5830619	-95.0155477
Houston-Pasadena-The Woodlands	Seabrook Friendship Park	482011050	4522 Park Rd, Seabrook	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Suburban	29.5830619	-95.0155477
Houston-Pasadena-The Woodlands	Seabrook Friendship Park	482011050	4522 Park Rd, Seabrook	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Middle Scale	Suburban	29.5830619	-95.0155477
Houston-Pasadena-The Woodlands	Seabrook Friendship Park	482011050	4522 Park Rd, Seabrook	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Middle Scale	Suburban	29.5830619	-95.0155477
Houston-Pasadena-The Woodlands	Seabrook Friendship Park	482011050	4522 Park Rd, Seabrook	Wind	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Middle Scale	Suburban	29.5830619	-95.0155477
Houston-Pasadena-The Woodlands	Texas City Ball Park	481670005	2516 1/2 Texas Avenue, Texas City	SO2	SPM	Pulsed Fluorescence	Continuous	Highest Concentration	Neighborhood	Urban and Center City	29.3852371	-94.9315312
Houston-Pasadena-The Woodlands	Texas City Ball Park	481670005	2516 1/2 Texas Avenue, Texas City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Neighborhood	Urban and Center City	29.3852371	-94.9315312
Houston-Pasadena-The Woodlands	Texas City Ball Park	481670005	2516 1/2 Texas Avenue, Texas City	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Urban and Center City	29.3852371	-94.9315312

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Houston-Pasadena-The Woodlands	Texas City Fire Station	481670004	2516 Texas Avenue, Texas City	PM10 (FRM)	SLAMS	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Highest Concentration	Neighborhood	Urban and Center City	29.3847929	-94.9313057
Killeen-Temple-Fort Hood	Killeen Skylark Field	480271047	1605 Stone Tree Drive, Killeen	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	General, Background	Urban Scale	Urban and Center City	31.0880092	-97.6797438
Killeen-Temple-Fort Hood	Killeen Skylark Field	480271047	1605 Stone Tree Drive, Killeen	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale	Urban and Center City	31.0880092	-97.6797438
Killeen-Temple-Fort Hood	Killeen Skylark Field	480271047	1605 Stone Tree Drive, Killeen	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Urban Scale	Urban and Center City	31.0880092	-97.6797438
Killeen-Temple-Fort Hood	Killeen Skylark Field	480271047	1605 Stone Tree Drive, Killeen	Wind	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Urban Scale	Urban and Center City	31.0880092	-97.6797438
Killeen-Temple-Fort Hood	Temple Georgia	480271045	8406 Georgia Avenue, Temple	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Urban Scale	Suburban	31.1224356	-97.4310452
Killeen-Temple-Fort Hood	Temple Georgia	480271045	8406 Georgia Avenue, Temple	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Urban Scale	Suburban	31.1224356	-97.4310452
Killeen-Temple-Fort Hood	Temple Georgia	480271045	8406 Georgia Avenue, Temple	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	31.1224356	-97.4310452
Killeen-Temple-Fort Hood	Temple Georgia	480271045	8406 Georgia Avenue, Temple	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	31.1224356	-97.4310452
Kingsville	National Seashore	482730314	20420 Park Road, Corpus Christi	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Regional Transport	Regional Scale	Rural	27.4224225	-97.3008586
Kingsville	National Seashore	482730314	20420 Park Road, Corpus Christi	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Regional Transport	Regional Scale	Rural	27.4224225	-97.3008586
Kingsville	National Seashore	482730314	20420 Park Road, Corpus Christi	Wind	SPM	AIO2 sonic weather sensor	Continuous	Regional Transport	Regional Scale	Rural	27.4224225	-97.3008586
Laredo	Laredo Bridge	484790017	700 Zaragosa St, Laredo	PM10 (FRM)	Border Grant, SLAMS	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Highest Concentration	Microscale	Urban and Center City	27.5018254	-99.5030062
Laredo	Laredo Bridge	484790017	700 Zaragosa St, Laredo	Speciated VOC (Canister)	Border Grant, SLAMS	Canister GC-MS	24 Hours; 1/6 Days	Highest Concentration	Neighborhood	Urban and Center City	27.5018254	-99.5030062
Laredo	Laredo Bridge	484790017	700 Zaragosa St, Laredo	Temperature (Outdoor)	Border Grant, SLAMS	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Urban and Center City	27.5018254	-99.5030062

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Laredo	Laredo Bridge	484790017	700 Zaragosa St, Laredo	Wind	Border Grant, SLAMS	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Urban and Center City	27.5018254	-99.5030062
Laredo	Laredo College	484790016	West End Washington Street, (corner of Taylor and Crawford	CO	Border Grant, SLAMS	Gas Filter Correlation	Continuous	Population Exposure	Neighborhood	Urban and Center City	27.5079621	-99.5239985
Laredo	Laredo College	484790016	West End Washington Street, (corner of Taylor and Crawford	O3	Border Grant, SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Urban and Center City	27.5079621	-99.5239985
Laredo	Laredo College	484790016	West End Washington Street, (corner of Taylor and Crawford	PM10 (FRM)	Border Grant, SLAMS	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Population Exposure	Neighborhood	Urban and Center City	27.5079621	-99.5239985
Laredo	Laredo College	484790016	West End Washington Street, (corner of Taylor and Crawford	Temperature (Outdoor)	Border Grant, SLAMS	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Urban and Center City	27.5079621	-99.5239985
Laredo	Laredo College	484790016	West End Washington Street, (corner of Taylor and Crawford	Wind	Border Grant, SLAMS	AIO2 sonic weather sensor	Continuous	Population Exposure	Neighborhood	Urban and Center City	27.5079621	-99.5239985
Laredo	World Trade Bridge	484790313	Mines Road 11601 FM 1472, Laredo	PM2.5 FEM	SLAMS	Beta Attenuation, 209	Continuous	Source Oriented	Microscale	Suburban	27.5996022	-99.5334135
Longview	Longview	481830001	Gregg Co Airport near Longview, Longview	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Population Exposure	Neighborhood	Rural	32.3786949	-94.7118191
Longview	Longview	481830001	Gregg Co Airport near Longview, Longview	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Rural	32.3786949	-94.7118191
Longview	Longview	481830001	Gregg Co Airport near Longview, Longview	Precipitation	SPM	Rain Gauge	Continuous	General, Background	Neighborhood	Rural	32.3786949	-94.7118191
Longview	Longview	481830001	Gregg Co Airport near Longview, Longview	SO2	SLAMS	Pulsed Fluorescence	Continuous	General, Background; Population Exposure	Neighborhood	Rural	32.3786949	-94.7118191
Longview	Longview	481830001	Gregg Co Airport near Longview, Longview	Solar Radiation	SPM	Photovoltaic	Continuous	General, Background	Neighborhood	Rural	32.3786949	-94.7118191
Longview	Longview	481830001	Gregg Co Airport near Longview, Longview	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	32.3786949	-94.7118191
Longview	Longview	481830001	Gregg Co Airport near Longview, Longview	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	32.3786949	-94.7118191
Longview	Tatum CR 2181d Martin Creek Lake	484011082	9515 County Road 2181d, Tatum	SO2	SPM	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood	Rural	32.2779277	-94.570867

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Longview	Tatum CR 2181d Martin Creek Lake	484011082	9515 County Road 2181d, Tatum	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	32.2779277	-94.570867
Longview	Tatum CR 2181d Martin Creek Lake	484011082	9515 County Road 2181d, Tatum	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	32.2779277	-94.570867
Lubbock	Lubbock 12th Street	483031028	3901 East 12th Street, Lubbock	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Urban Scale	Urban and Center City	33.5855582	-101.786921
Lubbock	Lubbock 12th Street	483031028	3901 East 12th Street, Lubbock	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Regional Scale	Urban and Center City	33.5855582	-101.786921
Lubbock	Lubbock 12th Street	483031028	3901 East 12th Street, Lubbock	Wind (3m)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Regional Scale	Urban and Center City	33.5855582	-101.786921
Longview**	Hallsville Red Oak Road	482031079	9206 Red Oak Road, Hallsville	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood	Rural	32.4702261	-94.4816027
Longview** (Marshall)	Hallsville Red Oak Road	482031079	9206 Red Oak Road, Hallsville	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	32.4702261	-94.4816027
Longview** (Marshall)	Hallsville Red Oak Road	482031079	9206 Red Oak Road, Hallsville	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	32.4702261	-94.4816027
Longview**	Karnack	482030002	Hwy 134 & Spur 449, Not In A City	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	General, Background	Regional Scale / Urban Scale	Rural	32.6689906	-94.1674541
Longview** (Marshall)	Karnack	482030002	Hwy 134 & Spur 449, Not In A City	O3	SLAMS	UV Photometric	Continuous	General, Background	Regional Scale	Rural	32.6689906	-94.1674541
Longview** (Marshall)	Karnack	482030002	Hwy 134 & Spur 449, Not In A City	PM2.5 (Speciation)	CSN Supplemental, SLAMS	Carbons, Elements, Ions, SASS, URG	24 Hours; 1/6 Days, 24 Hours; 1/3 Days	General, Background; Regional Transport	Regional Scale	Rural	32.6689906	-94.1674541
Longview** (Marshall)	Karnack	482030002	Hwy 134 & Spur 449, Not In A City	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	General, Background	Regional Scale	Rural	32.6689906	-94.1674541
Longview** (Marshall)	Karnack	482030002	Hwy 134 & Spur 449, Not In A City	Solar Radiation	SPM	Photovoltaic	Continuous	General, Background	Urban Scale	Rural	32.6689906	-94.1674541
Longview** (Marshall)	Karnack	482030002	Hwy 134 & Spur 449, Not In A City	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Urban Scale	Rural	32.6689906	-94.1674541
Longview** (Marshall)	Karnack	482030002	Hwy 134 & Spur 449, Not In A City	Visibility	SPM	Visibility Sensor	Continuous	General, Background	Urban Scale	Rural	32.6689906	-94.1674541

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Longview** (Marshall)	Karnack	482030002	Hwy 134 & Spur 449, Not In A City	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Urban Scale	Rural	32.6689906	-94.1674541
McAllen-Edinburg-Mission	Edinburg East Freddy Gonzalez Drive	482151046	1491 East Freddy Gonzalez Drive, Edinburg	PM2.5 FEM	SLAMS	Beta Attenuation, 209	Continuous	Population Exposure	Regional Scale	Urban and Center City	26.2884916	-98.152059
McAllen-Edinburg-Mission	Edinburg East Freddy Gonzalez Drive	482151046	1491 East Freddy Gonzalez Drive, Edinburg	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Regional Scale	Urban and Center City	26.2884916	-98.152059
McAllen-Edinburg-Mission	Edinburg East Freddy Gonzalez Drive	482151046	1491 East Freddy Gonzalez Drive, Edinburg	Wind (3m)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Regional Scale	Urban and Center City	26.2884916	-98.152059
McAllen-Edinburg-Mission	Mission	482150043	2300 North Glasscock, Mission	O3	SLAMS	UV Photometric	Continuous	General, Background	Neighborhood	Suburban	26.2262425	-98.2911384
McAllen-Edinburg-Mission	Mission	482150043	2300 North Glasscock, Mission	PM10 FEM	SLAMS	Broadband spectroscopy, 639	Continuous	Population Exposure	Neighborhood	Suburban	26.2262425	-98.2911384
McAllen-Edinburg-Mission	Mission	482150043	2300 North Glasscock, Mission	PM2.5 FEM	SLAMS	Broadband spectroscopy, 638	Continuous	Population Exposure	Neighborhood	Suburban	26.2262425	-98.2911384
McAllen-Edinburg-Mission	Mission	482150043	2300 North Glasscock, Mission	Solar Radiation	SPM	Photovoltaic	Continuous	General, Background	Neighborhood	Suburban	26.2262425	-98.2911384
McAllen-Edinburg-Mission	Mission	482150043	2300 North Glasscock, Mission	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	26.2262425	-98.2911384
McAllen-Edinburg-Mission	Mission	482150043	2300 North Glasscock, Mission	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	26.2262425	-98.2911384
Mount Pleasant	Cookville FM 4855	484491078	385 CR 4855, Not In A City	SO2	SLAMS	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood	Rural	33.0751297	-94.8472992
Mount Pleasant	Cookville FM 4855	484491078	385 CR 4855, Not In A City	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	33.0751297	-94.8472992
Mount Pleasant	Cookville FM 4855	484491078	385 CR 4855, Not In A City	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	33.0751297	-94.8472992
None	Bravo Big Bend	480430101	Big Bend National Park, Big Bend Nat Park	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	General, Background	Regional Scale	Rural	29.3025659	-103.177901
None	Bravo Big Bend	480430101	Big Bend National Park, Big Bend Nat Park	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Microscale	Rural	29.3025659	-103.177901

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
None	Bravo Big Bend	480430101	Big Bend National Park, Big Bend Nat Park	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Regional Scale	Rural	29.3025659	-103.177901
None	Fairfield FM 2570 Ward Ranch	481611084	488 FM 2570, Fairfield	SO2	SPM	Pulsed Fluorescence	Continuous	Source Oriented	Neighborhood	Rural	31.797821	-96.103106
None	Fairfield FM 2570 Ward Ranch	481611084	488 FM 2570, Fairfield	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Source Oriented	Neighborhood	Rural	31.797821	-96.103106
None	Fairfield FM 2570 Ward Ranch	481611084	488 FM 2570, Fairfield	Wind	SPM	AIO2 sonic weather sensor	Continuous	Source Oriented	Neighborhood	Rural	31.797821	-96.103106
None	Karnes County	482551070	1100B East Main Avenue, Karnes City	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Max Precursor Emissions Impact; Upwind Background	Urban Scale	Rural	28.8804342	-97.8880657
None	Karnes County	482551070	1100B East Main Avenue, Karnes City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Neighborhood	Rural	28.8804342	-97.8880657
None	Karnes County	482551070	1100B East Main Avenue, Karnes City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Neighborhood	Rural	28.8804342	-97.8880657
Odessa	Odessa Gonzales	481351014	2700 Disney, Odessa	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Highest Concentration	Regional Scale	Suburban	31.8702642	-102.334753
Odessa	Odessa Gonzales	481351014	2700 Disney, Odessa	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Population Exposure	Neighborhood	Suburban	31.8702642	-102.334753
Odessa	Odessa Gonzales	481351014	2700 Disney, Odessa	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Population Exposure	Neighborhood	Suburban	31.8702642	-102.334753
San Antonio-New Braunfels	Calaveras Lake	480290059	14620 Laguna Rd, San Antonio	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Source Oriented; Upwind Background	Urban Scale	Rural	29.2753871	-98.311694
San Antonio-New Braunfels	Calaveras Lake	480290059	14620 Laguna Rd, San Antonio	O3	SLAMS	UV Photometric	Continuous	Source Oriented; Upwind Background	Urban Scale	Rural	29.2753871	-98.311694
San Antonio-New Braunfels	Calaveras Lake	480290059	14620 Laguna Rd, San Antonio	PM2.5 FEM	SLAMS	Beta Attenuation, 209	Continuous	Population Exposure; Source Oriented	Urban Scale	Rural	29.2753871	-98.311694
San Antonio-New Braunfels	Calaveras Lake	480290059	14620 Laguna Rd, San Antonio	SO2	SLAMS	Pulsed Fluorescence	Continuous	Population Exposure; Source Oriented	Neighborhood	Rural	29.2753871	-98.311694
San Antonio-New Braunfels	Calaveras Lake	480290059	14620 Laguna Rd, San Antonio	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Source Oriented	Urban Scale	Rural	29.2753871	-98.311694

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
San Antonio-New Braunfels	Calaveras Lake	480290059	14620 Laguna Rd, San Antonio	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Source Oriented	Urban Scale	Rural	29.2753871	-98.311694
San Antonio-New Braunfels	Camp Bullis	480290052	marker off Wilderness Trail), Near Wilderness Rd,	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Max Precursor Emissions Impact	Urban Scale	Rural	29.6320912	-98.5649436
San Antonio-New Braunfels	Camp Bullis	480290052	marker off Wilderness Trail), Near Wilderness Rd,	O3	SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Population Exposure	Urban Scale	Rural	29.6320912	-98.5649436
San Antonio-New Braunfels	Camp Bullis	480290052	marker off Wilderness Trail), Near Wilderness Rd,	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Urban Scale	Rural	29.6320912	-98.5649436
San Antonio-New Braunfels	Camp Bullis	480290052	marker off Wilderness Trail), Near Wilderness Rd,	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Urban Scale	Rural	29.6320912	-98.5649436
San Antonio-New Braunfels	Camp Bullis	480290052	marker off Wilderness Trail), Near Wilderness Rd,	Wind	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Urban Scale	Rural	29.6320912	-98.5649436
San Antonio-New Braunfels	Floresville Hospital Boulevard	484931038	1404 Hospital Blvd, Floresville	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Max Precursor Emissions Impact; Upwind Background	Urban Scale	Rural	29.1306942	-98.1480798
San Antonio-New Braunfels	Floresville Hospital Boulevard	484931038	1404 Hospital Blvd, Floresville	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Neighborhood	Rural	29.1306942	-98.1480798
San Antonio-New Braunfels	Floresville Hospital Boulevard	484931038	1404 Hospital Blvd, Floresville	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Neighborhood	Rural	29.1306942	-98.1480798
San Antonio-New Braunfels	Frank Wing Municipal Court	480290060	401 South Frio St, San Antonio	PM10 (FRM)	SLAMS	HiVol Gravimetric, 141	24 Hours; 1/6 Days	Population Exposure	Middle Scale	Urban and Center City	29.4221892	-98.5054098
San Antonio-New Braunfels	Old Hwy 90	480290677	911 Old Hwy 90 West, San Antonio	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure	Neighborhood	Urban and Center City	29.4239414	-98.5805074
San Antonio-New Braunfels	Old Hwy 90	480290677	911 Old Hwy 90 West, San Antonio	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Neighborhood	Urban and Center City	29.4239414	-98.5805074
San Antonio-New Braunfels	Old Hwy 90	480290677	911 Old Hwy 90 West, San Antonio	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Neighborhood	Urban and Center City	29.4239414	-98.5805074
San Antonio-New Braunfels	San Antonio Bulverde Parkway	480291087	3843 Bulverde Parkway, San Antonio	PM10 FEM	SLAMS	Broadband spectroscopy, 639	Continuous	Population Exposure	Neighborhood	Suburban	29.6351323	-98.4176798
San Antonio-New Braunfels	San Antonio Bulverde Parkway	480291087	3843 Bulverde Parkway, San Antonio	PM2.5 FEM	SLAMS	Broadband spectroscopy, 638	Continuous	Population Exposure	Neighborhood	Suburban	29.6351323	-98.4176798

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MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
San Antonio-New Braunfels	San Antonio Bulverde Parkway	480291087	3843 Bulverde Parkway, San Antonio	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	29.6351323	-98.4176798
San Antonio-New Braunfels	San Antonio Bulverde Parkway	480291087	3843 Bulverde Parkway, San Antonio	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Suburban	29.6351323	-98.4176798
San Antonio-New Braunfels	San Antonio Interstate 10 West	480291069	5821 IH 10 West, San Antonio	NO/NO2/NOx	Near Road, SLAMS	Chemiluminescence	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.485106	-98.531343
San Antonio-New Braunfels	San Antonio Interstate 10 West	480291069	5821 IH 10 West, San Antonio	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.485106	-98.531343
San Antonio-New Braunfels	San Antonio Interstate 10 West	480291069	5821 IH 10 West, San Antonio	Wind	SPM	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.485106	-98.531343
San Antonio-New Braunfels	San Antonio Interstate 35	480291069	9904 IH 35 N, San Antonio	CO	Near Road, SLAMS	Gas Filter Correlation	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.5294195	-98.3913933
San Antonio-New Braunfels	San Antonio Interstate 35	480291069	9904 IH 35 N, San Antonio	NO/NO2/NOx	Near Road, SLAMS	Chemiluminescence	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.5294195	-98.3913933
San Antonio-New Braunfels	San Antonio Interstate 35	480291069	9904 IH 35 N, San Antonio	PM2.5 FEM	Near Road, SLAMS	Beta Attenuation, 209	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.5294195	-98.3913933
San Antonio-New Braunfels	San Antonio Interstate 35	480291069	9904 IH 35 N, San Antonio	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.5294195	-98.3913933
San Antonio-New Braunfels	San Antonio Interstate 35	480291069	9904 IH 35 N, San Antonio	Wind	SPM	AIO2 sonic weather sensor	Continuous	Max Precursor Emissions Impact	Microscale	Urban and Center City	29.5294195	-98.3913933
San Antonio-New Braunfels	San Antonio Northwest	480290032	6655 Bluebird Lane, San Antonio	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Population Exposure	Neighborhood	Suburban	29.5150608	-98.6202036
San Antonio-New Braunfels	San Antonio Northwest	480290032	6655 Bluebird Lane, San Antonio	O3	SLAMS	UV Photometric	Continuous	Max Ozone Concentration; Population Exposure	Urban Scale	Suburban	29.5150608	-98.6202036
San Antonio-New Braunfels	San Antonio Northwest	480290032	6655 Bluebird Lane, San Antonio	PM2.5 (FRM)	QA Collocated, SLAMS	Sequential FRM Gravimetric, 145	24 Hours; 1/12 Days	Population Exposure; Quality Assurance	Urban Scale	Suburban	29.5150608	-98.6202036
San Antonio-New Braunfels	San Antonio Northwest	480290032	6655 Bluebird Lane, San Antonio	PM2.5 FEM	SLAMS	Beta Attenuation, 209	Continuous	Population Exposure	Urban Scale	Suburban	29.5150608	-98.6202036
San Antonio-New Braunfels	San Antonio Northwest	480290032	6655 Bluebird Lane, San Antonio	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Urban Scale	Suburban	29.5150608	-98.6202036

Appendix B: Ambient Air Monitoring Network Site List

MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
San Antonio-New Braunfels	San Antonio Northwest	480290032	6655 Bluebird Lane, San Antonio	Wind	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Urban Scale	Suburban	29.5150608	-98.6202036
San Antonio-New Braunfels	Von Ormy Highway 16	480131090	17534 North State Highway 16, Not In A City	PM2.5 FEM	SPM	Beta Attenuation, 209	Continuous	Population Exposure; Source Oriented	Microscale	Rural	29.1628698	-98.5891166
San Antonio-New Braunfels	Von Ormy Highway 16	480131090	17534 North State Highway 16, Not In A City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	General, Background	Neighborhood	Rural	29.1628698	-98.5891166
San Antonio-New Braunfels	Von Ormy Highway 16	480131090	17534 North State Highway 16, Not In A City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	General, Background	Neighborhood	Rural	29.1628698	-98.5891166
Texarkana, TX-Texarkana, AR	Texarkana New Boston	480371031	2700 New Boston Rd, Texarkana	PM2.5 FEM	SLAMS	Beta Attenuation, 209	Continuous	Population Exposure	Urban Scale	Urban and Center City	33.4362237	-94.0777527
Texarkana, TX-Texarkana, AR	Texarkana New Boston	480371031	2700 New Boston Rd, Texarkana	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Urban Scale	Urban and Center City	33.4362237	-94.0777527
Texarkana, TX-Texarkana, AR	Texarkana New Boston	480371031	2700 New Boston Rd, Texarkana	Wind (3m)	SPM	AIO2 sonic weather sensor	Continuous	Population Exposure	Urban Scale	Urban and Center City	33.4362237	-94.0777527
Tyler	Tyler Airport Relocated	484230007	14790 County Road 1145, Tyler	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	General, Background	Urban Scale	Rural	32.3440208	-95.4157725
Tyler	Tyler Airport Relocated	484230007	14790 County Road 1145, Tyler	O3	SLAMS	UV Photometric	Continuous	General, Background	Urban Scale	Rural	32.3440208	-95.4157725
Tyler	Tyler Airport Relocated	484230007	14790 County Road 1145, Tyler	Precipitation	SPM	Rain Gauge	Continuous	General, Background	Neighborhood	Rural	32.3440208	-95.4157725
Tyler	Tyler Airport Relocated	484230007	14790 County Road 1145, Tyler	Solar Radiation	SPM	Photovoltaic	Continuous	General, Background	Neighborhood	Rural	32.3440208	-95.4157725
Tyler	Tyler Airport Relocated	484230007	14790 County Road 1145, Tyler	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	32.3440208	-95.4157725
Tyler	Tyler Airport Relocated	484230007	14790 County Road 1145, Tyler	Wind	SPM	AIO2 sonic weather sensor	Continuous	General, Background	Neighborhood	Rural	32.3440208	-95.4157725
Victoria	Victoria	484690003	106 Mockingbird Lane, Victoria	O3	SLAMS	UV Photometric	Continuous	Population Exposure	Neighborhood	Urban and Center City	28.836215	-97.005507
Victoria	Victoria	484690003	106 Mockingbird Lane, Victoria	Solar Radiation	SPM	Photovoltaic	Continuous	Highest Concentration	Neighborhood	Urban and Center City	28.836215	-97.005507

Appendix B: Ambient Air Monitoring Network Site List

MSA , CBSA	Site Name	Site Number	Address	Monitor Type	Network	Methods	Operating Schedule	Monitoring Objective	Spatial Scale	Location Setting	Latitude	Longitude
Victoria	Victoria	484690003	106 Mockingbird Lane, Victoria	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Neighborhood	Urban and Center City	28.836215	-97.005507
Victoria	Victoria	484690003	106 Mockingbird Lane, Victoria	Wind	SPM	AIO2 sonic weather sensor	Continuous	Highest Concentration	Neighborhood	Urban and Center City	28.836215	-97.005507
Waco	Waco Mazanec	483091037	4472 Mazanec Rd, Waco	CO	SLAMS	Gas Filter Correlation	Continuous	Upwind Background	Urban Scale	Rural	31.6531097	-97.0707005
Waco	Waco Mazanec	483091037	4472 Mazanec Rd, Waco	O3	SLAMS	UV Photometric	Continuous	Upwind Background	Regional Scale	Rural	31.6531097	-97.0707005
Waco	Waco Mazanec	483091037	4472 Mazanec Rd, Waco	PM2.5 (TEOM)^{N}	SPM	TEOM Gravimetric, 702	Continuous	Regional Transport	Regional Scale	Rural	31.6531097	-97.0707005
Waco	Waco Mazanec	483091037	4472 Mazanec Rd, Waco	SO2	SLAMS	Pulsed Fluorescence	Continuous	Upwind Background	Urban Scale	Rural	31.6531097	-97.0707005
Waco	Waco Mazanec	483091037	4472 Mazanec Rd, Waco	Solar Radiation	SPM	Photovoltaic	Continuous	Regional Transport	Urban Scale	Rural	31.6531097	-97.0707005
Waco	Waco Mazanec	483091037	4472 Mazanec Rd, Waco	Temperature (Outdoor)	SPM	AIO2 sonic weather sensor	Continuous	Regional Transport	Urban Scale	Rural	31.6531097	-97.0707005
Waco	Waco Mazanec	483091037	4472 Mazanec Rd, Waco	Wind	SPM	AIO2 sonic weather sensor	Continuous	Regional Transport	Urban Scale	Rural	31.6531097	-97.0707005

Appendix B: Ambient Air Monitoring Network Site List

Symbol/Acronym	Description
*	Micropolitan Statistical Area
**	Marshall, Texas, is no longer a Micropolitan Statistical Area according to the United States Office of Management and Budget (OMB) and is currently designated as a part of the Longview MSA, AQS is pending updates to match the new OMB designation.
N	Monitor is acceptable for Air Quality Index reporting and not suitable for comparison against the NAAQS
24-Hours; 1/12 Days	1 24-hour sample, once every twelfth day
24-Hours; 1/6 Days	1 24-hour sample, once every sixth day
24-Hours; 1/3 Days	1 24-hour sample, once every third day
24 Hours; Seasonal, 8 Hour; Seasonal	1 24-hour sample every sixth day seasonal, three eight-hour samples seasonal
8 Hour; Seasonal, 24 Hours; Seasonal	1 24-hour sample every sixth day seasonal, three eight-hour samples seasonal
#	number
AR	Arkansas
AutoGC	automated gas chromatograph
Ave	avenue
AQS	Air Quality System
BAM	beta attenuation method
Blvd	boulevard
Border	The Border network designation is part of the SLAMS network for monitors within 100 kilometers of the United States/Mexico border.
CBSA	core based statistical area
Co	county
CO	carbon monoxide
CR	county road
CSN STN	Chemical Speciation Network Speciation Trends Network site (includes NCore monitors/requirements, samples analyzed by EPA contracted laboratory)
DNPH	dinitrophenylhydrazine
Dr	drive
E	east
FM	farm-to-market
FEM	federal equivalent method
FRM	federal reference method
GC	gas chromatograph
GC-MS	gas chromatograph mass spectrometry
HiVol	high-volume
Hi-Vol ICP-MS	high-volume with inductively coupled plasma by mass spectrometry
HPLC	high performance liquid chromatography
Hwy(s)	highway(s)
IH	Interstate Highway
LBJ	Lyndon B Johnson
LC	local conditions
Ln	lane
m	meter
Max	maximum
MSA	metropolitan statistical area/micropolitan statistical area
NAAQS	National Ambient Air Quality Standards
NCore	National Core Multipollutant Monitoring Stations

Appendix B: Ambient Air Monitoring Network Site List

Symbol/Acronym	Description
N	north
NE	northeast
NO_2	nitrogen dioxide
$NO/NO_2/NO_x$	nitrogen oxides
NO_y	total reactive nitrogen
O_3	ozone
PAMS	Photochemical Assessment Monitoring Stations
Pkwy	parkway
PM_{10}	particulate matter of 10 micrometers or less in diameter
$PM_{10-2.5}$	coarse particulate matter
$PM_{2.5}$	particulate matter of 2.5 micrometers or less in diameter
QA Collocated	quality assurance collocated (duplicate monitor)
Rd	road
S	south
SASS	Speciation Air Sampling System
SE	southeast
SETRPC	Southeast Texas Regional Planning Commission
SLAMS	State or Local Air Monitoring Stations
SO_2	sulfur dioxide (one-hour and five-minute maximum monitors)
SPM	special purpose monitor
St	street
SVRD	service road
TCEQ	Texas Commission on Environmental Quality
TEOM	tapered element oscillating microbalance (not NAAQS comparable)
TNMOC	total non-methane organic compound
TSP (Pb)	total suspended particulate (lead)
TX	Texas
URG	Universal Research Group
UTEP	University of Texas at El Paso
UV	ultraviolet
VOC	volatile organic compound
W	west
Wind	All wind sampler types produce data for parameters 61101, 61103, 61104, 61105, and 61106.
Yd	yard

Appendix C

Population and Criteria Pollutant Monitor Requirements and Count Summary by Metropolitan Statistical Area

Texas Commission on Environmental Quality
2025 Annual Monitoring Network Plan

Appendix C: Population and Criteria Pollutant Monitor Requirements and Count Summary by Metropolitan Statistical Area

Texas Metropolitan Statistical Area	2023 Population Estimate[1]	NO_2 and NO/NO_y Monitors Required[2]	NO_2 and NO/NO_y Monitors Existing[2,3]	SO_2 Monitors Required[2]	SO_2 Monitors Existing[2,3]	Pb Monitors Required	Pb Monitors Existing	O_3 Monitors Required	O_3 Monitors Existing[3]	CO Monitors Required[2]	CO Monitors Existing[2,3]	PM_{10} Monitors Required[3]	PM_{10} Monitors Existing[3]	$PM_{2.5}$ Monitors Required[3]	$PM_{2.5}$ Monitors Existing[3]
Dallas-Fort Worth-Arlington	8,100,037	6	16	2	2	3	3	4	17	2	2	4-8	4	8	11
Houston-Pasadena-The Woodlands	7,510,253	6	20	3	6	0	0	4	21	2	3	4-8	6	8	19
San Antonio-New Braunfels	2,703,999	3	6	1	1	0	0	2	3	1	1	2-4	2	4	6
Austin-Round Rock-San Marcos	2,473,275	2	2	0	1	0	0	2	2	1	1	2-4	2	3	3
McAllen-Edinburg-Mission	898,471	0	0	0	0	0	0	1	1	0	0	1-2	1	2	2
El Paso	873,331	2	3	1	1	0	0	3	6	1	2	4-8	6	6	6
Killeen-Temple	501,333	0	1	0	0	0	0	2	2	0	0	1-2	0	1	1
Brownsville-Harlingen	426,710	0	0	0	0	0	0	1	1	0	0	0-1	0	1	2
Corpus Christi	448,323	0	0	0	3	0	0	2	2	0	0	0-1	1	1	3
Beaumont-Port Arthur	395,479	1	4	3	4	0	0	2	7	0	0	0-1	0	1	3
Lubbock	360,104	0	0	0	0	0	0	1	0	0	0	0-1	0	0	1
Longview	293,498	0	2	1	3	0	0	1	2	0	0	0-1	0	1	2
Waco	304,865	0	0	0	1	0	0	1	1	0	1	0-1	0	0	1
College Station-Bryan	281,445	0	0	1	1	0	0	0	0	0	0	0-1	0	1	1
Amarillo	272,395	0	0	1	2	0	0	0	0	0	0	0-1	0	0	1
Laredo	269,148	0	0	0	0	0	0	0	1	0	1	0-1	2	1	1
Tyler	245,209	0	1	0	0	0	0	1	1	0	0	0	0	0	0
Abilene	181,591	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midland	182,324	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odessa	164,494	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wichita Falls	149,947	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texarkana	145,907	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Sherman-Denison	146,907	0	0	0	0	0	0	0	0	0	0	0	0	0	0
San Angelo	120,606	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Victoria	98,808	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Granbury[4]	67,774	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Eagle Pass	57,762	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Corsicana[4]	55,635	0	1	1	2	0	0	0	1	0	0	0	0	0	1
Mount Pleasant[4]	56,423	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Big Spring[4]	30,554	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Kingsville[4]	30,069	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Borger[4]	20,033	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Karnes County[5]	NA	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Freestone County[5]	NA	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Big Bend National Park[5]	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals[3]		**20**	**57**	**17**	**31**	**3**	**3**	**28**	**70**	**7**	**11**	**18-45**	**24**	**40**	**69**

[1]United States Census Bureau population estimates as of July 1, 2023. Metropolitan and Micropolitan Statistical Areas Population Totals (census.gov)
[2]Required and existing counts include NO_y, high-sensitivity SO_2, and high-sensitivity CO monitors.
[3]Individual monitors may fulfill multiple requirements and are only counted once. Collocated quality control monitors are not included in totals.
[4]Area is classified as a micropolitan statistical area and not subject to SLAMS (State or Local Air Monitoring Stations) requirements.
[5]Area not classified as a metropolitan or micropolitan statistical area; county population data is not applicable.
Metropolitan Statistical Areas are delineated by the United States Office of Management and Budget Delineation Files (census.gov)

CO - carbon monoxide
NA - not applicable
NO_2 and NO/NO_y - nitrogen dioxide, nitrogen oxide, and total reactive nitrogen compounds
Pb - lead
PM_{10} - particulate matter of 10 micrometers or less in diameter
$PM_{2.5}$ - particulate matter of 2.5 micrometers or less in diameter
O_3 - ozone
SO_2 - sulfur dioxide

Appendix D

Nitrogen Dioxide, Nitrogen Oxide, and Total Reactive Nitrogen Compounds Monitor Requirements and Count Assessment

Texas Commission on Environmental Quality
2025 Annual Monitoring Network Plan

Appendix D: Nitrogen Dioxide, Nitrogen Oxide, and Total Reactive Nitrogen Compounds Monitor Requirements and Count Assessment

Core Based Statistical Areas	2023 Population Estimate[1]	Required NO_2 Area-Wide Monitors	Required NO_2 RA-40 Monitors	Required NO_2 Near-Road Monitors	Required True NO_2 PAMS Monitors	Required NO/NO_y PAMS/NCore Monitors	Total Required NO_2 and NO/NO_y Monitors	Total Existing NO_2 and NO/NO_y Monitors[2]
Dallas-Fort Worth-Arlington	8,100,037	1	1	2	1	1	6	16
Houston-Pasadena-The Woodlands	7,510,253	1	1	2	1	1	6	20
San Antonio-New Braunfels	2,703,999	1	0	2	0	0	3	6
Austin-Round Rock-San Marcos	2,473,275	1	0	1	0	0	2	2
McAllen-Edinburg-Mission	898,471	0	0	0	0	0	0	0
El Paso	873,331	0	1	0	0	1	2	3
Killeen-Temple	501,333	0	0	0	0	0	0	1
Brownsville-Harlingen	426,710	0	0	0	0	0	0	0
Corpus Christi	448,323	0	0	0	0	0	0	0
Beaumont-Port Arthur	395,479	0	1	0	0	0	1	4
Lubbock	360,104	0	0	0	0	0	0	0
Longview	293,498	0	0	0	0	0	0	2
Waco	304,865	0	0	0	0	0	0	0
College Station-Bryan	281,445	0	0	0	0	0	0	0
Amarillo	272,395	0	0	0	0	0	0	0
Laredo	269,148	0	0	0	0	0	0	0
Tyler	245,209	0	0	0	0	0	0	1
Abilene	181,591	0	0	0	0	0	0	0
Midland	182,324	0	0	0	0	0	0	0
Odessa	164,494	0	0	0	0	0	0	0
Wichita Falls	149,947	0	0	0	0	0	0	0
Texarkana	145,907	0	0	0	0	0	0	0
Sherman-Denison	146,907	0	0	0	0	0	0	0
San Angelo	120,606	0	0	0	0	0	0	0
Victoria	98,808	0	0	0	0	0	0	0
Eagle Pass	57,762	0	0	0	0	0	0	0
Corsicana[3]	55,635	0	0	0	0	0	0	1
Karnes County[4]	NA	0	0	0	0	0	0	1
Totals		**4**	**4**	**7**	**2**	**3**	**20**	**57**

[1]United States Census Bureau population estimates as of July 1, 2023. Metropolitan and Micropolitan Statistical Areas Population Totals (census.gov)

[2]Monitors may fulfill multiple monitoring requirements and are only counted once.

[3]Area is classified as a micropolitan statistical area and not subject to SLAMS (State or Local Air Monitoring Stations) requirements.

[4]Area not classified as a metropolitan or micropolitan statistical area; county population data is not applicable.

Core Based Statistical Areas are delineated by the United States Office of Management and Budget Delineation Files (census.gov)

NCore - National Core Multipollutant Monitoring Stations

NO - nitrogen oxide

NO_2 - nitrogen dioxide

NO_Y - total reactive nitrogen compounds

PAMS - Photochemical Assessment Monitoring Stations

RA-40 - Regional Administrator 40

Appendix E

Sulfur Dioxide Monitor Requirements and Count Assessment

Texas Commission on Environmental Quality
2025 Annual Monitoring Network Plan

Appendix E: Sulfur Dioxide Monitor Requirements and Count Assessment

Core Based Statistical Area	County	2023 Population Estimates[1]	2023 Point Source Data (tpy)	2020 NEI Data (tpy)	2020 Point Source Data (tpy)	2020 NEI Non-Point Source Data with 2023 Point Source Data (tpy)	PWEI	Required SO_2 PWEI Monitors	Required SO_2 DRR Monitors	Required SO_2 NCore Monitors (high-sensitivity)	Total Required SO_2 Monitors	Existing Monitors[2]
Dallas-Fort Worth-Arlington		8,100,037				5,307	42,991	1	0	1	2	2
	Collin		8	153	11	150						
	Dallas		217	1,025	345	897						
	Denton		283	437	342	378						
	Ellis		2,565	2,995	2,931	2,629						
	Hunt		3	48	1	50						
	Johnson		70	103	63	109						
	Kaufman		72	146	89	129						
	Parker		108	178	154	131						
	Rockwall		0	10	0	10						
	Tarrant		21	793	20	794						
	Wise		13	28	12	29						
Houston-Pasadena-The Woodlands		7,510,253				38,786	291,295	2	0	1	3	6
	Austin		4	14	3	15						
	Brazoria		562	674	547	689						
	Chambers		198	293	252	240						
	Fort Bend		28,515	23,979	23,881	28,613						
	Galveston		1,169	1,272	1,077	1,363						
	Harris		6,216	8,125	6,692	7,648						
	Liberty		9	29	11	26						
	Montgomery		76	121	30	167						
	San Jacinto		0	5	1	4						
	Waller		0	23	2	21						
San Antonio-New Braunfels		2,703,999				7,458	20,165	1	0	0	1	1
	Atascosa		4,748	10,920	10,615	5,052						
	Bandera		0	2	0	2						
	Bexar		1,189	1,574	1,267	1,495						
	Comal		331	352	325	358						
	Guadalupe		86	176	128	134						
	Kendall		0	10	2	7						
	Medina		0	10	0	10						
	Wilson		221	397	219	398						

Appendix E: Sulfur Dioxide Monitor Requirements and Count Assessment

Core Based Statistical Area	County	2023 Population Estimates[1]	2023 Point Source Data (tpy)	2020 NEI Data (tpy)	2020 Point Source Data (tpy)	2020 NEI Non-Point Source Data with 2023 Point Source Data (tpy)	PWEI	Required SO_2 PWEI Monitors	Required SO_2 DRR Monitors	Required SO_2 NCore Monitors (high-sensitivity)	Total Required SO_2 Monitors	Existing Monitors[2]
Austin-Round Rock-San Marcos		2,473,275				1,512	3,739	0	0	0	0	1
	Bastrop		83	102	88	97						
	Caldwell		2	22	0	23						
	Hays		848	1,459	1,428	878						
	Travis		121	377	129	369						
	Williamson		79	70	4	144						
McAllen-Edinburg-Mission		898,471				115	103	0	0	0	0	0
	Hidalgo		30	114	29	115						
El Paso		873,331				295	257	0	0	1	1	1
	El Paso		164	292	171	286						
	Hudspeth		6	9	6	9						
Killeen-Temple		501,333				172	86	0	0	0	0	0
	Bell		100	75	17	158						
	Coryell		0	8	0	8						
	Lampasas		0	5	0	5						
Brownsville-Harlingen		426,710				79	34	0	0	0	0	0
	Cameron		3	78	2	79						
Corpus Christi		448,323				1,321	592	0	0	0	0	3
	Aransas		0	12	0	12						
	Nueces		769	716	508	976						
	San Patricio		304	89	60	333						
Beaumont-Port Arthur		395,479				15,752	6,230	1	2	0	3	4
	Hardin		1	8	1	8						
	Jefferson		12,354	11,981	11,762	12,572						
	Orange		3,126	3,912	3,866	3,172						
Lubbock		360,104				857	309	0	0	0	0	0
	Cochran		0	609	0	609						
	Crosby		0	3	0	3						
	Garza		0	69	0	69						
	Hockley		53	47	1	99						
	Lubbock		7	74	9	71						
	Lynn		0	6	0	6						

Appendix E: Sulfur Dioxide Monitor Requirements and Count Assessment

Core Based Statistical Area	County	2023 Population Estimates[1]	2023 Point Source Data (tpy)	2020 NEI Data (tpy)	2020 Point Source Data (tpy)	2020 NEI Non-Point Source Data with 2023 Point Source Data (tpy)	PWEI	Required SO_2 PWEI Monitors	Required SO_2 DRR Monitors	Required SO_2 NCore Monitors (high-sensitivity)	Total Required SO_2 Monitors	Existing Monitors[2]
Longview		293,498				13,983	4,104	0	1	0	1	3
	Gregg		18	80	20	78						
	Harrison		420	1,947	1,913	453						
	Rusk		13,429	43,744	43,729	13,444						
	Upshur		0	9	2	8						
Waco		304,865				2,913	888	0	0	0	0	1
	Bosque		1,059	1,316	1,310	1,064						
	Falls		0	7	0	7						
	McLennan		1,743	2,496	2,397	1,843						
College Station-Bryan		281,445				10,382	2,922	0	1	0	1	1
	Brazos		8	51	9	49						
	Burleson		0	7	0	7						
	Robertson		10,322	11,182	11,178	10,326						
Amarillo		272,395				10,770	2,934	0	1	0	1	2
	Armstrong		1	2	1	2						
	Carson		14	3	0	17						
	Oldham		0	1	0	1						
	Potter		10,595	8,273	8,217	10,651						
	Randall		67	115	83	99						
Laredo		269,148				232	62	0	0	0	0	0
	Webb		190	388	347	232						
Tyler		245,209				396	97	0	0	0	0	0
	Smith		340	481	425	396						
Abilene		181,591				90	16	0	0	0	0	0
	Callahan		0	3	0	3						
	Jones		55	26	22	59						
	Taylor		0	29	0	29						
Midland		182,324				5,838	1,064	0	0	0	0	0
	Martin		175	3,532	39	3,667						
	Midland		173	2,121	123	2,171						
Odessa		164,494				1,679	276	0	0	0	0	0
	Ector		1,124	959	404	1,679						

Appendix E: Sulfur Dioxide Monitor Requirements and Count Assessment

Core Based Statistical Area	County	2023 Population Estimates[1]	2023 Point Source Data (tpy)	2020 NEI Data (tpy)	2020 Point Source Data (tpy)	2020 NEI Non-Point Source Data with 2023 Point Source Data (tpy)	PWEI	Required SO_2 PWEI Monitors	Required SO_2 DRR Monitors	Required SO_2 NCore Monitors (high-sensitivity)	Total Required SO_2 Monitors	Existing Monitors[2]
Wichita Falls		149,947				642	96	0	0	0	0	0
	Archer		0	2	0	2						
	Clay		70	61	59	73						
	Wichita		503	553	489	568						
Texarkana		145,907				47	7	0	0	0	0	0
	Bowie		26	56	35	47						
Sherman-Denison		146,907				60	9	0	0	0	0	0
	Grayson		8	57	6	60						
San Angelo		120,606				64	8	0	0	0	0	0
	Irion		0	34	0	34						
	Tom Green		1	31	1	30						
Victoria		98,808				9,637	952	0	0	0	0	0
	Goliad		9,578	7,959	7,955	9,582						
	Victoria		32	52	29	54						
Eagle Pass		57762				0	0	0	0	0	0	0
	Maverick		0	0	0	0						
Corsicana[3]		55,635				3,541	197	NA	1	0	1	2
	Navarro		3,518	3,630	3,607	3,541						
Mount Pleasant[3]		56,423				9,545	539	NA	1	0	1	1
	Camp		0	48	45	2						
	Morris		0	13	0	13						
	Titus		9,496	8,203	8,169	9,530						
Big Spring[3]		30,554				6,555	200	NA	1	0	1	1
	Howard		4,154	6,380	3,979	6,555						
Borger[3]		20,033				2,389	48	NA	1	0	1	1
	Hutchinson		2,377	7,827	7,815	2,389						
None		not available					NA	NA	NA	0	0	1
	Freestone[4]		16	20	15	21						
	Sterling[4]		1	8	1	8						
Total Monitors								**5**	**9**	**3**	**17**	**31**

1United States Census Bureau population estimates as of July 1, 2023. Metropolitan and Micropolitan Statistical Areas Population Totals (census.gov)
[2]Monitors may fulfill multiple monitoring requirements and are only counted once.
[3]Micropolitan statistical area
[4]Area not classified as a metropolitan or micropolitan statistical area.
Core Based Statistical Areas are defined by the United States Office of Management and Budget Delineation Files (census.gov)
DRR - Data Requirements Rule
NA - not applicable
NCore - National Core Multipollutant Monitoring Stations
NEI - National Emissions Inventory Air Emissions Inventories | US EPA
PWEI - population weighted emission index (Core Based Statistical Area Population*[2020 NEI non-point source data and 2023 point source data]/1,000,000)
SO_2 - sulfur dioxide
tpy - tons per year

Appendix F

Sulfur Dioxide Ongoing Data Requirements Annual Report

Texas Commission on Environmental Quality
2025 Annual Monitoring Network Plan

Appendix F: Sulfur Dioxide Ongoing Data Requirements Annual Report

As required by 40 Code of Federal Regulations (CFR) Section 51.1205(b), this report provides the Texas Commission on Environmental Quality's (TCEQ) annual assessment of sulfur dioxide (SO_2) emissions changes for areas designated attainment/unclassifiable for the 2010 SO_2 National Ambient Air Quality Standard (NAAQS), where the designations were based on characterization of air quality by modeling actual SO_2 emissions.

Out of all Texas counties (or portions of counties) currently designated attainment/unclassifiable for the 2010 SO_2 NAAQS, only the seven counties, shown in Table 1 below, were designated based on modeled actual SO_2 emissions. The most recent (2023) total estimated SO_2 emissions, based on quality assured data from the relevant sources in each county, are listed in Table 1 below. The table includes emissions from the previous year (2022) and the change in SO_2 emissions from 2022 to 2023. The relevant source in Wilbarger County was shut down in 2020, resulting in zero emissions for 2022-2023.

The relevant sources in Atascosa, Fort Bend, Lamb, Limestone, and Robertson Counties had emission decreases from the previous year. Since the emissions have decreased for these locations from the previous year, the original designation modeling for each county provides reasonable assurance that the areas continue to meet the 2010 one-hour SO_2 primary NAAQS.

The relevant source in Goliad County had an emission increase from the previous year. Table 2 below shows the average county SO_2 emissions data used in the 2012-2014 designation modeling. The average emissions data for years 2021-2023, which would likely be used for any new modeling initiated to reevaluate compliance with the 2010 SO_2 NAAQS, is shown in Table 2 below. This comparison shows that the original designation modeling evaluated higher emissions for each area. Since higher emissions were evaluated, the original designation modeling provides reasonable assurance that the areas continue to meet the 2010 one-hour SO_2 primary NAAQS.

For any area where SO_2 monitoring was conducted to characterize air quality pursuant to 40 CFR Section 51.1203, the TCEQ continues to operate the monitor(s) used to meet those requirements and reports quality assured data pursuant to existing ambient monitoring regulations, unless the monitor(s) have been approved for shut down by the EPA Regional Administrator pursuant to 40 CFR Section 51.1203(c)(3) or 40 CFR Section 58.14.

The TCEQ recommends that no additional SO_2 air quality modeling is needed to determine compliance with the 2010 SO_2 NAAQS for any of the seven Texas counties listed below in Table 1.

Table 1: 2022 to 2023 Emissions Comparisons

County	Relevant Source	2022 SO_2 (tpy)	2023 SO_2 (tpy)	Difference 2022 to 2023	Cause for Emission Increase
Atascosa	San Miguel Electric Plant	9,489	4,615	-4,874	No increase reported
Fort Bend	W.A. Parish Electric Generating Station	34,136	28,498	-5,638	No increase reported
Goliad	Coleto Creek Power Station	8,206	9,577	1,372	No major operational changes: increase in fuel oil consumption and the coal sulfur content increased

Appendix F: Sulfur Dioxide Ongoing Data Requirements Annual Report

County	Relevant Source	2022 SO_2 (tpy)	2023 SO_2 (tpy)	Difference 2022 to 2023	Cause for Emission Increase
Lamb	Tolk Station Power Plant	8,667	8,430	-238	No increase reported
Limestone	Limestone Electric Generating Station	6,337	5,596	-741	No increase reported
Robertson	Twin Oaks Power Station	2,316	2,126	-190	No increase reported
Wilbarger	Oklaunion Power Station (shut down in late 2020)	0	0	0	Not applicable

SO_2 – sulfur dioxide
tpy – tons per year

Table 2: Average Emissions Comparison

County	Relevant Source	2012-2014 SO_2 Average (tpy)	2021-2023 SO_2 Average (tpy)	Three Year Average SO_2 Comparison Change
Goliad	Coleto Creek Power Station	15,832	9,395	-6,437

SO_2 – sulfur dioxide
tpy – tons per year

Appendix G

Total Suspended Particulate Lead Monitor Requirements and Count Assessment

Texas Commission on Environmental Quality
2025 Annual Monitoring Network Plan

Appendix G: Total Suspended Particulate Lead Monitor Requirements and Count Assessment

Metropolitan Statistical Area	County	Pb Source (Facility Name) or Monitoring Requirement	2021 Pb Source Emissions (tpy)	2022 Pb Source Emissions (tpy)	2023 Pb Source Emissions (tpy)	Site Name	Required Monitors[1]	Existing Monitors[1]
Dallas-Fort Worth-Arlington							3	3
	Collin	Maintenance Area	NA	NA	NA	Frisco Eubanks[1,2]	1	1
	Collin	Maintenance Area	NA	NA	NA	Frisco Stonebrook[2]	1	1
	Kaufman	Conecsus, LLC	0.2130	0.0833	0.0970	Terrell Jamison Court[1,3]	1	1
Totals							**3**	**3**

[1]Collocated quality control monitors are not included in totals.

[2]Monitor required to fulfill State Implementation Plan commitments.

[3]Site relocated in October 2024

LLC - Limited Liability Company

NA - not applicable

Pb - lead

tpy - tons per year

Appendix H

Ozone Monitor Requirements and Count Assessment

Texas Commission on Environmental Quality
2025 Annual Monitoring Network Plan

Appendix H: Ozone Monitor Requirements and Count Assessment

Metropolitan Statistical Area	2023 Population Estimates[1]	2021-2023 8-Hour Design Value (ppm)	Design Value as Percent of NAAQS[2]	Total Required SLAMS Monitors	Total Required NCore/PAMS Monitors	Total Required Monitors[3]	Total Existing Monitors[4]
Dallas-Fort Worth-Arlington	8,100,037	0.081	116%	3	1	4	17
Houston-Pasadena-The Woodlands	7,510,253	0.083	119%	3	1	4	21
San Antonio-New Braunfels	2,703,999	0.076	109%	2	0	2	3
Austin-Round Rock-San Marcos	2,473,275	0.071	101%	2	0	2	2
McAllen-Edinburg-Mission[5]	898,471	0.058	83%	1	0	1	1
El Paso	873,331	0.074	106%	2	1	3	6
Killeen-Temple	501,333	0.071	101%	2	0	2	2
Brownsville-Harlingen	426,710	0.057	81%	1	0	1	1
Corpus Christi	448,323	0.063	90%	2	0	2	2
Beaumont-Port Arthur	395,479	0.065	93%	2	0	2	7
Lubbock	360,104	NA	NA	1	0	1	0
Longview	293,498	0.065	93%	1	0	1	2
Waco	304,865	0.068	97%	1	0	1	1
College Station-Bryan	281,445	NA	NA	0	0	0	0
Amarillo	272,395	NA	NA	0	0	0	0
Laredo[5]	269,148	0.057	81%	0	0	0	1
Tyler	245,209	0.069	99%	1	0	1	1
Abilene	181,591	NA	NA	0	0	0	0
Midland	182,324	NA	NA	0	0	0	0
Odessa	164,494	NA	NA	0	0	0	0
Wichita Falls	149,947	NA	NA	0	0	0	0
Texarkana	145,907	NA	NA	0	0	0	0
Sherman-Denison	146,907	NA	NA	0	0	0	0
San Angelo	120,606	NA	NA	0	0	0	0
Victoria	98,808	0.060	86%	1	0	1	1
Eagle Pass	57,762	NA	NA	0	0	0	0
Granbury[6]	67,774	0.075	107%	0	0	0	1
Corsicana[6]	55,635	0.065	93%	0	0	0	1
Totals				**25**	**3**	**28**	**70**

[1]United States Census Bureau population estimates as of July 1, 2023.
Metropolitan and Micropolitan Statistical Areas Population Totals (census.gov)

[2]2015 eight-hour ozone National Ambient Air Quality Standard (NAAQS) is 0.070 parts per million (ppm).

[3]Total Required Monitors is a sum of requirements for SLAMS, PAMS, and NCore.

[4]Monitors may fulfill multiple monitoring requirements and are only counted once.

[5]Monitor deployed 2022-2023, incomplete design values are not used for regulatory compliance.

[6]Area is classified as a micropolitan statistical area and is not subject to SLAMS requirements.
Metropolitan Statistical Areas are delineated by the United States Office of Management and Budget
Delineation Files (census.gov)

NA - not applicable
NCore - National Core Multipollutant Monitoring Stations
PAMS - Photochemical Assessment Monitoring Stations
SLAMS - State or Local Air Monitoring Stations

Appendix I

Carbon Monoxide Monitor Requirements and Count Assessment

Texas Commission on Environmental Quality
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Appendix I: Carbon Monoxide Monitor Requirements and Count Assessment

Core Based Statistical Area[1]	2023 Population Estimates[2]	Site Name	Required CO NCore Monitors	Required CO Near-Road Monitors	Total Required Monitors[3]	Total Existing Monitors[4]
Dallas-Fort Worth-Arlington	8,100,037		1	1	2	2
		Dallas Hinton[5]	1	0	1	1
		Fort Worth California Parkway North	0	1	1	1
Houston-Pasadena-The Woodlands	7,510,253		1	1	2	3
		Clinton[5]	0	0	0	1
		Houston Deer Park #2[5]	1	0	1	1
		Houston North Loop	0	1	1	1
San Antonio-New Braunfels	2,703,999		0	1	1	1
		San Antonio Interstate 35	0	1	1	1
Austin-Round Rock-San Marcos	2,473,275		0	1	1	1
		Austin North Interstate 35	0	1	1	1
El Paso	873,331		1	0	1	2
		El Paso Chamizal[5]	1	0	1	1
		Ojo De Agua	0	0	0	1
Waco	304,865		0	0	0	1
		Waco Mazanec	0	0	0	1
Laredo	269,148		0	0	0	1
		Laredo Vidaurri	0	0	0	1
Totals			**3**	**4**	**7**	**11**

[1]This list does not include core based statistical areas with zero requirements and zero monitors.
[2]United States Census Bureau population estimates as of July 1, 2023.
Metropolitan and Micropolitan Statistical Areas Population Totals (census.gov)
[3]Total Required Monitors is a sum of requirements for NCore and Near-Road.
[4]Monitors may fulfill multiple monitoring requirements and are only counted once.
[5]High-Sensitivity CO monitor
- number
CO - carbon monoxide
NCore - National Core Multipollutant Monitoring Stations

Appendix J

Particulate Matter of 10 Micrometers or Less Monitor Requirements and Count Assessment

Texas Commission on Environmental Quality
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Appendix J: Particulate Matter of 10 Micrometers or Less Monitor Requirements and Count Assessment

Table 1: Particulate Matter of 10 Micrometers or Less Monitoring Requirements Assessment and Monitor Locations[1]

Metropolitan Statistical Area	2023 Population Estimates[2]	Site Name	2021-2023 Maximum Concentration ($\mu g/m^3$)	Maximum Concentration in Comparison to Percent of NAAQS[3] (%)	Required Monitors[4,5]	Existing Monitors[4,5]
Dallas-Fort Worth-Arlington	**8,100,037**		**125**	**83**	**4-8**	**4**
		Convention Center (planned PM_{10} FEM continuous) (collocated QC manual filter-based pair)	125	83		
		Dallas Bexar Street (New monitor activated September 2021) (planned PM_{10} FEM continuous)	89	59		
		Dallas Hinton[6] (NEW! PM_{10} FEM continuous monitor activated June 2023)	NA	NA		
		Earhart (planned relocation)	97	65		
Houston-Pasadena-The Woodlands	**7,510,253**		**156**	**104**	**4-8**	**6**
		Clinton (PM_{10} FEM continuous monitor activated October 2024)	106	71		
		Houston Deer Park #2[6] (NEW! PM_{10} FEM continuous monitor activated February 2023)	NA	NA		
		Houston Monroe (NEW! collocated QC manual filter-based pair activated February 2025)	156	104		
		Houston North Wayside (monitor non-NAAQS comparable)	NA	NA		
		Lang	103	69		
		Texas City Fire Station (planned PM_{10} FEM continuous)	149	99		
San Antonio-New Braunfels	**2,703,999**		**101**	**67**	**2-4**	**2**
		San Antonio Bulverde Parkway (PM_{10} FEM continuous monitor activated November 2023)	101	67		
		Frank Wing Municipal Court (proposed relocation to Old Highway 90)	98	65		
Austin-Round Rock-San Marcos	**2,473,275**		**97**	**65**	**2-4**	**2**
		Austin Webberville Road (PM_{10} FEM continuous monitor activated November 2023)	97	65		
		Austin Audubon Society	90	60		

Appendix J: Particulate Matter of 10 Micrometers or Less Monitor Requirements and Count Assessment

Metropolitan Statistical Area	2023 Population Estimates[2]	Site Name	2021-2023 Maximum Concentration ($\mu g/m^3$)	Maximum Concentration in Comparison to Percent of NAAQS[3] (%)	Required Monitors[4,5]	Existing Monitors[4,5]
McAllen-Edinburg-Mission	**898,471**		**97**	**65**	**1-2**	**1**
		Mission (PM_{10} FEM continuous monitor activated October 2023)	97	65		
El Paso	**873,331**		**154**	**102**	**4-8**	**6**
		El Paso Mimosa (previously Riverside) (planned PM_{10} FEM continuous)	153	102		
		El Paso Chamizal[6] (NEW! PM_{10} FEM continuous monitor activated July 2023)	NA	NA		
		Ivanhoe (planned PM_{10} FEM continuous)	154	103		
		Ojo De Agua (planned PM_{10} FEM continuous)	126	84		
		Socorro Hueco (PM_{10} FEM continuous monitor activated May 2024)	116	77		
		Van Buren (planned PM_{10} FEM continuous)	135	90		
Killeen-Temple	**501,333**		**NA**	**0**	**1-2**	**0**
Brownsville-Harlingen	**426,710**		**NA**	**0**	**0-1**	**0**
Corpus Christi	**448,323**		**89**	**59**	**0-1**	**1**
		Dona Park (PM_{10} FEM continuous monitor activated January 2024)	89	59		
Beaumont-Port Arthur	**395,479**		**NA**	**0**	**0-1**	**0**
Lubbock	**360,104**		**NA**	**0**	**0-1**	**0**
Longview	**293,498**		**NA**	**0**	**0-1**	**0**
Waco	**304,865**		**NA**	**0**	**0-1**	**0**
College Station-Bryan	**281,445**		**NA**	**0**	**0-1**	**0**
Amarillo	**272,395**		**NA**	**0**	**0-1**	**0**

Appendix J: Particulate Matter of 10 Micrometers or Less Monitor Requirements and Count Assessment

Metropolitan Statistical Area	2023 Population Estimates[2]	Site Name	2021-2023 Maximum Concentration ($\mu g/m^3$)	Maximum Concentration in Comparison to Percent of NAAQS[3] (%)	Required Monitors[4,5]	Existing Monitors[4,5]
Laredo	**269,148**		**111**	**74**	**0-1**	**2**
		Laredo College (previously Laredo Vidaurri)	88	59		
		Laredo Bridge	111	74		
Totals					**18-45**	**24**

[1]This list doesn't include metropolitan statistical areas with zero requirements and zero monitors.
[2]United States Census Bureau population estimates as of July 1, 2023. Metropolitan and Micropolitan Statistical Areas Population Totals (census.gov)
[3]Current PM_{10} NAAQS is 150 micrograms per cubic meter ($\mu g/m^3$).
[4]2021-2023 PM_{10} available maximum 24-hour concentration data was evaluated to confirm minimum monitoring requriements as a percentage of the PM_{10} NAAQS
[5]Collocated quality control manual filter-based monitors are not counted.
[6]New monitor activated in 2023, limited PM_{10} ambient data insufficient for minimum monitoring requirement comparison
Metropolitan Statistical Areas are delineated by the United States Office of Management and Budget Delineation Files (census.gov)
% - percent
FEM - federal equivalent method
NAAQS - National Ambient Air Quality Standards
PM_{10} - particulate matter of 10 micrometers or less in diameter

Appendix J: Particulate Matter of 10 Micrometers or Less Monitor Requirements and Count Assessment

Table 2: Particulate Matter of 10 Micrometers or Less Manual Filter-Based Monitor Concentrations[1]

Site Name	2021-2023 Maximum Concentration[2] (µg/m³)	2023 Annual Mean Concentration (µg/m³)	2022 Annual Mean Concentration (µg/m³)[2]	2021 Annual Mean Concentration (µg/m³)[3]
El Paso Mimosa (previously Riverside) (planned FEM continuous)	220	52	49	51
Laredo Bridge (planned FEM continuous)	111	30	35	24
Houston Monroe (NEW! collocated QC pair)[3]	156	20	22	23
Ivanhoe (planned FEM continuous)	126	29	31	35
Van Buren (planned FEM continuous)	135	27	30	30
Convention Center (collocated QC pair) (planned FEM continuous)	92	28	28	21
Earhart (planned relocation and FEM continuous)	81	27	26	19
Frank Wing Municipal Court	98	24	25	24
Dallas Bexar Street (monitor deployed September 2021) (planned FEM continuous)	83	26	25	21
Ojo De Agua (collocated QC pair) (planned FEM continuous)	126	22	25	24
Lang	103	20	22	24
Texas City Fire Station (planned FEM continuous)	149	17	20	21
Laredo College (previously Laredo Vidaurri) (planned FEM continuous)	88	27	20	29
Austin Audubon Society (planned FEM continuous)	89	17	18	19

[1]Particulate matter of 10 micrometers or less (PM_{10}) continuous methods have no collocated QC requirements and are not evaluated in this table.
[2]Data associated with pending exceptional event reports are not included.
[3]Highest annual mean concentrations, confirms at least half of collocated QC monitoring occurs at network sites among the highest.
QC - quality control
µg/m³ - micrograms per cubic meter

Appendix K

Particulate Matter of 2.5 Micrometers or Less Monitor Requirements and Count Assessment

Texas Commission on Environmental Quality
2025 Annual Monitoring Network Plan

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Requirements and Count Assessment

Table 1: Particulate Matter of 2.5 Micrometers or Less Monitor Requirement and Count Summary

Metropolitan Statistical Area	2023 Population Estimates[1]	2021-2023 DV (µg/m^3) Annual (for Area)	2021-2023 DV (µg/m^3) 24-Hour (for Area)	Percent of NAAQS Annual[2] (for Area)	Percent of NAAQS 24-Hour[3] (for Area)	Required FRM/ FEM Monitors	Required NCore Monitors	Required Near-Road Monitors	Total Required Monitors[4]	Total Existing Monitors[4]
Dallas-Fort Worth-Arlington	8,100,037	9.9	25	110	71	3	4	1	8	11
Houston-Pasadena-The Woodlands	7,510,253	12.5	25	139	71	3	4	1	8	19
San Antonio-New Braunfels	2,703,999	9.0	25	100	71	3	0	1	4	6
Austin-Round Rock-San Marcos	2,473,275	9.6	23	107	66	3*	0	1	3	3
McAllen-Edinburg-Mission	898,471	9.6	26	107	74	2	0	0	2	2
El Paso	873,331	9.0	22	100	63	2	4	0	6	6
Killeen-Temple	501,333	7.3	21	81	60	1	0	0	1	1
Brownsville-Harlingen	426,710	10.9	30	121	86	1	0	0	1	2
Corpus Christi	448,323	8.4	24	93	69	1	0	0	1	3
Beaumont-Port Arthur	395,479	8.8	20	98	57	1	0	0	1	3
Lubbock	360,104	5.7	18	63	51	0	0	0	0	1
Longview[5]	293,498	9.5	23	106	66	1	0	0	1	2
Waco[6]	304,865	NA	NA	NA	NA	0	0	0	0	1
College Station-Bryan	281,445	7.9	21	88	60	1	0	0	1	1
Amarillo	272,395	6.0	15	67	43	0	0	0	0	1
Laredo	269,148	9.7	27	108	77	1	0	0	1	1
Odessa	164,494	7.3	18	81	51	0	0	0	0	1
Texarkana	145,907	10.3	23	114	66	1	0	0	1	1
Eagle Pass	57,762	7.9	23	88	66	1	0	0	1	1
Corsicana[5,7]	55,635	NA	NA	NA	NA	0	0	0	0	1
Kingsville[7]	30,069	9.9	28	110	80	0	0	0	0	1
Big Bend National Park[5,8]	NA	6.2	15	69	43	0	0	0	0	1
Totals*						**27**	**12**	**4**	**40**	**69**

[1]United States Census Bureau population estimates as of July 1, 2023. Metropolitan and Micropolitan Statistical Areas Population Totals (census.gov)
[2]2024 $PM_{2.5}$ Annual NAAQS is 9.0 micrograms per cubic meter (µg/m^3).
[3]2024 $PM_{2.5}$ 24-hour NAAQS is 35 µg/m^3.
[4]Individual monitors may fulfill multiple requirements and are only counted once. Collocated quality control monitors are not included in totals.
[5]Annual values do not meet completeness criteria; monitors deployed in 2021 to 2023. Incomplete design value information is not used for the purposes of regulatory compliance.
[6]$PM_{2.5}$ TEOM monitor is non-FEM/FRM (non-NAAQS comparable).
[7]Area is classified as a micropolitan statistical area and is not subject to SLAMS (State or Local Ambient Monitoring Stations) requirements.
[8]Area not classified as a metropolitan or micropolitan statistical area.
*Near-Road monitor fulfills multiple requirements
This list does not include metropolitan statistical areas with no requirement and no monitors.

DV - design value
FEM - federal equivalent method
FRM - federal reference method
NA - not applicable
NAAQS - National Ambient Air Quality Standards
NCore - National Core Multipollutant Monitoring Stations
µg/m^3 - micrograms per cubic meter

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Requirements and Count Assessment

Table 2: Particulate Matter of 2.5 Micrometers or Less Monitor Design Value, Location, Monitor Type, and Requirements Assessment

Metropolitan Statistical Area[1]	2023 Population Estimates[2]	Site Name	Monitor Type(s)	2021-2023 Annual DV (µg/m^3)	2021-2023 24-Hour DV (µg/m^3)	Percent of NAAQS (Annual[3])	Percent of NAAQS (24-Hour[4])	Total Existing Monitors[5]
Dallas-Fort Worth-Arlington	**8,100,037**			**9.9**	**25**	**110**	**71**	**11**
		Convention Center	BAM 1022 (planned T640x)	9.9	23	110	66	1
		Dallas Hinton (collocated QC pair)	Partisol 2025, T640x PM2.5, T640x PM10-2.5, SASS/URG Speciation[6] (Partisol 2025 QC)	8.9	19	99	54	4
		Dallas Bexar Street	TEOM[7] (planned BAM 1022)	NA	NA	NA	NA	1
		Denton Airport South	BAM 1022	7.7	20	86	57	1
		Fort Worth California Parkway North (collocated QC pair)	BAM 1022 (BAM 1022 QC)	8.7	22	97	63	1
		Fort Worth Northwest	BAM 1022	8.9	22	99	63	1
		Haws Athletic Center	BAM 1022	9.6	25	107	71	1
		Kaufman[8]	BAM 1022 (NEW in 2022)	8.0	21	89	60	1
Houston-Pasadena-The Woodlands	**7,510,253**			**12.5**	**25.0**	**139**	**71**	**19**
		Baytown	BAM 1022	10.5	22	117	63	1
		Clinton (collocated QC pair)	Partisol 2025, (Partisol 2025 QC), T640X PM2.5, Partisol 2025 Speciation	10.7	24	119	69	3
		Conroe Relocated[8]	BAM 1022 (NEW in 2021)	10.0	23	111	66	1
		Galveston 99th Street	BAM 1022	8.3	21	92	60	1

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Requirements and Count Assessment

Metropolitan Statistical Area[1]	2023 Population Estimates[2]	Site Name	Monitor Type(s)	2021-2023 Annual DV (µg/m^3)	2021-2023 24-Hour DV (µg/m^3)	Percent of NAAQS (Annual[3])	Percent of NAAQS (24-Hour[4])	Total Existing Monitors[5]
		Freeport South Avenue I[8]	Partisol 2025 with speciation (NEW in 2023)	8.3	21	92	60	2
		Houston Aldine (collocated QC pair)	BAM 1022, (Partisol 2025 QC)	10.2	22	113	63	1
		Houston Bayland Park[8]	BAM 1022 (NEW in 2022)	10.2	25	113	71	1
		Houston Deer Park #2 (speciation collocated QC pair)	Partisol 2025, T640X PM2.5, T640X PM10-2.5, SASS/URG Speciation[6] (SASS/URG Speciation QC[6])	8.9	23	99	66	4
		Houston East	BAM 1022	10.4	23	116	66	1
		Houston North Loop	BAM 1022	11.7	25	130	71	1
		Houston North Wayside	BAM 1022 (NEW in 2021)	12.5	27	139	77	1
		Houston Westhollow[8]	BAM 1022 (New in 2021)	8.6	21	96	60	1
		Seabrook Friendship Park[8]	BAM 1022 (NEW in 2021)	7.9	19	88	54	1
San Antonio-New Braunfels	**2,703,999**			**9.0**	**25**	**100**	**71**	**6**
		Calaveras Lake	BAM 1022	7.1	22	79	63	1
		Old Highway 90[8]	BAM 1022 (NEW in 2024)	NA	NA	NA	NA	1
		San Antonio Bulverde Parkway[8]	T640x (NEW in 2023)	NA	NA	NA	NA	1
		San Antonio Interstate 35	BAM 1022	8.9	22	99	63	1
		San Antonio Northwest (collocated QC pair)	BAM 1022, (Partisol 2025 QC)	8.6	23	96	66	1

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Requirements and Count Assessment

Metropolitan Statistical Area[1]	2023 Population Estimates[2]	Site Name	Monitor Type(s)	2021-2023 Annual DV (µg/m^3)	2021-2023 24-Hour DV (µg/m^3)	Percent of NAAQS (Annual[3])	Percent of NAAQS (24-Hour[4])	Total Existing Monitors[5]
		Von Ormy Highway 16	BAM 1022	9.0	25	100	71	1
Austin-Round Rock-San Marcos	**2,473,275**			**9.6**	**23**	**107**	**66**	**3**
		Austin North Interstate 35	BAM 1022	9.6	22	107	63	1
		Austin North Hills Drive (previously Austin Northwest)	BAM 1022	8.7	23	97	66	1
		Austin Webberville Road	T640x	9.3	22	103	63	1
McAllen-Edinburg-Mission	**898,471**			**9.6**	**26**	**107**	**74**	**2**
		Edinburg East Freddy Gonzalez Drive	BAM 1022	9.6	26	107	74	1
		Mission[8]	T640x	9.3	23	103	66	1
El Paso	**873,331**			**9.0**	**22**	**100**	**63**	**6**
		Ascarate Park SE (collocated QC pair)	BAM 1022 (NEW in 2024), (Partisol 2025 QC)	NA	NA	NA	NA	1
		El Paso Chamizal	Partisol 2025, T640x PM2.5, T640x PM10-2.5, URG/SASS Speciation[6]	9.0	22	100	63	4
		Socorro Hueco (collocated QC pair)	T640x (New in 2024), (T640x QC)	NA	NA	NA	NA	1
Killeen-Temple	**501,333**			**7.3**	**21**	**81**	**60**	**1**
		Temple Georgia	BAM 1022	7.3	21	81	60	1

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Requirements and Count Assessment

Metropolitan Statistical Area[1]	2023 Population Estimates[2]	Site Name	Monitor Type(s)	2021-2023 Annual DV (µg/m^3)	2021-2023 24-Hour DV (µg/m^3)	Percent of NAAQS (Annual[3])	Percent of NAAQS (24-Hour[4])	Total Existing Monitors[5]
Brownsville-Harlingen	**426,710**			**10.9**	**30**	**121**	**86**	**2**
		Brownsville East 6th Street[8]	BAM 1022	7.2	22	80	63	1
		Isla Blanca State Park Road	BAM 1022	10.9	30	121	86	1
Corpus Christi	**448,323**			**8.4**	**24**	**93**	**69**	**3**
		Corpus Christi Huisache (collocated QC pair)	BAM 1022 (BAM 1022 QC)	8.4	22	93	63	1
		Dona Park	T640x, URG/2025 Speciation	8.4	24	93	69	2
Beaumont-Port Arthur	**395,479**			**8.8**	**20**	**98**	**57**	**3**
		Hamshire	BAM 1022	8.1	19	90	54	1
		Port Arthur Memorial School (collocated QC pair)	BAM 1022, (BAM 1022 QC)	8.8	20	98	57	1
		SETRPC 42 Mauriceville	BAM 1022	8.3	19	92	54	1
Lubbock	**360,104**			**5.7**	**18**	**63**	**51**	**1**
		Lubbock 12th Street	BAM 1022	5.7	18	63	51	1
Longview[8]	**293,498**			**9.5**	**23**	**106**	**66**	**2**
		Karnack[8]	BAM 1022, URG/SASS Speciation[6]	9.5	23	106	66	2
Waco	**304,865**			**NA**	**NA**	**NA**	**NA**	**1**
		Waco Mazanec	TEOM 1405[7]	NA	NA	NA	NA	1

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Requirements and Count Assessment

Metropolitan Statistical Area[1]	2023 Population Estimates[2]	Site Name	Monitor Type(s)	2021-2023 Annual DV (µg/m^3)	2021-2023 24-Hour DV (µg/m^3)	Percent of NAAQS (Annual[3])	Percent of NAAQS (24-Hour[4])	Total Existing Monitors[5]
College Station-Bryan	**281,445**			**7.9**	**21**	**88**	**60**	**1**
		Bryan Finfeather Road	BAM 1022	7.9	21	88	60	1
Amarillo	**272,395**			**6.0**	**15**	**67**	**43**	**1**
		Amarillo 24th Street (relocated from Amarillo A&M in Dec 2024)	BAM 1022	6.0	15	67	43	1
Laredo	**269,148**			**9.7**	**27**	**108**	**77**	**1**
		World Trade Bridge	BAM 1022	9.7	27	108	77	1
Odessa	**164,494**			**7.3**	**18**	**81**	**51**	**1**
		Odessa Gonzales	BAM 1022	7.3	18	81	51	1
Texarkana	**145,907**			**10.3**	**23**	**114**	**66**	**1**
		Texarkana New Boston	BAM 1022	10.3	23	114	66	1
Eagle Pass	**57,762**			**7.9**	**23**	**88**	**66**	**1**
		Eagle Pass	BAM 1022	7.9	23	88	66	1
Corsicana[8,9]	**55,635**			**8.7**	**22**	**97**	**63**	**1**
		Corsicana Airport[8]	BAM 1022	8.7	22	97	63	1
Kingsville[9]	**30,069**			**9.9**	**28**	**110**	**80**	**1**
		National Seashore	BAM 1022	9.9	28	110	80	1

Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Requirements and Count Assessment

Metropolitan Statistical Area[1]	2023 Population Estimates[2]	Site Name	Monitor Type(s)	2021-2023 Annual DV (µg/m^3)	2021-2023 24-Hour DV (µg/m^3)	Percent of NAAQS (Annual[3])	Percent of NAAQS (24-Hour[4])	Total Existing Monitors[5]
Big Bend National Park[8,10]	**NA**			**6.2**	**15**	**69**	**43**	**1**
		Bravo Big Bend[8]	BAM 1022	6.2	15	69	43	1
Totals								**69**

[1]This list does not include metropolitan statistical areas with no requirements and no monitors.
[2]United States Census Bureau population estimates as of July 1, 2023. Metropolitan and Micropolitan Statistical Areas Population Totals (census.gov)
[3]2024 $PM_{2.5}$ Annual NAAQS is 9.0 µg/m^3.
[4]2024 $PM_{2.5}$ 24-hour NAAQS is 35 µg/m^3.
[5]Collocated quality control monitor types are not included in totals.
[6]Speciation monitor for NCore or Chemical Speciation Network (CSN).
[7]$PM_{2.5}$ TEOM monitors are non-FEM/FRM (non-NAAQS comparable).
[8]Annual values do not meet completeness criteria; monitors deployed in 2021 - 2023. Incomplete design value (gray font) information is not used for regulatory compliance.
[9]Area is classified as a micropolitan statistical area and is not subject to SLAMS requirements.
[10]Area not classified as a metropolitan or micropolitan statistical area.
Metropolitan Statistical Areas are delineated by the United States Office of Management and Budget Delineation Files (census.gov)
Monitors marked "NEW!" were recently activated continuous FEM. If the FEM replaced a FRM, then a design value will still be applicable for regulatory compliance.
- number
DV - design value
FEM - federal equivalent method
FRM - federal reference method
NA - not applicable
NAAQS - National Ambient Air Quality Standards
NCore - National Core Multipollutant Monitoring Stations require $PM_{2.5}$ FRM mass, $PM_{2.5}$ FEM continuous mass, $PM_{10-2.5}$ and $PM_{2.5}$ CSN speciation
OFW - Old Fort Worth
$PM_{2.5}$ FRM mass method code 145 by Partisol 2025 or 2025i
$PM_{2.5}$ FEM mass method code 209 by beta attenuation method (BAM) 1022
$PM_{2.5}$ FEM mass method code 638 by broadband spectroscopy T640x
$PM_{2.5}$ non-regulatory mass method code 702 by tapered element oscillating microbalance (TEOM)
$PM_{2.5}$ speciation method codes 810, 811, 812, 826, 831, 838, 839, 840, 841, 842, 846, and 849
$PM_{10-2.5}$ method code 640 by broadband spectroscopy T640x
QC - quality control
SASS - second generation speciation sampling system (for Chemical Speciation Network [CSN] only)
SETRPC - Southeast Texas Regional Planning Commission
SE - southeast
SLAMS - State or Local Air Monitoring Stations
URG - University Research Glassware speciation sampler
µg/m^3 - micrograms per cubic meter

Appendix L

Volatile Organic Compound and Carbonyl Monitor Requirements and Count Assessment

Texas Commission on Environmental Quality
2025 Annual Monitoring Network Plan

Appendix L: Volatile Organic Compound and Carbonyl Monitor Requirement and Count Summary

Table 1: Volatile Organic Compound Monitor Requirement and Count Assessment

Core Based Statistical Area[1]	Required PAMS VOC AutoGC Monitors	Existing VOC Canister Monitors	Existing VOC AutoGC Monitors	Total Existing VOC Monitors
Dallas-Fort Worth-Arlington	1	3	2	5
Houston-Pasadena-The Woodlands	1	0	3	3
El Paso	0	0	1	1
Beaumont-Port Arthur	0	0	2	2
Laredo	0	1	0	1
Totals	**2**	**4**	**8**	**12**

[1]This list does not include core based statistical areas with zero requirements and zero monitors.
AutoGC – automated gas chromatograph
PAMS – Photochemical Assessment Monitoring Stations
VOC – volatile organic compound

Table 2: Carbonyl Monitor Requirement and Count Summary

Core Based Statistical Area[1]	Required PAMS Carbonyl Samplers	Total Existing Carbonyl Samplers
Dallas-Fort Worth-Arlington	1	2
Houston-Pasadena-The Woodlands	1	2
Totals	**2**	**4**

[1]This list does not include core based statistical areas with zero requirements and zero monitors.
PAMS – Photochemical Assessment Monitoring Stations

Appendix M

TCEQ Response to Comments Received on the draft 2025 Annual Monitoring Network Plan

Texas Commission on Environmental Quality
2025 Annual Monitoring Network Plan

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

Introduction

As required under Title 40 Code of Federal Regulations (40 CFR) Section (§) 58.10, Texas Commission on Environmental Quality (TCEQ) posted the draft *2025 Annual Monitoring Network Plan* (AMNP or the Plan) for public inspection for 30 days prior to submittal to the United States Environmental Protection Agency (EPA). The AMNP provided information on the current TCEQ ambient air monitoring network established to determine compliance with federal monitoring requirements specified in 40 CFR Part 58 and its appendices. The AMNP presented the current federal network established for use in evaluations to determine compliance with the National Ambient Air Quality Standards (NAAQS) and to meet federal monitoring requirements and objectives. This Plan is limited to the portion of TCEQ air monitoring network designed to comply with federal monitoring requirements and supported by federal funding, referred to as the "federal monitoring network". This document includes the recommended federal monitoring network changes from July 1, 2025, through December 31, 2026. TCEQ also operates a robust network of state-initiative monitors that support a variety of purposes, including potential health effects evaluation; however, these monitors are outside the scope of this document and are not included.

TCEQ continues to evaluate additional ambient air monitoring requested during previous AMNP public inspection and comment periods. Details regarding the potential monitors under consideration may be included in the Additional Monitoring Considerations section of the Plan to solicit further public comment. Any future implementation of these monitoring considerations may be included as part of TCEQ's federal monitoring network or as state-initiative monitors. No new Additional Monitoring Considerations were included in the 2025 AMNP.

During the public comment period from April 15, 2025, to May 14, 2025, comments were submitted from one state representative, 20 individuals, 262 individuals submitting through *Know Who*, a service provider on behalf of the Sierra Club, and eight other letters representing a total of 30 organizations. Comments were received from Representative Ron Reynolds of the Texas House of Representatives, Coalition of Community Organizations (COCO), Fenceline Watch, Environment Texas (submitting a petition on behalf of 30 individuals), RESET Lab (letter submitted by "private citizens who are also researchers at The University of Texas at Austin"), and the Houston Regional Group of the Sierra Club. Earthjustice submitted a letter on behalf of the Lone Star Chapter of Sierra Club, Public Citizen, Air Alliance Houston, Midlothian Breathe, Coalition for Responsible Environmental Aggregate Mining (CREAM), Environmental Integrity Project, Rethink35, Environmental Defense Fund (EDF), Coastal Watch Association, Earthworks, and Preserve our Hill Country. EDF submitted a letter on behalf of Citizens Caring for the Future, Hispanic Access Foundation, New Mexico and El Paso Interfaith Power and Light, Texas Permian Future Generations, and Sierra Club. In addition, Lone Star Legal Aid (LSLA) provided comments on behalf of its respective clients and their communities including Port Arthur Community Action Network (PACAN), Caring for Pasadena Communities, Super Neighborhood 48 (SN 48) Trinity Gardens/Houston Gardens, Pleasantville Area Super Neighborhood 57, Progressive

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

Fifth Ward Community Association, Better Brazoria—Clean Air & Water, Houston Department of Transformation, Gulfton Super Neighborhood Council, and an individual from the Channelview area of Harris County, Texas. EDF indicated that they were incorporating by reference "comments submitted on behalf of the groups in Port Arthur that appropriately seek additional monitors, as well as any other comments received from groups and individuals seeking better air quality monitoring throughout the state", as well as incorporating unspecified commenters comments focused on the Permian Basin; therefore, TCEQ responses to such comments are also responses to EDF's general incorporation by reference.

Comments received by TCEQ during the 30-day comment period are summarized below and are addressed with responses in this appendix. Complete comments received on the draft 2025 AMNP are included in AMNP Appendix N.

TCEQ strives to strategically balance meeting federal monitoring requirements and state and local needs with available funding and staffing resources, and for those reasons, cannot always satisfy every monitoring request. TCEQ does receive, and appreciates, occasional short-term, one-time federal grant opportunities that can be used to fund additional monitoring resources. These short-term grant resources can allow TCEQ to purchase and upgrade aging air monitoring equipment and to meet changes in technical monitoring requirements. However, long-term resources to operate and audit air monitors and to quality assure and validate data are necessary for air monitoring network expansion. Federal grant funding to support long-term resources has not increased for decades, even though air monitoring requirements have increased over that same period. TCEQ estimates that implementing the additional ambient air monitoring requested during the AMNP's 30-day comment period would result in a minimum of 25 new air monitoring sites at an initial investment of approximately $8,500,000 for the equipment, deployment, and operations in the first year and a minimum of $3,300,000 in annual ongoing operational costs. Additionally, TCEQ would need a minimum of five additional staff to manage expansion of the network on this scale.

TCEQ will continue to evaluate air monitoring needs against existing federal monitoring requirements and available resources in the 2026 AMNP. Further, TCEQ conducted the *Texas 2025 Five-Year Ambient Monitoring Network Assessment* (Texas 2025 FYA) to confirm that the existing network continues to meet the objectives in 40 CFR Part 58, Appendix D, and to evaluate whether individual network monitors should be added, relocated, or decommissioned to best understand and evaluate air quality with existing resources. No changes were made to the draft 2025 AMNP based on the comments summarized below.

Comment Summaries and TCEQ Responses

Comment 1:

Texas State Representative Ron Reynolds urged TCEQ to install air quality monitors in Fort Bend County following extensive discussions with constituents, elected officials, and stakeholders with growing concerns about the region's air quality, given the

county's location within the Houston-Galveston-Brazoria nonattainment area. Representative Reynolds noted that he filed legislation during the 89th Legislative Session that aimed to improve air quality in House District 27, one of which would have required TCEQ to review and adopt new hydrogen sulfide standards. Representative Reynolds noted TCEQ retained authority to address the concerns even though the proposal saw limited progress. Representative Reynolds asked TCEQ to consider Fort Bend County's proximity to air pollutants and install air quality monitors in the region that were necessary to maintain the county's exceptional quality of living.

Response 1:

While TCEQ appreciates the Representative's concerns, additional monitoring is unnecessary to meet federal requirements designed to ensure adequate coverage for ambient air monitoring. Federal requirements are designed to ensure adequate coverage for ambient monitoring of criteria pollutants which are set by EPA to protect public health and welfare. As a result, TCEQ prioritizes air monitoring to assess air quality for compliance with federal air quality standards and in areas with concentrated industrial activity and/or major sources or emissions.

TCEQ's stationary air monitoring network is designed to meet federal air monitoring requirements of the Clean Air Act that dictate the number of monitors required for each of the six criteria pollutants in populated areas or metropolitan statistical areas (MSAs) throughout the state. The air monitoring network is used to characterize regional air quality in areas over time but is generally not intended to assess emissions from sources. Fort Bend County is part of the Houston-Pasadena-The Woodlands (Houston) MSA. While Texas is currently exceeding all minimum federal requirements for monitoring criteria pollutants in the Houston MSA (TCEQ is federally required to operate between 27 and 31 monitors, but exceeds requirements with 75), we acknowledge that none of these monitors are sited in Fort Bend County specifically. TCEQ evaluates placement of its air monitors using population data, as well as reported emissions inventory data, resulting in the placement of air monitors in areas where large sectors of the population intersect with a significant presence of industry. The closest air monitors to Fort Bend County include those at the Manvel Croix Park site (Brazoria County) that monitors for ozone and nitrogen dioxide (NO_2) and the Houston Croquet site (Harris County) that monitors ozone and sulfur dioxide (SO_2), less than three miles from the Fort Bend County line. Data from these monitors, as well as other monitors in the MSA, are publicly available on TCEQ webpage, and inform the daily air quality forecast for the area. These tools help inform communities about current air quality conditions in the general area.

TCEQ will continue to evaluate the availability of air monitoring assets and, as resources become available, may consider future placement of an air monitor in Fort Bend County. TCEQ is committed to ensuring clean air for the people of Texas and appreciates the opportunity to consider this request.

Comment 2:

The Houston Regional Group of the Sierra Club and 20 individuals requested Fort Bend County air monitoring for SO_2, nitrogen oxides (NO_x), particulate matter of 2.5 micrometers or less in diameter ($PM_{2.3}$), and ozone. Some of these individuals requested Fort Bend County air monitoring because one of the largest coal-fired power plants in

the nation was located there, the area was nonattainment for ozone, and expressed concerns about various health effects or the need to advocate for their health, environment, and community. Some individuals noted that most Texas counites with coal plants had SO_2 monitoring. One individual requested adding air monitors to each of the counties surrounding major metropolitan areas of Texas in addition to adding Fort Bend County air monitors. Some individuals commented that without local real-time data they must rely on extrapolated data outside the county and that data should be untouched, transparent, and relevant. Other individuals made comments related to carbon dioxide emissions from the Petro Nova carbon capture plant and that NRG should transition to battery or geothermal power sources. One individual commented there was a need for Fort Bend County air monitoring even though WA Parish reported a decrease in SO_2 emissions and had "mildly reducing" emission controls for $PM_{2.5}$ and NO_x. One individual commented that the University of Houston (UH) – Sugar Land campus would be a good central Fort Bend location for air monitoring especially since there was a previous TCEQ monitor there (deactivated in 2018).

Response 2:

TCEQ appreciates participation in the 2025 AMNP comment period and the request to install Fort Bend region air quality monitors. TCEQ notes that while ambient monitoring is not provided in Fort Bend County, specific sources in Fort Bend County, such as the coal-fired power plant, are required to monitor their specific air emissions. While TCEQ strives to strategically balance meeting federal air monitoring requirements with state and local concerns, funding and resource limitations impact the ability to conduct air monitoring in response to all requests. As a result, TCEQ prioritizes air monitoring to assess air quality for compliance with federal air quality standards.

The 2025 AMNP confirms that TCEQ meets and/or exceeds all federally required source-oriented SO_2 monitoring requirements in all areas of Texas (including counties and MSAs). Also documented in TCEQ's AMNP Appendix F, Fort Bend County and areas around the coal-fired power plant (relevant source), were characterized and designated based on modeled actual SO_2 emissions in compliance with the 2010 one-hour SO_2 NAAQS. Since the area was characterized by EPA's preferred method of modeling and reported emissions have decreased by approximately 30 percent (%) since the modeling was conducted, no further air quality characterization by ambient air monitors were required in Fort Bend County.

As discussed elsewhere in this response, TCEQ's stationary air monitoring network is designed to meet federal air monitoring requirements of the Clean Air Act that dictate the number of monitors required for each of the six criteria pollutants in populated areas or MSAs throughout the state. Federal requirements set by EPA are designed to ensure adequate coverage for ambient monitoring of criteria pollutants to protect public health and welfare. The air monitoring network is intended to characterize regional air quality across broad areas over time and is not required in every county. Additionally, the network is not intended to assess emissions from sources. Fort Bend County is part of the Houston MSA. While Texas is currently exceeding all minimum federal requirements for monitoring criteria pollutants in the Houston MSA (TCEQ is federally required to operate between 27 and 31 monitors, but exceeds requirements with 75), we acknowledge that none of these monitors are sited specifically in Fort

Bend County. TCEQ evaluates placement of its air monitors using population data as well as reported emissions inventory data, resulting in the placement of air monitors in areas where large sectors of the population intersect with a significant presence of industry. The closest air monitors to Fort Bend County include those at the Manvel Croix Park site (Brazoria County) that monitors for ozone and NO_2 and the Houston Croquet site (Harris County) that monitors for ozone and SO_2, less than three miles from the Fort Bend County line.

Houston area air monitoring sites, monitors, and county lines are illustrated below in Figure A. TCEQ clarifies that all major metropolitan areas (discussed in the 2025 AMNP and the Texas 2025 FYA as MSAs) have air monitors that meet and/or exceed federal monitoring requirements. Data from these monitors are publicly available on TCEQ webpage, and inform the daily air quality forecast for the area. These tools help inform communities about current air quality conditions in the general area.

TCEQ will continue to evaluate the availability of air monitoring assets and, as resources become available, may consider future placement of an air monitor in Fort Bend County. TCEQ is committed to ensuring clean air for the people of Texas and appreciates the opportunity to consider this request. Comments relating to specific emission sources, health effects, or carbon capture related emissions are beyond the scope of this plan.

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

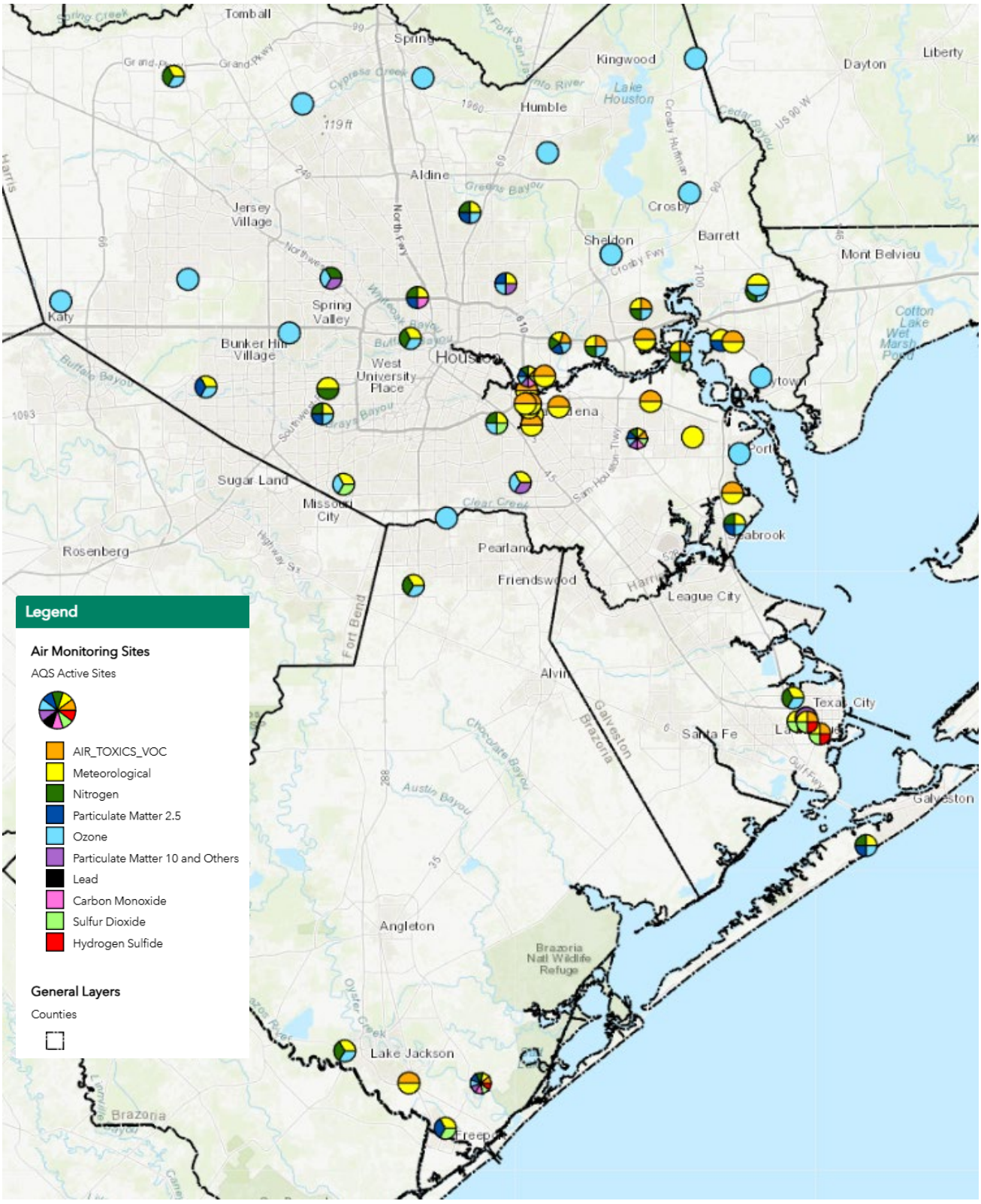


Figure A: Houston Area Active Sites and Monitors with County Outlines

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

Comment 3:

COCO submitted a letter in strong support of the placement of $PM_{2.5}$ and volatile organic compounds (VOC) monitors at Finnegan Park <sic> in Houston's Fifth Ward. COCO noted appreciation for TCEQ's commitment to enhancing air quality monitoring infrastructure in their neighborhoods and recommended TCEQ consider expanding this effort by placing similar $PM_{2.5}$ and VOC monitors in the Pleasantville community of Houston.

Response 3:

TCEQ appreciates the support for the placement of $PM_{2.5}$ monitoring and state-initiative, non-regulatory VOC canister monitoring to the new Houston Finnigan Park site and the request to add monitoring in the Houston Pleasantville neighborhood. As part of the final 2023 AMNP, due to the outpouring of positive comments and support received, TCEQ incorporated the proposal to deploy a $PM_{2.5}$ monitor and state-initiative, non-regulatory VOC canister monitor in the Houston Pleasantville neighborhood. TCEQ agrees that the data from these monitors will be useful for assessing air quality in this area and is currently working on deploying a new air monitoring site at Pleasantville Elementary School in the Houston Pleasantville neighborhood. TCEQ appreciates the continued support and collaboration from community groups to monitor daily ambient air quality conditions in the Houston Ship Channel and surrounding areas. The new Houston Finnigan Park and Houston Pleasantville Elementary air monitoring sites will be activated shortly after site construction is completed and power is connected by the service provider.

Comment 4:

Fenceline Watch commended TCEQ for making the 2025 AMNP available in Spanish and encouraged TCEQ to expand the accessibility of the AMNP by incorporating other widely spoken languages in the Houston Region, including, but not limited to, Vietnamese and Chinese. Earthjustice, EDF, and Fenceline Watch commented that TCEQ's Draft 2025 Plan must be included in the applicable State Implementation Plan (SIP) revision and as such, federal law requires TCEQ to provide notice and undertake a public hearing before promulgating the plan. The commenters state that the Federal Clean Air Act and its implementing regulation make it clear that a state's monitoring plan is part of its SIP, 42 United States Code (USC) Part 7410(1). The commenters requested that TCEQ remand the Draft 2025 Plan and revise it through notice and comment rulemaking. In addition, the comment states TCEQ's failure to conduct public outreach and hold public meetings or hearings regarding its proposed Plan deprive Texas native and non-English speaking communities of air quality and public health information. The commenters requested that TCEQ hold a public hearing, with Spanish interpretation services available, in Houston, El Paso, Midland-Odessa, and other Texas areas to afford the public an opportunity to ask questions about the Plan to TCEQ staff responsible for its creation and implementation.

Response 4:

TCEQ appreciates the comments regarding the need for greater outreach, especially the provision to provide information in other commonly spoken languages in Texas. Since 2022, TCEQ has provided the AMNP in both Spanish and English, allowing access to

this information to Spanish speaking Texans. Ensuring accurate translation and terminology across different languages is challenging and logistically complex. Individuals needing basic information of EPA's requirements can search EPA's website for information concerning environmental topics or can request such information from TCEQ.

As discussed in responses to previous AMNP's, the 2025 AMNP is not a revision to the SIP and is not subject to notice and comment rulemaking procedures. This was affirmed by the Court of Appeals for the District of Columbia Circuit in a decision issued on May 31, 2019, in the case *Sierra Club v. Environmental Protection Agency*, 925 F.3d 490 (D.C. Cir. 2019). Sierra Club petitioned for review of EPA's Revision to Ambient Monitoring Quality Assurance and Other Requirements, 81 *Federal Register* 17,248 (March 28, 2016), which modified 40 CFR Part 58.

One of the Sierra Club's concerns in this court case addressed whether AMNPs should be subject to notice and comment rulemaking. The Court stated that EPA adopted regulations in 2006 that specifically place these plans outside the SIP-review process [see Revisions to Ambient Air Monitoring Regulations, *71 Federal Register 61,236* (October 17, 2006)]. Because the Clean Air Act requires that petitions for review of agency regulations be filed within sixty days of a challenged action appearing in the Federal Register, the Sierra Club could not re-open the issue more than ten years later. The court found that EPA's 2006 rulemaking makes clear that the annual monitoring network plans are not components of a SIP that require notice and comment. Instead, a state must make the plan "available for public inspection," without requiring the formal notice and comment procedures that are necessary for SIP revisions. The court also found that EPA's rulemaking that was under review in this case did not change these requirements and that there was no indication EPA intended to address or change the non-SIP approach for annual monitoring network plans.

Therefore, TCEQ's current public comment process for the AMNP complies with 40 CFR § 58.10(a)(1), and TCEQ is not compelled to hold public hearings on the AMNP. TCEQ is responding to the comments that were received during the provided notice period for the Plan and is submitting all comments and responses to EPA. The final plan, including responses to comments, will be publicly available on the TCEQ webpage in English and in Spanish.

Comment 5:

EDF requested an ozone monitor in the Midland-Odessa region to assist Texas in assessing ozone transport issues. EDF asserts that the high ozone and ozone precursors in the Texas Permian Basin justified siting more monitors for NO_x, VOCs, and ozone to be in compliance with enforcement of the Clean Air Act and the NAAQS. EDF stated the increase in oil and gas production has made the Permian Basin the single largest source of NO_x and VOCs in the region. EDF stated that existing monitors measuring ozone around the Permian Basin showed the region was likely exceeding the ozone NAAQS (such as the Guadalupe Mountains National Park ozone monitor, decommissioned in 2022). They noted this assertion was supported by nearby ozone monitor design values that exceeded the ozone NAAQS of 0.70 parts per billion (ppb) collected in the last three consecutive calendar years. EDF noted a significant number of people lived in the affected counties and also in close proximity to the oil and gas

sites; therefore, new sites should be added to the network to achieve a comprehensive ozone monitoring program and better protect public health of Texans living in the Permian Basin. EDF stated TCEQ clearly did not monitor for peak air pollution or significant sources of air pollution. Furthermore, EDF stated that 40 CFR Part 58, Appendix D, § 4.1B<sic> "within an ozone network, at least one ozone site for each metropolitan statistical area (MSA)…. must be designed to record the maximum concentration for that particular metropolitan area", and as such, the combined population for the Midland-Odessa combined statistical area (CSA) exceeded the threshold for which an ozone monitor was required, under Table D-2 of Appendix D to Part 58 (Table D-2). EDF criticized TCEQ for counting very large MSAs (e.g. San Antonio, Dallas-Fort Worth-Arlington, etc.) as "single units" under Table D-2 and stated that it would be arbitrary and capricious to treat these large urban conglomerations as single units under Table D-2, while refusing to do the same for the much smaller Midland-Odessa CSA. EDF noted that even if the Midland-Odessa area was treated as an MSA instead of a CSA, NAAQS ozone monitor requirements were still applicable. TCEQ was encouraged to use the ozone design values of adjacent/nearby monitors as the best estimate available for Midland-Odessa's design value. When determining where to place monitors, EDF encouraged TCEQ to think and act beyond Table D-2, including considering private monitoring data in lieu of an ozone monitor network in the Permian Basin; EDF asserted that there was no legal basis for TCEQ to not consider this data to indicate NAAQS exceedances. Ignoring this data would be considered arbitrary and capricious, especially when TCEQ used private monitoring data to make siting determinations.

Response 5:

TCEQ acknowledges the recommendation for expanded air monitoring in the Permian Basin. TCEQ does not agree with EDF's recommendation to deploy one or more monitors for ozone and its precursors in the Permian Basin in order to accurately assess the air quality impacts of oil and gas developments, peak air pollution, or significant sources of air pollution. Federal ozone monitoring requirements, which are designed by EPA to assess air quality, are triggered by the MSA population based on the latest available census figures (see 40 CFR Part 58.50(c) and Table D-2 of 40 CFR Part 58, Appendix D). Table D-2 specifically categorizes monitoring requirements based on MSAs. TCEQ disagrees that its usage of the OMB delineated Texas Permian Basin area of two separate MSAs, Odessa and Midland, is arbitrary or capricious.

TCEQ uses statistical-based definitions for MSAs, as defined and delineated by the U.S. Office of Management and Budget (OMB). The OMB 2020 standards (86 FR 37770) provide that each MSA must have at least one urban area of 50,000 or more inhabitants. Under the OMB delineation standards, MSAs are characterized by a relatively high population density at their core, consisting of the county or counties associated with at least one urbanized area/urban cluster of at least 10,000 population or the county (or counties) in which at least 50% of the population resides. If specified criteria are met, a metropolitan statistical area containing a single core with a population of 2.5 million or more may be subdivided to form smaller groupings of counties referred to as "metropolitan divisions." In some instances, the OMB has merged formerly separate areas. The OMB reassessed MSA delineation in 2023 based on the 2020 decennial census and did not assign any changes to the Midland or Odessa

MSAs based on these standards. Expansion of oil and gas developments does not require installation and monitoring of ozone and its precursors (NO_x and VOCs) to meet federal monitoring requirements. The purpose of the 2025 AMNP is to demonstrate how TCEQ's air monitoring network complies with federal monitoring requirements detailed in 40 CFR Part 58. TCEQ meets federal ozone monitoring requirements for the MSAs in the Permian Basin area, as detailed in the 2025 AMNP and in Appendix C of this Plan, and no additional changes are recommended at this time.

As stated in the introduction, state-initiative monitoring is not included in this Plan; however, TCEQ deployed three Permian Basin state-initiative air monitoring sites that continuously monitor for VOCs, SO_2, and hydrogen sulfide (H_2S) in Odessa, Goldsmith, and Midland in 2020 and 2021. In addition, TCEQ operated a non-continuous VOC canister sampler at the Odessa Hays air monitoring site from 1993 to 1999, a continuous VOC monitor from 1999 to 2015, and has operated a non-continuous VOC canister sampler since 2015. The Permian Basin active air monitoring sites and monitors, including state-initiative monitoring, are illustrated below in Figure B. The latest information regarding TCEQ's air monitoring network and monitoring data, including information on the Permian Basin sites, are available on TCEQ's webpage TCEQ Air Quality and Monitoring. Comments related to private monitoring data usage are outside the scope of this Plan.

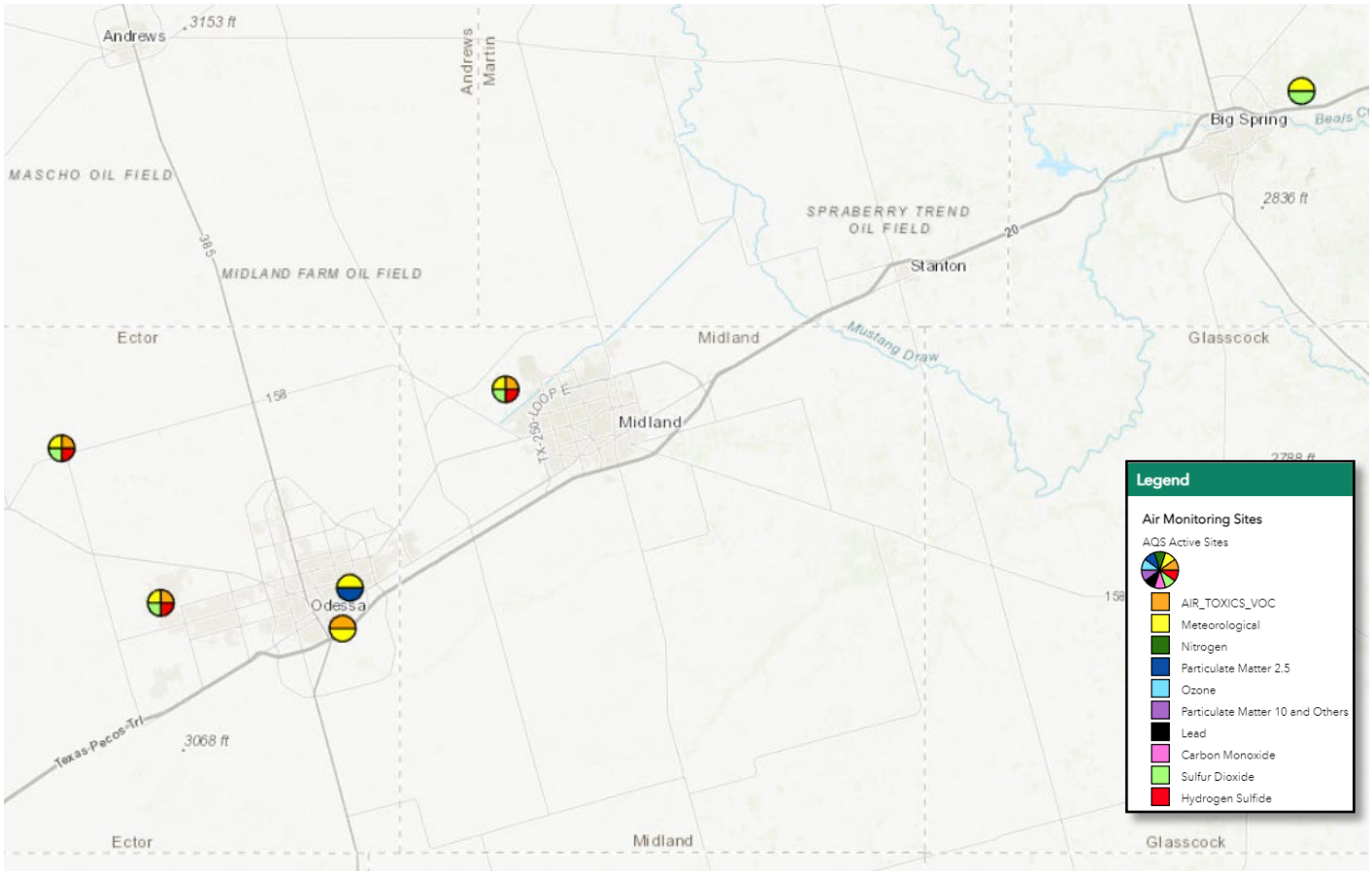


Figure B: Permian Basin Area Sites and Monitors

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

Comment 6:

Earthjustice, on behalf of Midlothian Breathe, noted concerns over the long, protracted gap in reactivating the Midlothian Old Fort Road<sic> monitor due to the ongoing problems with siting and city ordinances. Midlothian Breathe stated they have made continual efforts to raise this issue with the local governments and with TCEQ. Midlothian Breathe suggested that the draft air quality management plan<sic> could implement a back-up location to ensure quick monitor placement. Midlothian Breathe suggested that TCEQ should work with local nonprofits and/or citizens (those most interested in ensuring a reduction in community air pollution), to identify viable locations and back-up sites with community buy-in.

Midlothian Breathe commented that according to 40 CFR Part 58, Appendix D, TCEQ should amend the plan to include a new additional monitor north/northwest of Holcim, Texas, to better capture particulate matter emissions and suggested the movement of the former Midlothian $PM_{2.5}$ federal reference monitoring (FRM) monitor to the north/northwest of Holcim. They noted that since the area had three cement plants, a steel mill, and a growing population in the Dallas CBSA, another monitor was justified. Additionally, they commented that more than just PM should be monitored as the Midlothian area is likely to be in nonattainment of the ozone NAAQS. Midlothian Breathe commented that area residents have fallen into a data gap and await new monitoring that must be adequate to be representative of overall Midlothian air quality.

Response 6:

TCEQ acknowledges the comments regarding air monitoring in Midlothian and relocating the Midlothian OFW air monitoring site. TCEQ was required to temporarily deactivate the Midlothian air monitoring site due to the property owner revoking TCEQ's access to the site. As discussed in the Introduction of this Plan, site relocations involve a lengthy process that can take between two to four years due to the complexity of each step and reliance on external partners. Back-up air monitoring site locations would also be subject to the same potential delays related to access agreements, permit approvals, and construction. TCEQ evaluated monitoring site locations that would appropriately and sufficiently characterize regional air quality in an area with multiple sources. TCEQ collectively considered property owner agreement, predominant wind flow, and logistical constraints such as space, power availability, terrain, grade, and drainage. TCEQ ensured the potential site locations complied with the federal requirements listed in 40 CFR Part 58, Appendix E regarding siting criteria Given the presence of multiple facilities in the general vicinity of the former Midlothian OFW site, relocating the site near its original location, inside city limits, is still warranted and supported by emissions inventories of facilities in the general area.

TCEQ secured a site usage agreement in a location that meets logistical requirements, federal siting criteria, and will provide air quality data representative of the regional area around Midlothian. However, TCEQ continues to experience delays with the City of Midlothian in obtaining permits for the construction (site pad, fence, and electrical) of the new Midlothian North Ward Road site. TCEQ is addressing the current challenges and appreciates the support of local communities to ensure a timely deployment of the Midlothian North Ward Road site. TCEQ routinely works to identify

multiple alternative air monitoring sites during the site relocation process; however, in Midlothian, five alternative viable locations identified on City of Midlothian property were denied by the City. The City of Midlothian responded to TCEQ requests noting that all sites must be aesthetically presentable and that based on the appearance, an air monitoring trailer on city property would not lend itself to being permitted. The City ultimately suggested that TCEQ place the air quality monitoring site outside of the city's corporate limits, which, unfortunately does not align with air quality monitor placement in proximity to area sources as discussed above.

TCEQ meets and/or exceeds air monitoring requirements in the Dallas CBSA (shown in AMNP Appendix C). TCEQ exceeds the $PM_{2.5}$ and ozone requirements under 40 CFR Part 58, Appendix D in the Dallas CBSA, shown in AMNP Appendices H and K. Midlothian Breathe recommended that TCEQ monitor for more than just PM in Midlothian. TCEQ clarifies that once the new Midlothian air quality site is relocated and activated, multiple individual ambient air monitors measuring NO_x, ozone, $PM_{2.5}$ with speciated metals, SO_2, solar radiation, outdoor temperature, wind, and VOCs (by state-initiative canister) will be operational, similar to the air quality monitors that were historically at Midlothian OFW. TCEQ will continue to evaluate air monitoring needs in Midlothian against existing federal monitoring requirements and available resources.

Comment 7:

Earthjustice, on behalf of CREAM, noted TCEQ's 2025 Draft AMNP did not include any Williamson County $PM_{2.5}$ monitoring systems despite the 32 active aggregate production operations (APO) and 45 concrete batch plants (CBP) within the county. CREAM commented that TCEQ should add at least one $PM_{2.5}$ monitor in Williamson County to more clearly determine the county's attainment status. CREAM stated that the Sun City retirement community in Georgetown, Texas faces health concerns due to poor air quality and fine dust from nearby APOs and CBPs. CREAM stated the retirement community is a particularly sensitive population that needed accurate information about air quality. CREAM noted that the nearest $PM_{2.5}$ monitors were in Travis and Bell Counties, and these monitors were too far away to provide useful or relevant data for Williamson County. CREAM noted similar concerns as Midlothian Breathe about monitors taken out of service and/or ignored data, noting that TCEQ gave no indication that the Jarrell monitor would be shut down in the 2024 AMNP and commented that it was shut down in June 2024 and no new area $PM_{2.5}$ monitor replaced it.

Response 7:

TCEQ appreciates the recommendations to expand $PM_{2.5}$ monitoring in areas with significant APOs and CBPs, such as Williamson County. As stated in the introduction, the 2025 AMNP is intended to demonstrate TCEQ's compliance with federal air monitoring requirements under 40 CFR Part 58. TCEQ meets particulate matter federal air monitoring requirements under 40 CFR Part 58 in the Austin-Round Rock-San Marcos (Austin) CBSA. TCEQ clarifies that federal monitoring regulations do not require ambient air monitors in every county in a CBSA. TCEQ notes that Williamson County is part of the Austin CBSA along with Travis, Hays, Caldwell, and Bastrop counties, and this area is meeting all federal monitoring requirements. TCEQ's air monitoring network is designed to measure pollutant concentrations for assessing

regional air quality representative of areas frequented by the public and to provide information about compliance with the NAAQS. Monitors can measure the impact on air quality from industrial sources present in an area but are not intended to capture emissions and/or dispersion patterns from individual sources.

As noted in the introduction, this Plan is limited to the portion of TCEQ's air monitoring network designed to comply with federal monitoring requirements. However, TCEQ also operates a robust network of state-initiative monitors that support a variety of purposes, including potential health effects evaluation, and these monitors are outside the scope of this Plan and are not included. TCEQ, again clarifies, that the Jarrell FM 487 monitor was a state-initiative temporary monitor activated to assess the local air quality impacts of particulate matter sources located within 0.5 mile of the monitor. Since state-initiative air monitoring are not included in the Plan, an announcement regarding the discontinuation of the Jarrell FM 487 air monitoring site was provided in July 2024 to all public subscribers for updates to TCEQ's Air Monitoring Network, available on TCEQ's homepage. Jarrell FM 487 $PM_{2.5}$ data trended well with the other three regional $PM_{2.5}$ monitors within the Austin CBSA, and mean daily concentrations were generally below that of the other regional monitors. The data from the Jarrell FM 487 monitor remain publicly accessible at TCEQ's TAMIS webpage. Air monitoring data obtained at this site were also used in TCEQ's Toxicology, Risk Assessment, and Research (Toxicology) Division evaluation of particulates, including crystalline silica, near APOs. The monitoring project measured concentrations of crystalline silica in particulate matter of 4 micrometers or less in diameter (PM_4) and total $PM_{2.5}$ at existing TCEQ stationary ambient air monitoring sites that were publicly accessible and downwind of APO facilities, as well as at a background monitoring site that was not located near an APO facility. The goal was to determine what contribution, if any, the APO facilities had to ambient air concentrations of crystalline silica PM_4 and total $PM_{2.5}$ relative to that of background in the Central Texas area. Overall, this monitoring study found that total $PM_{2.5}$ concentrations were not measurably impacted by downwind APO operations. The full evaluation is available on TCEQ's Toxicology Division Research Projects webpage *Ambient Monitoring of Particulates, Including Crystalline Silica, Near APO Facilities Final Report*.

TCEQ notes that it activated a state-initiative $PM_{2.5}$ federal equivalent method (FEM) monitor at Austin Audubon Society on January 7, 2025, documented in TCEQ's draft 2025 AMNP. In the draft 2025 AMNP, TCEQ recommended adding this monitor to TCEQ's federal air monitoring network if EPA Region 6 approved the reclassification of $PM_{2.5}$ micro-scale near-road monitors as non-NAAQS comparable to the annual $PM_{2.5}$ NAAQS. The Austin Audubon Society air quality monitoring site is located in north Travis County within one mile of Williamson County and near industry sites of concern noted by the commenter. TCEQ's Austin area air quality monitoring sites are illustrated below in Figure C. TCEQ strives to strategically balance meeting federal monitoring requirements and state and local needs with available funding and staffing resources, and for those reasons, cannot always satisfy every monitoring request. However, TCEQ will continue to evaluate air monitoring needs in the Austin CBSA, including Williamson County, against existing federal monitoring requirements and available resources. Specific health concerns noted by commenters are beyond the scope of this AMNP.

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

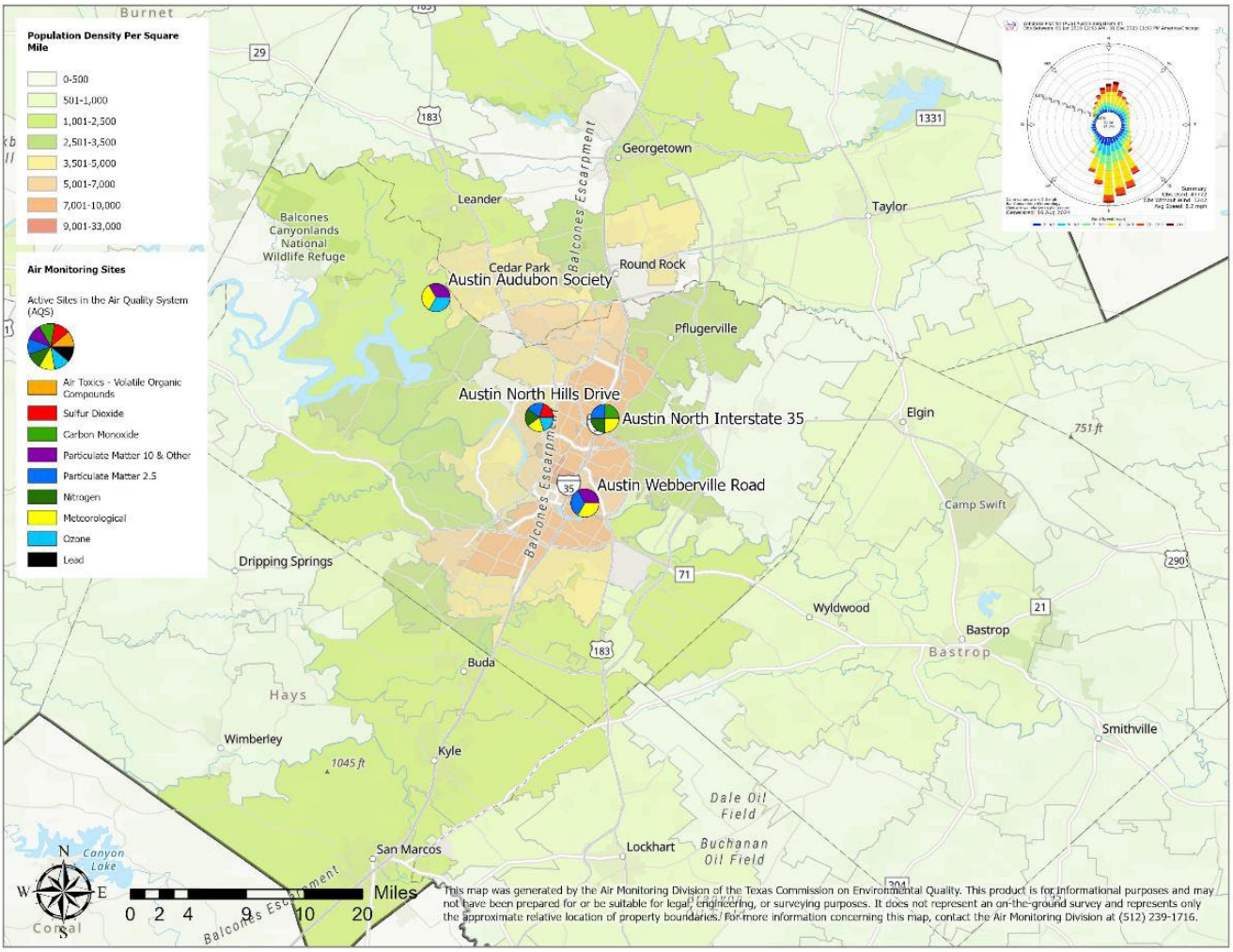


Figure C: Austin Area Active Sites and Monitors, Population Density, and Wind Rose

Comment 8:

Earthjustice noted TCEQ has not been able to meet the minimum requirements per 40 CFR Part 58 and Appendices, including sections 58.10 and 58.14, for monitoring nitrogen oxides, ozone, $PM_{2.5}$, and meteorology at the University of Texas El Paso (UTEP) site. Earthjustice commented that the lack of a UTEP site and lack of El Paso $PM_{2.5}$ data was problematic and a barrier to understanding whether the area is in compliance with the new $PM_{2.5}$ NAAQS. Earthjustice commented that TCEQ could meet monitoring needs by using temporary or mobile monitors that are more permanently parked and should craft a priority flow chart to better allocate funds to communities impacted by air quality concerns to provide greater transparency regarding the budget for this plan and should partner with local communities to get buy-in for potential site locations.

Response 8:

TCEQ appreciates the recommendations regarding the El Paso UTEP air monitoring site. The El Paso UTEP air quality monitoring site was temporarily deactivated for relocation in November 2021 due to the property owner revoking the site usage agreement for

building expansion. Areas within one mile of the previous El Paso UTEP air monitoring site offer unique challenges such as unlevel mountainous terrain, dense land use, tall downtown buildings, dense highway infrastructure, and the Texas/Mexico Border. TCEQ air monitoring sites are generally located on private property, and TCEQ must identify willing property owners who are amenable to allow TCEQ to place an air monitoring site on their property. TCEQ has worked with multiple public entities, including UTEP, City of El Paso, EPA, Texas Department of Transportation, and the U.S. International Boundary and Water Commission; in the effort to identify a suitable location within one to two miles of the previous site and has not been successful to date. TCEQ has allocated funds to relocate this air monitoring site and continues to evaluate potential locations.

TCEQ does not agree that minimum monitoring requirements in the El Paso CBSA are not met as required under 40 CFR Part 58 and its appendices; therefore, temporary or mobile monitors are not needed. TCEQ clarifies that use of temporary monitoring sites and/or mobile monitors are not approved air quality methods to generate data for the purpose of demonstrating compliance with the NAAQS. TCEQ assesses federal monitoring requirements as discussed elsewhere in this AMNP; therefore, no priority flow chart is necessary. TCEQ meets or exceeds all minimum requirements in the El Paso CBSA, including those for $PM_{2.5}$, as documented in TCEQ's 2025 AMNP and TCEQ's TEXAS 2025 FYA. TCEQ is required to operate between 17 to 21 monitors in the El Paso MSA and exceeds requirements by operating 24 monitors. Active El Paso ambient air monitors and monitoring requirements are listed in Table 1, and the active sites and monitors are illustrated in Figure D below.

Table 1: El Paso Area Required Monitors and Existing Active Monitors

El Paso Metropolitan Statistical Area Active Monitor Type	Minimum Monitors Required under 40 CFR Part 58	Existing Monitors
Carbon monoxide	1	2
NO_2 and NO_y	2	3
$PM_{2.5}$	6	6
PM_{10}	4-8	6
Ozone	3	6
Sulfur dioxide	1	1

CFR – Code of Federal Regulations
NO_2 – nitrogen dioxide
NO_y – total reactive nitrogen compounds
$PM_{2.5}$ – particulate matter of 2.5 micrometers or less in diameter
PM_{10} – particulate matter of 10 micrometers or less in diameter

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

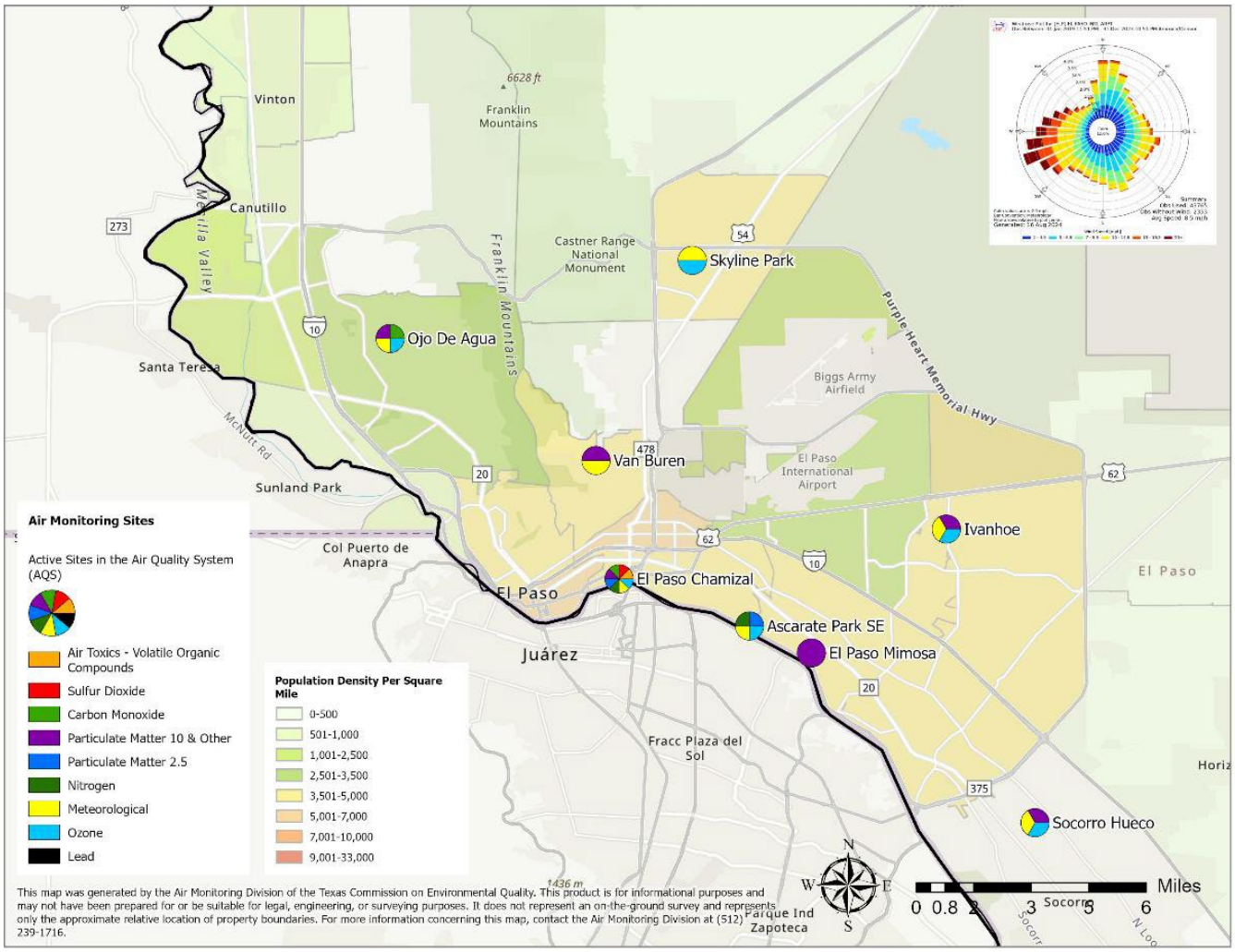


Figure D: El Paso Area Active Sites and Monitors, Population Density, and Wind Rose

Comment 9:

Earthjustice commented that the Odessa Gonzales $PM_{2.5}$ monitor was required for the AMNP to be approved, and it was still inactive, again, five years later. Earthjustice commented that EPA noted ongoing concerns related to ozone in the Permian Basin and that TCEQ should deploy one or more ozone monitors there and that TCEQ's AMNP failed to fund air quality monitoring in the Permian Basin, a well-known oil and gas field, where flares, compressor stations, and oil and gas equipment contribute to local, state-wide, and regional cross-state pollution concerns. Earthjustice noted that other groups submitted contemporaneous Permian Basin comments that they incorporated herein.

Response 9:

TCEQ clarifies that the Odessa Gonzales $PM_{2.5}$ monitor was activated in 2002 with a continuous non-NAAQS comparable $PM_{2.5}$ monitor and was upgraded to a $PM_{2.5}$ FEM

monitor in 2019. The historical and design value trends of the Odessa Gonzales $PM_{2.5}$ monitor are included in the Texas 2025 FYA. Earthjustice appears to have misinterpreted the information posted in the July 2021 AMNP where TCEQ noted concerns that the Odessa Gonzales $PM_{2.5}$ monitor required an eight-foot adjustment to meet siting criteria. The Odessa Gonzales $PM_{2.5}$ monitor continues to be operational today, though the location was adjusted in August 2021 to meet federal siting criteria.

TCEQ disagrees with Earthjustice's comment regarding a failure to fund Permian Basin air quality monitoring. TCEQ clarifies that the AMNP is generated to fulfil a federal requirement and is not a source of funding, an indicator of funding, or tied to funding in any way. State-initiated air monitoring is outside of the scope of this Plan, and thus not included. However, TCEQ activated three new Permian Basin state-initiative air monitoring sites with continuous automated gas chromatograph (autoGC) systems for VOCs, SO_2, and H_2S in Goldsmith, Odessa, and Midland in 2020 and 2021. Initial site deployment costs for the three new Permian Basin sites totaled approximately $1.3 million with recurring operational costs of approximately $500,000 per year.

In addition, TCEQ operated a non-continuous VOC canister sampler at the Odessa Hays air monitoring site from 1993 to 1999, a continuous autoGC system for VOCs from 1999 to 2015, and has operated a non-continuous VOC canister sampler since 2015. The Permian Basin state-initiative air monitoring sites are illustrated above in Figure B. The latest information regarding the Texas air monitoring network and monitoring data, including information on the Permian Basin sites, are available on TCEQ's webpage TCEQ Air Quality and Monitoring. Other Permian Basin comment summaries and TCEQ responses are detailed in Response 5.

Comment 10:

Earthjustice commented that Fort Bend County had no regulatory monitoring even though it was one the fastest-growing counties in Texas and the home to the largest coal-fired power plant in the state. Earthjustice commented that the county needed monitoring for emissions that were relevant and present. Earthjustice noted that Fort Bend air was completely uncharacterized even though the population was nearly one million persons. Earthjustice noted that even though TCEQ complied with the Houston area number of SO_2 monitors, the closest SO_2 monitor was 14 miles away in Harris County. Earthjustice agreed TCEQ's 2025 Draft AMNP showed a decrease in SO_2 emissions; however, the coal power plant received a Mercury and Air Toxics Standards exemption that could result in increased air emissions. Earthjustice commented that TCEQ should move the SO_2 monitor proposed for deactivation at Park Place to Fort Bend County to determine if the coal power plant protections (such as scrubbers) were effectively working. Earthjustice commented that since Fort Bend County was designated nonattainment for ozone, the area could not address ozone pollution using modeling data, and thus the county required an ozone monitor. Earthjustice commented that the closest $PM_{2.5}$ monitor to Fort Bend County, located in Harris County, was located outside of the concentrated plume from WA Parish and there was a necessity for monitoring $PM_{2.5}$ pollution in Fort Bend County. Earthjustice stated that regulated air monitoring for SO_2, ozone, $PM_{2.5}$, and carbon monoxide (CO) were overdue and needed for attainment status, to inform the public, and hold polluters accountable for their emissions.

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

Response 10:

TCEQ appreciates the request to place air quality monitors in Fort Bend County to monitor for emissions. TCEQ clarifies that federal monitoring regulations do not require ambient air monitors in every county in a CBSA. TCEQ's air monitoring network is designed to measure pollutant concentrations for assessing regional air quality representative of areas frequented by the public and to provide information about compliance with the NAAQS. Monitors can measure the impact on air quality from industrial sources present in an area but are not intended to capture emissions or evaluate if a facility's emissions controls are working.

TCEQ's stationary air monitoring network is designed to meet federal air monitoring requirements of the Clean Air Act that dictate the number of monitors required for each of the six criteria pollutants in populated areas or MSAs throughout the state. Fort Bend County is part of the Houston MSA. While Texas is currently exceeding all minimum federal requirements for monitoring criteria pollutants in the Houston MSA (TCEQ is federally required to operate between 27 and 31 monitors, but exceeds requirements with 75), TCEQ acknowledges that none of these monitors are sited in Fort Bend County specifically. TCEQ evaluates placement of its air monitors using population data as well as reported emissions inventory data resulting in the placement of air monitors in areas where large sectors of the population intersect with a significant presence of industry. The closest monitors to Fort Bend County include those at TCEQ's Manvel Croix Park site (Brazoria County) that monitors ozone and NO_2 and the Houston Croquet site (Harris County) that monitors ozone and SO_2, less than three miles from the Fort Bend County line. Data from these monitors, as well as other monitors in the MSA, are publicly available on TCEQ's webpage, and inform the daily air quality forecast for the area. These tools help inform communities about current air quality conditions in the general area.

As documented in the AMNP Appendix F, Fort Bend County, and areas around the coal-fired power plant (relevant source), were characterized and designated based on modeled actual SO_2 emissions in compliance with the 2010 one-hour SO_2 NAAQS. Since the area was characterized by EPA's preferred method of modeling and reported emissions have decreased approximately 30% since the modeling was conducted, no further air quality characterization by ambient air monitors were required in Fort Bend County. Furthermore, TCEQ disagrees that federal regulations require air monitoring in every county and that there must be air monitors in every county designated nonattainment.

TCEQ provided information regarding new air quality monitoring site deployment steps in the 2025 AMNP Introduction. Assuming the SO_2 monitor from the Park Place air monitoring site was repurposed for a new monitoring site in Fort Bend County, along with equipment to monitor CO, $PM_{2.5}$, and ozone, initial site deployment costs would total approximately $217,000, in addition to recurring operational costs of approximately $213,500 per year. TCEQ does not currently possess the resources to fulfill this request. While TCEQ strives to strategically balance meeting federal air monitoring requirements with state and local concerns, funding and resource limitations impact the ability to conduct air monitoring in response to all requests. As a result, TCEQ prioritizes air monitoring to assess air quality for compliance with federal air quality standards and in areas with concentrated industrial activity and/or

major sources or emissions.

TCEQ will continue to evaluate the availability of air monitoring resources and may consider future placement of an air monitor in Fort Bend County. TCEQ is committed to ensuring clean air for the people of Texas and appreciates the opportunity to consider this request.

Comment 11:

Earthjustice requested a $PM_{2.5}$ monitor, an NO_2 monitor, and a speciated VOC canister monitor in Houston's Sunnyside neighborhood, a historical community of color. Within the borders of Sunnyside there is a concentration of metal recycling facilities, concrete batch plants, and high-traffic roads. Earthjustice stated that the nearest regional air monitors were 8 to 10 miles away at Bayland Park and Cesar Chavez. Earthjustice noted that parts of the Sunnyside neighborhood were in the 90th percentile or above for lower life expectancy with increased rates of developing heart disease and asthma. Earthjustice commented that adding a $PM_{2.5}$ and/or a VOC monitor in Sunnyside would be a much-needed investment in the health of residents and would provide a complete understanding of the extent of potential exposure to protect public health and to monitor how well industrial sources are controlling their pollutant emissions.

Response 11:

TCEQ appreciates the recommendations for expanded air monitoring in the Sunnyside community; however, additional monitors are not necessary to meet federal monitoring requirements. While TCEQ strives to strategically balance meeting federal air monitoring requirements with state and local concerns, funding and resource limitations impact the ability to conduct air monitoring in response to all requests. As a result, TCEQ prioritizes air monitoring to assess air quality for compliance with federal air quality standards.

As demonstrated in the Plan, TCEQ federal air monitoring network in the Houston CBSA includes 19 active $PM_{2.5}$ monitors at 13 sites, three continuous autoGC systems for VOC measurements, and 18 NO_2 (direct NO_2 monitor and NO_X monitors measure NO_2) monitors.

TCEQ exceeds the federal requirement for a minimum of eight $PM_{2.5}$ monitors, a minimum of five NO_2 monitors, and a minimum of one continuous autoGC VOC system in the Houston CBSA. As stated in the introduction, state-initiative monitoring is not included in this Plan, however, TCEQ also operates a robust network of non-federal state-initiative monitors that support a variety of purposes. TCEQ's state-initiative monitoring network in the Houston area includes an additional six continuous VOC autoGC systems (for a total of nine continuous VOC systems), and eight VOC canister samplers. TCEQ's federal and state air monitoring sites and monitors are shown above in Figure A, with $PM_{2.5}$ monitors indicated by a dark blue section, NO_X /NO_2 monitors indicated by a dark green section, and VOCs indicated by an orange section. Data from these monitors, as well as other monitors in the CBSA are publicly available on TCEQ webpage, and inform the daily air quality forecast for the area. These tools help inform communities about current air quality conditions in the general area.

As stated in the introduction, the 2025 AMNP is intended to demonstrate TCEQ's compliance with federal air monitoring requirements under 40 CFR Part 58. Air

monitoring sites are generally placed to be representative of regional air quality, rather than monitoring emissions from specific sources. TCEQ will continue to evaluate the availability of air monitoring assets and, as resources become available, may consider future placement of an air monitor in the Sunnyside neighborhood. TCEQ is committed to ensuring clean air for the people of Texas and appreciates the opportunity to consider this request. Comments relating to how well industrial sources control their pollutant emissions and specific health concerns are beyond the scope of this AMNP.

Comment 12:

Earthjustice stated that Coastal Bend communities north of Corpus Christi Bay were in urgent need of air monitoring data to characterize current air quality to ensure public health protection. Earthjustice stated the area had experienced massive industrial development and expansion with numerous TCEQ-permitted sites in the area and more pending permit actions. If these pending permits were approved, the increased industry would greatly increase existing air emissions (and water pollution) along with existing pollution from large ships which dock in the Corpus Christi Bay and Channel.

Earthjustice stated that affected residents in the general area needed state and regulatory authorities to do what they are statutorily obligated to do. Earthjustice stated it is obvious from reviewing the 2022, 2023, and 2024 AMNPs, and the 2025 draft AMNP that TCEQ can request additional federal funding to develop an ambient air monitoring network that would property characterize air quality in the Coastal Bend areas beyond meeting the minimum requirements. They noted that TCEQ was capable of using existing funding and/or requesting additional monetary funding through the Texas legislature to provide protectiveness to its citizens and asked that TCEQ do so.

Response 12:

TCEQ acknowledges the recommendations for expanded monitoring in the Coastal Bend area north of Corpus Christi Bay. TCEQ is currently working with the City of Portland to establish a new air quality monitoring site in the Coastal Bend area. The new Portland air quality site is expected in 2026 and will have instrumentation to monitor for continuous $PM_{2.5}$, VOCs by canister, and meteorology.

As stated in the introduction, the 2025 AMNP is intended to demonstrate TCEQ's compliance with federal air monitoring requirements under 40 CFR Part 58 and its appendices. TCEQ's air monitoring network is designed to measure pollutant concentrations for assessing regional air quality representative of areas frequented by the public and to provide information about compliance with the NAAQS. Air monitoring sites are generally placed to be representative of regional air quality, rather than to characterize emissions from specific sources. TCEQ notes that federal monitoring regulations do not require ambient air monitors in every county in an CBSA. While Texas is currently exceeding all minimum federal requirements for monitoring criteria pollutants in the Corpus Christi CBSA (TCEQ is federally required to operate between three and four monitors, but exceeds requirements with nine, plus five additional state-initiative monitors), we acknowledge that none of these monitors are sited in San Patricio County. TCEQ evaluates placement of its air monitors using population data as well as reported emissions inventory data resulting in the placement of air monitors in areas where large sectors of the population intersect with

a significant presence of industry and has plans to add an air monitoring site in Portland, Texas, as discussed above. Data from the active Corpus Christi monitors are publicly available on TCEQ's webpage, and inform the daily air quality forecast for the area. These tools help inform communities about current air quality conditions in the general area.

TCEQ's air monitoring network, which meets all federal requirements, is designed to measure pollutant concentrations that are representative of regional areas. These areas include many communities located near heavily industrialized areas. TCEQ has always met its legal requirements to ensure that the network provides the information necessary to properly monitor areas within Texas in accordance with federal air monitoring regulations. TCEQ will continue to evaluate Texas air monitoring needs, including those of the Coastal Bend Corpus Christi area, against existing federal monitoring requirements and available resources. Requests for TCEQ to ask or apply for additional funding from the Texas Legislature or the federal government are outside of the scope of this Plan; however, it is important to recognize that any resource request submitted to the Texas Legislature must compete against other state priorities for limited resources and are not guaranteed. Also, as noted in the introduction to this appendix, the level of federal grant funding for long-term resources has not increased in decades, although monitoring requirements have increased over the same period.

While TCEQ strives to strategically balance meeting federal air monitoring requirements with state and local concerns, funding and resource limitations impact the ability to conduct air monitoring in response to all requests. As a result, TCEQ prioritizes air monitoring to assess air quality for compliance with federal air quality standards. TCEQ is committed to ensuring clean air for the people of Texas and appreciates the opportunity to consider this request.

Comment 13:

Earthjustice commented that the Houston and Dallas CBSA populations both exceeded 7.25 million people, nearly three times the population requirement for the minimum (2) near-road requirements and urged TCEQ to assist Texas Department of Transportation (TXDOT) by installing additional near road monitors in those two massive CBSAs. Additional near-road monitors would provide better data for TXDOT to mitigate near-road air pollution and achieve better programmatic performance. Earthjustice requested two additional near-road NO_2 monitors in each of the massive CBSAs to better reflect the amount of pollution on a population basis. Earthjustice also commented that TCEQ used old census data for the Austin CBSA, and that according to 2024 numbers, the Austin CBSA exceeds the 2.5 million residents requiring additional air monitoring. Earthjustice suggested TCEQ consider placing an additional monitor along Interstate Highway 35 (I-35) between Austin and San Antonio.

Earthjustice also urged TCEQ to add ozone monitoring near some of the largest sources of ozone precursors emissions in the Austin area, including in Fayette County. They noted that an ozone monitor in Fayette County would provide the public with a better understanding of air quality and allow TCEQ and other governmental entities to better plan.

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

Response 13:

TCEQ appreciates the recommendations for expanded NO_2 near-road and ozone monitoring; however, additional monitoring is unnecessary to meet federal requirements designed to ensure adequate coverage for ambient air monitoring. Federal requirements for criteria pollutants are set by EPA to protect public health and welfare. TCEQ is meeting near-road monitoring requirements based on the U.S. Census Bureau's latest available data (2023) at the time the Plan was drafted. Near-road NO_2 monitoring requirements are based on the population of the CBSA and Annual Average Daily Traffic (AADT) counts on road segments within the CBSA. One monitor is required in CBSAs with a population of one million or more. A second monitor is required in CBSAs with a population greater than or equal to 2.5 million or CBSAs with populations greater than or equal to 1 million and a roadway AADT greater than or equal to 250,000 on one or more road segments.

TCEQ recognizes that U.S. Census Bureau population data were updated mid-March 2025, after the draft 2025 AMNP was completed. TCEQ also acknowledges that 2024 population data indicate the Austin CBSA will require a second micro-scale near-road NO_2 monitor. TCEQ appreciates the recommendation to evaluate the I-35 stretch between Austin and San Antonio and will evaluate the AADT counts, TXDOT construction plans, and CFR requirements to evaluate placement options for the second Austin CBSA near-road site in the future.

TCEQ clarifies that near-road monitoring requirements under 40 CFR Part 58, Appendix D, Section 4.3.2, do not require more than a minimum of two near-road monitoring sites for CBSAs with greater than 2.5 million persons, and TCEQ is meeting these requirements in all CBSAs of Texas. TCEQ is happy to partner with other state organizations; however, due to funding and resource limitations, TCEQ is not able to support additional initiatives at this time.

TCEQ evaluates placement of its air monitors using population data as well as reported emissions inventory data resulting in the placement of air monitors in areas where large sectors of the population intersect with a significant presence of industry. Fayette County is not delineated in any Texas MSA, and therefore, there are no federal air monitoring requirements for that county. The closest monitors to Fayette County include non-regulatory ozone and meteorological monitors in adjacent Bastrop County at the Capital Area Council of Governments (CAPCOG) Bastrop site. TCEQ funds grants for local entities to perform additional area air monitoring as funding is available and currently partners with CAPCOG to provide additional air monitoring data at Austin MSA locations. For additional information on CAPCOG's air quality programs see Air Quality ⋆ Capital Area Council of Governments (CAPCOG). Data from these monitors, as well as other TCEQ monitors in the MSA are publicly available on TCEQ's webpage. Though the data from these non-regulatory monitors do not meet requirements specified in 40 CFR Part 58 for comparison to the NAAQS, the data provides a greater understanding of air quality in the region. These tools help inform communities about current air quality conditions in the general area. Figure E illustrates TCEQ and CAPCOG air monitoring sites in the Austin MSA.

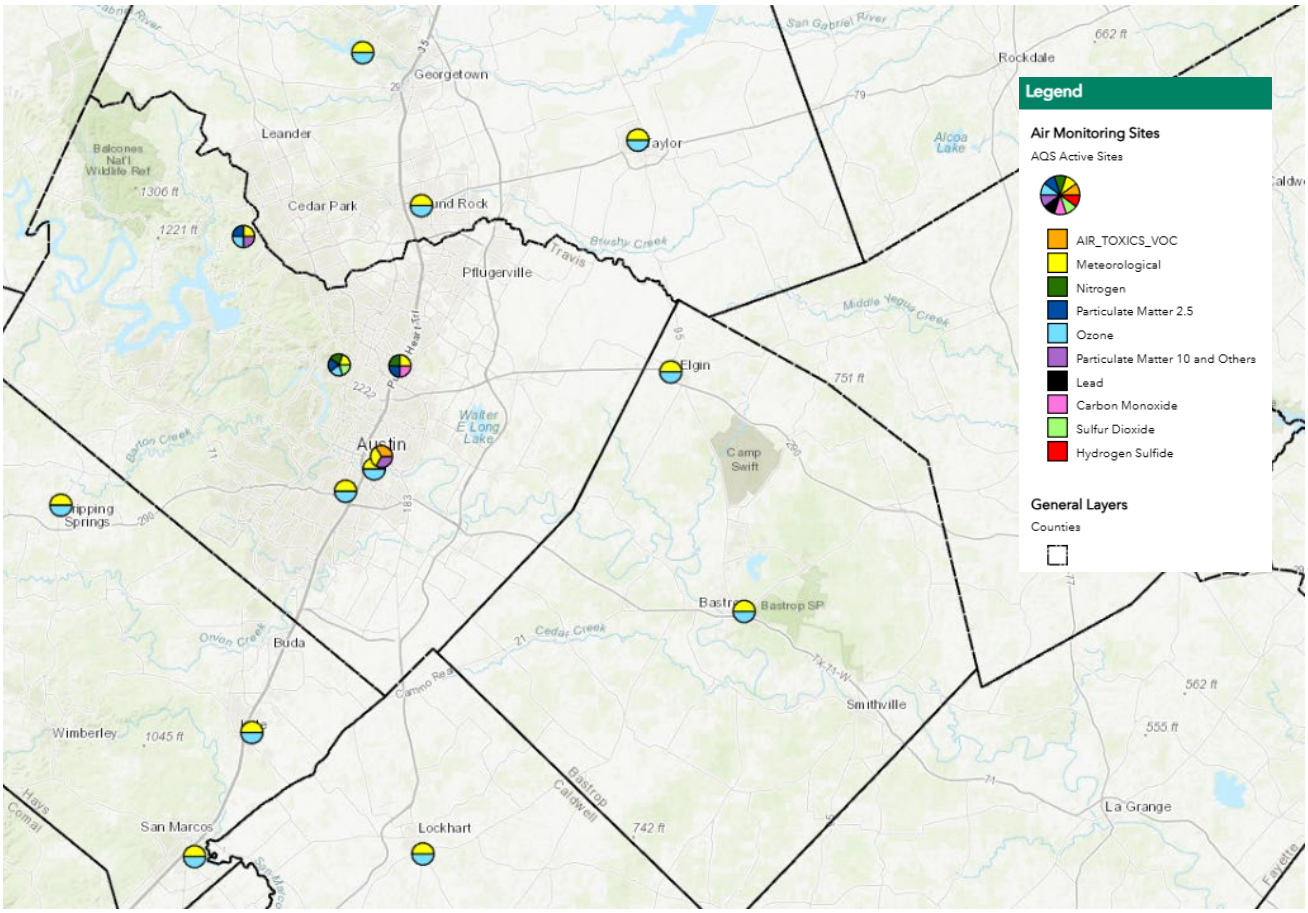


Figure E: Austin Area Active Air Monitoring Sites and County Outlines

While TCEQ strives to strategically balance meeting federal air monitoring requirements with state and local concerns, funding and resource limitations impact the ability to conduct air monitoring in response to all requests. As a result, TCEQ prioritizes air monitoring to assess air quality for compliance with federal air quality standards. TCEQ is committed to ensuring clean air for the people of Texas and appreciates the opportunity to consider this request.

Comment 14:

Earthjustice commented that the draft monitoring plan's proposal to reclassify the four near-road $PM_{2.5}$ monitors as non-NAAQS comparable did not make sense based on traffic and population and was otherwise unjustifiable (with supporting data). Earthjustice commented that the monitors were appropriately designated as NAAQS comparable for annual $PM_{2.5}$ concentrations along the high-traffic corridors with densely populated areas in each CBSA. Earthjustice commented that TCEQ did not correctly categorize the near-road sites as micro-scale due to the distance the sites are from the respective roadways, they should be middle scale. Earthjustice also commented TCEQ did not provide sufficient information to demonstrate that the Houston North Loop monitor could be considered micro-scale even though that monitor was exactly 15 meters from the roadway and the height of the monitor inlet must also be considered. Earthjustice contended that, based on the information in the

Plan, the spatial scale for all the near-road sites should be "middle scale". Earthjustice commented that the Houston North Loop sensor has the second highest $PM_{2.5}$ measurement in the region since its deployment and offered utility to assess performance in meeting federal regulatory standards and protecting public health. Earthjustice noted the Houston North Loop data would be critical to developing strategies to reduce regional $PM_{2.5}$ conditions from mobile sources and that its contribution to the 24-hour standard alone was insufficient. Earthjustice noted TCEQ's comparison of traffic counts along adjacent surface roads showing the high traffic roads were not typical or representative; rather, were intended to capture typical emission in the high-volume traffic corridors which extend beyond the area shown in TCEQ's figures.

Response 14:

TCEQ does not agree with these comments. The most important spatial scale for near-road NO_2 monitoring stations to effectively characterize the maximum expected hourly NO_2 concentrations due to mobile source emissions on major roadways is micro-scale, as discussed in 40 CFR Part 58, Appendix D § 4.3.5. For CBSAs with a population of 1,000,000 or more persons, at least one $PM_{2.5}$ monitor must be collocated at a near-road NO_2 station. For a $PM_{2.5}$ monitor to be collocated with a near-road NO_2 monitoring, inherently the two monitors at the same site should be classified as the same scale.

TCEQ acknowledges that near-road monitoring sites are designed to monitor along high traffic road corridors and that these corridors can extend for several miles. In the 2025 AMNP, TCEQ provided traffic count maps showing that the near-road monitoring site traffic counts are not representative across a CBSA as the counts on the roadway being monitored are generally 10 to 30 times greater than the surrounding area roadways. The 2025 AMNP Houston North Loop near-road site and surrounding area traffic count map in Figure F, illustrates the significant traffic count drop from the roadway. The $PM_{2.5}$ concentrations measured at the near-road sites are impacted by particulate matter from the nearby localized traffic and are not representative of area-wide air quality.

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

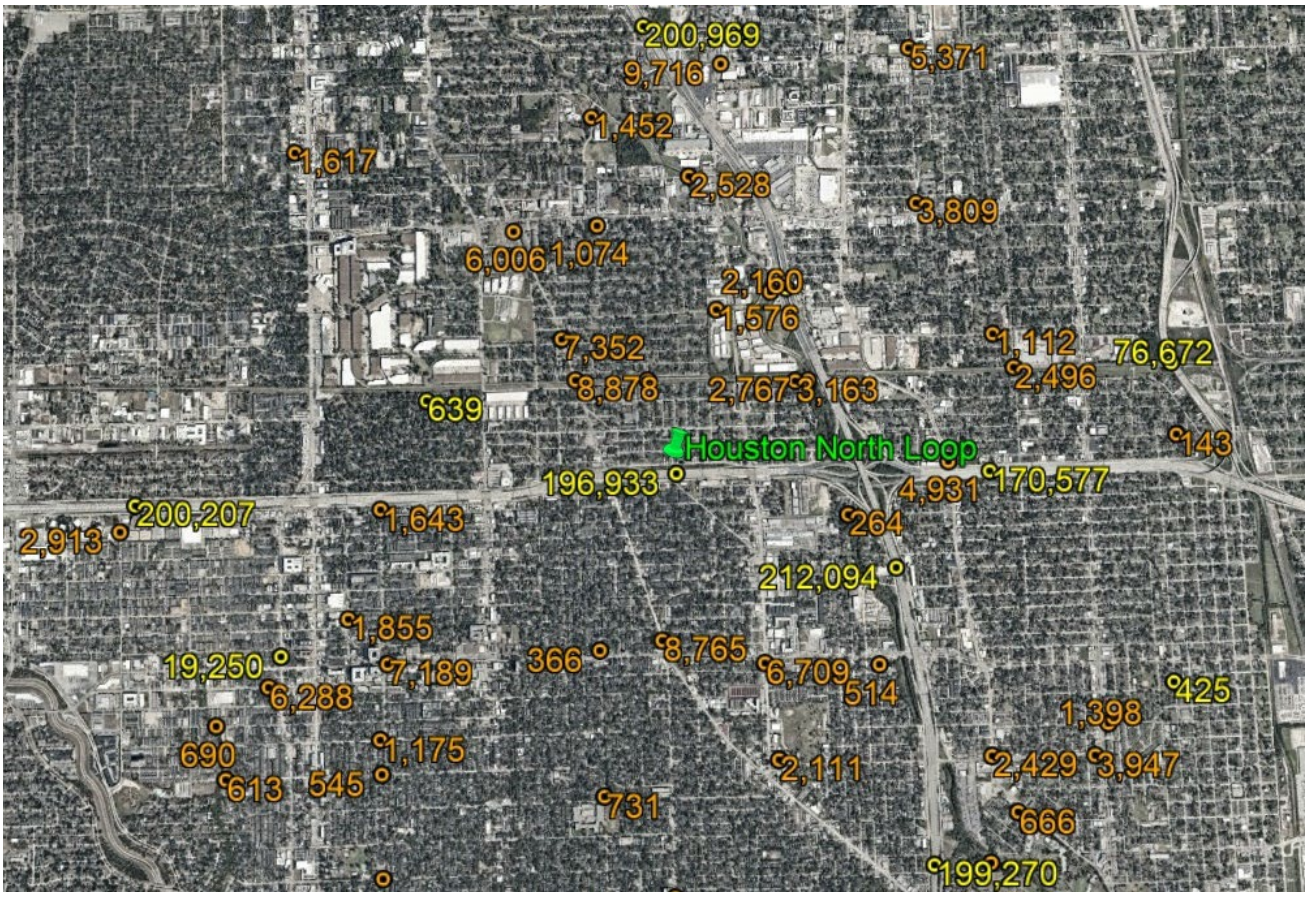


Figure F: Houston North Loop and Surrounding Area Annual and Five-Year Traffic Counts

The definition of micro-scale according to 40 CFR Part 58, Appendix D § 4.7.1(c)(1), dictates that the scale would typify areas such as traffic corridors where the general public would be exposed to maximum concentrations from mobile sources. TCEQ $PM_{2.5}$ monitor inlet heights are always between two to seven meters, as required by 40 CFR Part 58, Appendix E § 2.1(d). Therefore, the Houston North Loop monitor aligns with the micro-scale designation for monitors 15 meters or closer to the roadway. In general, micro-scale particulate matter sites should be located near inhabited buildings or locations where the general public can be expected to be exposed to the concentration measured. TCEQ's near-road $PM_{2.5}$ monitors fit this description.

TCEQ's near-road monitoring sites were approved by EPA Region 6 as meeting the requirements under 40 CFR Part 58, Appendix D § 4.3.2 for a micro-scale near-road NO_2 monitoring station. Regardless, according to 40 CFR § 58.30, $PM_{2.5}$ measurement data from monitors that are not representative of area-wide air quality but rather of relatively unique micro-scale, localized hot spots, or unique middle-scale impact sites, are not eligible for comparison to the annual $PM_{2.5}$ NAAQS but would remain eligible for comparison to the 24-hour $PM_{2.5}$ NAAQS. Even if TCEQ had classified these near-road $PM_{2.5}$ monitors as middle-scale, the same CFR citation would allow exclusion for certain middle-scale monitors from comparison to the annual $PM_{2.5}$ annual standard. Additionally, TCEQ's request to exclude the micro-scale near-road $PM_{2.5}$ monitor data is

clearly supported by federal air monitoring regulations.

TCEQ does not agree that reclassifying the Houston North Loop near-road $PM_{2.5}$ monitor would inhibit strategies to reduce regional $PM_{2.5}$ mobile source conditions. Complete hourly, daily, and annual data will continue to be measured and/or reported to TCEQ's TAMIS and EPA's Air Quality System (AQS) as federally required for all $PM_{2.5}$ monitors. No changes to monitoring data will occur for monitors that are not suitable for comparison against the annual $PM_{2.5}$ NAAQS, as described in 40 CFR § 58.30.

Comment 15:

Earthjustice commented that it was imperative that TCEQ add monitors near major sources of large $PM_{2.5}$ emitters. Earthjustice noted that counties near some of the state's largest PM sources, including Fayette County, Rusk County (near the Martin Lake power plant), and Fort Bend County (near the WA Parish power plant) were without any monitors. Earthjustice recommended monitors near these particulate matter sources in rural and low-population areas, to comply with the primary directive to protect public health.

Response 15:

TCEQ appreciates the comments requesting installation of $PM_{2.5}$ monitors in rural and low-population counties with large emission sources; however, additional monitoring is unnecessary to meet federal requirements designed to ensure adequate coverage for ambient air monitoring. Federal requirements for criteria pollutants are set by EPA to protect public health and welfare. While TCEQ strives to strategically balance meeting federal air monitoring requirements with state and local concerns, funding and resource limitations impact the ability to conduct air monitoring in response to all requests. As a result, TCEQ prioritizes air monitoring to assess air quality for compliance with federal air quality standards.

TCEQ's stationary air monitoring network is designed to meet federal air monitoring requirements of the Clean Air Act that dictate the number of monitors required for each of the six criteria pollutants in populated areas or metropolitan statistical areas (MSAs) throughout the state. The air monitoring network is used to characterize regional air quality in areas over time but is generally not intended to assess emissions from sources. TCEQ is currently meeting or exceeding all $PM_{2.5}$ minimum federal requirements in Texas (TCEQ is federally required to operate between 27 and 31 monitors and exceeds this requirement with 75 $PM_{2.5}$ monitors in Texas).

TCEQ evaluates placement of its air monitors using population data as well as reported emissions inventory data resulting in the placement of air monitors in areas where large sectors of the population intersect with a significant presence of industry. Data are publicly available on TCEQ webpage, and inform the daily air quality forecast for areas. These tools help inform communities about current air quality conditions in the general area.

Comment 16:

Earthjustice commented that there are only two H_2S monitors in the Beaumont-Port Arthur (BPA) area, two near Texas City, one near Freeport, two in the Corpus Christi area, three in the Midland-Odessa area and one southeast of San Antonio, which is

clearly insufficient to protect Texans. Earthjustice also commented that TCEQ does have the ability to provide mobile monitoring for special projects or to respond to complaints or other events, but it was a limited universe of monitoring. Earthjustice commented that TCEQ should expand its network of H_2S monitoring stations in the Odessa-Midland, El Paso, Corpus Christi, and larger Houston area, in addition to areas of South Texas. Earthjustice recommended TCEQ spend an additional $1 million per year to expand the H_2S monitoring network.

Response 16:

TCEQ disagrees with Earthjustice's characterization of the complete H_2S monitoring network. TCEQ's state-initiative monitoring network for H_2S includes one monitor in the El Paso area, three monitors in the Midland-Odessa area, one monitor in the BPA area, one monitor south of the San Antonio area, one monitor in the Corpus Christi area, and one monitor in the Houston area. Additionally, TCEQ hosts H_2S monitoring data provided by monitoring partners in the BPA area (one monitor) and in the Houston area (five monitors). As stated in the introduction, the 2025 Draft Plan is intended to demonstrate TCEQ's compliance with federal air monitoring requirements under 40 CFR Part 58. TCEQ's air monitoring network is designed to measure pollutant concentrations for assessing regional air quality representative of areas frequented by the public and to provide information about compliance with the NAAQS. Since H_2S monitors support state initiatives and are not federally required, these monitors are not included in the AMNP and are outside of the scope of this plan. The latest information regarding the Texas air monitoring network and monitoring data, including information on the H_2S monitoring, are available on TCEQ's webpage Air Quality and Monitoring - Texas Commission on Environmental Quality - www.tceq.texas.gov.

TCEQ acknowledges the limitations of mobile air monitoring; however, comments related to mobile monitoring systems are beyond the scope of this plan.

Comment 17:

Environment Texas submitted comments requesting monitoring in West Texas' Permian Basin and South Texas' Eagle Ford Basin due to the oil and gas activity that included emissions from leaks as well as venting and flaring. Environment Texas stated that more data was needed on ozone levels and their building blocks like nitrogen oxides and VOCs and another harmful pollution like particulate matter. Environment Texas included signatures of 30 Texas residents (identified as residing outside of these areas). Environment Texas requested TCEQ protect air and health by ensuring the industry's emissions and impacts are adequately measured.

Response 17:

TCEQ acknowledges the comments requesting installation of Permian Basin and Eagle Ford Basin air quality monitors; however, additional monitoring is unnecessary to meet federal requirements designed to ensure adequate coverage for ambient air monitoring. The air monitoring network is used to characterize regional air quality in areas over time but is generally not intended to assess emissions from sources. TCEQ evaluates placement of its air monitors using population data as well as reported emissions inventory data resulting in the placement of air monitors in areas where

large sectors of the population intersect with a significant presence of industry. TCEQ operates multiple air monitors in the vast Permian and Eagle Ford Shale Basin areas with monitors meeting federal and state-initiative monitoring objectives, including some ozone precursor monitors. These air monitors are summarized in Table 2 below.

Table 2: Permian Basin and Eagle Ford Shale Basin Air Monitors

County	Site Name	O_3	CO	H_2S	SO_2	NO_x	VOCs	$PM_{2.5}$	PM_{10}
	Total Sites: 11	**3**	**1**	**1**	**1**	**2**	**3**	**4**	**2**
Brazos	Bryan Finfeather Road							X	
Robertson	Franklin Oak Grove				X				
Bastrop	CAPCOG Bastrop	X							
	CAPCOG Elgin	X							
Atascosa	Von Ormy							X	
Karnes	Karnes County			X		X	X[1]		
Wilson	Floresville Hospital Boulevard					X	X[1]		
Maverick	Eagle Pass							X	
Webb	Laredo Bridge						X[2]		X
	Laredo College	X	X						X
	World Trade Bridge							X	

[1]VOCs by continuous automated gas chromatograph system
[2]VOCs by canister sampler
CO – carbon monoxide
H_2S - hydrogen sulfide
met - meteorological sensors including wind and temperature
NO_x – nitrogen oxides
O_3 – ozone
$PM_{2.5}$ - particulate matter of 2.5 micrometers or less in diameter
PM_{10} - particulate matter of 10 micrometers or less in diameter
SO_2 - sulfur dioxide
VOC - volatile organic compounds

Data from these monitors are publicly available on TCEQ webpage, and inform the daily air quality forecast for the area. These tools help inform communities about current air quality conditions in the general area. TCEQ remains committed to ensuring clean air for the people of Texas and appreciates the opportunity to consider this request.

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

Comment 18:

RESET Lab submitted a letter appreciating the opportunity to comment on the 2025 Draft AMNP and encouraged PM_{10} monitoring in Bastrop County due to growth of emission sources, lack of regulatory grade monitoring, and high levels of PM_{10} detected through independent monitoring. RESET Lab states that their independent monitoring near Utley, Texas indicated that the PM_{10} 24-hour average NAAQS limit of 150 micrograms per cubic meter ($\mu g/m^3$), may have been exceeded twice in March 2025, based on a "Quant-AQ" sensor. RESET Lab presumed that Bastrop area industry related to mining was responsible for the elevated levels of particulate matter. RESET Lab noted area industry such as food, nonmetallic minerals, wood, brick manufacturing, and electricity production were potential particulate matter contributors as well. RESET Lab recommended that TCEQ reach out to the communities near Utley, Texas, and others as well. RESET Lab recognized that existing TCEQ monitoring for PM_{10} in the Austin MSA met federal requirements within the range of 2-4 sensors; however, the MSA's rapid growth merited proactive monitoring across all communities due to expanding emissions sources, population growth, and limited monitoring resources. RESET Lab also urged TCEQ to establish a framework for community monitoring that could enhance regulatory monitoring and actions.

Response 18:

TCEQ appreciates the letter participating in the 2025 AMNP comment period requesting installation of PM_{10} monitoring in Bastrop County. TCEQ strives to strategically balance meeting federal air monitoring requirements with state and local concerns, funding and resource limitations impact the ability to conduct air monitoring in response to all requests. As a result, TCEQ prioritizes air monitoring to assess air quality for compliance with federal air quality standards. TCEQ's stationary air monitoring network is designed to meet federal air monitoring requirements of the Clean Air Act that dictate the number of monitors required for each of the six criteria pollutants in populated areas or MSAs throughout the state. The air monitoring network is used to characterize regional air quality in areas over time but is generally not intended to assess emissions from sources. TCEQ evaluates placement of its air monitors using population data as well as reported emissions inventory data resulting in the placement of air monitors in areas where large sectors of the population intersect with a significant presence of industry.

TCEQ agrees that existing Austin MSA PM_{10} monitoring meets federal requirements within the range of 2-4 federal monitors. TCEQ acknowledges the data collected through low-cost sensors in Texas communities may be useful in understanding the general picture of potential air quality in an area. However, these sensors are not federal reference or equivalent methods, and the data obtained from these sensors are not suitable for comparison to federal standards. Sensors do not produce data that are consistent with regulatory-grade monitor data due to various limitations, including but not limited to, quality control checks of the sensors. Additionally, low-cost sensors usually collect and report instantaneous readings and/or short-term spikes that are not appropriate for comparison to federal standards that are based on long-term data, rather than short-term or instantaneous values. Furthermore, comments related to community-based sensors, which are not federally required and are not comparable to federal standards, are beyond the scope of this document.

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

Comment 19:

LSLA, on behalf of Better Brazoria, provided demographic and other information about Brazoria County and Freeport, Texas, with an emphasis on minority demographics and local industry, as well as air toxics, heavy metals, NO_X and SO_2 pollution concerns. LSLA noted concerns regarding the location and number of air monitors, including a lack of monitoring. LSLA requested that ozone monitoring be reinstated at the Clute monitor given EPA's redesignation of the region from "serious" to "severe". Better Brazoria understood that the Clute ozone monitor was moved to Lake Jackson in 2003 and recognized the importance of monitoring there; however, the community remained concerned that there was no regulatory ozone monitoring near Port Freeport or the industrialized south side of Brazoria County.

Better Brazoria stated that Brazoria County lacked VOC monitoring and requested regulatory VOC monitors to be added to the Freeport South Avenue I site. Better Brazoria requested the Oyster Creek monitor begin monitoring at federally equivalent standards or to alternatively add federally equivalent pollutant monitors to the Freeport South Avenue I site. LSLA commented that in Freeport, metal emissions in the air were an ongoing concern around the Gladieux Facility since it was added to the Air Pollutant Watchlist (APWL) in 2005 due to arsenic, cobalt, nickel, and vanadium levels that exceeded air monitoring comparison values. LSLA commented that Brazoria County is home to many major sources of NO_x and SO_2, and these emissions were a major concern and thus these pollutants should be monitored at TCEQ's Freeport South Avenue I site.

Response 19:

TCEQ appreciates the comments requesting additional air monitoring in Brazoria County. TCEQ does not agree that additional ozone monitoring is required in order to evaluate the area's attainment status. TCEQ is federally required to operate a minimum of four ozone monitors in the Houston MSA and currently operates 21 ozone monitors. The Texas 2025 FYA provides an assessment of the Houston area ozone monitors; with additional supporting information in the Texas 2025 FYA Appendix D – Enhanced Monitoring Plan for Ozone. TCEQ continues to support the conclusion from TCEQ's workgroup of modelers and data users that the Lake Jackson site was a superior location for ozone measurements with ozone precursor measurements of NO_x measured by TCEQ and continuous VOCs measured by a TCEQ monitoring partner. The workgroup also concluded that the location was also superior to Clute due to the physical aspects of ozone formation. Ozone is not an emitted pollutant but rather is formed in the atmosphere and since ozone forms over time, there is greater potential for ozone formation as you move away from a VOC source. The Lake Jackson ozone monitor would be expected to measure the maximum ozone concentration for that area based on the predominant southeasterly wind direction and geographic location of industry. The Lake Jackson ozone monitor design value trends (0.065 ppm for 2020 and 2021, 0.067 ppm for 2022, and 0.070 ppm for 2023) do not indicate a need for additional area monitoring.

In addition, TCEQ monitoring partners (city, county, private, and/or industry) support ambient air monitoring at nearby Oyster Creek with an autoGC system for VOCs, CO, H_2S, NO_2, SO_2, ozone, PM_{10}, and $PM_{2.5}$ non-regulatory monitors. Though the data from

these non-regulatory monitors do not meet requirements specified in 40 CFR Part 58 for NAAQS comparison, monitoring partner data can provide a greater understanding of air quality in the region. Data from these additional monitors are available near real-time on TCEQ's TAMIS webpage.

TCEQ disagrees with the LSLA comment that Brazoria County lacked VOC monitoring as TCEQ's Clute air monitoring site has measured state-initiative VOCs by canister for over 30 years (since 1992). The Clute VOC monitor, located four miles northeast of Freeport South Avenue I, provides historical VOC monitoring useful to characterize regional air quality and determine trends in areas over time. VOC monitoring at Freeport South Avenue I would be redundant since the air monitoring sites are closely located. TCEQ notes that there are SO_2 and $PM_{2.5}$ metals monitoring at the Freeport South Avenue I site and were identified as such in the 2025 AMNP. The Freeport South Avenue I SO_2 monitor and $PM_{2.5}$ monitor with speciated metals were activated in 2011 as state-initiative monitors and added to the federal network in 2023.

TCEQ's Toxicology Division evaluates ambient air toxics sampling data conducted at Texas air monitoring sites (including Brazoria County) throughout the year and summarizes those data annually in their evaluation. TCEQ's Toxicology Division evaluations of air toxics data include the VOC data at TCEQ's Clute air monitoring site and monitoring partner data from the Oyster Creek and Lake Jackson sites. TCEQ's annual air toxics evaluation also includes the speciated metals data from the Freeport South Avenue I $PM_{2.5}$ monitor since monitor activation in 2011. Details on the most recently available 2023 TCEQ Toxicology Division air toxics evaluation are located on TCEQ's webpage at Toxicological Evaluations of Ambient Air Monitoring Data - TCEQ.

TCEQ's Lake Jackson NO_x monitor provides regional ambient air monitoring data. The Texas FYA provides an assessment of the Houston area (including Brazoria County) NO_x monitors, including the FYA Appendix D – Enhanced Monitoring Plan for Ozone. Brazoria County air monitoring sites and monitors are illustrated in Figure G below.

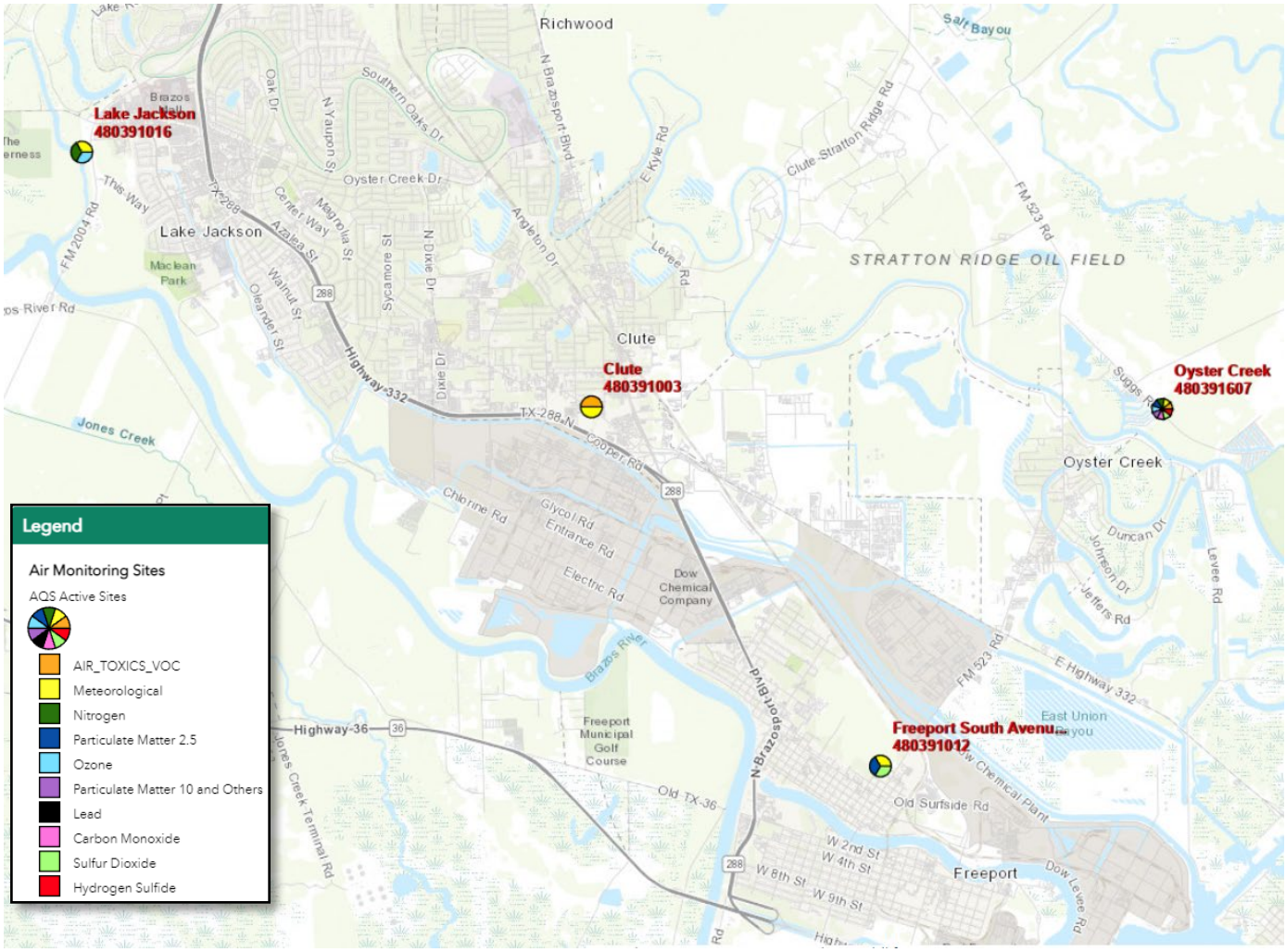


Figure G: Brazoria County Active Sites and Monitors

Air monitoring sites are generally placed to be representative of regional air quality, rather than monitoring emissions from specific sources. TCEQ strives to strategically balance meeting federal monitoring requirements and state and local needs with available funding and staffing resources and for those reasons, cannot always satisfy every monitoring request. TCEQ exceeds ozone, NO_x, and SO_2 monitoring requirements in the Houston CBSA (including Brazoria County). However, TCEQ will continue to evaluate air monitoring needs in the Houston CBSA (including Brazoria County), against existing federal monitoring requirements and available resources.

Comment 20:

LSLA provided demographic and other information about Jefferson County, with emphasis on minority communities, and SO_2 and PM_{10} monitoring concerns. LSLA commented that it was crucial that West Port Arthur have accurate and appropriate air monitoring due to its vulnerability and susceptibility to air pollution harms. PACAN, through LSLA, commented that since Oxbow disproportionately emits more SO_2 than any other Jefferson County facility, TCEQ should monitor that facility and ensure area monitoring resources are sufficient and property located to capture facility emissions.

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

PACAN noted repeated concern that the Port Arthur West 7th Street Gate 2 monitor, used to fulfill Data Requirements Rule (DRR) requirements for Oxbow Calcining, did not adequately capture the highest SO_2 levels, particularly in light of Oxbow Calcining's modifications to its plant. LSLA noted that the Port Arthur West 7th Street Gate SO_2 monitor is not located at one of the highest ranked modeled receptors (and attached TCEQ's image of top 10 ranked receptors as LSLA Figure 49). LSLA stated that it was not clear why TCEQ did not include Oxbow in its annual report in AMNP Appendix F. LSLA commented that TCEQ must include a better placed monitor(s) near and around Oxbow to comply with the DRR, ensure SO_2 levels in Port Arthur are not exceeding the NAAQS, and to capture the emissions in the area.

Response 20:

TCEQ does not agree with comments supporting further Jefferson County SO_2 and PM_{10} monitoring. TCEQ performed additional modeling in July 2019 based on the current permitted Oxbow emissions (accounting for Oxbow's modified operations, stack parameters, and recent meteorological data). The model followed the recommended procedures outlined in EPA's *SO2 NAAQS Designations Source-Oriented Monitoring Technical Assistance Document* using EPA's recommended AERMOD modeling system. The model showed that the site location at Port Arthur West 7th Street Gate 2 was predicted to monitor concentrations 91% to 100% relative to the maximum normalized design value (NDV) concentration. Figure H illustrates the top 10 ranked modeled receptors with green numbered squares and TCEQ's air monitoring site with a pink star. Areas south of the facility, where the model indicated locations likely to experience both high NDV and high frequencies of one-hour daily maximum concentrations during favorable wind conditions, were not viable for a monitoring site due to property access restrictions and/or lack of available power. As stated in the AMNP Introduction, TCEQ air monitoring sites are generally located on private property, and TCEQ must find willing property owners who are amenable to allowing TCEQ safe access to place an air monitoring site on their property. It is not possible for TCEQ to place air monitoring sites on private property with restricted access or in areas without access to power.

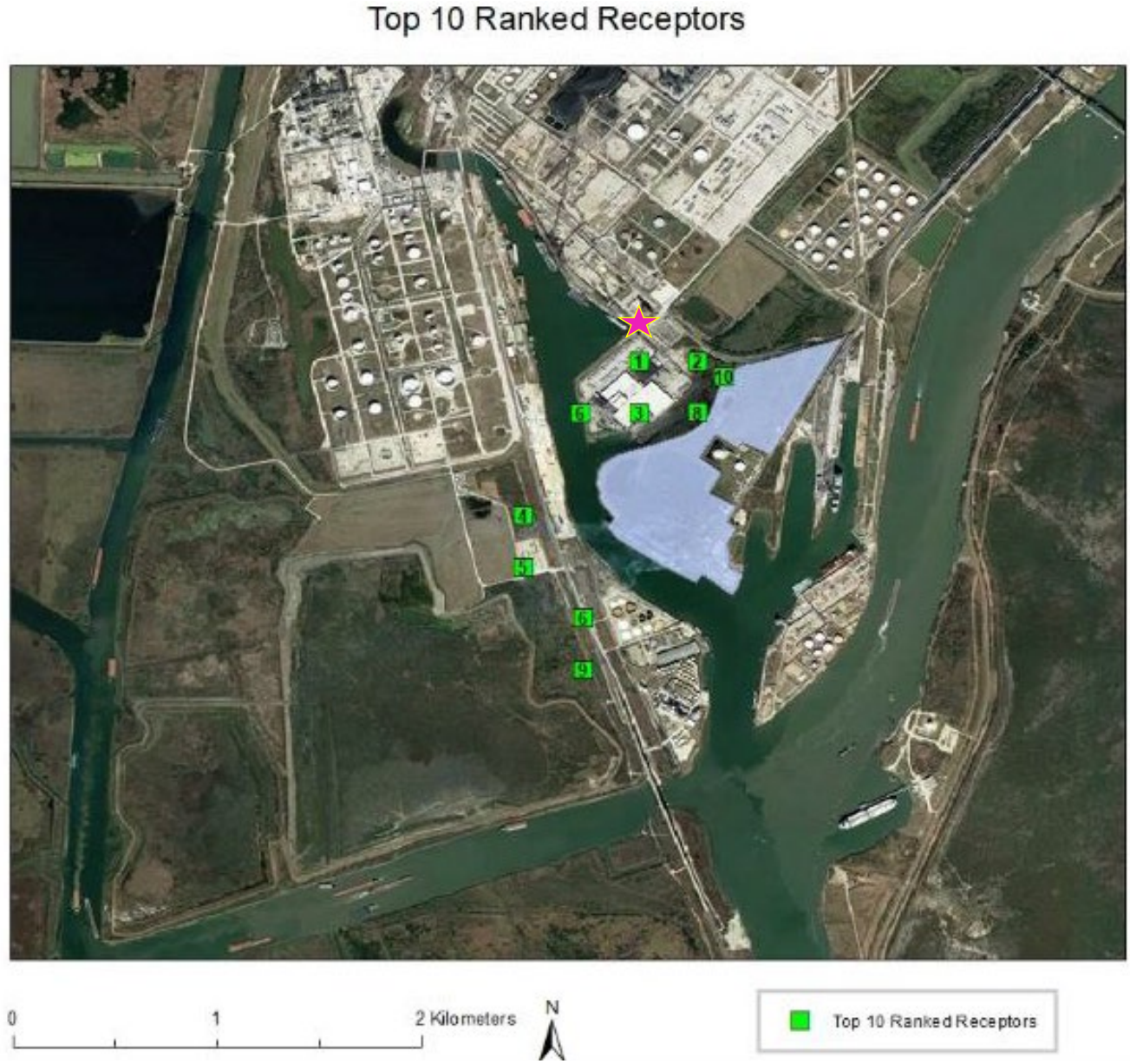


Figure H: TCEQ 2019 Modeling Analysis Top Ten Ranked Receptors with Active TCEQ Site and Monitor

TCEQ did not include Jefferson County in the AMNP Appendix F Sulfur Dioxide Ongoing Data Requirements Annual Report (*SO_2 Annual Report*) since that facility was designated based on characterization by air quality monitoring data, not modeling, and thus was not applicable to the report. The *SO_2 Annual Report* provides TCEQ's annual assessment of SO_2 emissions changes for areas designated attainment/unclassifiable for the 2010 SO_2 NAAQS, where the designations were based on air quality characterization by modeling actual SO_2 emissions, as required under 40 CFR § 51.1205(b). The counties of Atascosa, Fort Bend, Goliad, Lamb, Limestone, Robertson, and Wilbarger were designated based on modeled actual SO_2 emissions and are correctly included in the *SO_2 Annual Report*. No other Texas counties are applicable to

the *SO_2 Annual Report*.

Comment 21:

LSLA commented TCEQ was required to place between 0-1 PM_{10} monitors in the BPA area and thus TCEQ should locate a PM_{10} monitor in that area or add a new near-road monitor near Interstate-10. LSLA noted Interstate-10 through downtown Beaumont was one of the state's busier roadways and the area had numerous other particulate matter sources including many railroads, the Port of Beaumont, and major industrial facilities.

Response 21:

TCEQ does not agree with comments supporting adding Jefferson County PM_{10} monitoring. Federal regulations require PM_{10} monitoring in MSAs based on population and available measured concentration. Federal PM_{10} monitoring regulations provide flexibility regarding the number of required monitors since sources of pollutants and local control efforts can vary across the country. Federal regulations further note that the selection of an urban area and actual numbers of PM_{10} monitors per area is to be jointly determined by EPA and the state agency. TCEQ, in conjunction with EPA, determined that several areas in Texas meet the flexible requirements without having additional PM_{10} monitors, including the BPA area. TCEQ's air monitoring network is designed to measure pollutant concentrations for assessing regional air quality representative of areas frequented by the public and to provide information about compliance with the NAAQS. Monitors can measure the impact on air quality from industrial sources present in an area, but do not measure the emissions from individual sources. TCEQ previously monitored for PM_{10} at Beaumont Downtown from 1989 to 1996, and due to low 24-hour measurements, the resource was reallocated. TCEQ's monitoring partner, South East Texas Regional Planning Commission (SETRPC), supports non-regulatory air quality monitoring for PM_{10} and $PM_{2.5}$ (additionally CO, H_2S, NO_x, ozone, and SO_2) at the SETRPC Port Arthur air monitoring site, and ensures data are obtained using methods and quality assurance protocols that meet or exceed EPA's air quality monitoring requirements. Though the data from these non-regulatory monitors cannot be used for comparison to the NAAQS, TCEQ considers the data from monitoring partners as additional supporting information. Data from these additional monitors are publicly available on TCEQ's TAMIS webpage.

Current BPA area $PM_{2.5}$ monitors provide data supporting area-wide particulate matter air quality. As shown in the 2025 AMNP and in the Texas 2025 FYA, one $PM_{2.5}$ monitor is federally required and TCEQ exceeds minimum requirements with three $PM_{2.5}$ monitors in the BPA area. Lastly, TCEQ does not currently possess additional monitoring equipment or the resources to fulfill the request.

Comment 22:

LSLA provided demographic and other information about Harris County, with specific information regarding the Pasadena, Channelview, and Houston Ship Channel communities. LSLA commented that the one air monitor in the City of Pasadena was insufficient for the residents of Pasadena. LSLA noted that given the city's large size, the Pasadena Richey Elementary monitor could not accurately capture air quality for much of the city. LSLA noted that the neighboring City of Deer Park was a quarter of the size and had two monitors; providing more monitors per person per square mile,

and this discrepancy indicated that one air monitor was not enough in Pasadena. LSLA also commented that the Pasadena Richey Elementary VOC monitor did not accurately monitor the many facilities and was five miles away from ITC Pasadena. LSLA noted the Pasadena Richey Elementary monitor's location was deficient since the wind often blows from the southeast and many facilities are in the southeastern<sic> part of the city. LSLA recognized that there were 14 air monitors measuring 27 pollutant types around the municipalities surrounding Pasadena. LSLA noted that the air monitors outside of Pasadena did not reflect the air pollutants inside the Pasadena community. LSLA commented that TCEQ should place another VOC air monitor in Pasadena to better capture the air quality impacts of nearby facilities and install monitors for non-VOC chemicals and particulate matter. LSLA commented that TCEQ must ensure stronger air monitoring in Pasadena that recognized this environmental justice community and protected Pasadena residents who bear disproportionate air pollution harms.

Response 22:

TCEQ does not agree that additional monitors are warranted in the Pasadena area. Ambient air monitoring sites, including both state-initiative sites such as the Pasadena Richey Elementary site, and federally required sites are located to represent regional air quality, and do not measure emissions from specific sources. TCEQ further clarifies that federal regulations do not require air monitor placement based on a city's square mileage or individual population. The purpose of the 2025 AMNP is to demonstrate how TCEQ's air monitoring network fully complies with federal monitoring requirements detailed in 40 CFR Part 58. TCEQ exceeds the Houston CBSA federal air monitoring requirements for all criteria pollutants required under 40 CFR Part 58, as shown in the 2025 AMNP Appendix C. Additionally, TCEQ exceeds Photochemical Assessment Monitoring Stations (PAMS) network ozone precursor monitoring requirements with three continuous autoGC systems for VOCs designated as PAMS in the Houston CBSA, see 2025 AMNP Appendix L. TCEQ updated its Enhanced Monitoring Plan for Ozone in the Texas 2025 FYA as Appendix D. TCEQ's Enhanced Monitoring Plan for Ozone provides details on enhanced ozone and ozone precursor monitoring activities (including the three continuous autoGC systems in the Houston CBSA monitoring for ozone precursor VOCs) deemed important to understanding the state's ozone challenges.

As demonstrated in the 2025 AMNP, TCEQ's $PM_{2.5}$ federal monitoring network in the Houston CBSA includes 19 active $PM_{2.5}$ monitors at 13 sites, with two more $PM_{2.5}$ monitors expected this year at two new sites, to characterize ambient $PM_{2.5}$ concentrations. TCEQ exceeds the federal requirement of a minimum of eight $PM_{2.5}$ monitors in the Houston CBSA. Similarly, TCEQ is federally required to operate between four to eight PM_{10} monitors in the Houston MSA based on the MSA population and 2023 design values available at the time the AMNP was drafted and operates five federal equivalent and one non-NAAQS comparable PM_{10} monitors.

TCEQ's air monitoring network is designed to measure pollutant concentrations for assessing regional air quality representative of areas frequented by the public and to provide information about compliance with the NAAQS. Current PM monitors provide data supporting area-wide air quality throughout the Houston MSA which includes the communities in Pasadena. As shown in the 2025 AMNP, TCEQ is currently meeting or

exceeding federal requirements for both PM_{10} and $PM_{2.5}$ monitoring in the Houston MSA, and no additional changes are recommended at this time.

As discussed in the introduction, TCEQ also operates a robust network of state-initiative monitors that support a variety of purposes. Though TCEQ's state-initiative monitors are outside of the scope of this document, this state-initiative monitoring network provides valuable information for assessing public health. TCEQ significantly enhanced its state-initiative air monitoring capabilities along the Houston Ship Channel, including Pasadena, with three new air monitoring sites capable of continuous VOC measurements. One of these state-initiative enhancements included the site relocation and upgrade of the previous Pasadena North non-continuous VOC canister sampler to a continuous VOC autoGC monitoring system that provides continuous data 24 hours, seven days a week. The Pasadena North air monitoring site was located north-northwest of residential Pasadena areas and was not where the citizens resided, worked, and attended school.

TCEQ evaluated monitoring site locations in Pasadena that would appropriately and sufficiently characterize regional air quality in an area with multiple sources. TCEQ collectively considered predominant wind flow, property owner agreement, and logistical constraints, such as space, power availability, terrain, grade, and drainage. After a lengthy evaluation of potential air monitoring sites in and around the City of Pasadena, the site was relocated less than one mile south to Richey Elementary School. Richey Elementary School is in an area containing many residences, schools, parks, and businesses frequented by members of the public in the City of Pasadena, thus meeting air quality monitoring objectives. TCEQ disagrees that the placement of the Pasadena Richey Elementary air monitoring site is deficient, as the location provides critical air quality information to the citizens of Pasadena where they live, work, and go to school.

TCEQ clarifies that the "one monitor" referenced by LSLA located in the City of Pasadena is a comprehensive near real-time autoGC system that provides hourly air quality data on 48 VOCs (48 different pollutants and essentially 48 monitors). This autoGC system is a significant TCEQ investment in Pasadena and is the most costly TCEQ stationary air monitoring equipment to purchase, operate, and quality assure. TCEQ and its monitoring partners operate an extensive network of 14 additional state-initiative continuous VOC autoGC monitoring systems in the Houston CBSA (in and around the city limits of Pasadena). This network of autoGC monitoring systems in and around Pasadena is illustrated in Figure I below. Comments unrelated to federally required monitoring, are beyond the scope of this Plan.

TCEQ notes LSLA's recognition of the numerous air monitoring sites with multiple pollutant types around the Houston Ship Channel surrounding Pasadena. TCEQ emphasizes that TCEQ's air monitoring network, which meets all federal requirements, is designed to measure pollutant concentrations that are representative of regional areas. These areas include many minority and low-income communities located near heavily industrialized areas. TCEQ has always met its legal requirements to ensure that the network provides the information necessary to properly monitor and regulate areas within Texas in accordance with federal air monitoring regulations.. TCEQ strives to strategically balance meeting federal monitoring requirements and state and local needs with available funding and staffing resources, and for those reasons, cannot always satisfy every monitoring request. However, TCEQ will continue to evaluate air

monitoring needs in the Houston CBSA, against existing federal monitoring requirements and available resources. TCEQ is committed to ensuring clean air for the people of Texas, including those located in communities near industrialized areas.

Comment 23:

LSLA expressed concern about documented benzene readings in Channelview and commented that they supported a need for additional monitoring. LSLA noted that TCEQ's mobile monitoring results recorded in Channelview in 2021 and 2022 tracked readings that were higher than the Texas hourly guideline and showed discrepancies when compared to hourly readings collected by TCEQ's stationary monitor. LSLA noted reporting from the speciated VOC canister deployed at Channelview Drive Water Tower (482010036) partially confirmed the high TCEQ November 2021 mobile monitoring benzene readings reported by Public Health Watch. LSLA commented that because of the historic and more recent mobile monitoring results, Channelview residents wanted more answers on these impacts and more robust monitoring in the area to protect public health. LSLA requested TCEQ to commit to installing more VOC monitors in Channelview and other Houston Ship Channel communities.

Response 23:

As discussed in the introduction, TCEQ also operates a robust network of state-initiative monitors that support a variety of purposes. Though TCEQ's state-initiative monitors are outside of the scope of this document, this state-initiative monitoring network provides valuable information for assessing public health. TCEQ significantly enhanced its state-initiative air monitoring capabilities along the Houston Ship Channel in 2021 and 2022 by adding three new air quality monitoring sites with continuous autoGC monitoring systems for VOCs (including benzene) in Channelview, Manchester, and Pasadena. TCEQ also added a non-continuous canister sampler that measures 88 different VOCs to the existing Houston East site in March 2024 and has plans to add two additional new sites in 2025 with similar samplers. TCEQ's significant state-initiative investment of six new Houston Ship Channel area air monitoring sites since 2021, measuring VOCs (including benzene) with continuous and non-continuous systems illustrates TCEQ's commitment to protecting public health with expanded, and robust air quality monitoring. Figure I below illustrates the air monitoring sites operated by TCEQ and its monitoring partners (city, county, private, and/or industry) in and along the Houston Ship Channel area with VOC monitoring systems indicated by an orange section.

A single new air quality monitoring site with a continuous autoGC monitoring system for VOCs costs an average of $380,000 for the initial equipment, deployment, and operations in the first year and a minimum of $110,000 in annual ongoing costs. An air monitoring site with non-continuous VOCs by canister monitor averages $85,000 in initial costs with $33,000 in annual ongoing costs. TCEQ does not currently possess additional monitoring equipment or the resources to fulfill the request to add additional air monitors in the Channelview area. While TCEQ strives to strategically balance meeting federal air monitoring requirements with state and local concerns, funding and resource limitations impact the ability to conduct air monitoring in response to all requests.

TCEQ clarifies that stationary air monitoring data is not comparable to mobile

monitoring data and comments related to mobile monitoring data are outside of the scope of this Plan.

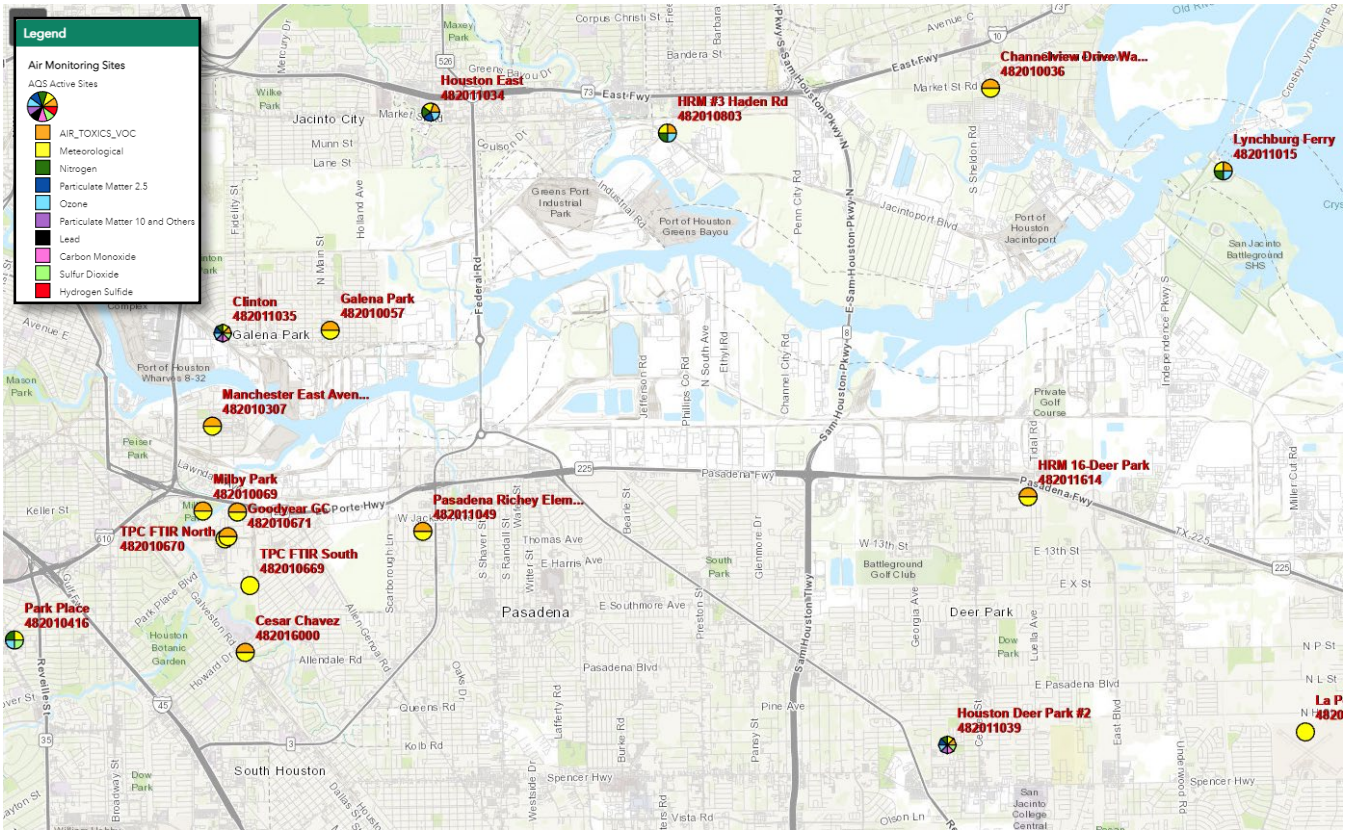


Figure I: Houston Ship Channel Active Sites and Monitors

Comment 24:

Earthjustice and LSLA both commended TCEQ's dedication and expressed appreciation that TCEQ responded to requests by allocating air monitors to the Houston Fifth Ward area, with LSLA providing demographic and other information on the Fifth Ward area. However, the LSLA stated it has taken an exceptionally long time to see the monitors installed at Finnigan Park. LSLA stated that area community data obtained from a Clarity air monitor recorded 242 days out of 365 where the $PM_{2.5}$ monitor registered above 12.0 µg/m^3, demonstrating the need for monitoring industrial sites. LSLA stated hope that the May 1, 2025, meeting between the city, TCEQ, and TCEQ's contractor will ensure the installation of this monitor before the deadline listed in the AMNP. Earthjustice stated they looked forward to seeing these important monitors activated by the end of the year.

Response 24:

TCEQ appreciates the support and appreciation from Earthjustice and LSLA regarding the new air monitoring sites in Finnigan Park in the Houston Fifth Ward. Unfortunately, TCEQ has experienced unexpected delays beyond its control regarding the Houston Finnigan Park site deployment. TCEQ obtained the required property usage agreement signatures from the property owner in August 2024. TCEQ's contractor experienced

delays obtaining construction permits, and site construction began in May 2025. TCEQ appreciates the support of local communities to ensure the timely air monitoring site deployment. The Houston Finnigan Park air monitoring site will be activated shortly after site construction is completed and power is connected by the service provider.

Comment 25:

Earthjustice and LSLA both commended the dedication and expressed appreciation that TCEQ responded to requests by allocating air monitors in the Pleasantville neighborhood, as promised in the past several AMNPs. LSLA provided demographic and other information about the Pleasantville area and stated that air monitoring was critical to ensure that the air is not contaminated with pollution from the Houston Ship Channel facilities and increases in industrial activity and emissions planned in the years to come. LSLA noted it was essential to have enough baseline air monitoring data prior to these activities beginning to ensure their impacts could be accurately measured. LSLA stated that TCEQ's contractor needed to complete the work to get the monitors installed at Pleasantville Elementary, as promised. Earthjustice stated they looked forward to seeing these important monitors activated by the end of the year.

Response 25:

TCEQ appreciates the support and appreciation from Earthjustice and LSLA regarding the new air monitoring site in the Houston Pleasantville neighborhood. Unfortunately, TCEQ has experienced unexpected delays beyond its control regarding the Pleasantville site deployment. After lengthy negotiations and property owner delays, TCEQ successfully obtained the approved property usage agreement and procured a contractor to construct the necessary site peripherals (fence, site pad, and electrical). There were additional delays in obtaining the property owner's signature on a deed restriction form for the permit application. TCEQ's contractor obtained the remaining necessary construction permits from the City of Houston after eight months of delays. TCEQ's contractor recently completed the air monitoring site construction, and TCEQ has requested electrical connection. The Houston Pleasantville Elementary air monitoring site will be activated shortly after power is connected by the service provider.

Comment 26:

LSLA stated that TCEQ's draft 2025 AMNP language threatened to undercut monitoring data in the Houston Fifth Ward and Pleasantville communities before it was collected. LSLA stated it was unclear if the new monitors in Houston Fifth Ward and Pleasantville communities would be designated as "area-wide" and that the process for evaluating monitors under 40 CFR § 58.30 was unclear. LSLA stated that TCEQ should use the Houston Fifth Ward and Pleasantville monitors in their annual $PM_{2.5}$ NAAQS. LSLA also stated it was not clear if TCEQ would follow the guidance of 40 CFR Appendix-D-to-Part 58(b)(3) <sic> requiring a monitoring station to be sited in an at-risk community with poor air quality in Harris County.

Response 26:

TCEQ appreciates the questions regarding the new Houston Finnigan Park and Houston Pleasantville Elementary $PM_{2.5}$ monitors. TCEQ clarifies that federal regulations define the term "area-wide" for monitors sited at neighborhood, urban, and regional scales

(and micro or middle-scale) that are representative of many such locations in the same CBSA. The Houston Finnigan Park and Houston Pleasantville Elementary $PM_{2.5}$ monitors are designed to represent area-wide air quality and will be classified as neighborhood scale. Title 40 CFR Part 58, Appendix D §.4.7.1(c) states that the neighborhood spatial scale is the most important spatial scale for $PM_{2.5}$ to effectively characterize air quality in areas that may be impacted by the emissions of particulate matter sources. Thus, the Houston Finnigan Park and Houston Pleasantville Elementary $PM_{2.5}$ monitors will be eligible in comparison to both the annual and 24-hour $PM_{2.5}$ NAAQS [see 40 CFR Part 58, Appendix D §.4.7.1(c)(3)]. TCEQ clarifies that four near-road monitoring sites specified in the draft 2025 AMNP, designated as micro-scale since activation, should only be eligible for comparison to the 24-hour $PM_{2.5}$ NAAQS. $PM_{2.5}$ monitors deployed to meet near-road monitoring requirements provide measurements of localized microenvironments near highly trafficked roadways that are not representative of a broader airshed. The planned monitors at Houston Finnigan Park and Houston Pleasantville Elementary do not fall into this category.

As stated in the 2025 AMNP, Appendix K, Table 2, TCEQ is federally required to operate a total of eight $PM_{2.5}$ monitors in the Houston MSA and has 19 existing monitors at 13 sites. TCEQ exceeds the requirements under 40 CFR Part 58, Appendix D § 4.7.1(b)(3) as a number of the existing $PM_{2.5}$ monitoring sites in the Houston MSA could be considered to be in areas defined by the CFR as “at-risk communities with poor air quality”.

Comment 27:

LSLA commented that their clients (Houston Department of Transformation and Gulfton Super Neighborhood Council) strongly opposed TCEQ’s proposal to reclassify the Houston North Loop monitor as “not suitable for comparison with the annual $PM_{2.5}$ NAAQS.” LSLA commented that TCEQ’s recommendation to reclassify the Houston North Loop monitor was a conspicuous reaction to EPA’s recent lowering of the $PM_{2.5}$ NAAQS and since TCEQ had declined for over a decade to question whether the monitor was suitable, the request was now unsubstantiated and arbitrary. The LSLA commented that there were no less than 50 other Harris County traffic stations with as many AADT counts as the Houston North Loop monitor and it was therefore not unique and comparable to the annual $PM_{2.5}$ NAAQS. LSLA commented that TCEQ should not move forward with designating the Houston North Loop monitor as not suitable for comparison with the annual $PM_{2.5}$ NAAQS under 40 CFR § 58.30 as that monitor is representative of numerous traffic corridors and many locations across Harris County.

Response 27:

TCEQ does not agree with these comments. The most important spatial scale for near-road NO_2 monitoring stations to effectively characterize the maximum expected hourly NO_2 concentrations due to mobile source emissions on major roadways is micro-scale, as noted in 40 CFR Part 58, Appendix D § 4.3.5. For CBSAs with a population of 1,000,000 or more persons, at least one $PM_{2.5}$ monitor must be collocated at a near-road NO_2 station. For a $PM_{2.5}$ monitor to be collocated with a near-road NO_2 monitoring, inherently the two monitors at the same site should be classified as the same scale.

The definition of micro-scale according to 40 CFR Part 58, Appendix D § 4.7.1(c)(1), states that the scale would typify areas such as traffic corridors where the general

public would be exposed to maximum concentrations from mobile sources and that SLAMS sites measured at the micro-scale level, should be limited to urban sites representative of many microenvironments in the area. TCEQ's near-road $PM_{2.5}$ monitors fit this description of many microenvironments in the area. TCEQ's near-road monitoring sites were approved by EPA Region 6 upon activation as meeting the required near-road NO_2 micro-scale definition. EPA noted in the response letter to the TCEQ's 2024 AMNP, that information on monitors that are not suitable for comparison against the annual $PM_{2.5}$ NAAQS, as described in 40 CFR § 58.30, should be identified in the AMNP. TCEQ's request to exclude the near-road $PM_{2.5}$ monitor data from the annual $PM_{2.5}$ NAAQS is not expected to change most area NAAQS designations by EPA, as other $PM_{2.5}$ monitors in these areas have higher annual $PM_{2.5}$ design values that will dictate the designation. Additionally, TCEQ's request to exclude the micro-scale near-road $PM_{2.5}$ monitor data is clearly supported by federal air monitoring regulations.

Comment 28:

LSLA commented that their clients (SN 48) requested that the Houston North Wayside PM_{10} monitor meet federally equivalent standards so that it is NAAQS comparable due to the concentration of concrete batch plants and their resulting PM_{10} emissions. LSLA noted that the Houston North Wayside monitor data suggested that the NAAQS may be exceeded more than once per year. SN 48 requested that the Houston North Wayside PM_{10} monitor be upgraded to collect NAAQS comparable data and that TCEQ should ensure there was adequate monitoring in northeast Houston where concrete operations cluster.

Response 28:

TCEQ appreciates the recommendation to upgrade the existing Houston North Wayside PM_{10} monitor to meet federal equivalent methods. TCEQ meets the Houston MSA federal air monitoring requirements for PM_{10} with five federal equivalent monitors as required under 40 CFR Part 58, Appendix D § 4.6, shown in the 2025 AMNP Appendix J. TCEQ strives to strategically balance meeting federal monitoring requirements and state and local needs with available funding and staffing resources, and for those reasons, cannot always satisfy every monitoring request. TCEQ will continue to evaluate air monitoring needs against existing federal monitoring requirements and available PM_{10} federal equivalent monitor resources in the 2026 AMNP.

Comment 29:

LSLA commented (for SN 48) that the monitoring at Houston North Wayside was deficient since it only evaluated PM_{10} (non-NAAQS comparable), $PM_{2.5}$, ozone, wind, and temperature and that this was insufficient to assess emissions from multiple different industrial facilities. LSLA appreciated that TCEQ responded to comments by adding a state-initiative VOC monitor at Houston East. LSLA additionally applauded TCEQ for agreeing to deploy a VOC monitor to Houston Finnigan Park and Houston Pleasantville Elementary. LSLA noted that while all three of these monitors were within five miles of Houton North Wayside, LSLA encouraged TCEQ to collect VOC and heavy metals at the Houston North Wayside site so that the adjacent communities can understand the health impacts of living near facilities with metal emissions since the area is industrialized with operators that are known to emit VOCs.

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

Response 29:

TCEQ appreciates the recommendations for additional Houston North Wayside air monitoring. TCEQ's stationary air monitoring network is designed to meet federal air monitoring requirements of the Clean Air Act that dictate the number of monitors required for each of the six criteria pollutants in populated areas or MSAs throughout the state. The air monitoring network is used to characterize regional air quality in areas over time but is not intended to assess emissions from sources. As previously stated, the 2025 AMNP is intended to demonstrate TCEQ's compliance with federal air monitoring requirements under 40 CFR Part 58. TCEQ exceeds the Houston CBSA federal air monitoring requirements for all criteria pollutants required under 40 CFR Part 58, as shown in the 2025 AMNP Appendix C. Additionally, TCEQ exceeds PAMS network requirements for VOCs in the Houston CBSA, as shown in the 2025 AMNP Appendix L, and TCEQ's state-initiative VOC network in the Houston CBSA includes 14 additional VOC monitors operated by TCEQ and its monitoring partners. TCEQ enhanced VOC monitoring in 2024 by adding a state-initiative VOC monitor at the Houston East air monitoring site that is five miles upwind of Houston North Wayside. TCEQ further notes that two more state-initiative VOC monitors are planned for Houston Finnigan Park and Houston Pleasantville Elementary later in 2025. These three VOC monitors are or will be within five miles of Houston North Wayside and will provide spatial coverage for this area.

Data from nearby TCEQ monitors, as well as other monitors in the CBSA, are publicly available on TCEQ webpage, and inform the daily air quality forecast for the area. These tools help inform communities about current air quality conditions in the general area. Additional special study state-initiative Houston North Wayside air monitoring data are also available. TCEQ performed a 12-month $PM_{2.5}$ speciation special study at Houston North Wayside in 2022-2023 to assist in the identification of particulate sources that could contribute to Houston North Wayside $PM_{2.5}$ concentrations. The Houston North Wayside $PM_{2.5}$ speciation special study's air toxics metals data were evaluated by TCEQ's Toxicology Division.. TCEQ's Toxicology Division evaluates ambient air toxics sampling data conducted at Texas air monitoring sites throughout the year and summarizes those data annually in their evaluation. TCEQ's Toxicology Division evaluation of air toxics data includes the VOC data at Houston area air monitoring sites and from the Houston North Wayside 12-month $PM_{2.5}$ speciation special study.. Details on the 2023 TCEQ Toxicology Division's air toxics evaluation are located on TCEQ's webpage at Toxicological Evaluations of Ambient Air Monitoring Data - TCEQ.

TCEQ does not currently possess additional monitoring equipment or the resources to fulfill the request to add VOC monitoring. While TCEQ strives to strategically balance meeting federal air monitoring requirements with state and local concerns, funding and resource limitations impact the ability to conduct air monitoring in response to all requests. TCEQ is committed to ensuring clean air for the people of Texas and appreciates the opportunity to consider this request.

Comment 30:

LSLA summarized in section III. *Summary of Requested Relief* that a near-road NO_2 monitor was requested along Interstate 45 north of Beltway 8 in Harris County.

Response 30:

TCEQ notes that no additional supporting information was provided in LSLA's letter regarding the Harris County near-road monitor request. TCEQ's near-road monitoring network meets the requirements under 40 CFR Part 58, Appendix D, Section 4.3.2 with two sites in the Houston CBSA at Houston Southwest Freeway and Houston North Loop (monitoring with NO_x instruments). Federal standards require a minimum of five NO_x or NO_2 (direct) monitors and one NO_y monitor to satisfy area-wide, Regional Administrator-40, near-road, PAMS, and NCore monitoring requirements, as of January 1, 2025, in the Houston CBSA. TCEQ exceeds requirements with 18 NO_x and NO_2 (direct) monitors, and two NO_y monitors. The Houston area NO_2 monitoring sites and design value trends were reviewed in the Texas 2025 FYA, and TCEQ's extensive network of NO_x monitors and area point sources are illustrated in Figure J below. The Houston CBSA's one-hour NO_2 design values and annual NO_2 concentrations have been stable over the past ten years. All Houston area monitors, including the near-road NO_2 monitors, remain well below (at or less than 50%) of the one-hour and annual NO_2 NAAQS; therefore, the design value trends do not indicate a need for additional NO_2 monitoring in the Houston area. However, TCEQ will continue to evaluate air monitoring needs in the Houston CBSA against existing federal monitoring requirements, data trends and available resources.

Appendix M: Response to Comments Received on the Draft 2025 Annual Monitoring Network Plan

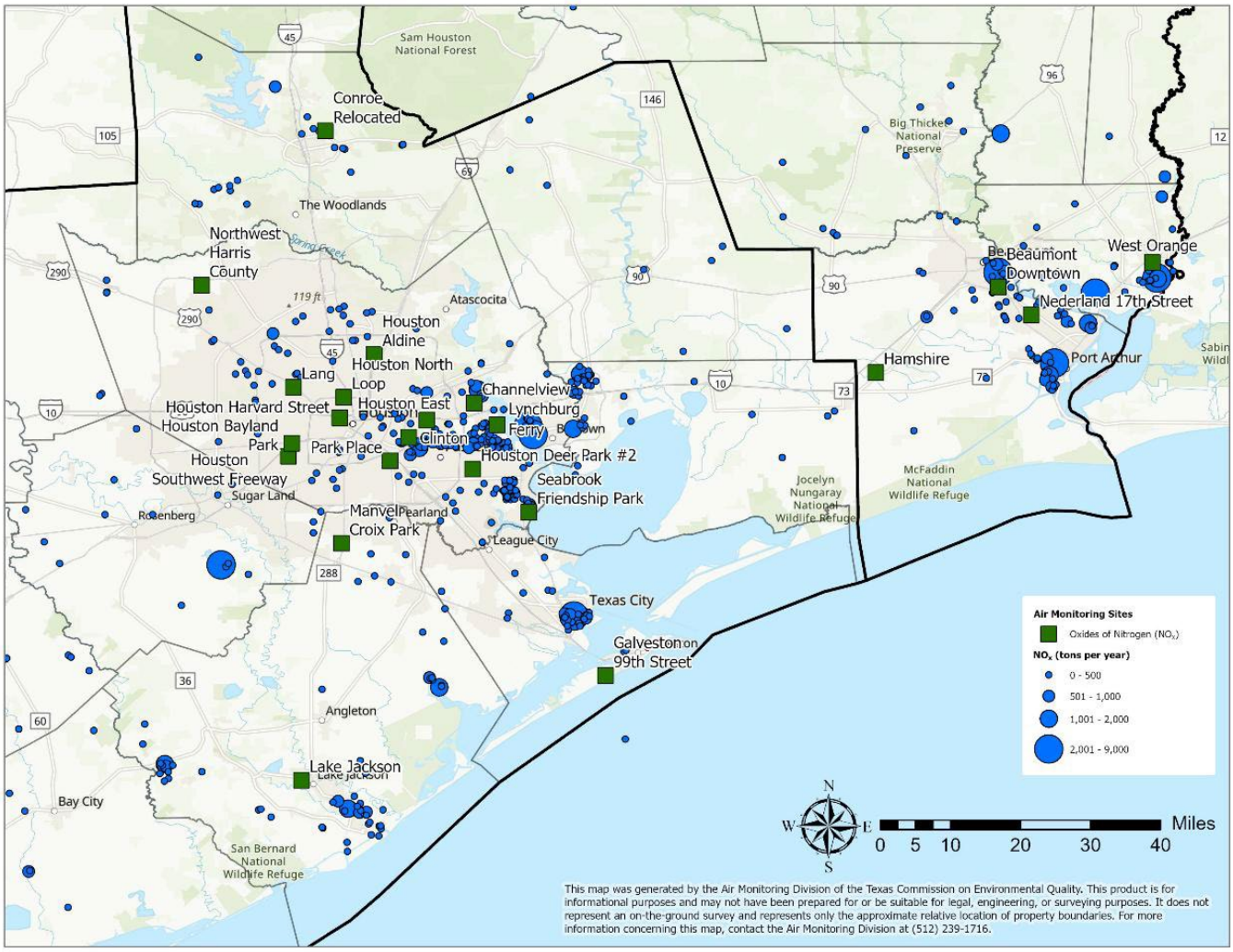


Figure J: Houston and Beaumont-Port Arthur Area Oxides of Nitrogen and 2022 Point Sources

Comment 31:

Fenceline Watch commented that the draft monitoring plan included the recommendation to deactivate the Park Place special purpose monitor measuring SO_2. Fenceline Watch requested that TCEQ not seek deactivation of the Park Place SO_2 monitor as it is located in an area with two schools. Fenceline Watch also commented that TCEQ cites the *2020 Five Year Ambient Monitoring Network Assessment* as the rationale for the deactivation of the SO_2 monitor based on Houston area one-hour SO_2 design value trends as the basis to designate the Park Place monitor as "low value". Fenceline Watch also commented that the Park Place monitor, based on its SO_2 concentration measurements, historical value, and the community in which it is placed should not be considered of "low" assessment value.

Response 31:

TCEQ disagrees with these comments, as Park Place SO_2 data have trended among the

lowest in the area with a 2023 design value of 10 ppb, 13% of the one-hour SO_2 NAAQS, and the SO_2 monitor was correctly scored with a low *Assessment Value* in both the Texas 2020 FYA and Texas 2025 FYA. The Park Place SO_2 monitor is not required to meet federal minimum requirements and is eligible for deactivation. Due to limitations in funding and resources to satisfy all monitoring requests, it is vital for TCEQ to be strategic about the use of its resources in areas that have the highest priorities for monitoring. Operational resources from the deactivation of this monitor will be reallocated to support the operation of the new Houston Finnigan Park and Houston Pleasantville Elementary air quality monitoring sites.

Comment 32:

Fenceline Watch commented that the draft monitoring plan's proposal to reclassify the Houston North Loop $PM_{2.5}$ monitor as non-NAAQS comparable stands in contrast to the *2020 Five Year Ambient Monitoring Network Assessment*, which identifies the monitor of "critical" assessment value. Fenceline Watch commented that TCEQ's contention that the readings from this monitor are so concentrated that they are unique and not representative of area-wide air quality in Houston seems incongruent with the facts on the ground.

Response 32:

TCEQ disagrees with this comment. TCEQ established near-road monitoring sites in accordance with 40 CFR Part 58, Appendices D and E and the *Near-Road NO_2 Technical Assistance Document* guidelines. $PM_{2.5}$ monitors deployed to meet near-road monitoring requirements provide measurements of localized microenvironments near highly trafficked roadways that are not representative of a broader airshed. The TCEQ FYA correctly scored near-road $PM_{2.5}$ monitors as critical since the monitors fulfill a regulatory requirement under 40 CFR Part 58, Appendix D (see the 2025 TCEQ FYA monitor *Regulatory Value* assessment defined on page 20). Additionally, the FYA *Regulatory Value* assessment is not related to a monitor's spatial scale or if the monitor should be comparable to the NAAQS.

The $PM_{2.5}$ concentrations measured at the near-road sites are impacted by particulate matter from the nearby localized traffic and are not representative of area-wide air quality. $PM_{2.5}$ measurement data from all eligible monitors that are representative of area-wide air quality are comparable to the annual and 24-hour $PM_{2.5}$ NAAQS. However, according to 40 CFR § 58.30, $PM_{2.5}$ measurement data from monitors that are not representative of area-wide air quality but rather of relatively unique micro-scale, localized hot spot, or unique middle-scale impact sites, are not eligible for comparison to the annual $PM_{2.5}$ NAAQS but would remain eligible for comparison to the 24-hour $PM_{2.5}$ NAAQS. TCEQ clarifies that the four near-road $PM_{2.5}$ monitors' complete hourly, daily, and annual data will continue to be measured and/or reported to TCEQ's TAMIS and EPA's AQS, as federally required.

EPA noted in the response letter to TCEQ's 2024 AMNP, that information on monitors that are not suitable for comparison against the annual $PM_{2.5}$ NAAQS, as described in 40 CFR § 58.30, should be identified in the 2025 AMNP. TCEQ requested approval in the 2025 AMNP to designate the micro-scale near-road site $PM_{2.5}$ monitor data as not suitable for comparison with the annual $PM_{2.5}$ NAAQS. The Houston area micro-scale near-road $PM_{2.5}$ monitoring site data are adjacent to a unique dominating local $PM_{2.5}$

source. Accordingly, the micro-scale $PM_{2.5}$ measurement data from the Houston North Loop monitor should only be eligible for comparison to the 24-hour $PM_{2.5}$ NAAQS.

Comment 33:

Individuals urged TCEQ to expand ambient air monitoring to include more ozone, particulate matter, and NO_x monitors in underserved and high-risk areas, as well as fence line benzene and H_2S monitoring in some areas. Individuals expressed that more monitors were needed in the following areas:

- Austin Metro and Williamson County region (Austin MSA)
- Houston area including Fort Bend (Houston MSA)
- Corpus Christi MSA
- Permian Basin (Midland and Odessa MSAs)
- East Texas near the Martin Lake coal plant in Panola County (Longview MSA)

Individuals noted these communities deserved accurate, localized data about their air quality to protect public health and guide regulatory decisions.

Response 33:

TCEQ appreciates individuals participating in the 2025 AMNP comment period and requesting installation of additional air quality monitors in multiple Texas MSAs. TCEQ does not agree that additional air monitors are required to meet federal requirements designed to ensure adequate coverage for ambient air monitoring. Federal requirements for criteria pollutants are set by EPA to protect public health and welfare. As referenced in the 2025 AMNP Introduction, TCEQ is federally required to operate between 133 and 160 air quality monitors. TCEQ's federal monitoring network includes 265 air quality monitors, approximately double the number of monitors required by federal rule. AMNP Appendix C summarizes the number of federally required and existing air quality monitors by MSA and criteria pollutant. The number, type, and location of monitors within TCEQ's federal monitoring network is sufficient to characterize air quality for all areas (and populations) required within Texas.

TCEQ's air monitoring network is designed to meet federal air monitoring requirements of the Clean Air Act that dictate the number of monitors required for each of the six criteria pollutants in populated areas or MSAs throughout the state. The air monitoring network is used to characterize regional air quality in areas over time. Data from the monitors in each MSA are publicly available on TCEQ's webpage, and inform the daily air quality forecast for the area. These tools help inform communities about current air quality conditions in the general area. H_2S monitors support state initiatives; thus, these monitors are not included in the AMNP and are outside of the scope of this plan. In addition, fence line benzene monitoring is outside of the scope of this plan.

Appendix N

Comments Received on the Draft 2025 Annual Monitoring Network Plan

Texas Commission on Environmental Quality
2025 Annual Monitoring Network Plan

From: Sarah H
To: tceqamnp
Subject: Request: Air Monitoring in Fort Bend!
Date: Monday, May 5, 2025 1:29:29 PM

Hi there,

I write with a request for **air monitoring** for Sulfur Dioxide (SO2), Nitrogen Oxide (NOx), Particulate Matter (PM2.5), and Ozone in **Fort Bend County**.

My family needs data, as we four suffer from **asthma**, **Reactive Airway Disease**, **costochondritis**, and **a lobectomy**-- all reducing our ability to breathe.

Thank you,
Sarah (Mark, Lily, and Tyler) Hesterlee
3311 Silvery Bryum Dr.
Rosenberg, TX 77471
(281) 799-1758

From:	Arjumand Mubaarak
To:	tceqamnp
Cc:	Donna Thomas
Subject:	Air Monitoring in Ft Bend County
Date:	Monday, May 5, 2025 1:42:24 PM

SIERRA CLUB

Houston Regional Group

To: TCEQ

Since we are in non-attainment for Ozone and have a **top-polluting coal plant** in our county, it only makes sense to have air monitoring for those emissions. **Most Texas counties with coal plants have Sulfur Dioxide (SO2) monitoring**, but Fort Bend communities deserve transparency and should be given data so we can advocate for our health, environment, and community.

As part of the Fort Bend County community and member of the Ft. Bend County Environmental Coalition, I request air monitoring for Sulfur Dioxide (SO2), Nitrogen Oxide (NOx), Particulate Matter (PM2.5), and Ozone **in Fort Bend County**. The monitors should be placed according to the EPA standards and best practices.

ARJUMAND
Arjumand S. Mubaarak
Houston Regional Group
THE SIERRA CLUB

Tel: 281 922 8601
Email: samubaarak@yahoo.com

From:	Law Office
To:	tceqamnp
Subject:	Parish Coal Plant
Date:	Monday, May 5, 2025 3:20:36 PM

I support air monitoring in Fort Bend County for the Parish Coal Plant for sulphur dioxide, nitrous oxide, particulate matter, and ozone.

My wife has compromised lungs and I have 3 grandchildren who live in Richmond. I want them to be able to breathe safe air.

--

Stephen A. Doggett
Attorney at Law
201 South Eleventh
Richmond, Texas 77469
Tel: (281) 342-3321
Fax: (281) 341-8458

From:	L C
To:	tceqamnp
Subject:	Air monitoring
Date:	Monday, May 5, 2025 5:46:19 PM

Dear TCEQ,

I am writing to request that TCEQ establish air monitoring for Fort Bend County. Specifically, I would like you to monitor for sulfur dioxide, nitrogen oxide, particulate matter, and ozone.

I am a long time homeowner in Sugar Land, and I have noticed the poor air quality in my neighborhood. Surprisingly, it seems as bad as some of the worst cities in China I have been to. I can also see the smoke rising from the Parish Coal Plant at night from our neighborhood park. I would really appreciate having air monitoring to know the quality of air we are breathing in our beautiful city of Sugar Land.

Thank you for your attention and help.

Regards,

Lisa Craven

From: John Howard
To: tceqamnp
Subject: Monitoring Air Quality in Ft Bend County
Date: Monday, May 5, 2025 9:09:35 PM

I do not understand how this is an issue especially with an agency task with environmental quality that impinges on the life of humans much less the ecosystems in which life exist.

Please provide air monitors in Ft Bend County, and each of the counties surrounding major metropolitan areas in Texas.
You know what is right, life supporting, and legally mandated.

Thanks for all your efforts in supporting the maintenance of a healthful life for all Texas.

John M Howard Jr
E-Mail: jmhowardjr45@gmail.com

From:	Maddy Petitjean
To:	tceqamnp
Subject:	Parish Coal in Ft. Bend County
Date:	Monday, May 5, 2025 9:53:58 PM

Dear Legislators and Regulators,

I had Lung Cancer and had a lobectomy. I have COPD and have breathing problems, I am sensitive to Allergens, Ozone and Particulates. I think that Natural Gas is a cleaner choice than Coal and would like to see monitoring in Ft. Bend County.

Thank You,

Madrienne Petitjean
11118 Cornalee Ct.
Richmond, TX 77407

From: Gina Biekman
To: tceqamnp
Subject: Parish Coal Plant Air Monitors
Date: Tuesday, May 6, 2025 8:59:22 AM

To the commissioners of the Texas Commission on Environmental Quality,

I am writing to you to request air monitoring to include Sulfur Dioxide (SO2), Nitrogen Oxide (NOx), Particulate Matter (PM2.5), and Ozone in Fort Bend County. Fort Bend County is in a non-attainment zone for Ozone and has a **top-polluting coal plant** in our county. Air monitoring for those emissions is needed. **Most Texas counties with coal plants have Sulfur Dioxide (SO2) monitoring**, but Fort Bend County has ZERO regulated air monitoring.

Fort Bend communities deserve transparency and should be given data so we can advocate for our health, environment, and community.
The Parish Power Plant continues to release arsenic, sulphur dioxide and particulate matter without monitoring into an area with increasing housing and 83,000 students effected in nearby schools.

Without localized, real-time data, we are forced to rely on extrapolated data outside the county or self-reported emission data from NRG at W.A. Parish. We should have untouched, transparent, relevant data for Fort Bend. Please provide regulated air monitoring for the W A Parish Power Plant to protect the citizens of Fort Bend County.

Thank you,
Gina Biekman

From:	Donna Thomas
To:	tceqamnp
Cc:	Donna Thomas
Subject:	Fort Bend County Homeowner Requesting Air Monitor from TCEQ
Date:	Tuesday, May 6, 2025 3:55:23 PM

Dear TCEQ,

I Donna Thomas
a homeowner,
mother, sister, and a neighbor living in Fort Bend County over years facing the worst pollution in this area of Houston in Fort Bend County. With that said I and my family have suffered with death by asthma, stroke, upper respiratory problems and other illnesses. I do believe due to the **lack of TCEQ protecting** us from **air pollution;** that more families are facing and affected by illnesses like myself in Fort Bend County.

We in Fort Bend County are in a **non-attainment** Ozone and we have one of the top-polluting coal plant **that has 4 coaling towers units** in our county, it only makes sense to have **air monitoring for those emissions**.
Most Texas counties with coal plants have Sulfur Dioxide (SO2)monitoring,
but Fort Bend County communities deserve transparency and should be given data so we can advocate for our health, environment and community.
I am requesting air monitors to check for emissions
Sulfur Dioxide (SO2), Nitrogen Oxide(NOx), Particulate Matter (PM2.5) and Ozone.
Let's not forget
Petra Nova is a carbon capture suppose to reduce carbon emissions from the boilers of coal burning so the coal also **releases**
Carbon Dioxide (CO2) in Fort Bend County that's affecting our county.

So on behalf of myself, family, friends, neighbors and all the children that are our future generation I am asking **TCEQ to make a difference in our community by placing air monitors in Fort Bend County.**

Thank you for your time and we look forward to TCEQ making a difference in Fort Bend County.

Donna Thomas
Homeowner
Houston, Texas
Fort Bend County

Sent from my iPhone

From: markhesterlee@gmail.com
To: tceqamnp
Subject: Request of Air Monitoring in Fort Bend County
Date: Wednesday, May 7, 2025 4:57:35 PM

Good afternoon,
I am writing to **request air monitoring** for
Sulfur Dioxide (SO2)
Nitrogen Oxide (NOx)
Particulate Matter (PM2.5)
and Ozone **in Fort Bend County**.

As home to one of the largest coal fired power generation stations in the nation, I feel that it is imperative that our community be provided reliable and independently verifiable **real time** regulatory air monitoring, so we are able to make informed decisions relating to the health and safety of our residents.

Please act in the best interest of our community of nearly **one million residents** and provide adequate monitoring throughout our county.

Regards,
Mark Hesterlee
3311 Silvery Bryum Dr.
Rosenberg, TX. 77471

From:	Jossue Ureno
To:	tceqamnp
Subject:	Annual Monitoring Network Plan
Date:	Thursday, May 8, 2025 11:51:22 AM

Hello, I would like to request regulated air monitoring in Fort Bend County. I find it concerning that Fort Bend County is home to WA Parish, which is a top polluter in Texas, and there is no monitoring in Fort Bend. I understand that the draft plan states that Sulfur Dioxide emissions are down, but Fort Bend is still in nonattainment for ozone. Using Harris County's monitors isn't enough, Fort Bend needs their own to really gauge the air quality in Fort Bend.

Thanks,
Jossue U.

From:	Erica Sezonov
To:	tceqamnp
Subject:	Requesting air monitoring in Fort Bend County
Date:	Friday, May 9, 2025 9:00:47 PM

To the TCEQ folks,

The lack of air monitoring greatly affects the lives of people in Fort Bend County.

I'm very concern about the lack of air monitoring in Fort Bend County, specifically for Sulfur Dioxide (SO2), Nitrogen Oxide (NOx), Particulate Matter (PM2.5), and Ozone.

I'm writing to request there be air monitoring in Fort Bend County.

Thank you, sincerely,

Erika Sezonov
Houston, TX 77074

From: Nan Hildreth
To: tceqamnp
Subject: Request for air monitors in Fort Bend County
Date: Saturday, May 10, 2025 10:58:25 AM

Please monitor the air for Sulfur Dioxide, Nitrogen Dioxide, Particulate Matter (PM2.5) and Ozone in Fort Bend County. I live in the next county and it drifts over to me too. am a residential customer of NRG, the owner of the largest polluter in Fort Bend County and one of the largest in Texas, WA Parish Coal Power Plant. We used to have no choice but to put up pollution of not have grid power. But now there is a better way. And one that will make more money for NRG than burning trainloads a day at WA Parish. NRG could transition the site to either a battery installation or a geothermal power station.

NRG may protest that they lack experience with these two new technologies. But they could partner with a company that has the experience. And they own one small grid battery set up now.

Thank you for your time.

Eleanor Hildreth

3939 Luca St

Houston, Tx 77021

832-244-7814

NanHildreth@riseup.net

From:	Ambereen Siddiqui
To:	tceqamnp
Subject:	Public Comment on the Monitoring Plan
Date:	Saturday, May 10, 2025 11:05:43 AM

Hello,

I am making a comment on the *2025 Annual Monitoring Network Plan.*
I am asking for air monitors to be installed in Fort Bend County to monitor Sulfur Dioxide, Nitrogen Oxides, Particulate Matter, and ozone. My family and I deserve transparency about the air we breathe - we all do. Our county is home to one of the state's top polluting coal plants. We need to know what our kids are breathing and make sure they are safe.

Please respond promptly if my email is missing any information necessary in order to be entered as an official comment in favor of air monitors.

Thank you,
Ambereen Siddiqui
Richmond, TX

From:	Mireya Garcia
To:	tceqamnp
Cc:	Ron Reynolds; Antron Johnson
Subject:	2025 Annual Monitoring Network Plan Public Comment
Date:	Tuesday, May 13, 2025 11:54:46 AM
Attachments:	Reynolds TCEQ 2025 Monitoring Plan Letter.pdf

Good morning,

Please find State Representative Ron Reynolds' public comment on the 2025 TCEQ Annual Monitoring Network Plan attached to this email.

Best,
Mireya

Mireya Garcia
Legislative Director
Representative Ron Reynolds
(512) 463-0494 | Mireya.garcia@house.texas.gov

Texas House of Representatives

RON REYNOLDS
STATE REPRESENTATIVE

May 12, 2025

Holly Landuyt
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, TX 78753

Subject: 2025 Annual Monitoring Network Plan

Dear Ms. Landuyt,

I am writing to you to participate in the open comment period for TCEQ's 2025 Annual Monitoring Network Plan and urge TCEQ to install air quality monitors in Fort Bend County. This request follows extensive discussions with constituents, elected officials, and stakeholders who have voiced growing concerns about the region's air quality, particularly given the county's location within the Houston-Galveston-Brazoria (HGB) nonattainment area.

Throughout the 89th Texas Legislative Session, I have tackled this issue head-on by filing legislation that aims to improve air quality in House District 27. House Bill 1341, which requires TCEQ to review and adopt new hydrogen sulfide standards, is one of the many bills I filed that addresses this issue. This bill was complimented with a budget rider that I proposed to assess and monitor the ground level concentrations of hydrogen sulfide emissions. While these proposals saw limited progress, TCEQ retains the authority to address these concerns.

As you create the 2025 Annual Monitoring Network Plan, I ask that you consider Fort Bend County's proximity to air pollutants and install air quality monitors in the region. Adding monitors is necessary to maintain the county's exceptional quality of living. Thank you for your attention to this matter and for your ongoing commitment to the public.

Sincerely,

Capitol Office:
P.O. Box 2910
Austin, Texas 78768-2910
(512) 463-0494
(512) 463-1403 Fax

Fort Bend County • District 27
RON.REYNOLDS@HOUSE.TEXAS.GOV

District Office:
2440 Texas Parkway, Suite 102
Missouri City, Texas 77489
(281) 208-3574
Fax (281) 208-3696

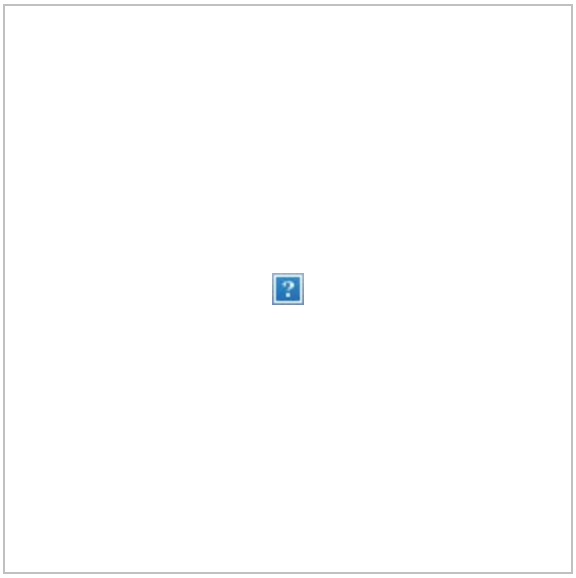
From:	Coalition of Community Organizations
To:	tceqamnp
Cc:	James Caldwell; James Caldwell
Subject:	2025 Annual Monitoring Network Plan
Date:	Tuesday, May 13, 2025 5:34:57 PM
Attachments:	TCEQ- 2025 comment.pdf

Greetings.

Attached is a letter of support for the placement of the PM2.5 and VOC monitors in Fifth Ward, Houston, Texas.

Thank you for your commitment!

Sincerely,
Rev. James Caldwell, Founder/Director
Coalition of Community Organizations
(P): 832.231.9176



What is C.O.C.O.?
Coalition of Community Organizations

COCO's mission is to educate, empower, and enhance lives, to make informed decisions with the goal of obtaining healthy and sustainable communities.

COCO's Vision: The distribution of info to this generation of communities and the next.

The Coalition of Community Organizations (COCO) originated in 2008 through the work of dedicated members from several community organizations and residents in Houston and

surrounding areas. These groups began working together to make sure that community interests are represented at the city, state, and national levels and that elected officials, corporations, businesses, law enforcement, and clergy have a vested interest in our communities.

Our first endeavor together was and continues to be to register voters and encourage eligible voters to get out to vote. Taken seriously, the quote from Hosea 4:6, “my people are destroyed for a lack of knowledge,” has made us more determined to make sure that each person or organization on our distribution list is more aware of the events, critical information, and resources that affect our communities. We provide community relevant information through our mailing list concerning healthcare, education, the environment, criminal justice, and immigration, just to mention a few of the issues that are relevant to the stakeholders in our communities.

Our future goal is to become a power-base within communities that is politically, economically, socially, academically, and spiritually strong to increase community involvement.

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COCO
Coalition of Community Organizations
Rev. James L. Caldwell
5901 Market St.
Suite 15310
Houston, TX 77020
(832) 231-9176
cocohoustonnow@gmail.com
coalitionofcommunityorganizations.org

Texas Commission on Environmental Quality
P.O. Box 13087
Attention: Holly Landuyt, MC-165
Austin, Texas 78711-3087

Subject: ***2025 Annual Monitoring Network Plan***

Dear TCEQ.

I am writing in strong support of the placement of PM2.5 and VOC air monitors at Finnegan Park in Houston's Fifth Ward. This is a critical step toward improving environmental oversight and public health protections in an underserved community that has long borne the burden of industrial pollution.

We appreciate TCEQ's commitment to enhancing air quality monitoring infrastructure in our neighborhood. The presence of these monitors will provide essential, real-time data to help us better understand our exposure to harmful pollutants, strengthen community education, and support accountability for local emissions.

We also respectfully urge TCEQ to consider expanding this effort by placing similar air monitors in the Pleasantville community. Like Fifth Ward, Pleasantville is a historically Black neighborhood situated near multiple sources of industrial emissions and would greatly benefit from increased air quality monitoring.

Thank you for taking meaningful steps toward environmental justice in our communities.

Sincerely,

Rev. James L. Caldwell
Coalition of Community Organizations
cocohoustonnow@gmail.com
832-231-9176

From: Kevin Perkins
To: tceqamnp
Subject: Air Monitoring
Date: Monday, May 12, 2025 2:58:42 PM

Hi,

I am requesting air monitoring for **Sulfur Dioxide (SO2), Nitrogen Oxide (NOx), Particulate Matter (PM2.5), and Ozone** in Fort Bend County! I am concerned about our air quality since we have a coal plant polluting our air.

--
Best,
Kevin Perkins, MD/PhD
Emergency Medicine Resident PGY-3
Baylor College of Medicine
Cell 203-710-6131

From: Ashly Waltman
To: tceqamnp
Subject: Fort Bend Needs Air Monitoring
Date: Tuesday, May 13, 2025 5:00:11 PM

We need air monitors in Fort Bend County to protect our air quality and the health of our constituents.

Sulfur Dioxide (SO2)
Nitrogen Oxides (NOX)
Particulate Matter (PM 2.5)
Ozone

This is extremely important to me as some of my family members and myself are exposed to such toxic levels of harmful air irritants. This is my health, my future that I am worried for, as well as for others who live in Fort Bend.

Thank you,

Ashly Waltman
Rosharon, TX 77583

From: Linda Mundwiller
To: tceqamnp
Subject: Need air monitoring
Date: Tuesday, May 13, 2025 7:48:07 AM

Dear TCEQ,

We need transparent (not self monitoring by NRG) air monitoring for Sulfur Dioxide (SO2), Nitrogen Oxide (NOx), Particulate Matter (PM2.5), and Ozone **in Fort Bend County.** We are in non-attainment for Ozone and have a **top-polluting coal plant!** NRG needs to be accountable for the emissions they make and emissions they allow. This impacts our health.

Respectfully,

Linda A. Mundwiller

Sent from my iPhone

From: Mimi Otts
To: tcegamnp
Subject: Please promote monitoring air quality for each of us
Date: Tuesday, May 13, 2025 9:38:59 AM

Sent from my iPhone

From:	Anna Lykoudis Zafiris
To:	tceqamnp
Cc:	Anna Lykoudis Zafiris
Subject:	Request for Air Monitors in Ft. Bend County
Date:	Tuesday, May 13, 2025 1:13:00 PM

Dear TCEQ,

My name is Anna Lykoudis and I am a 20+ year resident of Sugar Land, in Fort Bend County, Texas. I am a homeowner, a parent of three children and a community advocate on issues concerning our community. Over the past year, I learned that Fort Bend County is listed as a "non-attainment zone" for ozone and PM 2.5 pollution by the EPA and TCEQ, with our air quality being described as "severe." Unfortunately, when newspapers publish articles about Houston pollution statistics, Fort Bend is left out because of the lack of data due to the lack of AIR MONITORS in the county. Quoting from the Community Impact newspaper article, *"Environmental advocates, EPA officials discuss Fort Bend County issues,"* it states that "Although Fort Bend County doesn't have regulatory air monitors, David Garcia, director of the EPA's Air and Radiation Division, said it's "very likely" the county will also be deemed in nonattainment with the new PM2.5 standards due to its proximity to Harris County monitors and its contributions to air pollutants regionally—citing NRG Energy's W.A. Parish coal plant south of Sugar Land as a large emission source." The lack of AIR MONITORS in Fort Bend County is a great disservice to the residents and continues to endanger our health, safety and wellbeing while perpetuating a willful ignorance and avoidance to address our problems with our air quality.

We cannot look away while Fort Bend County increasingly faces the worst pollution in this area of Houston. Personally, my family suffers from upper respiratory problems and other illnesses that are exacerbated by the air quality. My oldest daughter attends grad school in NY state and has no more allergies after leaving Ft. Bend County. We need to ask ourselves what is happening here??? I do believe due to the **lack of TCEQ protecting** us from **air pollution, even more families will be affected by pollution-related illnesses in Fort Bend County.**

Despite Fort Bend County being in a "**non-attainment"** zone, we continue to add to our "severe" air quality because we have one of the top-polluting coal plants - W.A. Parish that operates within several miles from our homes. The W.A. Parish plant **has 4 coaling tower units** in our county. It is imperative to have **air monitoring for those emissions**. Comparatively speaking, most Texas counties with coal plants have Sulfur Dioxide (SO2) monitoring, in addition to monitoring other elements. Fort Bend county lacks transparency and important health related data regarding our air quality so residents can make informed decisions for our health, environment and community. There is ZERO EXCUSE to leave residents without important data and air monitoring!

Therefore, I am requesting air monitors to check for emissions in Fort Bend County, including, but not limited to:
Sulfur Dioxide (SO2),

Nitrogen Oxide (NOx),
Particulate Matter (PM2.5),
Ozone, and
***Carbon Dioxide (CO2). *Petra Nova** is a carbon capture supposed to reduce carbon emissions from the boilers of coal burning so the coal also **releases Carbon Dioxide (CO2) in Fort Bend County that's affecting our county.**

So on behalf of myself, family, friends, neighbors and all the children and even our future generations, I am requesting that **TCEQ do the right thing for our health, safety and wellbeing and make a difference in our community by placing air monitors in Fort Bend County.**

Thank you for your time and we look forward to TCEQ making a positive difference in Fort Bend County.

Anna Lykoudis
Homeowner
Sugar Land, Texas
Fort Bend County

From:	Haley Gehring
To:	tceqamnp
Subject:	TCEQ AMNP Public Comments - Request for Air Monitors in Fort Bend County
Date:	Tuesday, May 13, 2025 11:21:52 PM

Good evening,

My name is Haley Schulz and I am submitting formal comments on the annual 2025 TCEQ Air Monitoring Network Plan. I am a lifelong resident of Fort Bend County and grew up in Sugar Land, studied at the University of Houston, and now live with my family in Richmond.

I wanted to start my family and make Fort Bend County my forever home for many reasons. Fort Bend has a small-town charm while also being home to diverse cultures, cuisine, and innovation. I live in one of the fastest-growing counties in Texas, which comes with an increased presence of industry. My family moved to rural Richmond to see cows on our way to-and-from work, which have now been replaced with an Amazon distribution center.

I say all of this because even with this development, Fort Bend is still home. It also happens to be home to the largest coal-fired power plant in Texas. And if we want Fort Bend to continue growing and thriving, we need transparent data to show it's a county worth living in and fighting for.

I believe Fort Bend residents deserve to have and own data that isn't extrapolated from other counties or self-reported by the largest toxic releaser in the county. I think Fort Bend has been overlooked and excluded for far too long and it's unfortunate it's gotten to the point where legislators now need to propose bills and legislation to get regulated air monitoring in Fort Bend County. The American Lung Association issues their "State of the Air" report every year, but cannot give Fort Bend a score due to no monitoring. The community must rely on self-purchased PurpleAir monitors for citizen science, but that data isn't recognized by regulatory entities when advocating for clean air. And yet W.A. Parish gets to use their own stack emission data to show compliance with their own permits. How is any of this acceptable?

The TCEQ Air Monitoring Network Plan mentions a decrease in SO2 emissions from W.A. Parish, showing there was no need for SO2 monitors. But according to W.A. Parish and NRG Energy's reports, SO2 is their least prevented emission. While the plant has baghouses and SCRs to help mildly reduce PM2.5 and NOx, only one of the four coal stacks has a scrubber. Even with the emission controls in place, W.A. Parish is the second top emitter of SO2 and PM2.5 in the state. There is still absolutely a need for air monitoring in Fort Bend County.

For a county in severe non-attainment for ozone, why doesn't Fort Bend have air monitoring for that at least? How are we able to determine if we shift back into attainment if we have to use extrapolated monitoring from neighboring counties? W.A. Parish is a coal-fired power plant, which has many more emissions than just SO2. I am requesting Fort Bend County have regulated monitoring for **SO2, PM2.5, NOx, CO, and ozone**. If the coal plant has no plans to retire and protections against emissions continue to loosen and deregulate, then the very least we need from the TCEQ is the ability to monitor these emissions so we can advocate for ourselves if regulators will not advocate for us.

As for air monitoring locations, there are many prime locations that would provide the most benefit in monitoring for Fort Bend County. The TCEQ is already familiar with one location at the University of Houston - Sugar Land campus. While the last TCEQ monitor there was deactivated in 2018, there is still UH-SL staff and the lab on-site who are well-equipped and able to maintain the monitor. This is located in central Fort Bend and would do well to monitor emissions from W.A. Parish and local industry.

I carry my inhaler with me at all times. My family used to enjoy leisurely visits to Brazos Bend State Park, located in rural Fort Bend just minutes away from W.A. Parish. But after finding out about the plant and connecting the dots, my family now protects ourselves the only way we can. We stay indoors for ozone action days. We wear masks outdoors if the air quality is poor. We avoid going near the plant when they register emission events. But without regulated air monitoring placed in the right locations and monitoring

the necessary emissions, I get to continue guessing if I chose the right home for my family.

With Fort Bend set to double in population by 2050 with continued build-out and development, Fort Bend is in dire need of transparent, un-biased air monitoring data. I am asking the TCEQ to give us baseline data so we can advocate for our own health, environment, and communities. Compared to the other coal plants in Texas, most have SO2 monitoring - so why not Fort Bend? W.A. Parish has the largest population in a 20-mile radius of any coal plant in Texas at over 1.7 million people and we're continuing to grow. Austin Point is a master-planned community standing up 14,000 homes in the next decade just three miles west of W.A. Parish. How do we have the largest coal plant in Texas with zero monitoring from our environmental regulators?

Please, for our community, our children, and our future in Fort Bend, please provide our county regulated ambient air monitoring for **SO2, PM2.5, NOx, CO, and ozone**. We are being left behind every year and the number of monitors necessary in the Houston-region are not appropriately allocated to the areas that have the largest source of emissions. The TCEQ shouldn't just be concerned with how many monitors it is placing, but where they are being placed. Fort Bend County and our communities deserve air monitoring.

Thank you for considering my comment and I look forward to hearing from the TCEQ on an amended AMNP draft to include Fort Bend County.

Kind regards,
Haley Schulz
Richmond, TX 77407

From:	Fenceline Watch
To:	tceqamnp
Subject:	Fenceline Watch comment on TCEQ Air Network Monitoring Plan 2025
Date:	Wednesday, May 14, 2025 3:58:39 PM
Attachments:	Fenceline Watch commeont on TCEQ Air Network Monitor Plan 2025 .docx.pdf

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Good afternoon,

Fenceline Watch is submitting comment on TCEQ's Draft 2025 Air Network Monitoring Plan. Our comment is attached as a pdf below.

We would like to thank the TCEQ for the opportunity to provide comment; if anything else is required please do not hesitate to reach out.

Thank you,

-Shiv Srivastava
Pronouns: He/Him
Policy Director, Fenceline Watch
www.fencelinewatch.org
A Houston based environmental justice organization
a fiscally sponsored project of Occidental Arts and Ecology Center

Submitted electronically:
tceqamnp@tceq.texas.gov

May 14, 2025

Re: Fenceline Watch comment on proposed Draft 2025 Annual Monitoring Network Plan

My name is Shiv Srivastava, policy director at Fenceline Watch, a community-based organization located in the East End of Houston, Tx dedicated to eradicating multigenerational toxic harm faced by fenceline communities. We thank the Texas Commission on Environmental Quality for the opportunity to submit comments on the Draft 2025 Annual Monitoring Network Plan.

I. Process and Increasing Public Engagement

We would like to thank the TCEQ for making the 2025 Annual Monitoring Network Plan available in Spanish. We encourage the commission to continue to expand the accessibility of the Annual Monitoring Network Plans by incorporating other widely spoken languages in the region, including, but not limited to, Vietnamese and Chinese[1]. Additionally, as recommended in our comments for the Draft 2021 Annual Monitoring Network Plan, we request that these plans be subject to public proceedings through notice and comment rulemaking with meetings held in Houston and other impacted metropolitan statistical/core based statistical areas identified in the plan.

II. Deactivation of Park Place Sulfur Dioxide SPM monitor

The Draft 2025 Air Network Monitor Plan includes a recommendation by TCEQ for the deactivation of the Park Place SPM monitor measuring sulfur dioxide. We ask TCEQ not to seek deactivation of the Park Place SPM sulfur dioxide monitor.

A. Proposed deactivation of Park Place SO_2 monitoring

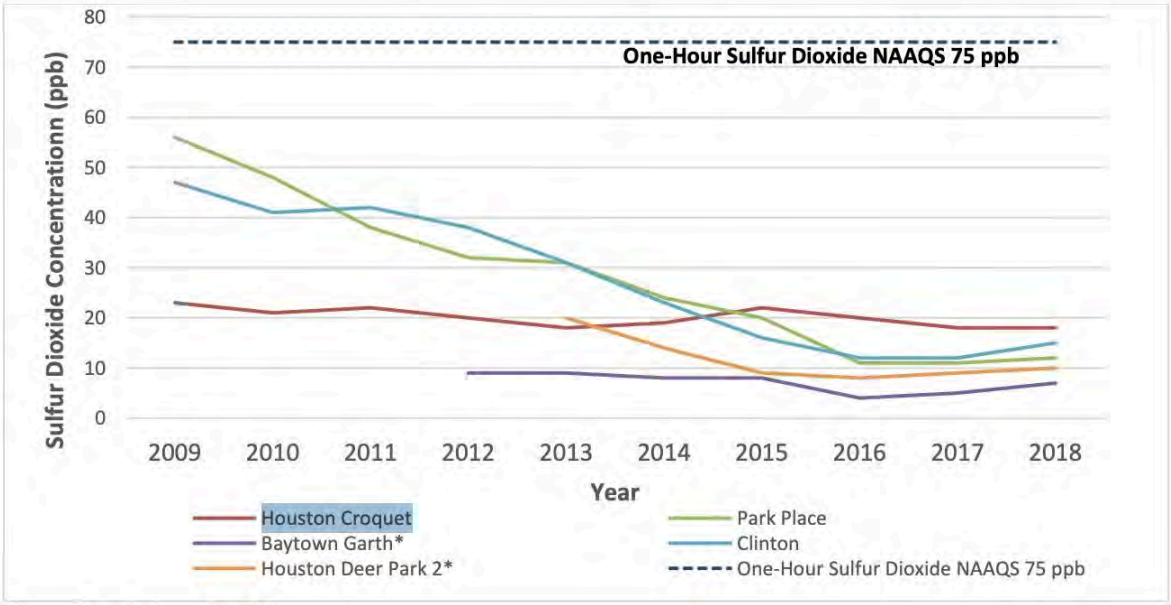
TCEQ cites the 2020 Five Year Ambient Monitoring Network Assessment as the rational for the deactivation of this monitor. Specifically, it relies on Houston area one-hour sulfur dioxide design value trends as the basis to designate the Park Place monitor as “low value”. However, according to statistical trends, the Park Place area ranks only behind the Houston Croquet and Clinton air monitors in SO_2 concentrations; the aforementioned monitors being labled as critical. Moreover, the Park Place monitor recorded greater concentrations of SO_2 than the Deer Park 2 monitor according to trends from 2009-2018.

[1] https://www.houstontx.gov/ispeakhouston/Top-25-Houston-Languages-2021.pdf

Submitted electronically:
tceqamnp@tceq.texas.gov

Additionally, the sulfur dioxide network evaluation rubric used in the 2020 and 2025 Five Year Ambient Monitoring Network Assessment ranks the Park Place monitor at "2" for source impact value and "3" for historical value. Its regulatory value is the only area in which the Park Place monitor was ranked lower than other monitors identified as critical, and that is because those monitors had been implicitly required by federal regulation, thus automatically being scored at a "4". The Park Place monitor, based on it SO_2 concentration measurements, historical value, and the community in which it is placed should not be considered of "low" assessment value.

Texas Commission on Environmental Quality
2020 Five-Year Ambient Monitoring Network Assessment



*incomplete design value data
ppb – parts per billion
NAAQS – National Ambient Air Quality Standard

Figure 18: Houston Area One-Hour Sulfur Dioxide Design Value Trends, 2009-2018

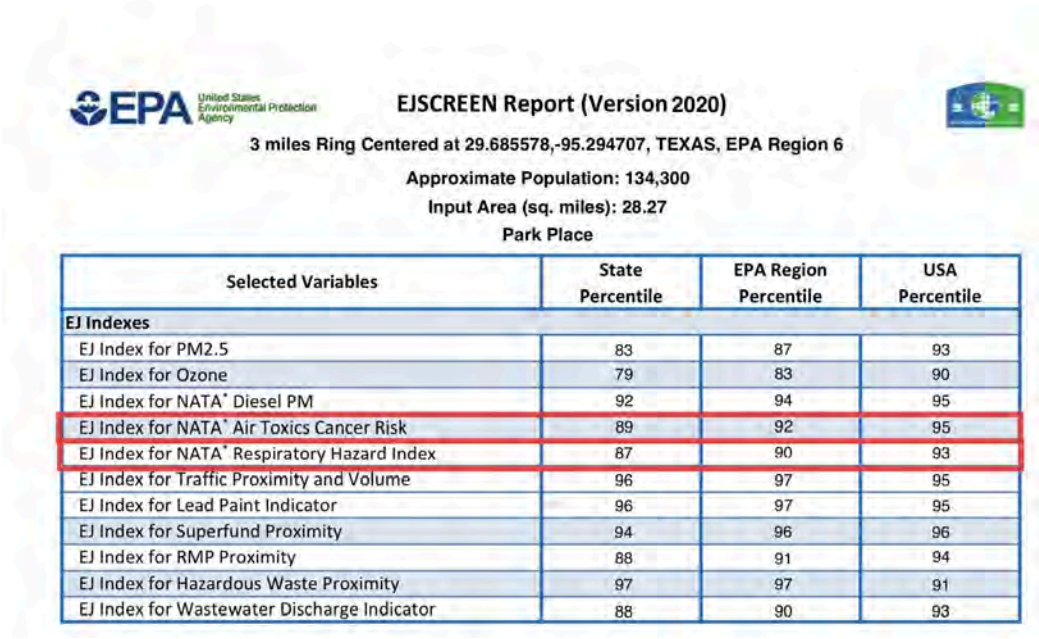
B. Park Place Community Profile

Our recommendation is for this monitor to not be deactivated and sulfur dioxide to continue to be measured. The Park Place monitor sits in an area with two schools, Goldcrest and Seguin Elementary, that serve large English Language Learner populations

Submitted electronically:
tceqamnp@tceq.texas.gov

of 64.5% and 58.1% respectively. TCEQ should consider approaching this process with increased access by holding meetings in these areas around the proposed deactivation with particular consideration given to language accessibility and transparency.

- Park Place community profile
    - Ranks in the 95th percentile for Air Toxics Cancer Risks
    - 93rd percentile in the country for Respiratory Hazard Index



EPA United States Environmental Protection Agency

EJSCREEN Report (Version 2020)

3 miles Ring Centered at 29.685578,-95.294707, TEXAS, EPA Region 6

Approximate Population: 134,300

Input Area (sq. miles): 28.27

Park Place

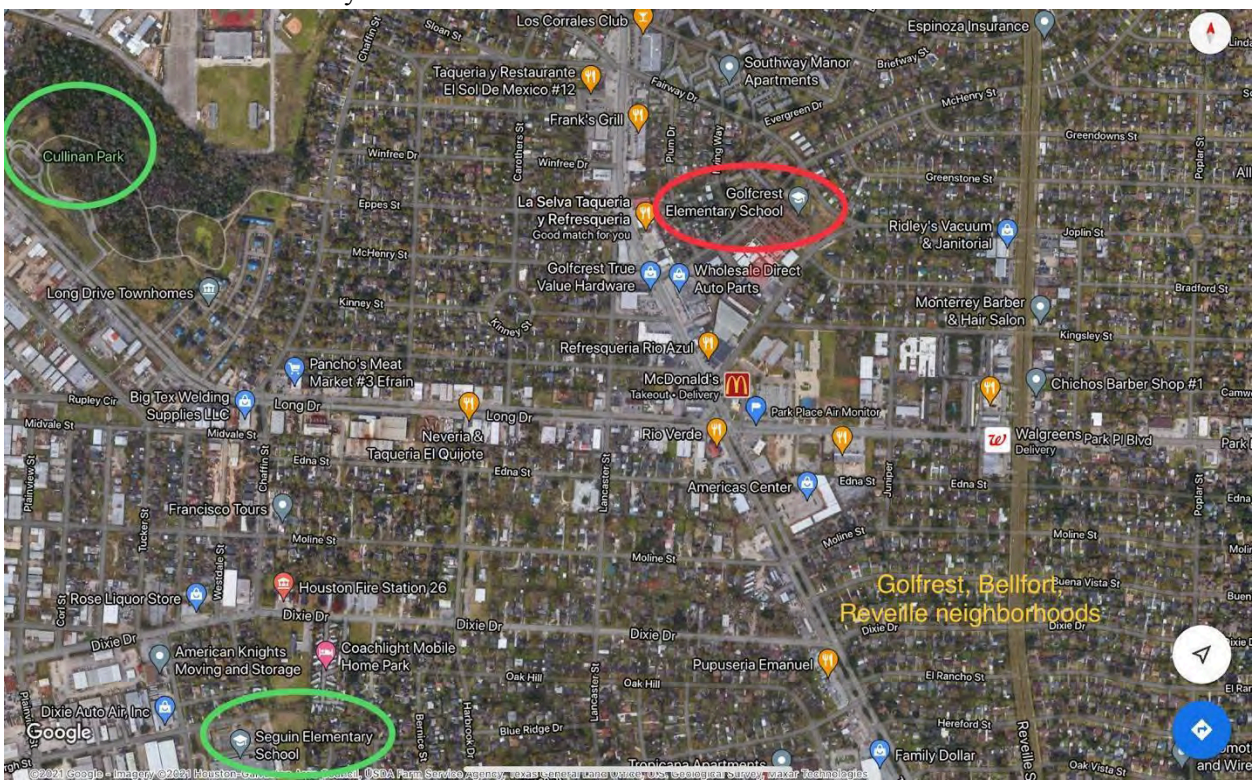
Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	83	87	93
EJ Index for Ozone	79	83	90
EJ Index for NATA* Diesel PM	92	94	95
EJ Index for NATA* Air Toxics Cancer Risk	89	92	95
EJ Index for NATA* Respiratory Hazard Index	87	90	93
EJ Index for Traffic Proximity and Volume	96	97	95
EJ Index for Lead Paint Indicator	96	97	95
EJ Index for Superfund Proximity	94	96	96
EJ Index for RMP Proximity	88	91	94
EJ Index for Hazardous Waste Proximity	97	97	91
EJ Index for Wastewater Discharge Indicator	88	90	93

- Situated in the Golfrest, Bellfort, Reveille neighborhoods
- Parks near Park Place monitor: Cullinan Park
- Schools near Park Place:
- Golfcrest Elementary [2]
    - 98.2% Economically Disadvantaged
    - 64.5% English Language Learner
    - 9.4% Students Receiving Special Education Services
    - 95.2% Hispanic Student Population
    - 3.9% African American
    - Total Students (2019-2020) - 608
- Seguin Elementary [3]

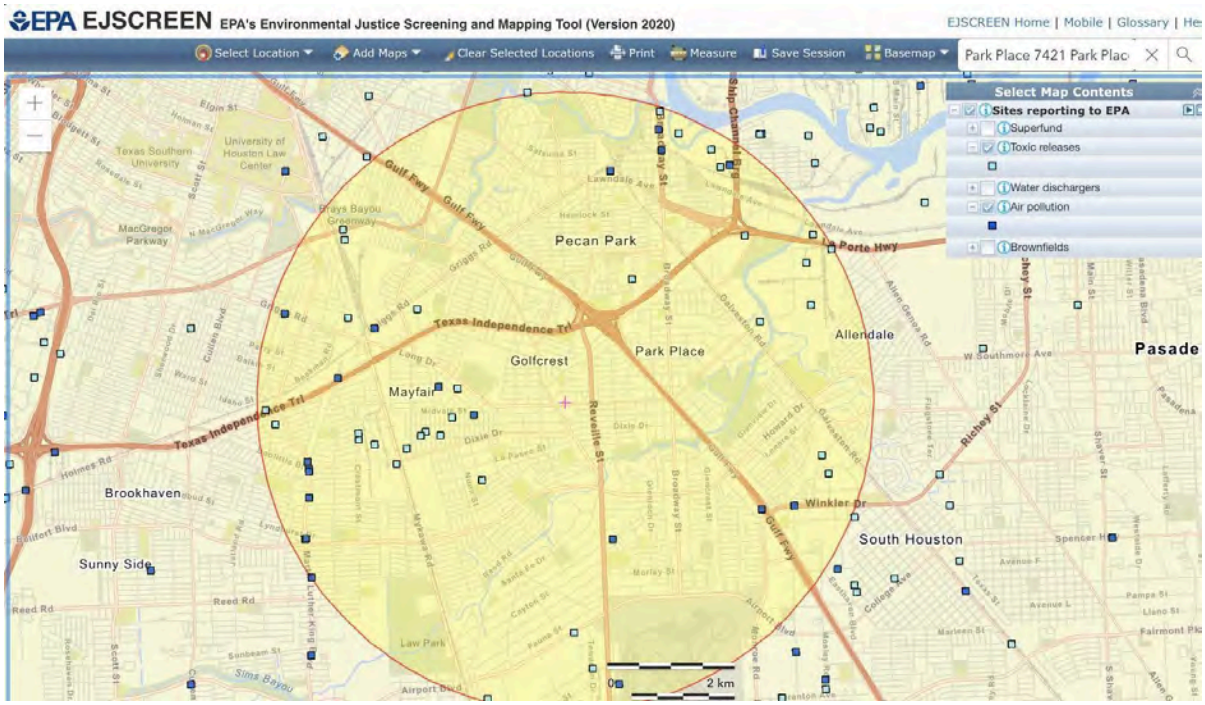
[2] https://txschools.gov/schools/101912159/profile?lang=en
[3] https://txschools.gov/schools/101912373/profile?lang=en

- 93.6% Economically Disadvantaged
- 58.1% English Language Learner
- 6.6% Students Receiving Special Education Services
- 88.8% Hispanic Student Population
- 9.7% African American
- Total Students (2019-2020) - 534

- Aston Oaks Healthcare nearby



- EJSCREEN showing toxic releases and Air Pollution within a three mile radius of Park Place air monitor



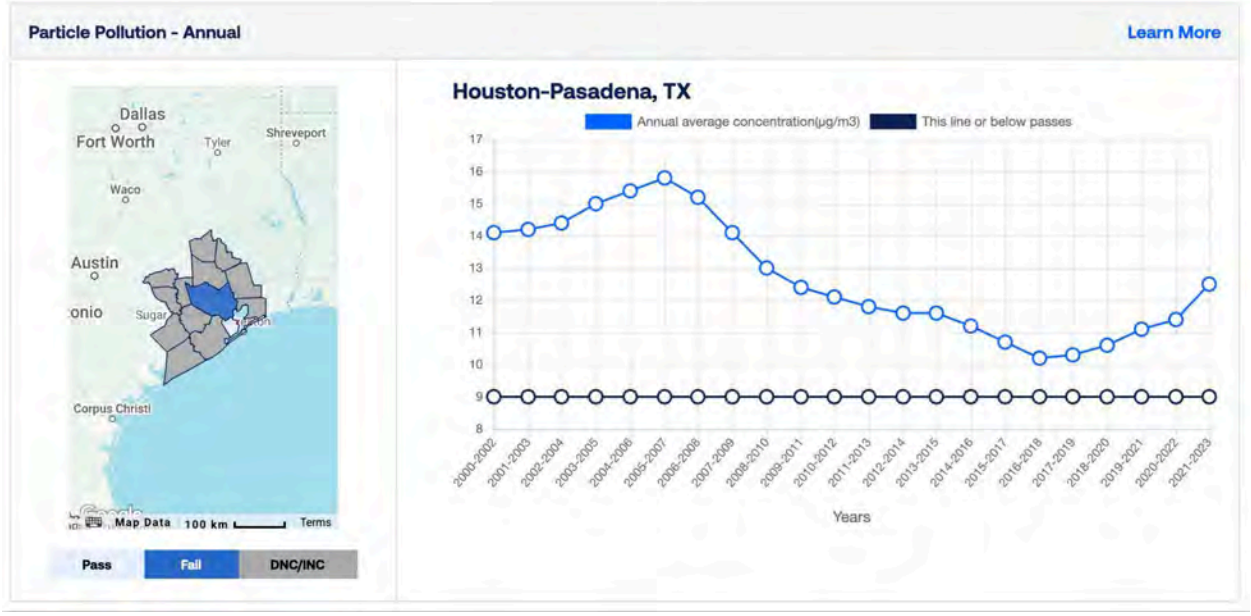
III. Designation of the Houston North Loop micro-scale PM2.5 data as not comparable to annual PM2.5 NAAQS

A. The Draft 2025 Air Network Monitor Plan suggests that the Houston North Loop monitor site not be considered comparable to the annual PM2.5 NAAQS. TCEQ argues that the monitor is near one of the highest annual average daily traffic (AADT) areas of the city. TCEQ also contends that micro-scale near-road air monitoring data is not representative of area-wide air quality in the Houston core based statistical area, and thus, should not be considered as comparable data to NAAQS PM2.5 standards. TCEQ continues by stating that:

"*The Houston North Loop site is not representative of most other interstate*

areas since that location was chosen near one of the highest AADTs, making it adjacent to a unique dominating local PM2.5 source.[4]"

This determination by TCEQ, however, is undermined by the admission that this area ranked 46th for AADT in the Houston HCBA at the time of assessment. TCEQ's contention that the readings from this monitor are so concentrated that they are unique and not representative of area-wide area quality in Houston also seems incongruent with the facts on the ground. The American Lung Association has graded Houston area air quality with an F ranking, finding Houston ranked 7th in the nation with the most high ozone days out of 228 metropolitan areas and ranks 8th worst for annual particle pollution out of 208 metropolitan areas[5].



American Lung Association 2025 State of the Air report ranking Houston 7th in the nation for high ozone days and 8th in the US for annual particulate pollution. The Houston area was ranked overall with an F for air pollution

[4]https://www.tceq.texas.gov/downloads/air-quality/air-monitoring/network/draft-2025-amnp.pdf/draft-2025-amnp.pdf

[5] https://www.lung.org/research/sota/city-rankings/msas/houston-pasadena-tx

Submitted electronically:
tceqamnp@tceq.texas.gov

TCEQ's recommendation to not consider the North Loop PM2.5 readings as comparable to NAAQS also stands in contrast to the 2020 Five Year Ambient Monitoring Network Assessment, which identifies the monitor of "critical" assessment value.

Table 22: Houston Area Particulate Matter of 2.5 Micrometers or Less Network Evaluation

Site Name	Sampler Type	Regulatory Value*	NAAQS Value Percent*	Data Trend	Historical Value	Source Impact Value	Total Monitor Value	Assess-ment Value
Baytown	$PM_{2.5}$ FEM	4	3	1	4	2	14	critical
Clinton	$PM_{2.5}$ FRM	4	4	1	4	2	15	critical
Clinton	$PM_{2.5}$ (TEOM)	1	NA	NA	4	2	7	medium
Conroe Relocated	$PM_{2.5}$ (TEOM)	1	NA	NA	4	2	7	medium
Galveston 99th Street	$PM_{2.5}$ FEM	1	2**	1	3	2	9	medium
Houston Aldine	$PM_{2.5}$ FEM	4	3**	1	4	2	14	critical
Houston Deer Park 2	$PM_{2.5}$ FEM	4	2	1	2	2	11	critical
Houston Deer Park 2	$PM_{2.5}$ FRM	4	2	1	2	2	11	critical
Houston Deer Park 2	$PM_{2.5}$ (Speciation)	4	NA	NA	4	2	10	critical
Houston Deer Park 2	$PM_{10-2.5}$	4	NA	NA	2	2	8	critical
Houston East***	$PM_{2.5}$ FEM	1	NA	NA	4	2	7	medium
Houston North Loop	$PM_{2.5}$ FRM	4	3	1	1	3	11	critical
Seabrook Friendship Park	$PM_{2.5}$ (TEOM)	1	NA	NA	4	2	7	medium

*Regulatory Value or NAAQS Value Percent of four indicates an implicit federal requirement equaling an automatic critical assessment value.
**NAAQS Value Percent based on incomplete design value due to data loss or new monitor
***Historical Value based on all years of site $PM_{2.5}$ monitoring
NAAQS – National Ambient Air Quality Standards
NA – not applicable
FEM – federal equivalent method
FRM – federal reference method
$PM_{2.5}$ – particulate matter of 2.5 micrometers or less
$PM_{10-2.5}$ – coarse particulate matter
TEOM – tapered element oscillating microbalance, non-NAAQS comparable

We thank TCEQ for the opportunity to provide comment on the Draft 2025 Network Monitoring Plan and offer our organization as a resource and community partner going forward.

Thank you,

Shiv Srivastava, Policy Director

From:	Lauren Godshall
To:	tceqamnp
Cc:	Jen Powis; Joshua Smith
Subject:	Comments to TCEQ re draft 2025 Annual Monitoring Network Plan
Date:	Wednesday, May 14, 2025 4:24:49 PM
Attachments:	2025.05.14 Air Quality Monitoring Plan Comments and Exhibits.pdf

Good afternoon,

Attached please find comments with exhibits regarding the draft 2025 Annual Monitoring Network Plan, submitted on behalf of Sierra Club, Public Citizen, Air Alliance Houston, Midlothian Breathe, Coalition for Responsible Environmental Aggregate Mining (CREAM), Environmental Integrity Project, Rethink35, Environmental Defense Fund, Coastal Watch Association – Ingleside on the Bay, and Earthworks. We appreciate the opportunity to provide these comments. Please let me know if you have any questions or would like to discuss the attached.

Best,
Lauren Godshall

Lauren E. Godshall
Senior Attorney
Gulf Regional Office
lgodshall@earthjustice.org
+1 773-828-0836

EARTHJUSTICE

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EARTHJUSTICE

May 14, 2025

Via email: tceqamnp@tceq.texas.gov
Texas Commission on Environmental Quality
P.O. Box 13087
Attention: Holly Landuyt, MC-165
Austin, Texas 78711-3087

Re: Public Hearing Request and Comments on the 2025 Annual Monitoring Network Plan

Dear Ms. Landuyt:

On behalf of the undersigned Commenters, who represent members and supporters that live, work and recreate in Texas, we respectfully submit these comments regarding the Texas Commission on Environmental Quality ("TCEQ") proposed 2025 Annual Monitoring Network Plan ("Plan").

Because the proposed 2025 Annual Monitoring Network Plan is a revision to Texas's State Implementation Plan, it should be subject to notice and comment rulemaking. Commenters request that Texas Commission on Environmental Quality ("TCEQ") allow the public an additional opportunity to provide comments on the proposed plan and suggest new monitoring sites based on needs across the state through public hearings. Commenters further request that these comments be considered and incorporated by TCEQ into the 2025 Annual Monitoring Network Plan to ensure that air quality is effectively monitored for dangerous pollutants. Commenters urge TCEQ not simply to look at federal standards, which provide a floor of minimum criteria, but also pressing public health threats to assess the air quality monitoring needs of all Texans.

Commentors also adopt and incorporate by reference comments submitted on behalf of the groups in Port Arthur that appropriately seek additional monitors, as well as any other comments received from groups and individuals seeking better air quality monitoring throughout the state.

Under any scenario, broad deployment of zero- and near-zero emission technologies in the Houston and Dallas air basins will be needed in the 2025 to 2035 timeframe to attain current national health-based air quality standards as required by federal law. While the Annual Monitoring Network Plan cannot by itself implement such transitions, TCEQ must utilize the Plan for data that will allow it to meet these required public health standards. In order to do that, TCEQ should utilize this opportunity to address particular pollutant loads from transportation corridors, as well as siting federal regulatory monitors at neighborhood or urban scales at known hot spots and dense areas as requested below.

Commentors that have signed on reflect a broad Texas-wide coalition of entities uniquely concerned about the negative public health effects from exposure to air pollution when the state of Texas refuses to utilize its regulatory power to reduce overall emissions. This is apparent from both the Governor's letter seeking "serious" nonattainment for ozone, providing industry a license to pollute more, as well as the Governor's letter declaring all counties in attainment for the $PM_{2.5}$ NAAQS standards despite monitoring evidence to the contrary.[1]

For years, TCEQ has failed to achieve air quality consistent with public health standards for most of the major metropolitan areas across the state. This failure is due in part to the inability of this air quality monitoring plan to identify specifically sources that should be required to add pollution control equipment in order to protect the highest degree possible the airshed of the surrounding community. According to the American Lung Association's "State of the Air" report, released April 2025, the Houston-Pasadena, Texas is the seventh worst city in the U.S. for ozone and the eighth worst for year-round particle pollution. The Dallas, San Antonio and El Paso areas all fall within the top twenty worst cities for ozone and the Brownville area is 16th for year-round particle pollution.[2] Air quality across the state is dangerous for Texans, and conditions are not improving.

Under the Network Design Criteria for ambient air quality monitoring, TCEQ is required to design a plan to meet the following three criteria:

1. Provide air pollution data to the general public in a timely way
2. Support compliance with the ambient air quality standards and emissions strategy development
3. Support for air pollution research studies.[3]

Beyond these general goals, however, TCEQ is required to craft a monitoring program based on a variety of factors such as population, air pollution sources, and an *intent* to achieve compliance with the National Ambient Air Quality Standards (NAAQS) for a variety of pollutants. TCEQ must go beyond the bare minimum requirements in order to accurately assess air quality throughout the state and to ensure that sister agencies, such as the Texas Department of Transportation (TXDOT) or local Metropolitan Planning Organizations (like Houston-Galveston Area Council) can use reliable data in planning for future growth scenarios.

In 2036, Texas will celebrate its 200th birthday. In order to continue the growth trajectory and the "Texas miracle," policymakers recognize the need to better protect air quality, ensuring better public health and the opportunity for robust investment. In order to plan for the years ahead, we

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[1] *See* Exhibit A, Oct. 12, 2023 Letter to Michael Regan from Gov. Abbott re: "Voluntary Reclassification of Texas 2015 Ozone Standard Moderate Nonattainment Areas;" Exhibit B, Feb. 6, 2025 Letter to Lee Zeldin from Gov. Abbott re "State Designations for the 2024 Revised Primary Annual Fine Particulate Matter National Ambient Air Quality Standard (NAAQS or Standard)."

[2] American Lung Association, "State of the Air 2025 Report," available at https://www.lung.org/getmedia/5d8035e5-4e86-4205-b408-865550860783/State-of-the-Air-2025.pdf; see also American Lung Association, "Most Polluted Cities 2025," available at https://www.lung.org/research/sota/city-rankings/most-polluted-cities

[3] Title 40 C.F.R. part 58 appendix D1.1(a-c).

urge TCEQ to amend the proposed AQMP during this year's assessment to address the following concerns:

I. Clean Air Act Background

A. Texas must maintain an air quality monitoring network.

The Clean Air Act ("CAA" or "Act") requires Texas to establish and maintain an air quality monitoring network. This monitoring plan must be included in the applicable State Implementation Plan ("SIP"). 42 U.S.C. § 7410(a)(2)(B). Texas's network must meet three criteria: "(a) Provide air pollution data to the general public in a timely manner … (b) Support compliance with ambient air quality standards and emissions strategy development … (c) Support for air pollution research studies…" 40 C.F.R. Part 58 App. D ¶ 1.1.

Crucially, monitoring data are used to determine compliance with National Ambient Air Quality Standards ("NAAQS"). 40 C.F.R. Part 58 App. A ¶ 1.1(a). The U.S. Environmental Protection Agency ("EPA") has established NAAQS for six criteria pollutants: ozone (O_3), particulate matter ($PM_{2.5}$ and PM_{10}), carbon monoxide (CO), lead (Pb), sulfur dioxide (SO_2) and nitrogen dioxide (NO_2). To determine whether an area meets a NAAQS, EPA compares monitoring data to the NAAQS. 40 C.F.R. Part 58 App. D ¶ 1.1(b). Areas that fail to meet a NAAQS are subject to more stringent public health protections under the Act. For areas that fail to attain the NAAQS, for example, major sources of pollution must install and operate reasonably available control technology ("RACT"). 42 U.S.C. § 7502(c)(1). The Act further requires new major sources to conduct prevention of significant deterioration ("PSD") permits and requires polluters will have to reduce their ozone-forming emissions or secure offsets to more than offset the new pollution they will emit. 42 U.S.C. §§ 7503, 7511a.

Each year, Texas must demonstrate compliance with federal minimum monitoring requirements. 40 C.F.R. § 58.10(a)(1), (b). The state's monitoring network plan must include detailed information about the network's design, including the exact location of each monitor in the network, how each monitor operates, and proposed changes to individual monitors. 40 C.F.R. § 58.10(b)(1)-(5), Part 58 App. D. Plans that propose new monitoring sites or other modifications, like the TCEQ plan here, must be approved or denied by the EPA Regional Administrator within 120 days of submission. 40 C.F.R. §§ 58.10(a), (e), 58.11(c), 58.14.

Federal regulations prescribe only minimum design criteria for State and Local Area Monitoring Stations ("SLAMS") networks to monitor for criteria pollutants, leaving room for states to establish enhanced air monitoring as areas in their states may require. *See* 40 C.F.R. § 58.1; *see also* 40 C.F.R. Part 58 App. D ¶¶ 4.1-4.8.1 (establishing "Pollutant-Specific Design Criteria" for monitoring networks). SLAMS networks are a collection of devices in various locations that sample the ambient air (or outdoor air) to detect the level of a particular pollutant.[4]

The design of a monitoring network—the number of monitors, their specific placement, how frequently they take samples—is critical to getting accurate and representative results. *See*

[4] A map of the Texas air monitoring network is available here: https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=ab6f85198bda483a997a6956a8486539.

generally 40 C.F.R. Part 58 App. D (establishing mandatory "Network Design Criteria for Ambient Air Quality Monitoring"). Because different pollutants and standards are especially sensitive to particular design criteria, such as the choice of monitor location, EPA provides monitoring network design guidance documents.[5] In part, the purpose of the network is "to provide support to the [SIP], national air quality assessments, and *policy decisions*." 40 C.F.R. § 58.2(a)(5) (emphasis added). Thus, network design and operating procedures are critical to assessing compliance with the public health goals of the Clean Air Act and for state and regional air quality planning efforts.

Apart from Clean Air Act compliance, there are other uses for air quality data that call on Texas to enhance its monitoring network for the protection of public health. Federal regulations envision members of the public making use of publicly available air quality data—the regulations themselves require data dissemination in urban centers, 40 C.F.R. § 58.50, and EPA maintains daily reports via AirNow, available at https://airnow.gov/.[6] Because air quality data from Texas's network is publicly available near real-time,[7] and is used to assess health risks, it is imperative that the data is accurate and complete.

B. The public process afforded to TCEQ's proposed Monitoring Network Plan violates the Clean Air Act.

TCEQ's proposed Monitoring Network Plan ("Plan") is a SIP revision that should be subject to notice and comment rulemaking. The CAA and its implementing regulations make it clear that a State's monitoring plan is part of its SIP.[8] Because an update to the monitoring plan is a SIP

---

[5] *See, e.g.*, EPA, Guidance for Network Design and Optimum Site Exposure for $PM_{2.5}$ and PM_{10} at 2-7 (1997) ("A PM sampler location, especially its proximity to local sources, can play a large role in its ability to assess spatial variability and source contributions") (available at: https://www3.epa.gov/ttn/amtic/files/ambient/pm25/network/r-99-022.pdf); *see also* EPA, Guidance for Using Continuous Monitors in $PM_{2.5}$ Monitoring Networks at 6-1 to 6-2 (1998) (discussing the difference between Community Representative or "CORE" $PM_{2.5}$ monitors located where people live, work and play in comparison to hot spot monitor sites "located near an emitter with a microscale or middle-scale zone of influence" and Special Purpose Monitors ("SPMs") "used to understand the nature and causes of excessive concentrations measured at [CORE] or hot spot compliance monitoring sites.") (available at: https://www3.epa.gov/ttnamti1/files/ambient/pm25/r-98-012.pdf); *see also* EPA, Photochemical Assessment Monitoring Stations Implementation Manual at 2-6 (1994) ("Site selection is one of the most important tasks associated with monitoring network design and must result in the most representative location to monitor the air quality conditions being assessed.") (available at: https://www3.epa.gov/ttn/amtic/files/ambient/pams/b93-051a.pdf).

[6] AirNow data is also shared with and broadcast by major media outlets that disseminate air quality forecasts to individuals. *See* https://www.airnow.gov/index.cfm?action=ani.airnowUS (AirNow "[d]istributes air quality forecasts and data with The Weather Channel, USA Today, CNN, weather service providers, NOAA National Weather Service").

[7] TCEQ, AutoGC Data by Day by Site (all parameters), available at: https://www.tceq.texas.gov/cgi-bin/compliance/monops/agc_daily_summary.pl; *see also* TCEQ, Today's Texas Air Quality Forecast, https://www.tceq.texas.gov/airquality/monops/forecast_today.html

[8] *See* 42 U.S.C. § 7410(A)(2)(b) (each SIP must "provide for establishment and operation of . . . systems . . . necessary to . . . monitor, compile, and analyze data on ambient air quality"); 40 C.F.R. § 51.17(b)(1)-(6) (each SIP "shall include a description of the . . . proposed air quality surveillance system, which shall set forth," among other things: the exact location of the monitors; how each monitor operates; and the timetable for installing any equipment needed to complete the monitoring system").

revision, federal law requires TCEQ to provide notice and undertake a public hearing before promulgating the plan.[9]

On its webpage, TCEQ solicits public comment for the proposed Plan but it also appears that TCEQ did not and will not hold any public meetings or hearings to explain this Plan to the public – particularly the changes it is proposing in this year's plan. Many low-income communities and communities of color throughout Texas suffer from poor air quality and would benefit from greater air quality monitoring in their area. Hearings in English and Spanish would help all Texans understand whether and how extensively the air around them is monitored. However, due to TCEQ's failure to conduct public outreach and hold public meetings or hearings regarding its proposed Plan—again, including Spanish language outreach and hearings—Texans in these communities may be wholly unaware of Texas' air quality monitoring network or that it changes every year.

Commenters request that TCEQ hold a public hearing, with Spanish interpretation services available, in Houston or El Paso to afford the public an opportunity to ask questions about the Plan of TCEQ staff responsible for its creation and implementation.

II. Individual Communities Should Receive Adequate Monitoring in order to Comply with the Minimum Requirements for this Plan.

A. Ellis County and Midlothian, Texas

Midlothian Breathe is a group of local residents in Midlothian, Texas, the proclaimed "cement capital" of Texas. Since April 2022, the Midlothian Old Fort Road monitor has been off-line and though slated to be relocated and activated by the end of August 2024, was never activated due to on-going problems with siting and city ordinances, as TCEQ notes in the Plan:[10]

Midlothian OFW	Midlothian North Ward Road	891 North Ward Road, Midlothian, Texas (pending permit approval by the City of Midlothian Development Review Committee)	Relocation approximately 0.7 mile southwest on current property due to property owner revocation of site access (new property owners), approved by the EPA in a letter dated November 17, 2023.Site construction permit denied, site logistical updates to meet city Development Review Committee requirements and local ordinances under continued negotiation with City of Midlothian.	Site temporarily deactivated April 22, 2022, relocation expected by December 2026

Since the (idled) monitor provides the only actionable data used to safeguard public health, Midlothian Breathe has been very concerned about this long, protracted gap in air quality information. The community group has made continual efforts to raise this issue with local

[9] *See Hall v. EPA*, 273 F.3d 1146, 1162 (9th Cir. 2001) ("The Act requires that SIP revisions 'be adopted by the State after reasonable notice and public hearing.'") (quoting 42 U.S.C. § 7410(l)).
[10] TCEQ, Annual Network Monitoring Plan, 2025, p. 43 ("Air Monitoring Site Relocations").

governments and with the TCEQ, to no avail. TCEQ's gap of data for Midlothian will stretch into an unacceptable period of 4.6 years.

The draft air quality management plan through this air quality monitoring plan could implement a back-up location in order to ensure that a monitor is placed as quickly as possible. Instead, however, the plan continues to stall, pushing off any new data collection for another year and a half, at least. Though traditionally TCEQ does not work with local nonprofits, or individual citizens, if TCEQ began working with those most interested in ensuring a reduction in air pollution in their community, TCEQ may more readily identify viable locations, including back-up sites, by gaining community buy-in to the process at the outset.

Per 40 C.F.R. Part 58 Appendix D, TCEQ should also amend this monitoring plan to include a new additional monitor north/northwest of Holcim, Texas in order to better capture particulate matter emissions. This could be achieved in a cost-effective way through moving the former Midlothian FRM monitor to the north/northwest of Holcim, which means data could be collected downwind of the area's most significant particulate matter (PM) emitter. If a monitor is placed there, it would better capture regional issues and capture data that would be missed by the proposed new monitor near Martin Marietta and Gerdau. Because this area has three cement plants and a steel mill, with a growing population that includes the Dallas-Ft. Worth-Arlington CSBA of 7.9 million residents, another monitor is justified. More than just PM should be monitored; the Midlothian area is likely to be in nonattainment of the ozone NAAQS and, in the 10-county North Texas region, Ellis County accounts for over 40% of the point source emissions for Nox, according to TCEQ 2022 emissions data.

Midlothian area residents have fallen into a data gap for years as we await new monitoring – but this new monitoring must be adequate to be representative of overall Midlothian air quality. And members of Midlothian Breathe are ready to assist with garnering community input and support in finding monitoring sites.

B. Williamson County

Coalition for Responsible Environmental Aggregate Mining (CREAM) is a non-profit organization which seeks to minimize the impacts of Aggregate Production Operations (APOs) and Concrete Batch Plants (CBPs) on local communities. CREAM has over 250 members, many of whom live in or are affected by fugitive dust and fine particulate matter from APOs and CBPs in Williamson County. TCEQ's Draft Plan does not include any $PM_{2.5}$ monitoring systems in Williamson County despite there being 32 active APOs and 45 CBPs within the county boundaries.[11] These two industries are extremely dusty and generate substantial quantities of fugitive dust which travels off-site and negatively impacts nearby residents.

[11] EPA Enforcement and Compliance History Online (ECHO) website queried for Standard Industrial Code 1422, Crushed and Broken Limestone on May 13, 2025 at: https://echo.epa.gov/facilities/facility-search/results; EPA's Website queried for Wiliamson County and SIC code 3273 for Ready-Mixed Concrete on May 13, 2025, at: https://echo.epa.gov/facilities/facility-search/results

TCEQ should add at least one $PM_{2.5}$ monitor to Williamson County in order to more clearly determine the county's attainment status according to the NAAQS. At present, the nearest regulatory $PM_{2.5}$ monitors operated by TCEQ are located in Travis and Bell Counties. These are too far away to provide any useful or relevant data for Williamson County.

Sun City is a Williamson County retirement community located in Georgetown, Texas with 9,300 homes and 18,500 senior residents. Poor air quality and fine dust from nearby APOs and CBPs are a concern because of the adverse impact to the health of senior citizens who are more likely to have heart disease and lung disease. This is a particularly sensitive population that needs accurate information about air quality.

CREAM has similar concerns as Midlothian Breathe about monitors taken out of service and/or ignored data. TCEQ placed a temporary monitor (No. 1094) for compliance purposes near several quarries in Jarrell in Williamson County. It was removed in June 2024 after operating for 3.5 years.[12] In its 2024 air monitoring plan, TCEQ gave no indication that the monitor would be shut down and instead emphasized its importance to the area: "The TCEQ would like to further clarify that the Jarrell FM487 monitor was not deployed as a result of an enforcement action but was sited on a temporary basis to assess local air quality impacts of nearby particulate matter sources."[13] However, by June of 2024 the Jarrell monitor was deactivated and no new PM monitoring in the area replaced it. Williamson County is categorized as "unclassified" under the $PM_{2.5}$ NAAQS due to a lack of regulatory monitoring data, despite having a dense collection of particulate matter-intense industry throughout the county.

C. El Paso

Similarly, since 2021, TCEQ has not been able to meet the minimum requirements per 40 CFR Part 58 and Appendices, including Section 58.10 and Section 58.14 for monitoring nitric oxide (NO), nitrogen dioxide (NO_2), nitrogen oxides (NO_X), ozone (O_3), particulate matter 2.5 ($PM_{2.5}$), and meteorology at the University of Texas El Paso (UTEP) site.[14]

El Paso UTEP	Pending site selection	Pending site selection	Relocation pending due to property owner revocation of usage agreement (building expansion over site location)	Site temporarily deactivated November 2021, relocation expected by December 2026

That site has not been operational since November 2021 and each year, TCEQ has opined that the site would be relocated, and yet, nearly 5 years later, the site is still not operational. This is

[12] "This monitoring site was brought onto the TCEQ real-time data collection system on **Thursday, July 23, 2020** and was deactivated on **Wednesday, June 26, 2024**." TCEQ, "Jarrell FM 487 C1094 Data by Site by Date (all parameters)," available at https://www.tceq.texas.gov/cgi-bin/compliance/monops/daily_summary.pl?cams=1094#.
[13] TCEQ, Annual Network Monitoring Plan, 2024, p. 162, available at https://www.tceq.texas.gov/downloads/air-quality/air-monitoring/network/historical/2024-amnp.pdf
[14] TCEQ, Annual Network Monitoring Plan, 2025, p. 43 ("Air Monitoring Site Relocations").

particularly problematic in the context of particulate matter because the lack of $PM_{2.5}$ data for El Paso is a barrier to understanding whether the area is in compliance with the new $PM_{2.5}$ NAAQS.

While many of TCEQ's air monitors require third-party agreements to site the monitors, TCEQ could meet the needs of protecting this community through the use of temporary monitors or even a mobile monitoring unit more permanently parked in order to continue this data collection. Commenters recognize that Texas historically underfunds TCEQ for air monitoring work, and yet, the community of El Paso, like the community in Midlothian, has sought this monitor for years to no avail. TCEQ should consider crafting a prioritization flow chart to better allocate its funds to communities most impacted by air quality concerns to provide for greater transparency and more accountability to the public with respect to the budget for this plan and should partner with local communities to get buy-in for potential site locations.

D. Permian Basin

In 2021, EPA stated that the Odessa Gonzalez $PM_{2.5}$ monitor was required in order for the state annual plan to be approved in its entirety.[15] That monitor is still inactive, again, 5 years later, and now EPA has recognized the ongoing concerns related to ozone in that region. Yet, TCEQ's monitoring plan fails to apportion any funding for air quality monitoring in the Permian basin, a world-known oil and gas field where countless flares, compressor stations, and other oil and gas equipment contribute to local, state-wide and indeed, regional cross-state pollution concerns.

This concern was again expressed in May 2023, where EPA expressly stated to TCEQ that it "should deploy one or more ozone monitors in the Permian Basin."[16] Other groups are submitting contemporaneous comments focused on the Permian Basin, which Commenters adopt and incorporate herein.

E. Fort Bend County

Fort Bend County, one of the fastest-growing and most diverse counties in Texas, is also home to the largest coal-fired power plant in the state. The W.A. Parish Electric Generation Station accounts for 66% of the toxic release emissions in the county,[17] and yet Fort Bend has no regulatory air monitoring.

Across the state, over half of the counties with coal plants already have monitors provided by TCEQ or EPA. The Martin Lake and Oak Grove coal plants have scrubbers to reduce SO_2 pollution but also have SO_2 monitoring. The JK Spruce coal plant has baghouses to reduce $PM_{2.5}$

[15] EPA to TCEQ, Oct. 20, 2021, providing EPA's response to proposed draft monitoring plan; available at https://www.tceq.texas.gov/downloads/air-quality/air-monitoring/network/historical/epa-response-to-tceq-2021-amnp.pdf

[16] EPA to TCEQ, Mar. 3, 2023, providing EPA's response to proposed draft monitoring plan; available at https://www.tceq.texas.gov/downloads/air-quality/air-monitoring/network/historical/epa-response-to-2022-amnp.pdf

[17] EPA, TRI Facility Report: W.A. Parish Electric Generating Station, accessed May 13, 2025, at https://enviro.epa.gov/facts/tri/ef-facilities/#/Facility/77481WPRSHYUJON

pollution but also has $PM_{2.5}$ monitoring. In contrast, the W.A. Parish is both missing three scrubbers on the four coal stacks and lacks SO_2 monitoring.

Fort Bend has had TCEQ monitors over the years, including a one-year Ozone monitor in Rosenberg (deactivated in 1990) and one monitor for Carbon Monoxide and Ozone in Sugar Land (deactivated in 2018). As a result, any data relevant to Fort Bend County has required modeling or extrapolated data from bordering counties. Not only does the county need monitoring, but it needs monitoring for emissions that are relevant and present.

i. Sulfur Dioxide

According to the 2021 National Emissions Inventory, facilities in Fort Bend County emitted nearly 34,000 tons of sulfur dioxide (SO_2).[18] Air in the area is completely uncharacterized as there are no regulatory monitors in Fort Bend even though the population of Fort Bend County is nearly 1 million.[19] Short-term exposures to SO_2 is harmful to the human respiratory system and people with asthma, particularly children, are sensitive to these effects of SO_2. Additionally, high concentrations of SO_2 generally also lead to the formation of other sulfur oxides (SO_x). SO_x can react with other compounds in the atmosphere that can contribute to PM pollution.[20]

W.A. Parish is the largest SO_2 point source in the greater Houston region and exacerbates pollution in said region. The plant's owner, NRG Energy, only controls SO_2 emissions on one of the four coal units with one scrubber. The permit to operate W.A. Parish is based on modeling only with no regulatory monitors in the vicinity, or by utilizing self-reported data.

Although TCEQ may comply with the number of SO_2 monitors for the Houston-Pasadena-the Woodlands area, all SO_2 monitors are located in Harris County, with the closest SO_2 monitor to W.A. Parish 14 miles away. SO_2 monitors were loaned by the New Hampshire Department of Environmental Services and placed at the University of Houston – Sugar Land branch in May 2019, where the previous CO and ozone monitor was located. During those monitor readings, it was confirmed W.A. Parish is the most dominant SO_2 source in the region and requires closer monitoring.

While the 2025 draft Plan shows a decrease in SO_2 related to the W.A. Parish Electric Generating plant in Fort Bend from 2022 to 2023 (Table 1, page 103), this coal power plant facility was recently granted a MATS (Mercury and Air Toxics Standards) Clean Air Act exemption for at least the next two years. This will certainly result in increased air emissions that can have a negative impact on the health of nearby residents and may have larger detrimental regional air quality implications. Given that there is no air monitoring in Fort Bend currently, it is difficult to

[18] EPA, "2021 Air Emissions Data," Jan. 15, 2025, available at https://www.epa.gov/air-emissions-inventories/2021-air-emissions-data

[19] U.S. Census Bureau,, "QuickFacts Fort Bend County, Texas," accessed May 15, 2025, available at https://www.census.gov/quickfacts/fact/table/fortbendcountytexas/PST045224

[20] EPA, "Sulfur Dioxide Basics," Jan. 10, 2025, available at https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#effects

fully understand the health impacts this will have in the county or in the Houston Pasadena MSA.

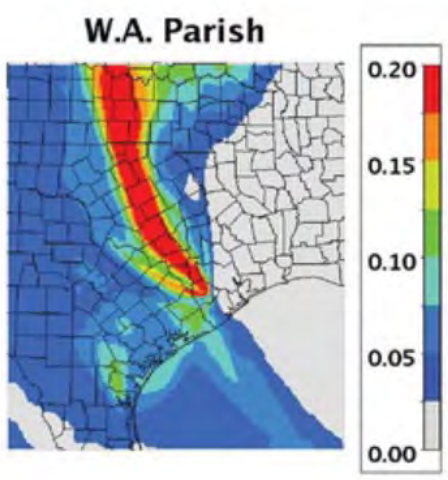
TCEQ should move the SO_2 monitor that is proposed to be inactivated at Park Place to Fort Bend County. Moving the SO_2 monitor to Fort Bend would provide an instrument/measurable data to ensure public health protections, compliance with federal criteria pollution standards and a way to determine coal power plant protections such as scrubbers are effectively working.

ii. Ozone

Fort Bend County is also in non-attainment for ozone,[21] and has been for several years running, indicating there needs to be tracking, measuring, and improvement made to reach attainment status. Fort Bend County cannot proactively address ozone pollution using modeling data, thus requiring ozone monitoring directly in the county.

iii. Particulate Matter 2.5

Plume tracking from W.A. Parish indicates $PM_{2.5}$ travels in a northwestern arc, reaching impacting most of western Harris Couty:[22]



The $PM_{2.5}$ monitor located 17 miles north of the facility is just outside the concentrated plume, missing critical data.

Based on TCEQ's Point Source Emissions Inventory, W.A. Parish is the second worst $PM_{2.5}$ polluter in the state. Within Fort Bend and Harris counties, the second leading cause of death is cancer, with lung cancer being the most common. $PM_{2.5}$ is directly linked to the development of

[21] EPA, "Texas Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants," April 30, 2025, https://www3.epa.gov/airquality/greenbook/anayo_tx.html (Fort Bend County in nonattainment under both the 2008 and 2015 ozone NAAQS).

[22] Exhibit C, Strasert, B., Teh, S. C., & Cohan, D. S. (2019). Air quality and health benefits from potential coal power plant closures in Texas. *Journal of the Air & Waste Management Association*, *69*(3), 333–350. https://doi.org/10.1080/10962247.2018.1537984; https://www.tandfonline.com/doi/full/10.1080/10962247.2018.1537984#abstract

lung cancer, along with development of asthma and decreased lung function in children. In 2022, W.A. Parish released 66% of the total amount of $PM_{2.5}$ released by Harris County's 47 largest industrial facilities. There is a necessity for monitoring $PM_{2.5}$ pollution in Fort Bend County.

iv. Carbon Monoxide

In December 2024, W.A. Parish was in violation of its Federal Operating Permit with a failure to comply with permitted Carbon Monoxide concentrations. The public, however, was not notified of this violation and was given no opportunity to protect themselves from this exposure. Residents deserve regulated and independent air monitoring rather than relying on W.A. Parish to self-report violations long after the fact.

Regulated air monitoring of Sulfur Dioxide, Ozone, Particulate Matter 2.5, and Carbon Monoxide are overdue and needed to monitor attainment status, inform the public, and hold polluters accountable for their emissions to remain in line with regulatory thresholds.

F. Sunnyside – Houston

Commentors recommend deploying a new continuous multipollutant regulatory site to monitor $PM_{2.5}$, NO_2 and speciated volatile organic compounds (VOCs) in the Sunnyside neighborhood of Houston (zip code 77021, 77033, 77045, 77051, 77054) to ensure air quality meets standards to protect public health and to monitor how well industrial sources are controlling their pollutant emissions.

According to EPA, parts of Sunnyside are in the 90th percentile or above for lower life expectancy with some of the highest rates of heart disease and asthma compared to the rest of the country. Four out of five of Sunnyside's zip codes were identified by the City of Houston Public Health department to be asthma high burden zip codes defined as "high rates of ambulance utilization to treat asthma attacks" and roughly 10-11% of adults have been diagnosed with asthma by a doctor, compared to 5.8% of adults in Harris County as a whole.[23]

Harris County has the highest concentration of facilities emitting urban air toxics in the nation and residents benefit from speciated VOC data to understand levels of hazardous air pollutants. Within the borders of Sunnyside, there is a concentration of metal recycling facilities, concrete batch/crushing facilities, and high-traffic roads. The EPA regulates three brownfields, three facilities for air pollution and twelve facilities for hazardous waste.

The nearest $PM_{2.5}$ monitor is about 10 miles away at Bayland Park and the closest instrument measuring VOCs is about 8 miles away at Cesar Chavez location. Given the industrial activity and transportation sources of air pollution from nearby 610 and 288 freeways, regional air monitoring for criteria and hazardous air pollutants in this blind spot of the Houston region are critically needed. Indeed, the community air monitoring network of low-cost Clarity S-node sensors operated by Sunnyside Community Redevelopment Organization shows that on average

[23] Houston State of Health; Adults with Current Asthma, Harris County (Accessed May 14, 2025), https://www.houstonstateofhealth.com/indicators/index/view?indicatorId=79&localeId=2675

35% of monthly $PM_{2.5}$ measurements in their network are at or above 9 $\mu g/m^3$ over the past 12 months. Adding a $PM_{2.5}$ and or VOC monitor in Sunnyside would be a much-needed investment in the health of residents of this part of the Houston region.

G. Coastal Bend

Texas Coastal Bend communities north of Corpus Christi Bay are in urgent need of air monitoring data that characterizes current air quality to ensure public health protection. There has been massive industrial development and expansion in the relevant geographic area that not only includes Ingleside on the Bay residents, but also the communities of Taft, Gregory, Portland, Ingleside, and Arkansas Pass. The development of TCEQ-permitted industrial sites in the Coastal Bend area since 2015 includes, but is not limited to: Gibson Energy - South Texas Gateway Terminal, Cheniere - Corpus Christi LNG Facility, Enbridge - Ingleside Energy Center, Flint Hills Resources - Ingleside LLC Marine Terminal, Gulf Coast Growth Ventures-an ExxonMobil and SABIC joint venture, Midstream Texas Operating LLC Corporation, TPCO, Kiewitt, Plains Pipeline LP - Taft Station, voestalpine Texas LLC, in addition to the two other large industrial processing facilities that were built prior to 2015 - Oxy Occidental Chemical and the Chemours Ingleside Texas facility. There are numerous permitting actions that are pending that, if/when approved, will include additional industrial sites that will greatly increase existing air emissions (and water pollution) in the area. This of course does not account for the dozens of large ships and barges that both dock and transport commodities within Corpus Christi Bay and the Corpus Christi Channel, both of which lie just south and adjacent to Ingleside on the Bay Community Watch Association members' homes and businesses, on a daily basis since the massive industrial expansion.[24]

Affected residents and potential downwind receptors in the general area need state and regulatory authorities to do what they are statutorily obligated to do whether popular or not with the regulated community. It is obvious from reviewing the 2022, 2023, and 2024 Plans, and the 2025 draft Plan, that TCEQ can request additional federal funding to develop an ambient air monitoring network that would properly characterize air quality in the Coastal Bend area beyond meeting the minimal federal requirements of having monitoring in Corpus Christi area south of Corpus Christi Bay. This conclusion was obvious from the language that was used in the EPA response letters, and the fact that TCEQ is certainly capable of using existing funding and/or requesting additional monetary funding through the Texas legislature to provide protectiveness to its citizens, and thus IOBCWA is respectively requesting it to do so.

III. Additional Near-Road Monitoring is Necessary in Multiple Locations

[24] Ships and barges are known to be the source of fugitive emissions. *See* Thoma, E. D., M. Modrak, AND D. J. Williams. Investigation of fugitive emissions from petrochemical transport barges using optical remote sensing. U.S. Environmental Protection Agency, Washington, DC, 2009 (available at https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryID=213705) (reporting on EPA study of barges using optical remote sensing and locating numerous emissions leaks from barges and ships in port).

Per the Code of Federal Regulations, monitoring sites must be capable of informing managers about many things including the peak air pollution levels, typical levels in populated areas, air pollution transported into and outside of a city or region, and air pollution levels near specific sources.[25] This requires a mix of micro-scale, middle-scale, and neighborhood and urban scale monitors.

A. Population Trends and Census Numbers Call for Multiple Additional Monitors

Since 2009, EPA and the states have recognized that roadway-associated exposures account for a majority of the ambient exposures to peak NO_2 concentrations. This finding, in part, led to new minimum monitoring requirements for NO_2 near roadways and also created a national near road network to support further understanding of the role transportation plays in poor air quality for communities. For Texas, TCEQ's near road NO_2 data should provide "a clear means to determine whether the NAAQS is being met within the near road environment throughout a particular area."[26]

While the pending Annual Monitoring Network Plan draft articulates the minimum requirements for two near road monitors in any core based statistical areas (CBSA) with over 2.5 million residents, TCEQ ignores the fact that the Houston-Pasadena-The Woodlands CBSA and Dallas-Fort Worth-Arlington CBSA both exceed 7.25 million residents—nearly 3 times the amount of the minimum required for the two monitors.[27] As such, we urge TCEQ to assist its sister agency, Texas Department of Transportation (TXDOT), by installing additional near road monitors in those two massive CBSA's in order to provide better data for TXDOT to actively take steps to mitigate near road air pollution for urban communities.

This is particularly important because transportation control measures such as programs for improved public transportation, restricting certain roads to high occupancy vehicles (HOV), or traffic flow improvement programs could be enhanced with better data identifying the impact of traffic in these massive urban areas that have historically not achieved attainment for a variety of pollutants (including ozone which NO_2 is a precursor for).[28] Thus, with more data from TCEQ on near road emissions, TXDOT could achieve better programmatic performance.

As such, we request an additional two near-road NO_2 monitors in each of those massive CSBA's to better reflect the amount of pollution on a population basis.

Similarly, with the Austin CBSA, TCEQ is relying on older census data. According to 2024 numbers, the Austin CBSA exceeds the 2.5 million residents required to justify additional air

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[25] 40 CFR Appendix D to Part 58 - Network Design Criteria for Ambient Air Quality Monitoring, part 1.1.1.

[26] EPA, NO_2 Near-Road Monitoring Network in EPA's Quality Assurance Handbook for Air Pollution Measurement Systems, volume 2, Ambient Air Quality Monitoring Program, last visited April 28, 2025 at 17, published January 2017, available at https://www3.epa.gov/ttnamti1/files/ambient/pm25/qa/Final%20Handbook%20Document%201_17.pdf

[27] Populations in 2022 provided by Comptroller of Texas at https://comptroller.texas.gov/economy/economic-data/regions/2024/statewide.php

[28] See for example Texas Department of Transportation Air Quality Guidelines from 1999 at https://www.dot.state.tx.us/env/pdf/resources/airqualityguidelines1999.pdf

monitoring, as does the San Antonio-New Braunfels area.[29] TCEQ should consider placing an additional monitor along the I-35 stretch between the Austin and San Antonio major urban environments to better reflect the reality of the growth in these communities and does need to start planning for a second monitor in the Austin area regardless. By doing so, TCEQ and TXDOT would be better able to react and plan as the Texas Hill Country continues its unmanageable growth pattern.

Given recent exceedances of the 2015 ozone NAAQS in Travis County, we also urge TCEQ to add ozone monitoring near some of the largest sources of ozone precursor emissions in the area, including the Fayette power plant (also known as Sam Seymour) in Fayette County. EPA's most-recent, verified design value data indicates that Travis County is in violation of the 2015 ozone NAAQS.[30] The Fayette power plant is, by far, the largest source of nitrogen oxide pollution in the greater Austin area,[31] and is a likely contributor to ozone exceedances in Travis County. To provide the public with a better understanding of air quality in the region, and to allow TCEQ and other governmental entities to better plan, we urge the agency to add at least one monitor to Fayette County.

B. TCEQ Must Not Reclassify Four Near-Road $PM_{2.5}$ Monitors

The draft monitoring plan's proposal to reclassify the four Near-Road $PM_{2.5}$ monitors as non-NAAQS comparable does not make sense based on traffic and population data and is otherwise unjustifiable.

TCEQ should not reclassify the four existing near-road $PM_{2.5}$ monitors. They are appropriately designated as NAAQS-comparable for annual PM2.5 concentrations along the high-traffic corridors with densely populated areas of each of the core based statistical areas.

i. The monitoring sites should be classified as "Middle-scale" rather than "Micro-scale"

TCEQ has described the four near-road $PM_{2.5}$ monitoring sites as micro-scale sites (see Plan on pages 28-29). Although monitoring systems should include and incorporate micro-scale monitoring per 40 C.F.R. part 58, these have not been correctly categorized as micro-scale by TCEQ. Based on the distance of these sites from the respective roadways, the monitors should be considered middle-scale sites and are more representative of conditions in the immediate area around the monitors than TCEQ claims.

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[29] US Census Datasets for metropolitan areas from 2024 downloaded from https://www.census.gov/data/tables/time-series/demo/popest/2020s-total-metro-and-micro-statistical-areas.html#v2024

[30] See EPA, Ozone Design Values 2023, https://www.epa.gov/system/files/documents/2024-06/o3_designvalues_2021_2023_final_06_04_24.xlsx (Table 2, Other Violations), attached and highlighted as Exhibit D

[31] *See* https://campd.epa.gov/data (query 2023 annual emissions data for Texas) (accessed May 15, 2025).

40 CFR Appendix E, Section 2.5 provides siting requirements for monitoring sites near roadways. Paragraph 2.5.3(b) states that "For microscale traffic corridor sites, the location must be greater than or equal 5.0 meters and less than or equal to 15 meters from the major roadway." According to Table 12 (see Plan page 29), none of the sites are closer than 15 meters to the nearest traffic lane. As detailed in Figure E-1 (copied below), monitors more than 15 feet from the major roadway are considered "Middle scale" sites. For the Houston North Loop Monitor, the distance from the interstate is shown as exactly 15 meters, but TCEQ has not provided sufficient information to demonstrate that the monitor could be considered micro-scale. The height of the monitor inlet must also be considered when the monitor is within 15 feet of the roadway. Therefore, based on the data provided in the Plan, we contend that these spatial scale for these sites is actually "middle scale."

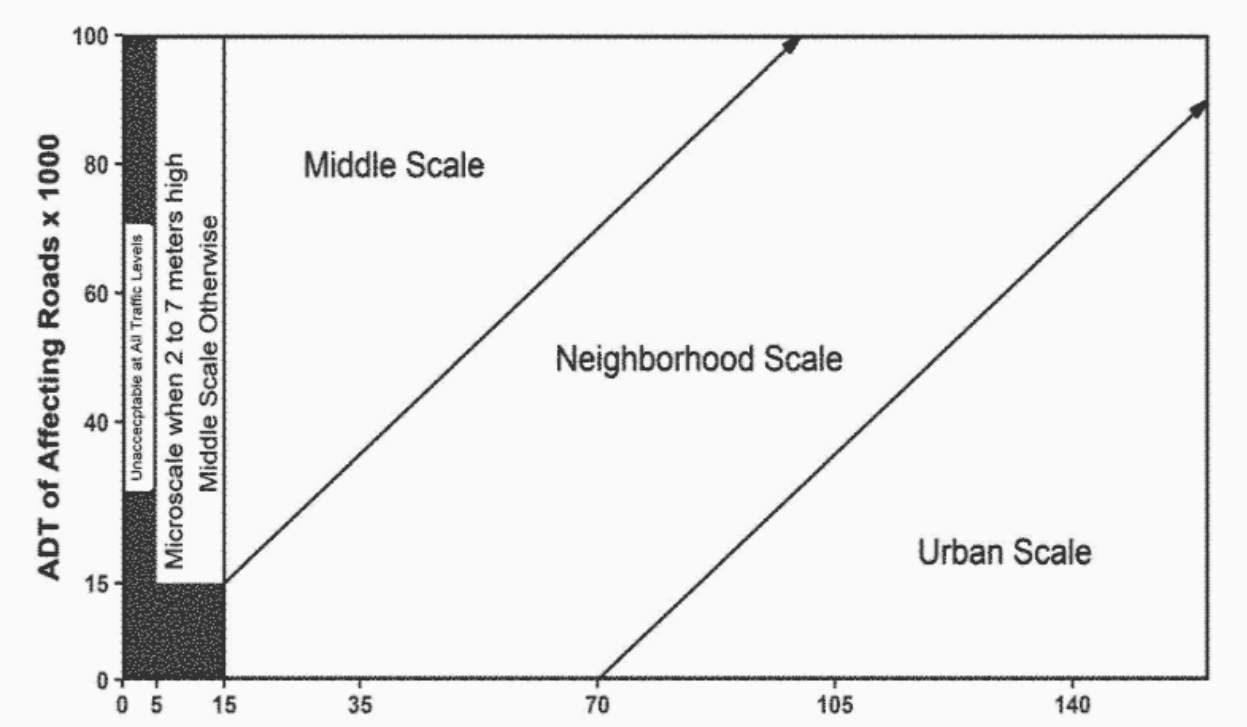


Figure E-1. Distance of PM Samplers to nearest traffic lane (meters)

Notes: Microscale street canyon sites must reside between 2 and 10 meters from the roadway.
Near-Road sites must be within 50 meters of the roadway.
The slopes of the lines between monitoring scales are one to one.

ii. The monitoring sites are representative of traffic conditions along the high-traffic corridors where they are located.

TCEQ claims that the near-road monitoring sites are not representative of the conditions in their respective CBSAs because they are among the highest traffic interstate locations in each CBSA (Plan, pages 29, 30, 32-33, 35, 37). This claim, however, is not supported by the evidence provided

by TCEQ. These sites *are* representative of conditions along the extended highway corridors and the $PM_{2.5}$ concentrations measured at these sites are appropriate for comparison to both the short-term and annual $PM_{2.5}$ NAAQS.

40 CFR Appendix D Section 4.7 provides the network design criteria for $PM_{2.5}$ monitors and while the regulations state that monitoring stations are typically at the neighborhood or urban scale, "micro-or middle-scale $PM_{2.5}$ monitoring sites that represent many such locations throughout a metropolitan area are considered to represent area-wide air quality."

While TCEQ claims that the roadways are not-representative of the nearby interstates because of their high traffic counts, each of these near-road $PM_{2.5}$ monitoring sites are located along traffic corridors where annual average daily traffic ("AADT") counts are just as high or higher for extended portions of the roadway. None of the sites represent the highest AADT for the CBSA, as evidenced by the roadway rankings provided by TCEQ in Plan Table 12, which shows that the AADT ranks at the monitoring sites range from 10^{th} highest (San Antonio) to 52^{nd} highest (Houston). In terms of actual counts, the highest AADT counts in each CBSA are significantly higher, with counts at the monitoring sites lower than the highest traffic counts in their respective CBSAs by 24% to 49%, as shown in Exhibit E.

Traffic corridors with similar traffic counts extend along these interstates or adjacent highways for several miles and road segments with higher traffic counts can be found within just a few miles of each site, as shown in Exhibit E. The road segments where these challenged monitors are located are plainly representative of the surrounding area.

TCEQ tries to compare the traffic counts at the monitoring sites (along interstate highways) with traffic counts along local surface roads to show that these high traffic roads are not typical or representative (*See* Plan Figures 4, 8, 12, and 16 (pages 29-39)). The near-road monitors, however, are not intended to be representative of conditions on low-traffic surface streets but rather are precisely intended to capture typical emissions in the high-volume traffic corridors which extend well beyond the limited area shown in TCEQ's Figures.

These middle-scale monitors are capturing and recording important data about the air quality around these major highways; important information for public health purposes as well in order to understand emissions patterns and changes over time.

iii. TCEQ should not classify Houston North Loop as ineligible for comparison to the annual $PM_{2.5}$ NAAQS

Unfortunately, traffic in Houston is not an exceptional event and, as is demonstrated in Figure 9 and 12 of the draft 2025 Plan, many homes are situated almost as close to the interstate as the monitor. The Houston North Loop appropriately characterizes the area-wide air quality in

Houston for those residents living adjacent to the 557 miles of interstates in the Houston CBSA.[32]

As per page 14 of the TCEQ 2025 draft Plan, the Houston North Loop location was purposefully chosen to measure near-road traffic related air quality. Certainly, TCEQ gave a lot of consideration in selecting this location previously and those conditions have not changed. This is by far not the most congested road in the Houston region. Major freeways like I-10, I-69, State highway 288 and 290 have many more lanes. A broad range of vehicles traverse the Houston North Loop location, consistent with road conditions and transportation sources in other parts of the Houston-Pasadena MSA and a good representation of mobile $PM_{2.5}$ contributions to the Houston region's airshed. As per page 35 of the draft Plan, "2021-2023 annual $PM_{2.5}$ design values ranging between 8.3 to 12.5 $\mu g/m^3$." This sensor has had the second highest $PM_{2.5}$ measurements consistently in the region since its deployment and several times over the past few years exceeded the previous health protective annual $PM_{2.5}$ standard of 12 $\mu g/m^3$. As such its utility in assessing our performance in meeting federal regulatory air standards and protecting public health is obvious and imperative. Given Houston is already not compliant with the 2024 revision of the $PM_{2.5}$ NAAQS annual standard of 9 $\mu g/m^3$ and not expected to be in attainment by 2032, it is even more critical that this air monitor and its design value continue to be contribute toward the annual standard. The data it provides will be critical to develop strategies including the State Implementation Plan to reduce regional $PM_{2.5}$ conditions particularly from mobile sources. Its design value will give Houston and TCEQ a valuable metric to show improvements to the air shed. Its contribution to the 24-hour standard alone is insufficient. We need to understand the overall picture throughout the year, in aggregate, not just short-term daily average spikes in air quality.

IV. The Plan Must Address Statewide Particulate Matter Monitoring Concerns

Scientific, peer-reviewed literature has provided a wealth of evidence that both short-term and long-term exposure to Particulate Matter (PM) can harm human health. Because PM is so small, it can be inhaled deeply into the lungs and can cross into the bloodstream. $PM_{2.5}$ exposure can lead to heart attacks, irregular heartbeat, decreased lung function, irritation of the airways and difficulty breathing, asthma attacks, and premature death. Children, older adults, and people with lung or heart conditions are more susceptible to risks of adverse health effects from $PM_{2.5}$.[33]

The Governor's complete disregard of all $PM_{2.5}$ nonattainment data in his submission to the EPA with regard to the new $PM_{2.5}$ NAAQS limit demonstrates how vital it is that this air quality plan support a network that covers the state in order to demonstrate actual air quality conditions, rather than leaving Texas residents waiting in limbo for clear understanding of their current air quality as existing data sets are undermined as incomplete or inadequate.

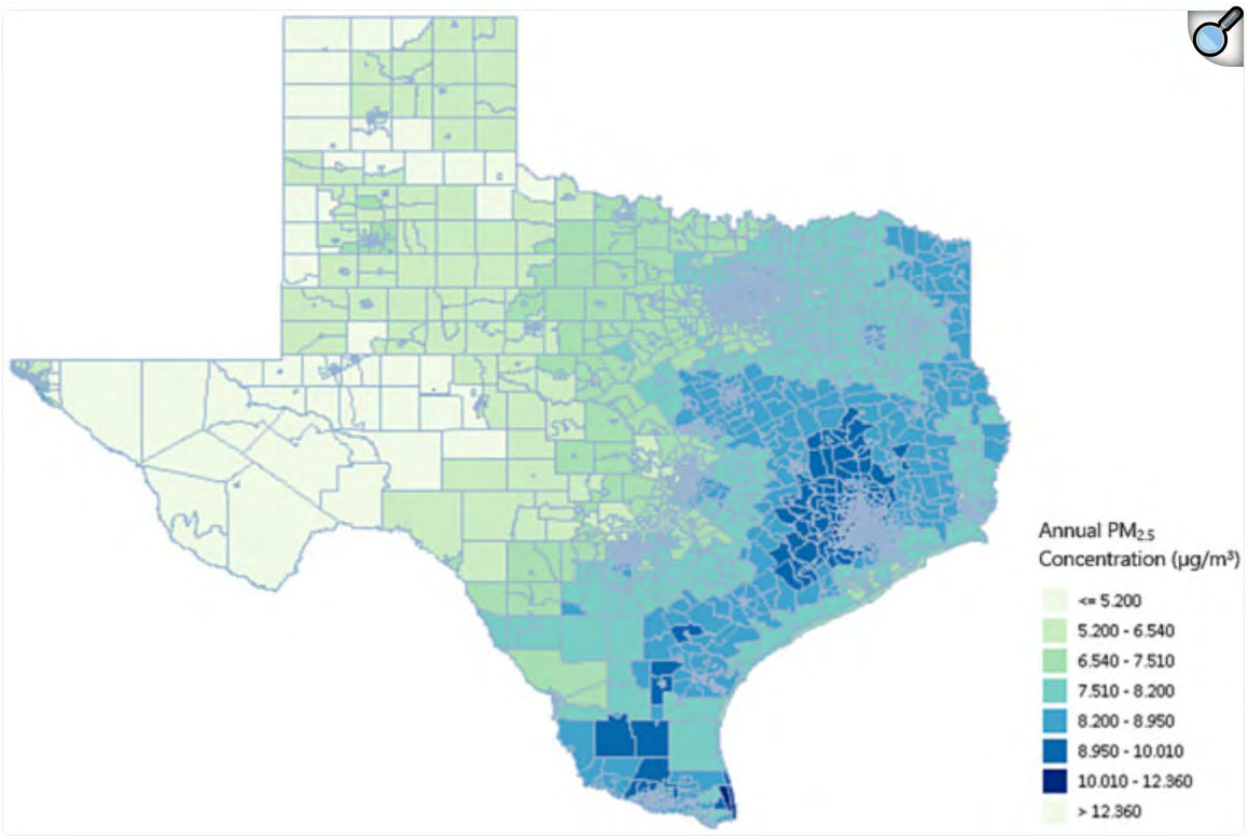
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[32] Federal Highway Administration, "Highway Statistics Series; Highway Statistics 2020," October 26, 2021, available at https://www.fhwa.dot.gov/policyinformation/statistics/2020/hm72.cfm

[33] EPA, "Research on Health Effects from Air Pollution," April 11, 2025, available at https://www.epa.gov/air-research/research-health-effects-air-pollution

TCEQ initially considered 12 counties as potentially in nonattainment with the 9.0 µg/m^3 PM2.5 standard, relying on data generated through its own FRM network.[34] However, by the end of the process of responding to the new $PM_{2.5}$ NAAQS, TCEQ had been removed from the decision-making and the Governor assumed the duty of determining and reporting that all Texas counties were either in attainment or unclassifiable. Those initial 12 counties had recorded at least 3 consecutive years of data indicating that average $PM_{2.5}$ concentrations exceeded the new standard.

In a scientific study using NASA data and 2016 $PM_{2.5}$ data, the below map of Texas census blocks by $PM_{2.5}$ concentration was developed: [35]



Using 2016 emissions data and population data, the authors of this study predicted that:

> The main finding of this study is that air pollution by fine airborne particulate matter ($PM_{2.5}$) is a major cause of disease and premature death in the state of Texas . . . These findings indicate that improving air quality in Texas could save thousands of lives from disease, disability, and premature death.

[34] Exhibit F, Slide from TCEQ Presentation, "Public Information Meeting: Particulate Matter (PM) Standard Revision," June 26, 2024, available at https://www.tceq.texas.gov/downloads/air-quality/sip/pm/designations/naaqs-pm25-2012/pm-naaqs-revision-outreach_houston_2024.pdf

[35] Exhibit G, Bryan L, Landrigan P. "$PM_{2.5}$ pollution in Texas: a geospatial analysis of health impact functions." Front Public Health. 2023 Dec 1;11:1286755. doi: 10.3389/fpubh.2023.1286755. PMID: 38106908; PMCID: PMC10722416; https://pmc.ncbi.nlm.nih.gov/articles/PMC10722416/

> We found that there were 8,405 premature deaths due to $PM_{2.5}$ pollution in Texas in 2016, comprising 4.3% of all deaths in the state. Harris, Dallas, Tarrant, and Bexar counties had air-pollution-related death tolls of 500–1,400. Statewide increases in air-pollution-related morbidity and mortality were seen for stroke, low birthweight, non-fatal lung cancers, new onset Alzheimer's, and new onset asthma.[36]

The authors point out that the NASA data used to generate the statewide map of $PM_{2.5}$ emissions was the best available data, but *their analysis was hampered by the lack of actual $PM_{2.5}$ monitoring data across large swaths of the state*. Particulate matter – especially $PM_{2.5}$ – is plainly a problem for Texas residents; even this older and incomplete data from 2016 shows that real deaths are occurring as a result of our constant exposure to particulate matter. Now that the NAAQS standard has been lowered to 9.0 $\mu g/m^3$, additional monitoring is necessary in order to detect areas where particulate matter is a public health hazard but would not have previously triggered NAAQS nonattainment under the previous standard.

As evidence from emissions sources shows, there are large $PM_{2.5}$ emitters in counties without any monitors. It is therefore imperative that TCEQ add monitors near major sources in order to protect public health – even in more rural and low-population areas – in order to comply with the primary directive to protect public health. Specifically, we recommend monitors near some of the state's largest sources of particulate matter pollution in the state, including, at a minimum, W.A. Parish in Fort Bend County, the Fayette power plant in Fayette County, and the Martin Lake power plant in Rusk County. These coal-burning power plants are significant sources of particulate matter, yet there are no monitors in any of those counties.

V. Ambient Monitoring of H2S in the Plan Is Inadequate to Address Safety Concerns

TCEQ presently has limited continuous monitoring of hydrogen sulfide (H_2S) despite the widespread smell of "rotten eggs" in many areas of Texas. People usually can smell hydrogen sulfide at low concentrations in air ranging from 0.0005 to 0.3 parts per million (ppm). Hydrogen sulfide is one of the leading causes of workplace gas inhalation deaths in the United States. According to the Bureau of Labor Statistics (BLS), hydrogen sulfide caused 46 worker deaths between 2011 and 2017.[37]

For surrounding communities, exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat. Respiratory distress or arrest has been observed in people exposed to very high concentrations of hydrogen sulfide. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of hydrogen sulfide can cause loss of consciousness[38] and possibly death.

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[36] *Id*.

[37] Occupational Safety and Health Administration, Hydrosulfide Overview accessed at: https://www.osha.gov/hydrogen-sulfide

[38] Agency for Toxic Substances and Disease Registry, Hydrogen Sulfide Fact Sheet (Appendix E), Dec 2016 accessed at: https://www.epa.gov/sites/default/files/2017-12/documents/appendix_e-atsdr_h2s_factsheet.pdf

In total, there are only two H_2S monitors in the Beaumont-Port Arthur area, two near Texas City, one near Freeport, two in the Corpus Christi area, three in the Midland-Odessa area and one southeast of San Antonio. Given the large number of refineries and oil and gas wells throughout Texas, this is clearly insufficient to protect Texans. Obviously, many industrial facilities have their own fenceline monitoring as part of permit conditions and many samples are taken by individual companies. In addition, TCEQ does have the ability to provide mobile monitoring for special projects or to respond to particular complaints or other events, but it is a limited universe of monitoring.

A. H_2S Odors are Detected Frequently Throughout the State

Citizens throughout Texas have complained for years to the TCEQ and Texas Railroad Commission about the rotten egg smell, and the resulting sickness and nausea felt by many Texans near oil and gas fields, refineries, wastewater treatment plants and other areas. In Texas, complaints related to H_2S often mention smells like rotten eggs or other indicators of the gas, though some complaints are vague, such as mentioning “oil and gas odors.” Multiple state agencies, including the TCEQ and the Railroad Commission, are involved in regulating H_2S and addressing related complaints. TCEQ has received 89 complaints specifically mentioning H_2S since 2018. However, the agency's complaint data often includes only vague summaries, such as "oil and gas odors," making it difficult to track specific instances of H_2S exposure.

B. H_2S Health Impacts are Significant

In October 2024, two workers died and 13 others were injured after a release of hydrogen sulfide gas at the PEMEX Deer Park refinery in Texas.[39] The incident, which occurred while workers were attempting to remove an isolation blind, caused a leak of the toxic gas, leading to the fatalities and injuries. The release also prompted a shelter-in-place order for nearby communities.

In Odessa, Texas, a 2019 hydrogen sulfide release at an Aghorn Operating waterflood station resulted in the deaths of an employee and his spouse. The employee was overcome by the gas in a pump house after responding to an alarm, and his wife was also killed after she came to the facility to look for him.[40] The release occurred due to a malfunction of a water pump, releasing water containing hydrogen sulfide. The incident highlighted deficiencies in the facility's hydrogen sulfide monitoring systems, which were not functioning properly.

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[39] Chemical Safety & Hazard Investigation Board, “U.S. Chemical Safety Board Releases Investigation Update into Fatal Hydrogen Sulfide Release at PEMEX Deer Park Refinery in Deer Park, Texas,” Nov. 20, 2024, available at https://www.csb.gov/us-chemical-safety-board-releases-investigation-update-into-fatal-hydrogen-sulfide-release-at-pemex-deer-park-refinery-in-deer-park-texas/#:~:text=In%20addition%20to%20the%20two%20fatalities%20and,Texas%20State%20Highway%20225%20was%20closed%20temporarily.

[40] Chemical Safety & Hazard Investigation Board, “Aghorn Operating Waterflood Station Hydrogen Sulfide Release,” May 21, 2021, available at https://www.csb.gov/aghorn-operating-waterflood-station-hydrogen-sulfide-release-/

C. H_2S Monitoring Needs to Expand Across the State

Commenters urge Texas to expand its network of H_2S monitoring stations in the Odessa-Midland, El Paso, Corpus Christi and larger Houston area, in addition to areas of South Texas. We are recommending an additional $1 million per year to expand the hydrogen sulfide network. There is currently a proposal in the House version of the state budget to increase funding to better monitor hydrogen sulfide.[41] TCEQ's resources are limited but this is a dangerous emission that has led to deaths and, as the pending proposal demonstrates, should be a priority for the state.

VI. Conclusion

TCEQ is vital in protecting the environment for all Texans, and Commenters appreciate the work that goes in to placing and maintaining the existing monitoring network. We specifically commend the dedication TCEQ has shown in the addition of the $PM_{2.5}$ and VOC monitors in Pleasantville at the elementary school and Finnegan Park in Fifth Ward (Houston). TCEQ has made a commitment to improving the air quality in these Houston communities and worked closely with local community leaders to place them in the locations prioritized by residents. It has taken two years of work by TCEQ and we all look forward to seeing these important monitors activated by the end of the year. This success demonstrates that community involvement with TCEQ can achieve better air monitoring outcomes.

Commenters appreciate this opportunity to provide input on the pending Annual Network Monitoring Plan and provide the following overall recommendations:

1. TCEQ should hold public hearings on air monitoring, particularly directed at Spanish-speaking Texans
2. The idled Ellis County $PM_{2.5}$ monitor must be relocated as quickly as possible, and an additional PM monitor should be placed where it can accurately assess the particulate matter released by the major cement plants in the county
3. A NAAQS-compliant FRM $PM_{2.5}$ monitor must be placed in Williamson County, given the density of APOs and CBP, in order to start generating design data for this area.
4. El Paso's inactive monitors must be relocated as quickly as possible.
5. The Permian Basin requires air monitoring, given the explosive growth in oil and gas development throughout the area.
6. Fort Bend County needs monitoring for sulfur dioxide, ozone, $PM_{2.5}$ and carbon monoxide.
7. Coastal Bend communities need monitoring for NAAQS.

[41] Texas Senate Finance Committee Riders - Article VI Adopted March 12, 2025 Legislative Budget Board, p. 23 ("Commission on Environmental Quality, Article VI Proposed Funding and Rider Hydrogen Sulfide Monitoring and Assessment"), available at https://www.lbb.texas.gov/Documents/Appropriations_Bills/89/Senate_Adopted/Art%20VI%20Riders_SFC_89.pdf#:~:text=1.1%2C%20Air%20Quality%20Assessment%20and%20Planning%2C%20of,meet%20state%20and%20federal%20standards%2C%20to%20monitor

8. Additional near-road monitors are needed in the Houston and Dallas areas, as well as the Auston and San Antonio metropolitan areas.
9. TCEQ must not reclassify the four near-road monitors as it proposes.
10. Statewide $PM_{2.5}$ monitoring must be increased, given available data and the new NAAQS. Specifically, TCEQ should consider siting monitors near some of the state's largest sources of particulate matter pollution in the state, including, at a minimum, W.A. Parish in Fort Bend County, the Fayette power plant in Fayette County, and the Martin Lake power plant in Rusk County.
11. Statewide H_2S monitoring must be increased, given dangers associated with H_2S releases.

Respectfully submitted by,

/s/ Lauren E. Godshall

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Preserve our Hill Country Environment
Comal County, Texas

GOVERNOR GREG ABBOTT

October 12, 2023

The Honorable Michael Regan
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Via Email

Subject: Voluntary Reclassification of Texas 2015 Ozone Standard Moderate Nonattainment Areas

Dear Administrator Regan:

I am exercising my authority under federal Clean Air Act (FCAA), §181(b)(3) to request voluntary reclassification of the Bexar County, Dallas-Fort Worth, and Houston-Galveston Brazoria 2015 ozone standard nonattainment areas from moderate to serious. EPA has left Texas no choice but to request voluntary reclassification of these areas by establishing absurd state implementation plan (SIP) submittal deadlines, changing the accepted approaches for how to meet FCAA requirements while SIP development is in progress, and failing to provide states with timely guidance on how to meet these moving goalposts, all of which demonstrates disrespect for limited state resources.

EPA placed an undue burden on states to develop and implement complex plans for moderate nonattainment areas on an unreasonably compressed timeline. Effective November 7, 2022, EPA established a deadline for states to submit required plans by January 1, 2023, a timeline of less than two months. EPA knowingly set states up to fail by establishing a deadline that was impossible to meet. EPA's compressed timeline did not provide a reasonable amount of time for Texas to develop new attainment plans, evaluate controls, conduct rulemaking, and give affected businesses sufficient time to implement control requirements that could demonstrate attainment by December 2023.

All of these failures on the part of EPA have put Texas at risk of potential sanctions and federal implementation plans that could have lasting detrimental impacts to industry in our state. I am requesting voluntary reclassification of these nonattainment areas to protect the Texas economy and my fellow Texans from the unreasonable consequences of EPA's failures.

Sincerely,

Greg Abbott
Governor

cc: Earthea Nance, EPA Administrator for Region 6
Jon Niermann, Chairman of TCEQ
Kelly Keel, Interim Executive Director of TCEQ

Exhibit A

GOVERNOR GREG ABBOTT

February 6, 2025

The Honorable Lee Zeldin
Administrator
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20760

Re: State Designations for the 2024 Revised Primary Annual Fine Particulate Matter National Ambient Air Quality Standard (NAAQS or Standard)

Dear Administrator Zeldin:

On February 7, 2024, the Biden–Harris Administration's U.S. Environmental Protection Agency (EPA) authorized a substantial lowering of the primary annual fine particulate matter ($PM_{2.5}$) NAAQS by pointing to alleged public health benefits. Ironically, the legally required scientific evidence used to support the revision was nearly identical to the evidence the Trump Administration used in 2020 to conclude that the 2020 $PM_{2.5}$ NAAQS was protective of public health.

The State of Texas, along with numerous other states, private entities, and interest groups filed suit challenging the revised $PM_{2.5}$ Standard. The petitioners correctly state that the revised $PM_{2.5}$ NAAQS is unlawful, violates the federal Clean Air Act (FCAA), and should be vacated. S*ee Commonwealth of Kentucky and State of West Virginia, et al. v. EPA*, D.C. Cir. Dkt. No. 24-1050 (consolidated with 24-1051, 24-1052, 24-1073, and 24-1091). Rather than revising the $PM_{2.5}$ NAAQS pursuant to the FCAA's explicit authorization—to focus on "public health"—the previous EPA seems to have heavily relied on President Biden's policies of advancing environmental justice. This is supported by the fact that this is the first time in history EPA has ever voluntarily initiated and effectuated a reconsideration of a NAAQS outside the normal statutory review period. Even though the case remains pending, I reiterate Texas' view that the previous Trump Administration's 2020 decision should be reinstated. I additionally urge EPA to reconsider the 2024 $PM_{2.5}$ NAAQS.

The consequences of arbitrarily revising the $PM_{2.5}$ Standard are significant and far reaching. Designating areas as "nonattainment" results in staggering economic costs and complex permitting requirements. One study estimated the costs to implement the 2015 eight-hour ozone NAAQS to be between $3.2 and $36.2 billion dollars for one nonattainment county.[1] These costs include increased expenses for pre-construction permitting (new source review), general and transportation conformity, and other regulatory hurdles for air quality planning. Additionally, there are potential national

[1] Nivin, Steven R. Ph.D., LLC for Alamo Area Council of Governments, Potential Cost of Nonattainment in the San Antonio Metropolitan Area, February 21, 2017, https://aacog.gov/sites/default/files/2022-07/Potential%20Cost%20of%20Nonattainment%20in%20the%20San%20Antonio%20Metropolitan%20Area%20%28Report%29.pdf

Exhibit B

security implications for areas with military and Department of Defense operations due to delays in, or the constricting of, critical military defense operations.

Section 107(d) of the FCAA requires the governor of each state to submit to EPA a list of all areas with a designation of attainment, nonattainment, or unclassifiable, within one year of the promulgation of a new or revised NAAQS. Because of the Biden–Harris Administration's arbitrary and unlawful adoption of the revised $PM_{2.5}$ NAAQS, I urge EPA to defer all designations. Alternatively, because the FCAA requires that governors submit designations to EPA, I am designating all counties within the State of Texas with regulatory monitors and complete data meeting the 2024 $PM_{2.5}$ NAAQS as attainment, and all remaining counties will continue to be designated as "attainment/unclassifiable."

Sincerely,



Greg Abbott
Governor

GA:bhd

cc: The Honorable John Cornyn, United States Senator
The Honorable Ted Cruz, United States Senator

W. Scott Mason IV, EPA Administrator for Region 6
Brooke Paup, Chairwoman, Texas Commission on Environmental Quality
Kelly Keel, Executive Director, Texas Commission on Environmental Quality



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Air quality and health benefits from potential coal power plant closures in Texas

Brian Strasert, Su Chen Teh & Daniel S. Cohan

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Exhibit C

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TECHNICAL PAPER

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Air quality and health benefits from potential coal power plant closures in Texas

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Department of Civil and Environmental Engineering, Rice University, Houston, TX, USA

ABSTRACT

As power production from renewable energy and natural gas grows, closures of some coal-fired power plants in Texas become increasingly likely. In this study, the potential effects of such closures on air quality and human health were analyzed by linking a regional photochemical model with a health impacts assessment tool. The impacts varied significantly across 13 of the state's largest coal-fired power plants, sometimes by more than an order of magnitude, even after normalizing by generation. While some power plants had negligible impacts on concentrations at important monitors, average impacts up to 0.5 parts per billion (ppb) and 0.2 μg/m^3 and maximum impacts up to 3.3 ppb and 0.9 μg/m^3 were seen for ozone and fine particulate matter ($PM_{2.5}$), respectively. Individual power plants impacted average visibility by up to 0.25 deciviews in Class I Areas. Health impacts arose mostly from $PM_{2.5}$ and were an order of magnitude higher for plants that lack scrubbers for SO_2. Rankings of health impacts were largely consistent across the base model results and two reduced form models. Carbon dioxide emissions were relatively uniform, ranging from 1.00 to 1.26 short tons/MWh, and can be monetized based on a social cost of carbon. Despite all of these unpaid externalities, estimated direct costs of each power plant exceeded wholesale power prices in 2016.

Implications: While their CO_2 emission rates are fairly similar, sharply different NO_x and SO_2 emission rates and spatial factors cause coal-fired power plants to vary by an order of magnitude in their impacts on ozone, particulate matter, and associated health and visibility outcomes. On a monetized basis, the air pollution health impacts often exceed the value of the electricity generated and are of similar magnitude to climate impacts. This suggests that both air pollution and climate should be considered if externalities are used to inform decision making about power-plant dispatch and retirement.

PAPER HISTORY
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Introduction

Coal-fired power plants are responsible for a significant though declining portion of the nitrogen oxides (NO_x = NO and NO_2), SO_2, and CO_2 emitted in the United States (US EPA 2017a, 2018a). These emissions impact human health and the environment in a variety of ways (Lim et al. 2012; US EPA 2006, 2008a, 2008b, 2009). Specifically, NO_x contributes to the formation of tropospheric ozone, and NO_x and SO_2 contribute to the formation of fine particulate matter ($PM_{2.5}$). NO_2, SO_2, ozone, and $PM_{2.5}$ are all criteria pollutants subject to EPA ambient air quality standards because of their health impacts, while CO_2 is a greenhouse gas.

Texas has historically led the nation in power-plant emissions of each of these pollutants, emitting nearly twice as much CO_2 as second-ranked Florida (EIA 2018), more than twice as much SO_2 as second-ranked Missouri, and 24% more NO_x than second-ranked Indiana (US EPA 2016a). Utilization of coal-fired power plants has been declining due to stagnant demand and competition with cheaper natural gas and growing amounts of wind and solar power, which have kept power prices low (IEEFA 2016). As a result, four coal-fired power plants in Texas (J T Deely, Monticello, Big Brown, and Sandow) are scheduled to retire in 2018 (Luminant 2017a, 2017b). Analysts from IEEFA (2016), Moody's Investors Service (2016), and UBS Financial (2016) all expect additional closures in coming years.

The impacts of power-plant emissions on air quality have long been a focus of atmospheric research, including airborne observations of power-plant plumes (Ryerson et al. 2001), photochemical modeling (e.g., Bergin et al. 2008), and studies combining observations with modeling (e.g., Zhou et al. 2012). Ozone formation from power-plant NO_x depends strongly upon meteorology and biogenic emissions of hydrocarbons in surrounding areas (Baker, Kotchenruther, and Hudman 2016; Ryerson et al. 2001). Meanwhile, PM formation from NO_x and

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SO_2 depends strongly upon meteorology and concentrations of ammonia downwind of the plant (Karamchandani and Seigneur 1999; Pinder, Dennis, and Bhave 2008). These factors, together with population density and baseline morbidity and mortality rates, influence the health impacts of power-plant pollution per unit of emissions (Levy, Baxter, and Schwartz 2009; Muller and Mendelsohn 2007; Fann, Fulcher, and Hubbell 2009). Similarly, the propensity of a power plant to contribute to regional haze depends upon spatially and temporally varying factors (Odman et al. 2007). By contrast, climate impacts of carbon dioxide are independent of the location or timing of emissions since the greenhouse gas is very long-lived and is well mixed in the atmosphere.

Impacts of power-plant emissions on attainment of air quality standards for ozone, PM, and regional haze are most often simulated with regional-scale Eulerian photochemical models such as the Community Multiscale Air Quality (CMAQ) model (Byun and Schere 2006) or the Comprehensive Air Quality Model with Extensions (CAMx) (www.camx.com). These models provide the best available representation of a wide range of oxidant concentrations and atmospheric conditions that influence formation of ozone and PM from precursor gases. Linking photochemical model sensitivity results with concentration-response functions in a health effects model such as the Benefits Mapping and Analysis Program (BenMAP) (US EPA 2015a) allows associated health effects to be computed (Hubbell, Fann, and Levy 2009). However, these models are computationally intensive to run for testing sensitivity to individual sources (Cohan et al. 2006), often limiting simulations to short episodes for regulatory purposes (Cohan et al. 2007).

Recently, reduced-form models such as the Air Pollution Emission Experiments and Policy (APEEP) (Muller 2014) and the Estimating Air pollution Social Impact Using Regression (EASIUR) (Heo, Adams, and Gao 2016) models have been introduced to more efficiently link point source emissions to health outcomes. The reduced-form models extract pollutant-emission responses from hundreds of runs of dispersion models or regional photochemical models and associate them with population data and concentration-response functions to estimate monetized health impacts (Muller and Mendelsohn 2007). The reduced-form models offer the advantages of fast calculations based on long-term underlying simulation periods, but do not fully represent the temporal variability of individual sources or fine-scale features of regional photochemistry. Because reduced-form models are relatively new, there is a lack of studies comparing them and regional photochemical models.

This work seeks to quantify the impacts of potential closures on greenhouse gas and criteria pollutant emissions, air quality, regulatory attainment, and human health through a modeling analysis of 13 coal-fired power plants in Texas. We compare results from a regional photochemical model (CAMx) and two reduced-form models (APEEP and EASIUR). Quantifying these impacts on a per-megawatt-hour basis allows us to compare how the societal benefits of coal plant closures depend on choices of which facilities are closed. To our knowledge, this is the first study to simultaneously examine the climate, photochemical, health, and regional haze impacts and financial viability of multiple power plants, and the first to compare CAMx with APEEP and EASIUR for point source impacts.

Methods and data

Photochemical modeling

Photochemical modeling was conducted with version 6.30 of CAMx. The gas chemistry mechanism used was Carbon Bond 6 Revision 2 (CB6r2) (Hildebrandt Ruiz and Yarwood 2013), and the aerosol chemistry was solved using the default CAMx processes (RADM-AQ, ISORROPIA, and SOAP), using a static two-mode coarse/fine (CF) size distribution (Chang et al. 1987; Nenes, Pandis, and Pilinis 1998, 1999; Strader, Lurmann, and Pandis 1999).

The model included a modeling domain of three nested grids (Figure 1). These included a coarse grid of 36-km cells covering all of North America, a medium grid of 12-km cells covering all of Texas and some of the surrounding states, and a fine grid of 4-km cells covering just the area of interest within Texas.

Simulation inputs were taken from the Texas Commission on Environmental Quality (TCEQ) Future Year 2017 Case, released December 5, 2016 (TCEQ 2016b), with 2012 meteorology simulated by the Weather Research and Forecasting (WRF) model (Skamarock et al. 2008) and 2017 emissions extrapolated from 2015 emissions provided by US EPA (2017b). To obtain the projected 2017 emissions for the power plants, the emissions for each hour of the day were averaged across every day of each month of 2015, to get a diurnal cycle of emissions that was applied to every day in the respective month (i.e., every day in January had the same emissions cycle, every day in February had the same emissions cycle, etc.). Then the NO_x emissions rates were increased by a scaling factor specific to each plant based on the effects of the Cross State Air Pollution Rule and the Emissions Banking and Trading Programs, but the SO_2 emissions were not. More

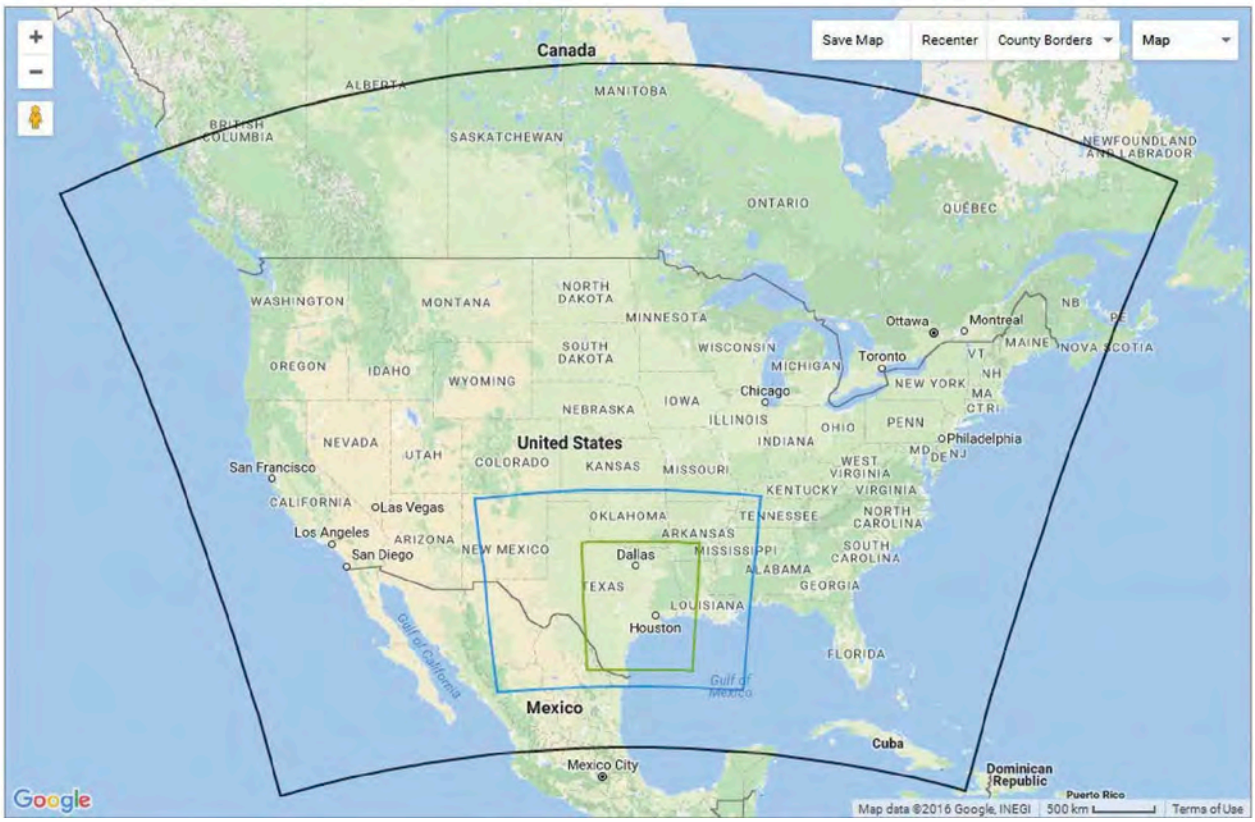


Figure 1. CAMx modeling domains with resolution of 36, 12, and 4 km (TCEQ 2016a).

detailed information on the development of these inputs and on the TCEQ model can be found in Chapters 2 and 3 of TCEQ (2016a). Variabilities in daily emissions rates at each power plant are shown in Figures SI1 and SI2.

All runs were conducted on a High Throughput Computing (HTC) Cluster of the Rice Big Research Data (BiRD) cloud infrastructure (80 dual processor HP SL230s nodes and 16 cores supporting two threads on each node). TCEQ evaluated its model for accuracy in both the meteorological data and ambient air pollution data for ozone and its precursors. Overall, the model outperformed EPA benchmarks for regulatory modeling, although it underpredicted some of the highest ozone peaks (TCEQ 2016a). Because the same inputs were used for this study, and because ozone concentrations did not change significantly with aerosol chemistry included, these model evaluations were sufficient to indicate that the model used in this study also performed adequately for meteorology and gas-phase pollutants.

Model evaluation

TCEQ's simulation did not include aerosol processes needed to simulate $PM_{2.5}$. We conducted sensitivity tests that confirmed that our inclusion of the aerosol chemistry capabilities of CAMx did not substantially change ozone concentrations or their sensitivity to power-plant NO_x emissions. In order to evaluate the model performance in terms of $PM_{2.5}$, modeled concentrations averaged over all episode days for total $PM_{2.5}$ and major $PM_{2.5}$ species were compared to observed 2012 concentrations at monitors averaged in the same manner. The comparisons are imprecise, since the model used 2017 projected emissions with 2012 meteorology, whereas the observations are from 2012, but are the best available since TCEQ did not model PM in 2012. At the power plants considered here, SO_2 emissions declined by 13% and NO_x emissions by 18% from 2012 to 2017. However, PM precursors such as biogenic emissions were not affected by the projections. The model-simulated concentrations were moderately lower than the 2012 observations for total $PM_{2.5}$, sulfate, and ammonium (normalized mean bias [NMB] −13%, −31% and −9%, respectively), consistent with the reduction in SO_2 emissions. However, the model sharply underestimated nitrate (NMB −84%) (Table 1). Similar underestimates of nitrate have been documented in other summertime simulations (e.g., Morris et al. 2005; Tesche et al. 2006); nitrate was a small portion of

Table 1. Performance statistics for CAMx simulations of total and speciated $PM_{2.5}$, evaluated against observations at regulatory monitors.

	Total $PM_{2.5}$	Nitrate	Sulfate	Ammonium
Mean bias	−1.4	−0.3	−0.8	−0.1
Mean error	3.5	0.3	0.8	0.3
Mean normalized bias	−22%	−84%	−30%	2%
Mean normalized error	27%	84%	30%	42%
Normalized mean bias	−13%	−84%	−31%	−9%
Normalized mean error	31%	84%	31%	40%
Mean fractional bias	−8%	−147%	−36%	−7%
Mean fractional error	48%	147%	36%	43%
Root mean square error	4.5	0.3	0.9	0.3

Note. For Mean Bias, Mean error, and Root mean square error, the units are $\mu g/m^3$.

total $PM_{2.5}$ observed at Texas monitors during the episode (0.31 – 0.41 $\mu g/m^3$; 3 – 5%). Organic carbon evaluations were not quantified because of the uncertainty involved in scaling organic carbon measurements (El-Zanan et al. 2005), and because coal-fired power plants are not major sources of the hydrocarbons that form organic aerosols in Texas.

Unfortunately, estimating confidence intervals for responsiveness of ozone and $PM_{2.5}$ to precursor emissions in photochemical models is extraordinarily complex (e.g., Beddows et al. 2017; Digar, Cohan, and Bell 2011; Huang et al. 2017). Thus, uncertainty analysis of the CAMx model sensitivity results is beyond the scope of this study.

Air pollution episodes

Modeling was conducted for two separate 2-week episodes, using WRF-simulated meteorology from June 15–20 and August 1–14, 2012 (Figure 2). These episodes were chosen based on high ozone concentrations in and around Harris, Bexar, Dallas, and Tarrant counties in the Base Case. These counties have the highest peak ozone concentrations in Texas and are thus the focus of regulatory efforts. Ozone concentrations during the episodes were 13–21% higher than observed during the full ozone season in these counties, and $PM_{2.5}$ concentrations were 17–20% higher than the annual averages (Table SI4).

In addition to the simulation with "Base Case" projected 2017 emissions, each "zero-out" run was conducted by removing one of the 13 highest-emitting coal-fired power plants in the fine modeling domain. Zeroing out power plants one at a time is a reasonable approach since impacts of two plumes tend to be additive rather than nonlinear when interactions occur substantially downwind (Cohan et al. 2005), as is the case here. The capacity, generation, and emissions of those power plants are shown in Table 2. Information on control technologies for those power plants is shown in Table SI1.

Emissions

Emissions depend strongly upon control technologies. For example, SO_2 emissions per MWhr are more than an order of magnitude higher at the facilities that lack desulfurization devices (Big Brown, Coleto Creek, J T Deely, and Welsh) than at plants where all the units have wet scrubbers (Fayette, J K Spruce, and Oak Grove). At Monticello and W A Parish, only certain units are scrubbed and thus overall SO_2 emissions are high. Differences in NO_x emissions per MWhr are less extreme, since all of the power plants

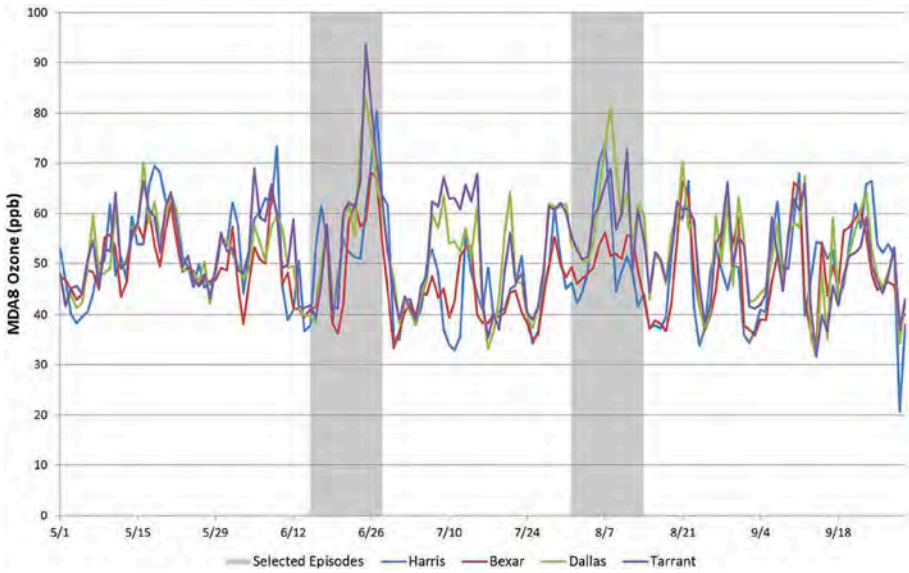


Figure 2. Base Case modeled MDA8 ozone concentrations averaged within selected counties of Texas.

Table 2. Capacities, generation, daily SO_2 and NO_x emissions (averaged over all episode days), and annual CO_2 emissions (2015 data) for coal-fired power plants in Texas (US EPA 2017b).

	Capacity (MW)	Annual generation (GWhr/yr)	Unscaled generation (GWhr/day)	Scaled generation (GWhr/day)	SO_2 (tpd)	NO_x (tpd)	CO_2 (tpy)
Big Brown	1,208	8,200	24.7	20.3	141.6	13.6	8,900,000
Coleto Creek	635	3,400	12.7	14.6	29.3	8.5	3,400,000
Fayette Power Project	1,636	9,400	34.3	34.6	3.3	18.9	10,200,000
J K Spruce	1,350	4,800	20.2	25.0	1.9	11.2	5,200,000
J T Deely	840	3,900	15.7	24.3	38.6	12.4	4,300,000
Limestone	1,689	9,800	33.8	22.1	58.3	19.7	9,900,000
Martin Lake	2,455	11,000	40.7	31.6	70.6	27.3	12,500,000
Monticello	1,955	5,200	33.0	33.9	132.2	26.8	5,900,000
Oak Grove	1,665	12,800	39.8	46.8	11.5	16.2	13,200,000
San Miguel	391	2,400	7.9	6.2	17.2	5.6	3,100,000
Sandow	600	4,500	13.3	22.4	59.8	7.3	4,900,000
W A Parish	2,499	16,100	53.8	63.7	144.9	15.5	16,300,000
Welsh	1,584	4,200	14.8	11.3	34.1	11.2	4,600,000

use some technologies to reduce NO_x emissions. However, the high-performing selective catalytic reduction devices at W A Parish, necessitated by its location within an ozone nonattainment region, enable it to emit a factor of 5 less NO_x per MWhr than the highest emitting power plants. We considered only smokestack emissions from coal combustion, neglecting the upstream emissions from coal mining and transport, which add about 6% to the greenhouse gas footprint (Venkatesh et al. 2012), and fugitive dust from the coal pile (Mueller et al. 2015).

Air quality impacts

Average impacts were determined by differencing the maximum daily 8-hr average (MDA8) ozone and daily 24-hr average (DA24) $PM_{2.5}$ concentrations across the fine domain, for each day of each episode, between the Base Case and each zero-out case. EPA has set ambient air quality standards at 70 ppb for fourth highest MDA8 ozone and 12 $\mu g/m^3$ for annual average $PM_{2.5}$. Since this study did not simulate a whole year, the modeled changes to monitor concentrations do not translate perfectly to these regulatory limits, especially since high-ozone periods were chosen for the episodes (Table SI4), but they can indicate the scope of the expected impacts. The representativeness of episodes is especially a concern for ozone, due to the strongly nonlinear response of ozone concentrations to emissions.

For ozone, regulatory impacts were analyzed at the 26 monitors (Figure 3) for which the 2015 design values (DV)

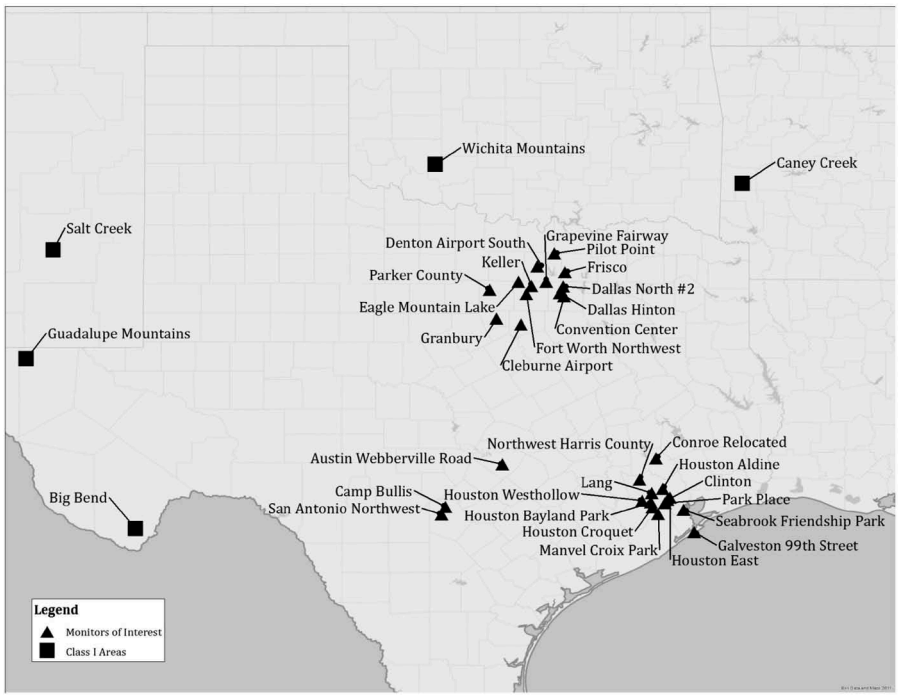


Figure 3. Locations of monitors of interest and Class I areas.

exceeded the 70 ppb MDA8 ozone standard. For each of these monitors, the effect of each zero-out case was measured as (1) the average decrease in the MDA8 ozone concentration across all days and (2) the maximum decrease in the MDA8 ozone concentration across all days.

For $PM_{2.5}$, all Texas monitors attain the 12-μg/m^3 annual standard, but it is possible that EPA could tighten the standard in the future. The World Health Organization sets a guideline value of 10 μg/m^3 for annual $PM_{2.5}$ (http://www.who.int/mediacentre/factsheets/fs313/en), a level exceeded by some Texas monitors. Thus, for $PM_{2.5}$ we focus on effects at the one monitor in each of the four major Texas metropolitan areas (Dallas–Fort Worth, Houston, San Antonio, and Austin) that had the highest 2015 DV (Figure 3). For each of these monitors, the effect of each zero-out case was measured in two ways: (1) the average decrease in the $PM_{2.5}$ concentration across all days and (2) the maximum decrease in the DA24 $PM_{2.5}$ concentration across all days. Impacts of the power-plant plumes on particle-phase water were excluded.

Climate impacts

Climate impacts were assessed based on the CO_2 emissions rate of each power plant. Upstream emissions from coal mining and transport were not considered. We assumed a $52/short ton monetized social cost of CO_2 emissions, based on interpolating between the 2015 and 2020 estimates under a 3% discount rate from the Interagency Working Group on Social Cost of Greenhouse Gases (2016), and converting to 2017 dollars.

Visibility impacts

Changes in visibility at Class I Areas were evaluated using the IMPROVE algorithm (Pitchford et al. 2007). Class I Areas are a group of 158 national parks, fish and wildlife refuges, and Forest Service Wilderness Areas that were given the greatest level of air quality protection under the Clean Air Act in a 1977 amendment. In this study, effects on Big Bend National Park, Guadalupe Mountain National Park, Salt Creek Fish & Wildlife Refuge, Wichita Mountain Fish & Wildlife Refuge, and Caney Creek Forest Service Wilderness Area were considered (Figure 3). To determine the effects on visibility at each of these Class I Areas, the concentrations of each of the components of the IMPROVE equation were averaged for each episode. Then the IMPROVE equation was used to calculate average light extinction for each episode, using the hygroscopicity for that month (Pitchford et al. 2007). These values were then averaged and used to calculate a Haze Index (in deciview, dV) across both episodes. A visibility change of 1 dV is generally recognized to be humanly perceptible (US EPA 2016b).

BenMAP modeling of health impacts

Health impacts stemming from the changes in air quality were analyzed with BenMAP, using the same health impact and valuation functions as were used by US EPA (2015b) to determine and valuate mortality due to long-term exposure to $PM_{2.5}$ (Krewski et al. 2009; Lepeule et al. 2012) and short-term exposure to ozone (Smith, Baowei, and Switzer 2009; Zanobetti and Schwartz 2008) (see Table SI2 for details). For ozone, mortality of all ages was considered, but for $PM_{2.5}$, only adult mortality was considered because the studies used considered only adult mortality and, based on the results from US EPA (2015b), the impacts on infant mortality would be small in comparison. Note that effects from non-mortality-related impacts were not included in this analysis. Because not all impacts are included, our results are conservative estimates of total impacts. Because two health impact functions were used to calculate both ozone and $PM_{2.5}$ impacts, the two results were averaged to obtain the impact from each pollutant. Also, in order to capture the uncertainty in the impacts, we calculated the 95% confidence intervals (CIs) of the health impact functions and the valuation functions. We scaled the ozone impacts by 0.42, following the approach of Digar, Cohan, and Bell (2011), since we expect NO_x reductions to reduce ozone only during the 5-month ozone season. Ozone itself remains unhealthful throughout the year (Bell et al. 2004), but is insensitive to or even negatively correlated with NO_x when cool weather suppresses biogenic VOC emissions (Zhang et al. 2009; Luecken et al. 2018). We did not scale the $PM_{2.5}$ impacts, because NO_x and SO_2 contribute to $PM_{2.5}$ year-round, albeit with temporal variations that cannot be assessed here. Each of these impacts was also normalized based on daily-average generation (MWhr/day).

Because modeling episodes were chosen based on high ozone concentrations, it is possible that this scaling method overestimated ozone impacts (and, to a lesser extent, $PM_{2.5}$ impacts). However, these biases will be lessened by the facts that impacts were calculated based on changes in concentrations, rather than absolute concentrations, and that ozone and $PM_{2.5}$ concentrations during these episodes were just 13–21% higher than seasonal and annual averages, respectively (Table SI4).

Reduced-form modeling of health impacts

Reduced-form modeling was used to provide alternate estimates of the monetized mortality impacts of the power-plant emissions considered in the preceding. We obtained version 2 of APEEP (AP2) from its developer Nick Muller and adopted the updates described by Pourhashem et al. (2017). We obtained EASIUR from its developer Jinhyok Heo (http://barney.ce.cmu.edu/~jinhyok/easiur).

APEEP computes the ozone impacts of NO_x emissions and the PM impacts of NO_x and SO_2 emissions from each county and each of three emissions heights using a Gaussian plume model (Muller 2011; National Research Council 2010). Some applications of APEEP have tallied monetized impacts as an aggregate of marginal effects of emissions on mortality, morbidity, agriculture, visibility, and recreation (Muller 2014). Here, we considered only the premature mortality impacts, since they dominate other impacts on a monetized basis (U.S. EPA, 2011) and for consistency with EASIUR and BenMAP as applied here. APEEP considers impacts of short-term ozone exposure based on Bell et al. (2004), short-term $PM_{2.5}$ exposure based on Klemm and Mason (2003), and long-term $PM_{2.5}$ exposure based on Pope et al. (2002). EASIUR considers only the impacts of $PM_{2.5}$ exposure based on Krewski et al. (2009), which is the less responsive of the two functions averaged in the BenMAP analysis (Table SI4). We treated emissions from J K Spruce, San Miguel, Sandow, and Welsh as being released from medium stacks (250–500 m effective plume height) and the remainder from tall stacks (> 500 m effective plume height), following the recommendation of Nick Muller (personal communication, March 2018). APEEP does not simulate emissions from Oak Grove directly since it opened after 2008, so we use its estimates of marginal damages from emissions from its county at a medium plume height (250–500 m).

EASIUR considers only mortality impacts from $PM_{2.5}$ resulting from emissions in each grid cell (Heo et al. 2016). We applied EASIUR to NO_x and SO_2 emissions from each power plant, mapped to the corresponding EASIUR grid cell. EASIUR models emissions from ground-level, 150-m, and 300-m sources; we assumed a 300-m stack height for all plants. EASIUR computes source–receptor relationships using a tagged emissions version of the CAMx model. That provides a more comprehensive representation of atmospheric photochemistry than the Gaussian plume model used by APEEP, but limits meteorological inputs to a single year, 2005.

APEEP sets the value of a statistical life (VSL) at $6 million in 2000 USD (Muller 2014), and EASIUR at $8.6 million in 2010 USD (Heo, Adams, and Gao 2016). The user can choose the value of VSL in BenMAP. U.S. EPA (2015b) reviewed 26 published estimates of VSL and chose a central estimate of $10.0 million in 2011 USD based on projected 2024 income levels. To neutralize the effect of these assumptions on comparisons and to be roughly consistent with US EPA (2015b), we adjusted all values to a VSL of $10 million in 2016 USD.

Profitability assessment

Finally, we estimated the profitability of each power plant based on market conditions in 2016. The data used in this analysis were taken from SNL Financial's online data portal. For fuel costs, we used plant-specific estimates reported by each plant or calculated by SNL. We assumed nonfuel variable operations and maintenance (O&M) costs equaled the 2016 average of the costs for Harrington, Tolk, Welsh, Pirkey, and Oklaunion power plants, since these plants are regulated entities and must therefore report these costs. Similarly, the annual capital expenses (Cap-ex) for each plant in this study were assumed to be equal to half of the average across those same five plants of the averaged 2006 to 2016 Cap-ex, which were calculated as the yearly difference between the "Total Cost" values in their FERC Form 1. This number was halved because it is likely that as these plants become less financially stable, they will put less money than in the past into Cap-ex, if at all possible, and that these plants have lower capital expenses than the regulated entities.

For revenues, ERCOT forward market prices were pulled from SNL Financial on July 24, 2017, and averaged across all ERCOT zones and then between on-peak and off-peak prices to obtain an overall monthly ERCOT market price for 2016. Monthly generation for each plant was taken as reported by SNL Financial. Using all of these data, a pretax earnings estimate for 2016 was calculated for each power plant.

Results and discussion

Climate impacts

CO_2 emission rates fell in a narrow range from 1.00 to 1.26 short tons/MWhr in 2015. These values are direct emissions from combustion, and do not consider the life cycle of coal mining and transport or power-plant construction. The range in CO_2 emission rates reflects the relative efficiencies of the power plants and the carbon content of their coal. None of the plants captured their carbon emissions in 2015, though W A Parish now captures CO_2 from a portion of the slipstream of one of its four units. San Miguel and

Monticello had the highest emission rates (1.26 and 1.15 short tons/MWhr, respectively), in part due to their use of lignite, which has a lower heat content than other coal.

Ozone impacts

Ozone impacts were far more varied across the plants, due to their sharply different NO_x emissions and the spatial variability of ozone sensitivity to NO_x. Averaged over the fine domain, Martin Lake and Monticello formed the most ground-level ozone, about 0.06 ppb each (Table 5). As can be seen in Figure 4, ozone impacts were most intense in counties adjacent to the plants, and extended for hundreds of kilometers downwind.

Normalized by daily generation, San Miguel, Limestone, and Welsh most strongly impacted ozone, with impacts near 2.5 ppt/GWhr. Impacts were below 1 ppt/GWhr for four other power plants (Figure 5), reflecting their lower NO_x emission rates (Table 2).

As expected, the power plants closest to each of the three main metropolitan areas (Dallas–Fort Worth, Houston, and San Antonio) tended to have the greatest effects on regulatory monitors in those regions (Figure 6).

In the Dallas–Fort Worth region, averaged over the episodes, Limestone had the greatest impact on a single monitor (0.17 ppb at Dallas Hinton), while Fayette Power Project had the greatest impact on the most monitors (7 of the 12). Monticello had the greatest impact on a monitor on a single day (1.7 ppb at Dallas Hinton). At all four of the monitors with the highest ozone design value, Fayette Power Project, Limestone, and Oak Grove had the largest impacts (Figure 6).

In the Houston region, W A Parish had the largest impact on episode-average ozone at 10 of the 12 monitors examined, including 0.48 ppb at Houston Croquet.

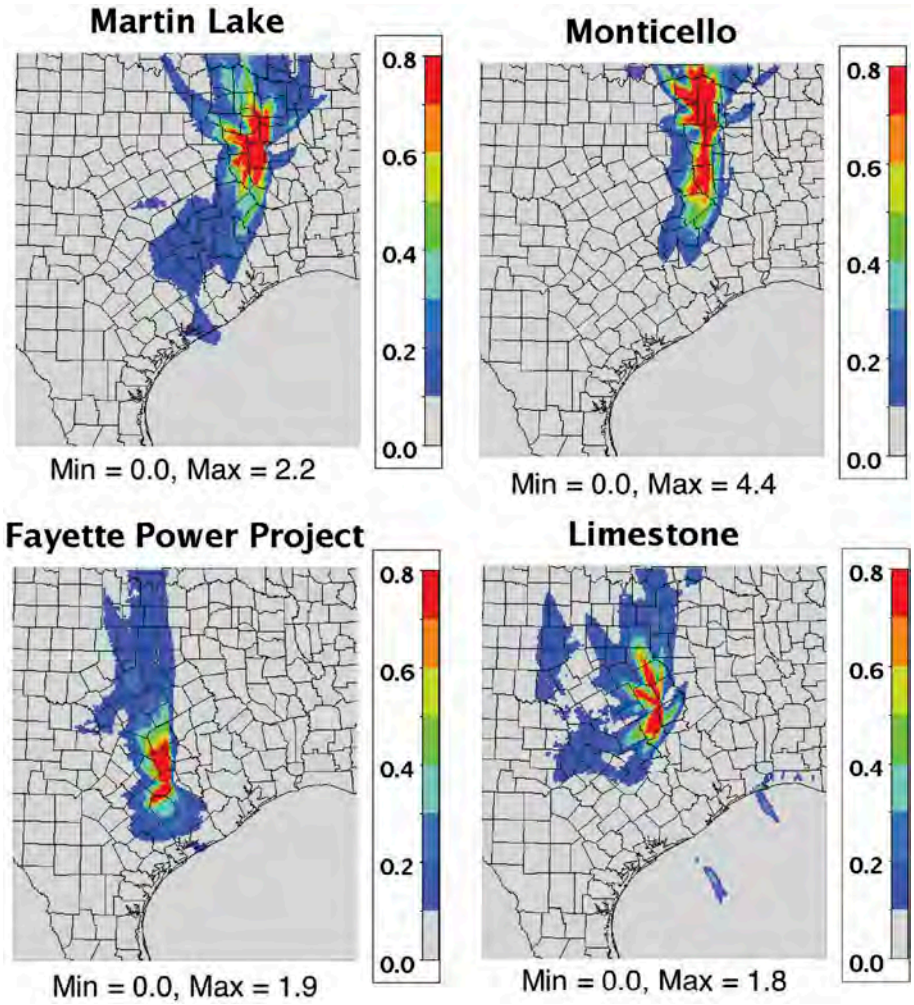


Figure 4. Difference between MDA8 ozone in Base Case and power-plant zero-outs averaged over June episode for plants with high overall impacts (ppb).



Figure 5. Impacts on MDA8 ozone averaged over all days and over the fine-scale domain and normalized by daily GWhr.

Its peak single-day MDA8 ozone impact was 3.3 ppb at the Northwest Harris County monitor. The large ozone impacts reflect the proximity of W A Parish in the southwest corner of the Houston region and its large size, despite its stringent NO_x control from selective catalytic reduction. W A Parish had by far the largest impacts, followed by Martin Lake, on all four of the monitors with the highest DV (Figure 6).

In the San Antonio region, the nearby J T Deely had the most impact on episode-average ozone at both monitors, including 0.48 ppb at Camp Bullis. Two other nearby power plants, J K Spruce and San Miguel, ranked second and third. J K Spruce had the largest single-day ozone impact, 1.5 ppb at San Antonio Northwest.

In each region, daily variations in power-plant impacts were not significantly correlated with daily ozone concentrations. In other words, power plants did not have a consistently larger impact on high-ozone days than on average- or low-ozone days.

$PM_{2.5}$ impacts

As with ozone, $PM_{2.5}$ impacts varied widely across the plants. Averaged over the fine domain and episodes, the largest amounts of $PM_{2.5}$ formed from W A Parish (0.06 $\mu g/m^3$), Monticello (0.03 $\mu g/m^3$), Big Brown (0.03 $\mu g/m^3$), and Martin Lake (0.02 $\mu g/m^3$) (Table 5). These four plants were also the largest SO_2 emitters (Table 2). All other plants had $PM_{2.5}$ impacts below 0.015 $\mu g/m^3$. Normalized by daily generation, Big Brown had the largest domain-wide impact (1.3 ng/m^3/GWhr) (Figure 8).

As shown in Figure 9, though located in the Houston region, W A Parish had the largest episode-average impact on $PM_{2.5}$ not only at the most polluted monitor in the Houston region (Clinton; 0.15 $\mu g/m^3$), but also in the Dallas–Fort Worth region (Convention Center; 0.08 $\mu g/m^3$) and Austin region (Austin Webberville Road; 0.05 $\mu g/m^3$). In the San Antonio region, nearby J T Deely had the largest impact at its most polluted monitor (San Antonio Northwest; 0.06 $\mu g/m^3$). After normalizing by daily generation, though, Sandow had the largest impact in Dallas–Fort Worth and Austin (3.8 and 3.0 ng/m^3/GWhr, respectively), while W A Parish remained the most important in Houston and J T Deely in San Antonio (2.8 and 3.7 ng/m^3/GWhr, respectively).

In terms of maximum daily impacts, Monticello had the greatest effect in Dallas–Fort Worth (0.43 $\mu g/m^3$), W A Parish in Houston (0.92 $\mu g/m^3$), Coleto Creek in San Antonio (0.47 $\mu g/m^3$), and Big Brown in Austin (0.40 $\mu g/m^3$).

Visibility impacts

As shown in Figure 10, among the Class I Areas on an episode-average basis, Caney Creek was most impacted by the power plants—0.25 dV from Monticello, 0.21 dV from Big Brown, 0.16 dV from Parish, and 0.12 dV from Martin Lake. Since 1 dV is recognized as humanly perceptible (US EPA 2016b), these collective impacts can be substantial, especially on days with higher than average impacts. In the Wichita Mountains, average impacts were 0.14 dV from Parish and 0.11 dV from Big Brown. For all other Class I Areas, impacts from individual power plants were below 0.1 dV. This does not necessarily rule out concern about haze impacts in those other areas, since there could be impacts on peak days during nonsummer months.

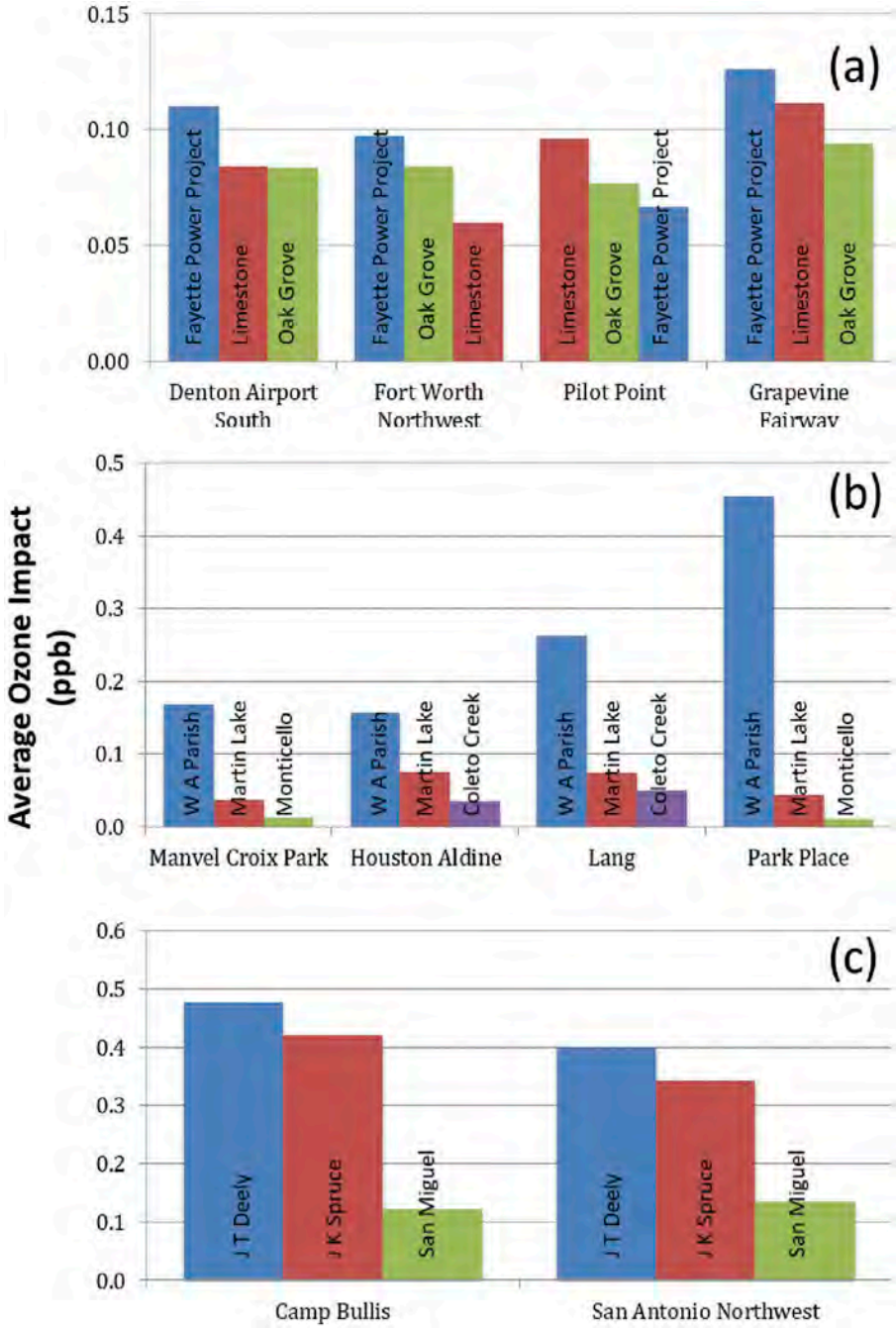


Figure 6. Three largest impacts on MDA8 ozone averaged over all days at the monitors with the highest design values in the (a) Dallas–Fort Worth, (b) Houston, and (c) San Antonio regions.

Health impacts

The air quality impacts computed by CAMx were input into BenMAP to compute resulting impacts on health. BenMAP provides results both in terms of increased mortality and associated monetized impacts, with valuation set at approximately $10 million per death. The 95% CI ranges represent uncertainty only in the health impact functions and valuation functions within BenMAP, because uncertainties of photochemical model outputs from CAMx cannot be readily computed.

Overall in the CAMx/BenMAP modeling, power-plant mortality impacts via $PM_{2.5}$ were more than an order of magnitude larger than those via ozone (Table 5). Martin Lake and Limestone created the most health effects due to ozone (1.1 [0.4–2.0] and 1.0 [0.4–1.9] deaths/yr,

respectively), whereas W A Parish and Big Brown had the greatest effects from $PM_{2.5}$ (177 [77–353] and 81 [35–162] deaths/yr, respectively). The top five most impactful plants for each pollutant are shown in Table 3.

After normalizing by generation, San Miguel and Limestone had the largest estimated impacts from ozone (0.13 [0.05–0.24] and 0.13 [0.05–0.23] deaths/TWhr, respectively) and Sandow, Big Brown, and W A Parish had the largest impacts from $PM_{2.5}$ (9.1 [4.0–18.1], 9.0 [3.9–18.0], and 9.0 [3.9–18.0] deaths/TWhr, respectively). The rankings result from relatively high SO_2 emission rates and, for W A Parish, proximity to Houston.

When considering the value of the impacts from both ozone and $PM_{2.5}$, the largest normalized health impacts (Sandow, Big Brown, and W A Parish) each correspond to a monetized value of approximately $90/MWhr. Each of these plants emitted large amounts of SO_2 upwind of populated areas. By contrast, power plants with modern SO_2 controls such as Fayette, J K Spruce, and Oak Grove (Table SI1) caused health impacts of roughly $10/MWhr. For comparison, Levy, Baxter, and Schwartz (2009) reported a range of $20 to $1,570/MWhr as the health effects associated with electricity generation from coal across U.S. power plants.

Significant additional monetary impacts are realized when considering the social cost of CO_2 emissions. Using a social cost of carbon of $52/short ton (in 2017 dollars), climate impacts range from $47/MWhr at Limestone to $59/MWhr at San Miguel. This narrow range reflects the relatively uniform rates of CO_2 emissions compared to the starkly divergent SO_2 emission rates.

Combining all societal impacts (Figure 11), Big Brown and Sandow had the largest impacts ($143/MWhr), while all of the 13 plants had impacts above $57/MWhr. That is far higher than the average wholesale cost of electricity in ERCOT, which was just $22/MWhr in 2016, according to data from SNL Financial.

The reduced-form models APEEP and EASIUR provide alternatives to CAMx/BenMAP for computing monetized health impacts. For ozone, CAMx/BenMAP estimates an impact of $0.85/MWhr averaged across the power plants, whereas APEEP (normalized to a $10 million VSL) estimates $0.23/MWhr. This difference likely arises from the use of high ozone episodes in CAMx and annual conditions in APEEP. EASIUR does not model ozone. For $PM_{2.5}$, CAMx/BenMAP estimates $44/MWhr, APEEP estimates $30/MWhr, and EASIUR estimates $42/MWhr. The lower estimates from APEEP may result in part from its use of a relatively simple Gaussian plume model rather than the more sophisticated representation of photochemistry in CAMx and EASIUR.

Comparing individual power-plant impacts across the three methods, the coefficient of determination between EASIUR and CAMx/BenMAP results was R^2 = 0.80, and between APEEP and CAMx/BenMAP it was R^2 = 0.63 (Figure 12). The methods consistently ranked several power plants (e.g., Big Brown) as having the largest impacts on health per MWhr, and certain other plants (e.g., J K Spruce) having an order of magnitude smaller effect. One notable difference is that EASIUR indicated a large spread between the per-

Table 3. Power plants with the five largest impacts on mortality summed over the fine-scale domain, as computed by CAMx/BenMAP. Values in parentheses are 95% CIs of health impact functions.

	Normalization	
	None (deaths/year)	Generation (deaths/TWhr)
MDA8 Ozone	Martin Lake	San Miguel
	1.1	0.13
	(0.4, 2.0)	(0.05, 0.24)
	Limestone	Limestone
	1.0	0.13
	(0.4, 1.9)	(0.05, 0.23)
	W A Parish	Big Brown
	1.0	0.1
	(0.4, 1.8)	(0.04, 0.18)
	Monticello	J T Deely
	0.9	0.1
	(0.4, 1.7)	(0.04, 0.17)
	Fayette Power Project	Welsh
	0.9	0.1
	(0.4, 1.7)	(0.04, 0.17)
$PM_{2.5}$	W A Parish	Sandow
	177	9.1
	(77, 353)	(4.0, 18.1)
	Big Brown	Big Brown
	81	9.0
	(35, 162)	(3.9, 18.0)
	Monticello	W A Parish
	76	9.0
	(33, 152)	(3.9, 18.0)
	Sandow	Monticello
	44	6.3
	(19, 88)	(2.8, 12.6)
	Martin Lake	J T Deely
	41	5.1
	(18, 83)	(2.2, 10.2)

Table 4. Estimated variable O&M costs and pretax earnings in 2016 for power plants in Texas.

	Variable O&M ($/MWhr)	Pretax earnings (million $)	Pretax earnings ($/MWhr)
Sandow	17.41	−1.7	−0.44
Coleto Creek	25.11	−25.1	−8.04
Oak Grove	19.75	−29.2	−2.41
Limestone	20.88	−46.8	−5.11
Big Brown	24.03	−49.0	−7.80
Martin Lake	19.98	−49.3	−4.39
J T Deely	33.62	−53.7	−22.11
San Miguel	43.67	−63.8	−27.15
Welsh	31.42	−75.4	−16.80
Monticello	26.52	−89.4	−11.87
J K Spruce	31.93	−91.3	−16.76
Fayette	26.65	−100.3	−9.88
W A Parish	25.99	−124.2	−9.87

Table 5. Results of the six main impact metrics (maximum MDA8 ozone, average MDA8 ozone, maximum DA24 $PM_{2.5}$, average DA24 $PM_{2.5}$, mortality from ozone, mortality from $PM_{2.5}$) for each of the 13 power plants of interest in CAMx/BenMAP modeling.

	Maximum MDA8 ozone (ppb)	Average MDA8 ozone (ppb)	Maximum DA24 $PM_{2.5}$ ($\mu g/m^3$)	Average DA24 $PM_{2.5}$ ($\mu g/m^3$)	Ozone health (deaths)	$PM_{2.5}$ health (deaths)
Big Brown	2.1	0.04	0.5	0.031	1	81
Coleto Creek	1.7	0.03	0.2	0.009	0	22
Fayette Power Project	2.2	0.06	0.1	0.003	1	7
J K Spruce	0.7	0.02	0.1	0.001	1	5
J T Deely	0.7	0.03	0.1	0.009	1	29
Limestone	1.8	0.05	0.2	0.014	1	41
Martin Lake	2.9	0.06	0.5	0.020	1	42
Monticello	4.4	0.06	1.0	0.033	1	76
Oak Grove	1.6	0.05	0.2	0.005	1	15
San Miguel	1.2	0.02	0.1	0.003	0	7
Sandow	1.4	0.02	0.6	0.015	1	44
W A Parish	1.0	0.03	1.2	0.062	1	177
Welsh	2.2	0.03	0.2	0.008	0	18

Note. Maximum refers to the grid cell with the maximum impacts after averaging over all days.

MWhr health impacts of Big Brown, Sandow, and W A Parish, whereas CAMx/BenMAP computed a narrower spread (Figure 12). That is because CAMx modeled the W A Parish plume to frequently impact densely populated areas in the nearby Houston suburbs and the Dallas–Fort Worth region downwind during the episodes (Figure 7), counteracting its lower per-MWhr emissions rate (Table 2). The coarse modeling of EASIUR muted the spatial differences of plume locations and population density, and thus found per-MWhr health impacts that more closely resembled the spread in per-MWhr emissions.

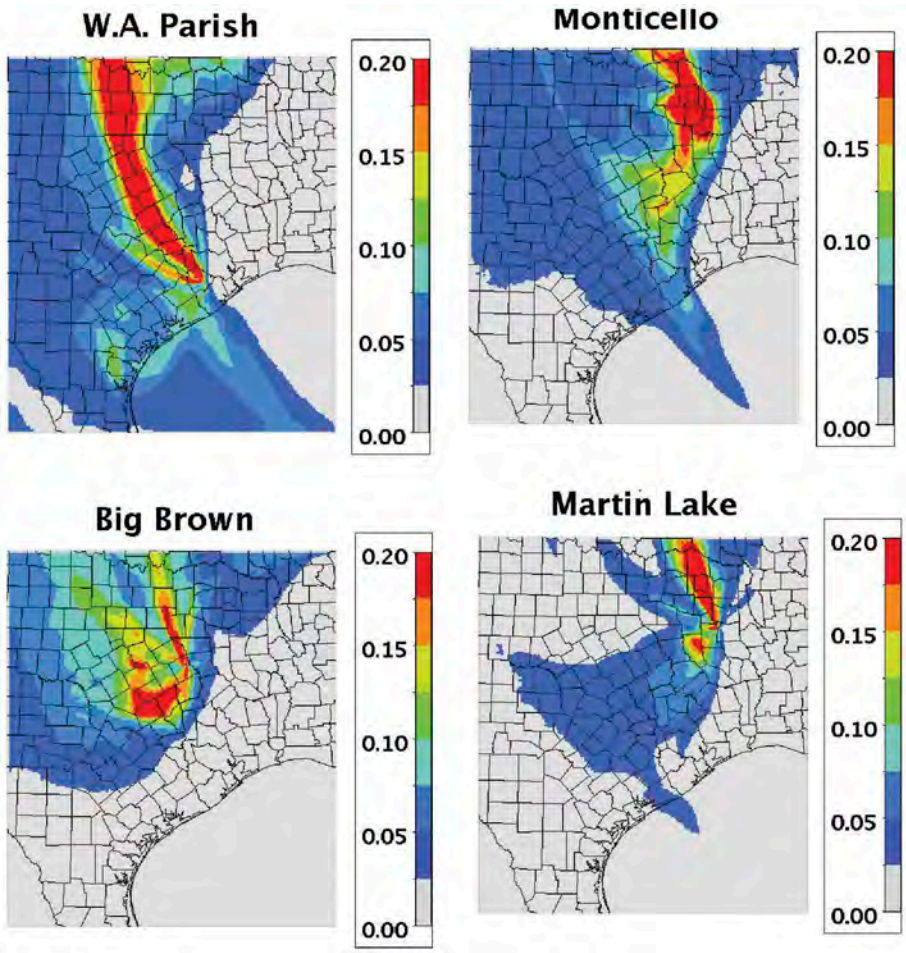


Figure 7. Difference between $PM_{2.5}$ in Base Case and power-plant zero-outs averaged over June episode for plants with high overall impacts ($\mu g/m^3$).

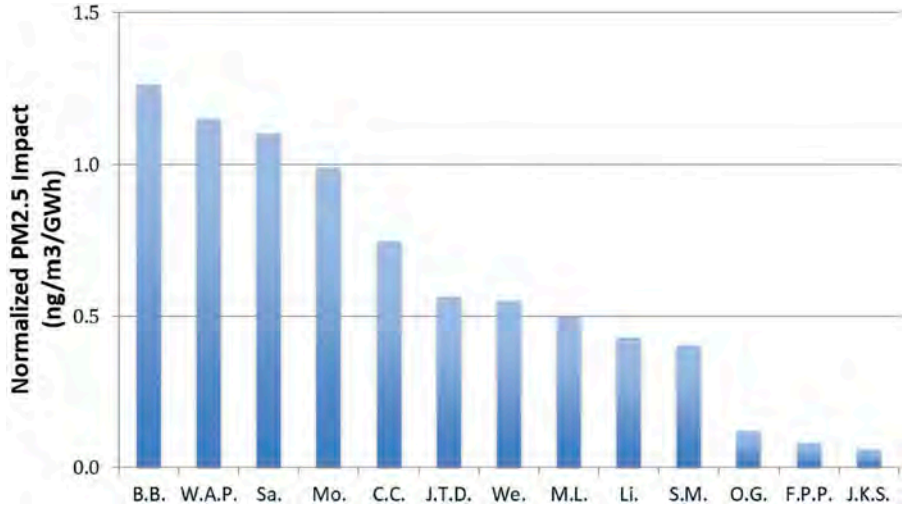


Figure 8. Impacts on $PM_{2.5}$ averaged over all days and over the fine-scale domain and normalized by daily GWhr.

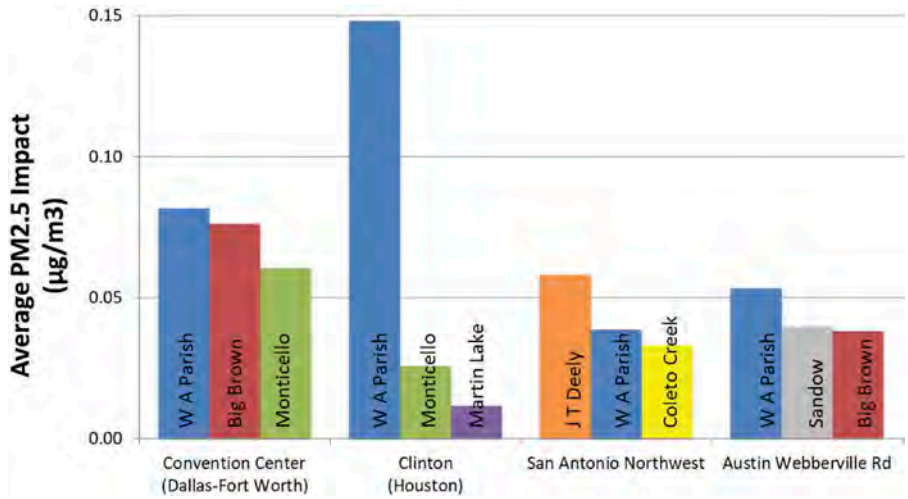


Figure 9. The three largest impacts from power plants on $PM_{2.5}$ averaged over all days at the monitor in each region with the highest $PM_{2.5}$ design value.

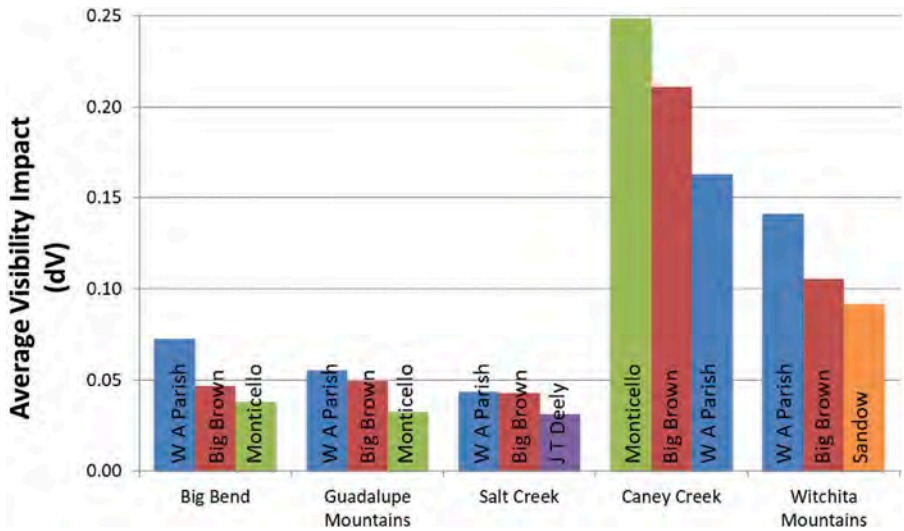


Figure 10. The three largest impacts from power plants on visibility at each Class I area, averaged over all episode days.

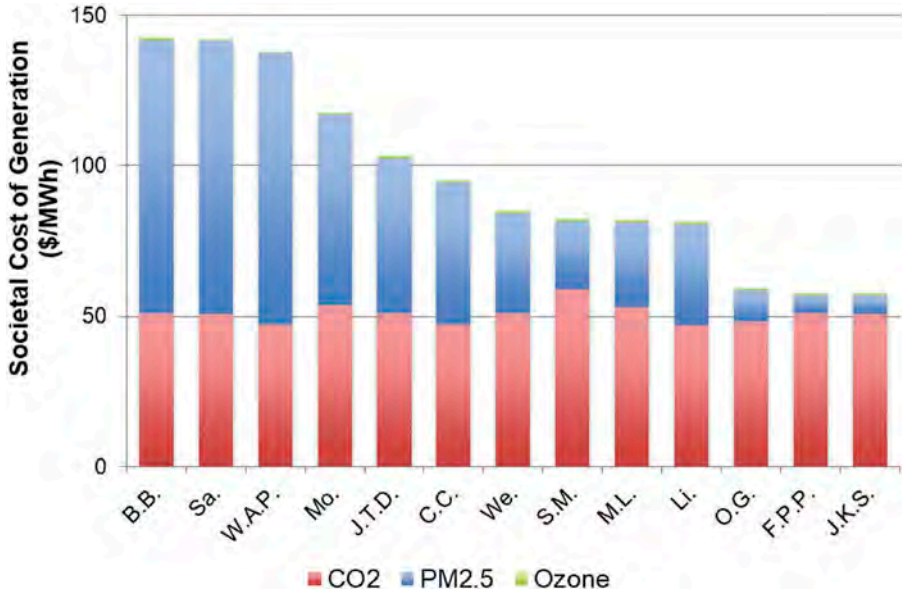


Figure 11. Societal costs of generation for each power plant, based on a $52/ton social cost of CO_2 and the mortality impacts of $PM_{2.5}$ and ozone.

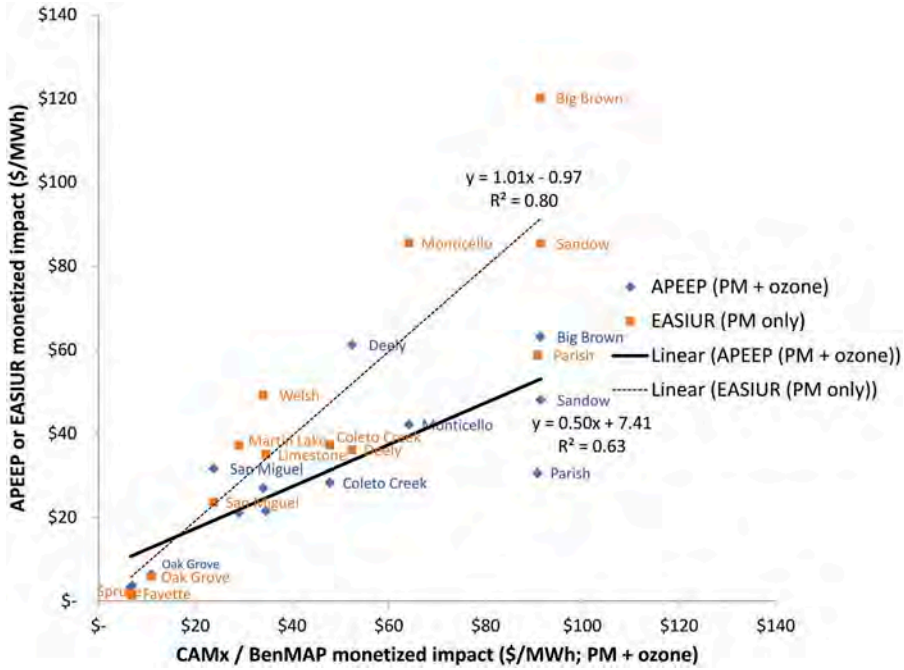


Figure 12. Monetized mortality impacts from each power plant simulated by APEEP or EASIUR compared to the results from CAMx/BenMAP.

Note that the EASIUR results exclude ozone, but that ozone represents a small portion of the CAMx/BenMAP and APEEP monetized impacts. Also, note in Table SI2 that EASIUR uses only the less responsive one (Krewski et al. 2009) of the two $PM_{2.5}$ concentration-response functions considered in our application of BenMAP (Krewski et al. 2009; Lepeule et al. 2012); scaling the EASIUR results by a factor of 1.62 would normalize for that difference. The form of the $PM_{2.5}$ concentration-response function embedded into APEEP (Pope et al. 2002; Table SI3) differs from the ones used by BenMAP and EASIUR, and thus cannot be readily scaled to match the others.

Profitability analysis

Our analysis of power prices, fuel and other operating and maintenance costs, and discounted capital expenses

indicates that none of the 13 coal-fired power plants earned a net profit in 2016 (Table 4). Our estimates of net cash flow range from –$1.7 million at Sandow to –$124.2 million at W A Parish. Normalized by 2016 generation, losses ranged from $0.44/MWhr at Sandow to $27.15/MWhr at San Miguel. The range reflects the much lower variable O&M costs for Sandow ($17.41/MWhr) than for San Miguel ($43.67/MWhr). Note that 9 of the 13 power plants had fuel and other variable O&M costs that were, by themselves, more expensive than the average ERCOT market price for 2016 as reported by SNL Financial ($22.10/MWhr).

It is possible that the closure of some of these plants will lead to an increase in the ERCOT market price, which could improve the financial situations of the plants that did not close. This will become apparent in 2018, when four of the plants considered here (Monticello, Big Brown, Sandow, and J T Deely) will close. That may be why other plants have not closed already, despite their likely negative cash flows. However, it is also possible that increased generation during this time period, namely, from natural gas and renewables, will negate some or all of the positive effects of coal plant closures on the finances of other coal plants.

Conclusion

Our results show fairly similar climate impacts from each coal-fired power plant but an order of magnitude range in impacts on ozone and $PM_{2.5}$, both at regulatory monitors and on a health or visibility basis, after normalizing by daily generation. Differing emissions control technologies and proximity to urban areas drove the differences in health impacts, while the narrow range of efficiencies drove the similarities in CO_2 emissions.

Ozone impacts may be overstated because the episodes modeled included periods of high ozone concentrations, although the differences from seasonal averages were modest (Table SI4). Since ozone represents a small portion of overall monetized valuations (Figure 11), the effect of episode selection bias on aggregate impacts will be muted.

Another caveat is that all of our health impacts modeling apply what the Health Effects Institute calls a "chain of accountability" to link emissions with ambient air quality, exposure, and ultimately human health responses (Health Effects Institute 2003). Each link in this chain compounds uncertainty. For example, the historical concentration-response functions computed by epidemiological studies in other regions will not precisely represent conditions in Texas today.

We find that health impacts are more variable and in some cases larger than climate impacts on a monetized basis. In particular, power plants that do not scrub their sulfur are most damaging to health and visibility via impacts on particulate sulfate. Setting policy solely based on carbon emissions may mean foregoing opportunities to accelerate progress on air quality, health, and visibility. Our finding that particulate matter imposes the greatest impact on human health is consistent with other studies (Fann et al. 2012; Pope and Dockery 2006).

Sulfur emissions and associated $PM_{2.5}$ have received less attention in Texas than ozone-forming NO_x, because the state's largest urban areas violate ambient standards for ozone but not for $PM_{2.5}$. In fact, TCEQ regulatory modeling does not even simulate formation of $PM_{2.5}$, requiring us to reactivate this standard feature of the CAMx model to conduct our analysis. While $PM_{2.5}$ modeling may be unnecessary for ozone attainment planning, our results suggest that $PM_{2.5}$ formation from SO_2 emissions is the leading cause of health impacts.

Our findings highlight opportunities for modeling to inform policies that would enhance societal outcomes as the Texas power market evolves. For now, power-plant closure decisions are based almost exclusively upon financial considerations of the facility owner, emitting pollution virtually for free within permitted limits. With health impacts per MWhr varying by an order of magnitude across facilities, policies targeting sulfur emissions and to a lesser extent NO_x could spur closures or emissions abatement at the facilities most potent at forming air pollution and associated health and visibility impacts. Since it will take a number of years before natural gas and renewable energy can fully replace coal on the Texas grid, such policies could accelerate the air quality and health benefits of the ongoing transition from coal to cleaner sources of electricity.

A missed opportunity for accelerating those benefits came with the reversal of the Regional Haze plan issued by EPA for Texas at the end of the Obama Administration (US EPA 2016b). That plan would have required SO_2 controls at eight of the highest emitting power plants considered here. Given the poor financial status of those plants as indicated by our study, such a plan would likely have prompted most of those plants to close or convert to natural gas, yielding substantial benefits for climate, air quality, and health beyond the stated purpose of reducing regional haze. Instead, EPA in 2017 replaced the plan with a cap-and-trade scheme, setting the cap higher than emissions in recent years (2018b; US EPA 2017c). That will allow several power plants to continue operating unscrubbed, resulting in monetized health impacts that far exceed the market price for their electricity.

Future work could compare the multifaceted impacts of power plants elsewhere. Dispatch modeling would be needed to explore how closures of some

plants might lead to a rebound in utilization of remaining plants. Also, because $PM_{2.5}$ and associated regional haze affect health and visibility year-round, it will be important to model conditions outside the summer ozone season. The correlation between results from the CAMx/BenMAP, APEEP, and EASIUR approaches suggests that both regional photochemical modeling and reduced-form models are options for informing decision making, though further study is needed to compare the methods in other regions and time periods. Though EASIUR has a shorter track record than APEEP, its more advanced photochemical modeling and closer agreement with our direct modeling (Figure 12) suggest that it deserves more attention in future reduced-form modeling studies.

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Table 2. Violating Sites in Areas Not Previously Designated Nonattainment for the 2015 8-Hour Ozone NAAQS
AQS Data Retrieval: 5/7/2024 Last Updated: 5/7/2024

State Name	County Name	EPA Region	AQS Site ID	2021-2023 Design Value (ppm) [1,2]	CBSA Name
Arkansas	Crittenden	6	050350005	0.072	Memphis, TN-MS-AR
California	Inyo	9	060270101	0.071	
Colorado	El Paso	8	080410016	0.071	Colorado Springs, CO
Colorado	Gilpin	8	080470003	0.075	Denver-Aurora-Lakewood, CO
Illinois	Jersey	5	170830117	0.073	St. Louis, MO-IL
Illinois	Randolph	5	171570001	0.071	
Illinois	Winnebago	5	172012001	0.071	Rockford, IL
Indiana	LaPorte	5	180910005	0.072	Michigan City-La Porte, IN
Indiana	Marion	5	180970078	0.071	Indianapolis-Carmel-Anderson, IN
Louisiana	Iberville	6	220470012	0.072	Baton Rouge, LA
Missouri	Clay	7	290470006	0.071	Kansas City, MO-KS
Missouri	Perry	7	291570001	0.071	
Nebraska	Knox	7	311079991	0.071	
New Mexico	Bernalillo	6	350011012	0.072	Albuquerque, NM
New Mexico	Dona Ana	6	350130008	0.076	Las Cruces, NM
New Mexico	Eddy	6	350150010	0.078	Carlsbad-Artesia, NM
New Mexico	Eddy	6	350151005	0.078	Carlsbad-Artesia, NM
New Mexico	Lea	6	350250008	0.071	Hobbs, NM
Ohio	Lucas	5	390950035	0.072	Toledo, OH
Oklahoma	McClain	6	400871074	0.071	Oklahoma City, OK
Oklahoma	Oklahoma	6	401091037	0.071	Oklahoma City, OK
Oklahoma	Osage	6	401130226	0.071	Tulsa, OK
Oklahoma	Tulsa	6	401430178	0.073	Tulsa, OK
Tennessee	Shelby	4	471570075	0.072	Memphis, TN-MS-AR
Texas	Bell	6	480271047	0.071	Killeen-Temple, TX
Texas	Hood	6	482210001	0.075	Dallas-Fort Worth-Arlington, TX
Texas	Travis	6	484530014	0.071	Austin-Round Rock, TX
Washington	King	10	530330023	0.073	Seattle-Tacoma-Bellevue, WA
Wisconsin	Kewaunee	5	550610002	0.071	Green Bay, WI
Wisconsin	Rock	5	551050030	0.071	Janesville-Beloit, WI
Wisconsin	Walworth	5	551270006	0.073	Whitewater-Elkhorn, WI

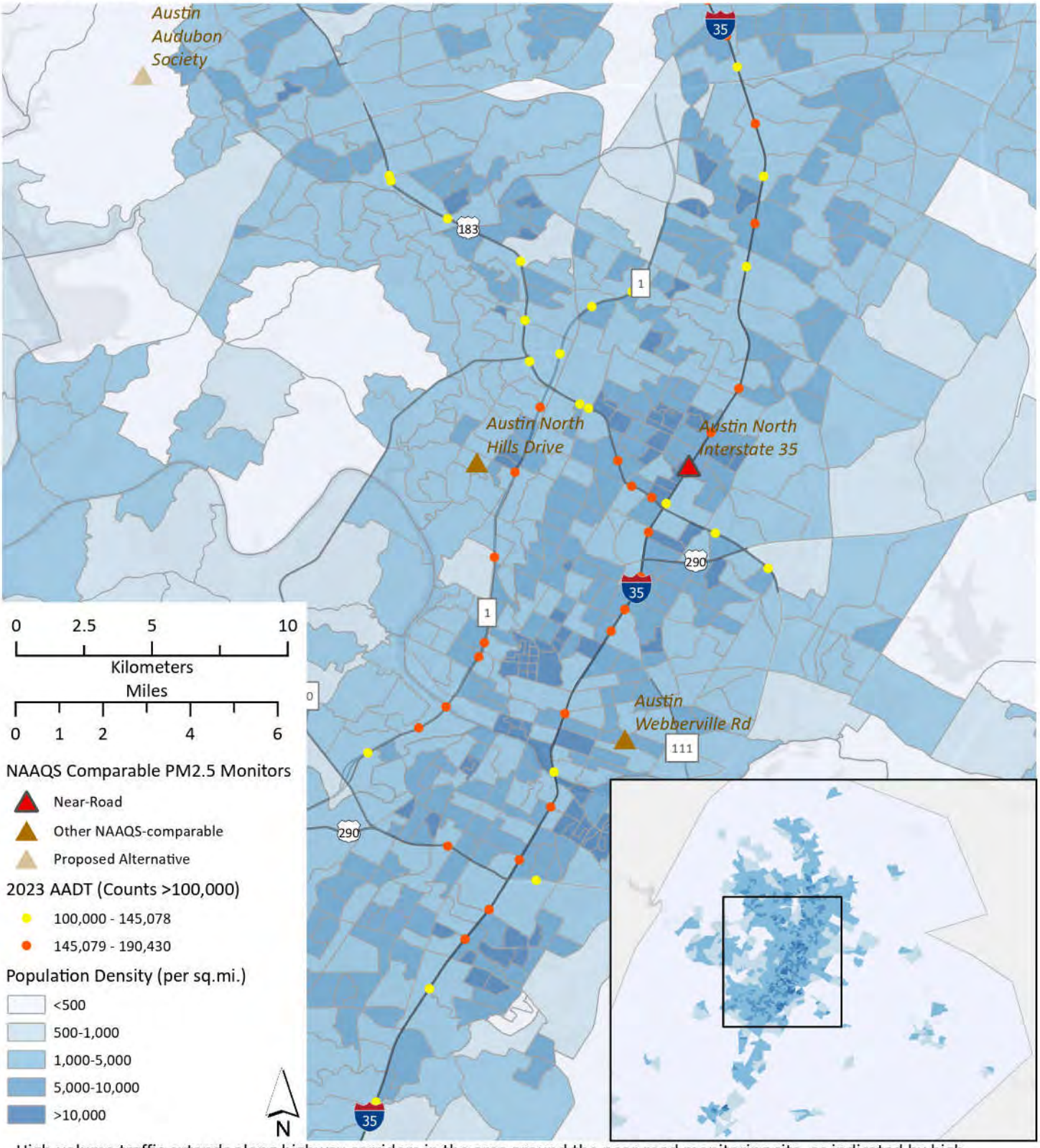
Notes:
1. The level of the 2015 8-hour ozone NAAQS is 0.070 parts per million (ppm). The design value is the 3-year average of the annual 4th highest daily maximum 8-hour ozone concentration.

2. The design values shown here are computed using Federal Reference Method or equivalent data reported by State, Tribal, and Local monitoring agencies to EPA's Air Quality System (AQS) as of May 7, 2024. Concentrations flagged by State, Tribal, or Local monitoring agencies as having been affected by an exceptional event (e.g., wildfire, volcanic eruption) and concurred by the associated EPA Regional Office are not included in these calculations.

Disclaimer: The information listed in this report and in these tables is intended for informational use only and does not constitute a regulatory determination by EPA as to whether an area has attained a NAAQS. The information set forth in this report has no regulatory effect. To have a regulatory effect, a final EPA determination as to whether an area has attained a NAAQS or attained a NAAQS as of its applicable attainment date can be accomplished only after rulemaking that provides an opportunity for notice and comment. No such determination for regulatory purposes exists in the absence of such a rulemaking. This report does not constitute a proposed or final

Exhibit D

Near Road PM2.5 Monitor and Adjacent High-Traffic Corridors
Austin-Round Rock-San Marcos CBSA

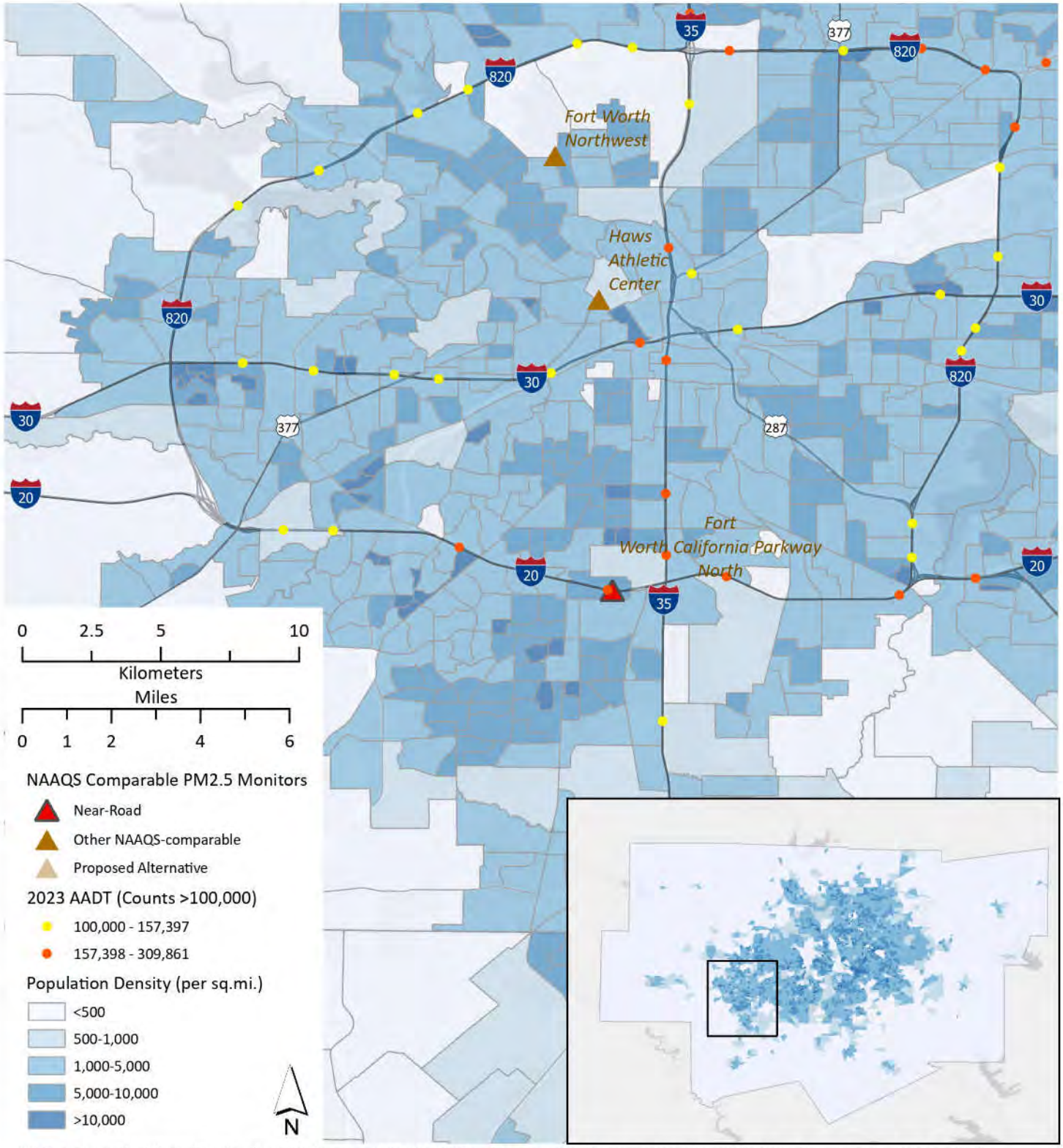


High-volume traffic extends along highway corridors in the area around the near-road monitoring site, as indicated by high-volume traffic count locations. Sites with 2023 AADT greater than or equal to AADT at monitoring site (145,079) shown as orange circles. Additional high-volume counts (greater than 100,000) shown as yellow circles.
These high-volume AADT occur in the most densely populated portions of the CBSA. Population density in near-road block groups is greater than in areas further from the high-traffic corridors, as shown in the inset map, and the average population density for the CBSA overall (541 per square mile).

Layer Credits: Austin Community College, City of Austin, Texas Parks & Wildlife, Esri, HERE, Garmin, USGS, EPA, NPS, Esri, HERE, Garmin, USGS, EPA, NPS

Exhibit E

Near Road PM2.5 Monitor and Adjacent High-Traffic Corridor
Dallas-Fort Worth-Arlington CBSA

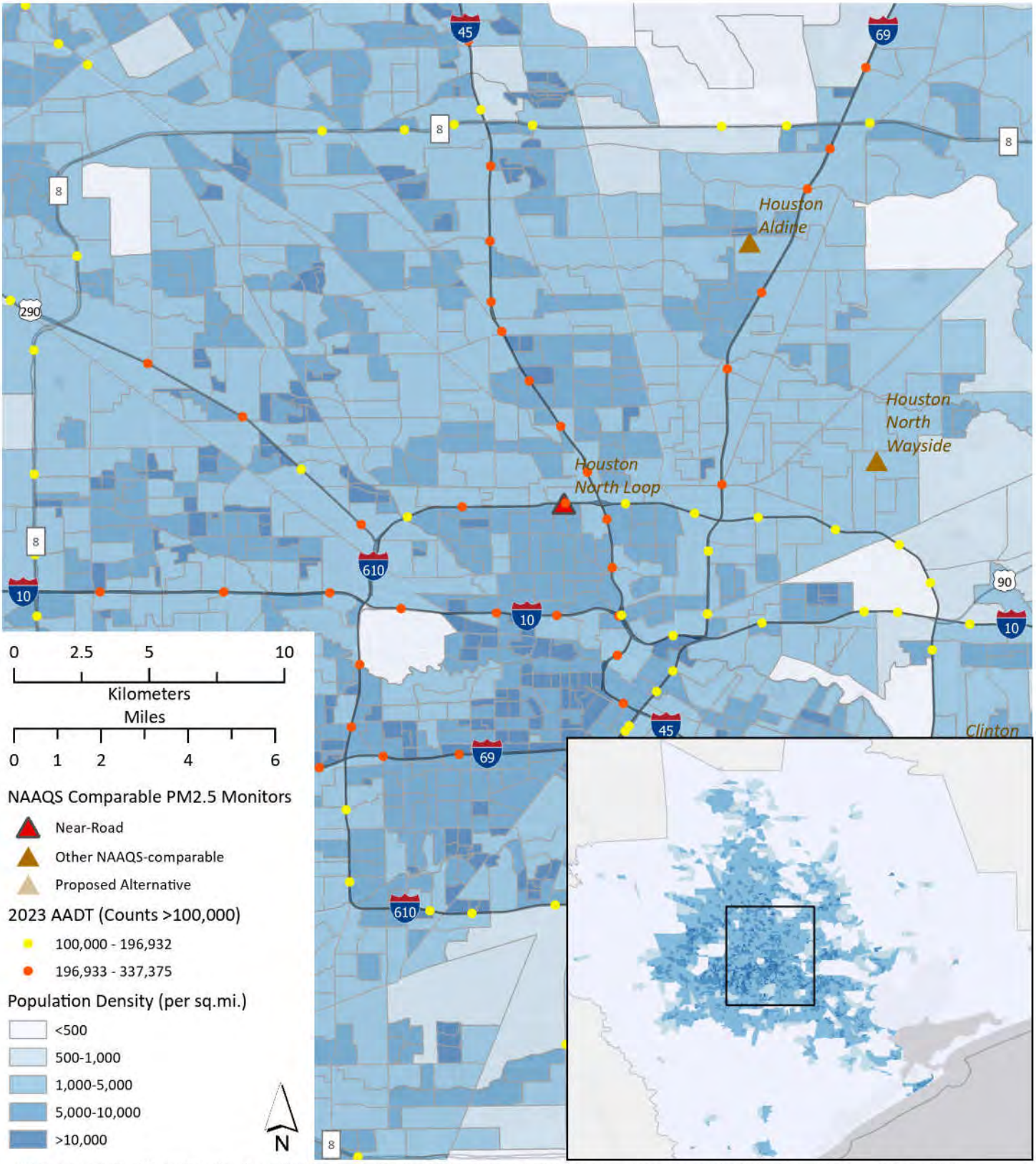


High-volume traffic extends along highway corridors in the area around the near-road monitoring site, as indicated by high-volume traffic count locations. Sites with 2023 AADT greater than or equal to AADT at monitoring site (157,398) shown as orange circles. Additional high-volume counts (greater than 100,000) shown as yellow circles.

These high-volume AADT occur in the most densely populated portions of the CBSA. Population density in near-road block groups is greater than in areas further from the high-traffic corridors, as shown in the inset map, and the average population density for the CBSA overall (880 per square mile).

Layer Credits: City of Fort Worth, Tarrant County College, Texas Parks & Wildlife, Esri, HERE, Garmin, USGS, EPA, NPS, Esri, HERE, Garmin, USGS, EPA, NPS

Near Road PM2.5 Monitor and Adjacent High-Traffic Corridors
Houston-Pasadena-The Woodlands CBSA

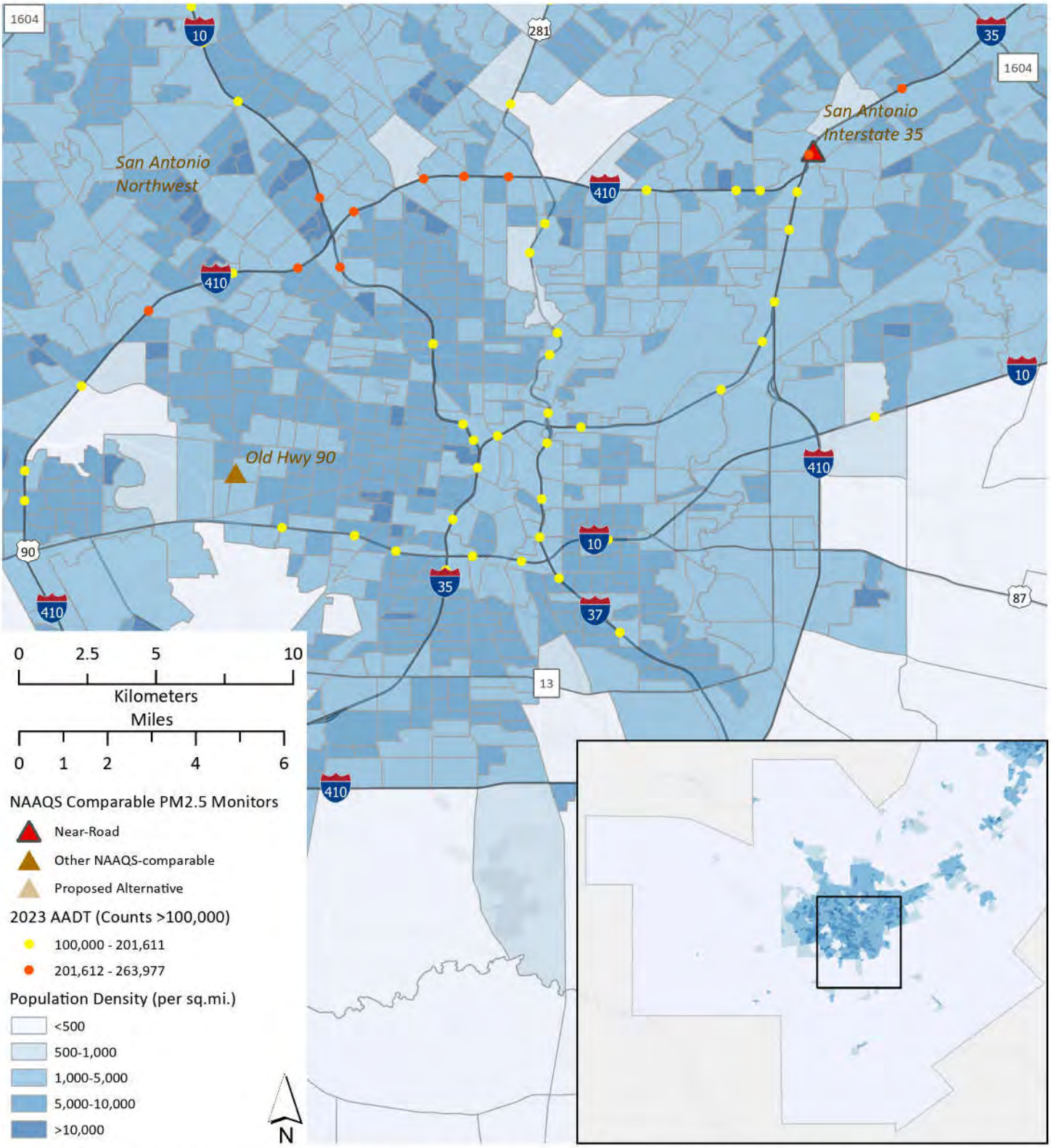


High-volume traffic extends along highway corridors in the area around the near-road monitoring site, as indicated by high-volume traffic count locations. Sites with 2023 AADT greater than or equal to AADT at monitoring site (196,933) shown as orange circles. Additional high-volume counts (greater than 100,000) shown as yellow circles.

These high-volume AADT occur in the most densely populated portions of the CBSA. Population density in near-road block groups is greater than in areas further from the high-traffic corridors, as shown in the inset map, and the average population density for the CBSA overall (809 per square mile).

Layer Credits: City of Houston, HPB, Texas Parks & Wildlife, Esri, HERE, Garmin, USGS, EPA, NPS, Esri, HERE, Garmin, USGS, EPA, NPS

Near Road PM2.5 Monitor and Adjacent High-Traffic Corridors
San Antonio-New Braunfels CBSA

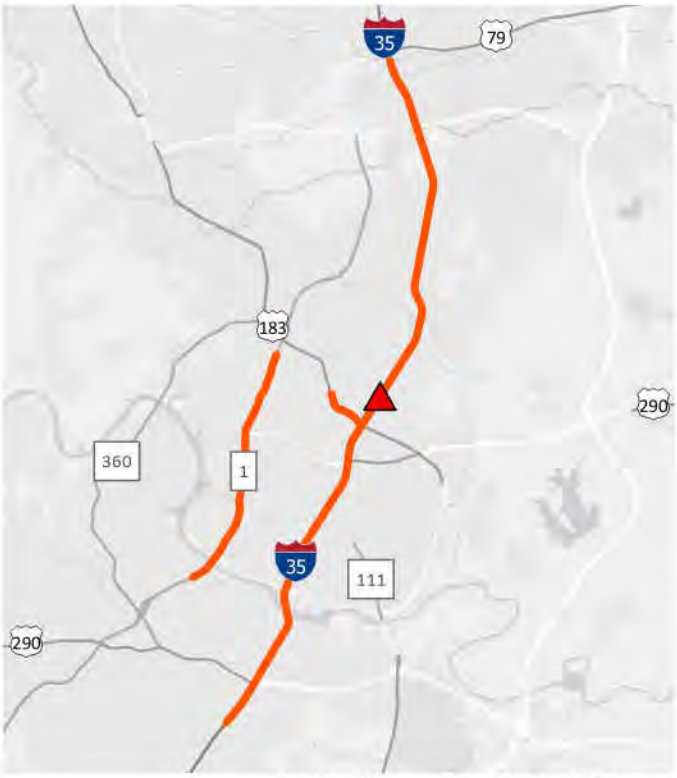


High-volume traffic extends along highway corridors in the area around the near-road monitoring site, as indicated by high-volume traffic count locations. Sites with 2023 AADT greater than or equal to AADT at monitoring site (201,612) shown as orange circles. Additional high-volume counts (greater than 100,000) shown as yellow circles.

These high-volume AADT occur in the most densely populated portions of the CBSA. Population density in near-road block groups is greater than in areas further from the high-traffic corridors, as shown in the inset map, and the average population density for the CBSA overall (350 per square mile).

Layer Credits: BCAD, Texas Parks & Wildlife, Esri, HERE, Garmin, USGS, EPA, NPS, Esri, HERE, Garmin, USGS, EPA, NPS

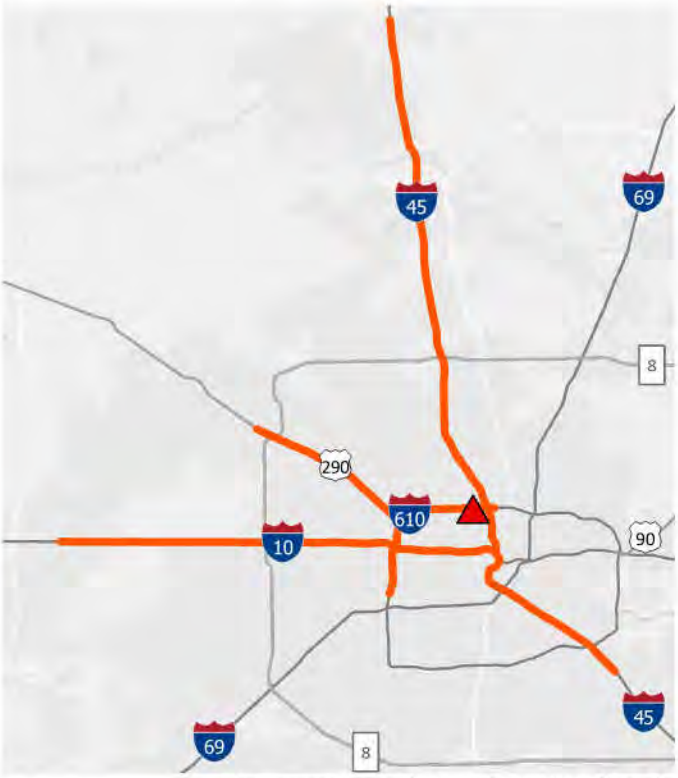
High-Traffic Corridors Used in Near-Road Population Density Calculations



Austin-Round Rock-San Marcos



Dallas-Fort Worth-Arlington



Houston-Pasadena-The Woodlands



San Antonio-New Braunfels

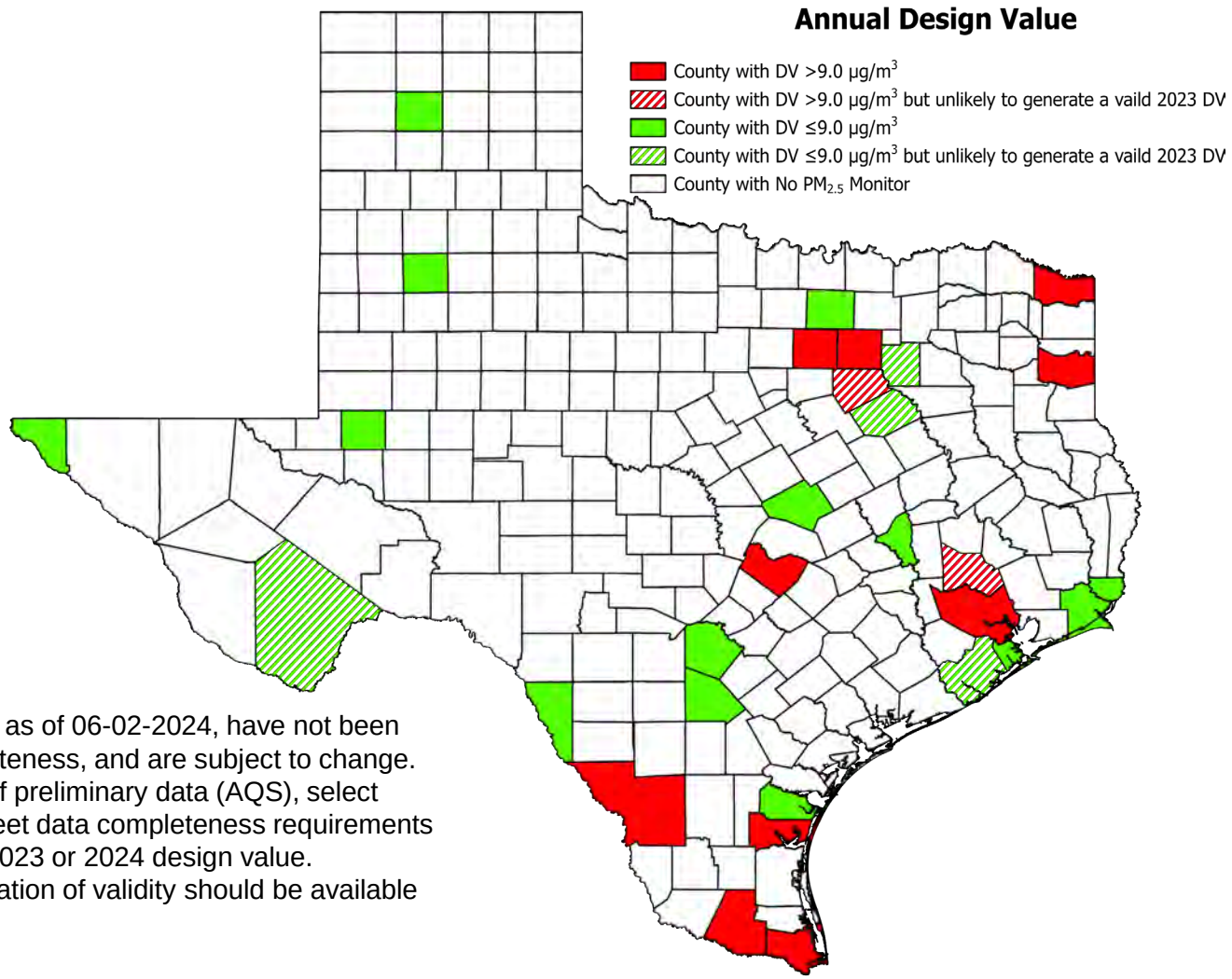
Near-road Monitoring Site High-Traffic Corridor

Map Scales Vary

N

Layer Credits: Austin Community College, City of Austin, Texas Parks & Wildlife, Esri, HERE, Garmin, USGS, EPA, NPS, Esri, HERE, Garmin, USGS, EPA, NPS

Potentially Affected Counties



Notes:

- Data are preliminary as of 06-02-2024, have not been screened for completeness, and are subject to change.
- Based on a review of preliminary data (AQS), select monitors may not meet data completeness requirements to generate a valid 2023 or 2024 design value.
- The formal determination of validity should be available by June of 2024.

County	Preliminary 2023 Annual DV (µg/m³)
Harris	12.5
Cameron	11.0
Bowie	10.3
Montgomery	10.0*
Dallas	9.9
Kleberg	9.9
Hidalgo	9.7
Webb	9.7
Tarrant	9.6
Travis	9.6
Harrison	9.5
Ellis	9.2**
Atascosa	9.0
El Paso	9.0
Bexar	8.9
Jefferson	8.8
Navarro	8.7**
Nueces	8.4
Brazoria	8.3**
Galveston	8.3
Orange	8.3
Kaufman	8.1*
Brazos	8.0
Maverick	7.9
Denton	7.7
Bell	7.4
Ector	7.3
Brewster	6.2*
Potter	6.0
Lubbock	5.7

*unlikely to generate a valid 2023 DV but may generate a valid 2024 DV
**unlikely to generate a valid 2023 or 2024 DV

Exhibit F

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$PM_{2.5}$ pollution in Texas: a geospatial analysis of health impact functions

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Background: Air pollution is the greatest environmental threat to human health in the world today and is responsible for an estimated 7–9 million deaths annually. One of the most damaging air pollutants is $PM_{2.5}$ pollution, fine airborne particulate matter under 2.5 microns in diameter. Exposure to $PM_{2.5}$ pollution can cause premature death, heart disease, lung cancer, stroke, diabetes, asthma, low birthweight, and IQ loss. To avoid these adverse health effects, the WHO recommends that $PM_{2.5}$ levels not exceed 5 $\mu g/m^3$.

Methods: This study estimates the negative health impacts of $PM_{2.5}$ pollution in Texas in 2016. Local exposure estimates were calculated at the census tract level using the EPA's BenMAP-CE software. In BenMAP, a variety of exposure-response functions combine air pollution exposure data with population data and county-level disease and death data to estimate the number of health effects attributable to $PM_{2.5}$ pollution for each census tract. The health effects investigated were mortality, low birthweight, stroke, new onset asthma, new onset Alzheimer's, and non-fatal lung cancer.

Findings: This study found that approximately 26.7 million (98.9%) of the 27.0 million people living in Texas in 2016 resided in areas where $PM_{2.5}$ concentrations were above the WHO recommendation of 5 $\mu g/m^3$, and that 2.6 million people (9.8%) lived in areas where the average $PM_{2.5}$ concentration exceeded 10 $\mu g/m^3$. This study estimates that there were 8,405 (confidence interval [CI], 5,674–11,033) premature deaths due to $PM_{2.5}$ pollution in Texas in 2016, comprising 4.3% of all deaths. Statewide increases in air-pollution-related morbidity and mortality were seen for stroke (2,209 – CI: [576, 3,776]), low birthweight (2,841 – CI: [1,696, 3,925]), non-fatal lung cancers (636 – CI: [219, 980]), new onset Alzheimer's disease (24,575 – CI: [20,800, 27,540]), and new onset asthma (7,823 – CI: [7,557, 8,079]).

Conclusion: This study found that air pollution poses significant risks to the health of Texans, despite the fact that pollution levels across most of the state comply with the EPA standard for $PM_{2.5}$ pollution of 12 $\mu g/m^3$. Improving air quality in Texas could save thousands of lives from disease, disability, and premature death.

KEYWORDS

air pollution, particulate matter, $PM_{2.5}$, Texas, county, census tracts, health impact functions

Exhibit G

1 Background

Air pollution is the greatest environmental threat to human health in the world today and is responsible for an estimated 7–9 million deaths annually, according to the World Health Organization (1). In the United States, approximately 200,000 deaths are due to air pollution each year (2).

One of the most damaging air pollutants is $PM_{2.5}$ (3), fine, invisible airborne particulate matter less than 2.5 micrometers in diameter (4). Most $PM_{2.5}$ is formed by the incomplete combustion of fossil fuels - coal, gas, and oil - or biomass fuels such as wood (5). Other sources include wildfires, road dust, construction sites, landfills, industrial sources, and pollen (5–7). Due to their minuscule size, these tiny particles can enter deep into the lungs and in some cases enter the bloodstream (8, 9). $PM_{2.5}$ pollution has been shown to damage the heart, lungs, and other organs and pose a significant risk to human health (8–12).

Exposure to $PM_{2.5}$ can cause premature death (13–16) from ischemic heart disease, lung cancer, COPD and stroke (10, 16, 17). Exposure to $PM_{2.5}$ also increases non-fatal incidence of these diseases as well as of diabetes and asthma (8, 10, 14, 15, 17–22). $PM_{2.5}$ exposure may also cause pregnancy-related effects such as low birthweight, preterm birth, and stillbirth (9, 19, 23, 24). Recent studies have shown links between $PM_{2.5}$ and neurocognitive disorders such as Alzheimer's disease and IQ loss (17, 18, 25–27).

Recent studies show that $PM_{2.5}$ exposure levels previously thought to be safe cause disease, disability, and premature death (1, 16). In light of these studies, the WHO lowered their recommended guideline for $PM_{2.5}$ pollution to 5 μg/m³ in 2021 from their previous recommendation of 10 μg/m³ (16, 28). The United States EPA air quality standard for $PM_{2.5}$ is 12 μg/m³, calculated as an annual mean (29).

Air pollution is widespread across the state of Texas – a large state in the southern United States with over 27 million people (30). A 2013 study examined data from 18 monitoring stations across Texas and found that the annual mean $PM_{2.5}$ concentrations at all 18 sites were between 6 and 12 μg/m³ (31). While the study recognized that these values were below the EPA's standard recommendation of 12 μg/m³, the $PM_{2.5}$ levels at each of these monitoring stations were above 5 μg/m³. A separate 2022 study found similar results along the Texas-Mexico border, with all monitors observing $PM_{2.5}$ concentrations greater than 5 μg/m³ across the year (32).

As previous studies have found hazardous levels of $PM_{2.5}$ throughout the state of Texas, it is important to understand the impact of this pollution. This study seeks to provide localized estimates for health effects attributable to $PM_{2.5}$ pollution. This type of exposomal analysis can provide insight into the burden of disease of air pollution, as $PM_{2.5}$ not only causes premature death, but also disease and disability at all stages of life. This study performs a localized analysis so these costs can be assessed at the state, county, and census tract levels.

Abbreviations: CI, Confidence Interval; EPA, Environmental Protection Agency; NASA, National Aeronautics and Space Administration; $PM_{2.5}$, Particulate Matter 2.5; WHO, World Health Organization; μg/m³, Micrograms per meter cubed.

2 Methods

2.1 Overview

This study estimates the negative health impacts of $PM_{2.5}$ pollution across the state of Texas using known health impact functions, local population data, observed health outcomes, and $PM_{2.5}$ data. Population data were obtained from the US Census and were calculated at the census tract level (30). $PM_{2.5}$ estimates came from the NASA 2016 daily $PM_{2.5}$ dataset and were also estimated by census tract (33). Birth and death data, calculated at the county level, came from the Texas Department of State Health Services (34, 35). Lung cancer and asthma data came from the Texas.gov website (36, 37). Stroke data came from a 2011–2019 multi-year analysis of stroke prevalence in Texas (38). Data for Alzheimer's disease incidence came from a 2023 national historical report from the Alzheimer's Association (39). Health impact functions were selected for relevance to health outcomes of interest, their sample sizes, and by the quantity and quality of their citations in other studies. All non-vital health data were approximated at the state level. All estimates were made for 2016, because that is the most recent year for which information from the NASA daily $PM_{2.5}$ dataset was available.

First PM2.5 estimates were generated for each census tract. These data were then joined to population data – also at the census tract level – using the EPA's BenMAP-CE software. Then, all health impact functions were categorized by health outcome and input into BenMAP-CE. Census tract level calculations ran for each health impact function to estimate the number of health effects attributable to $PM_{2.5}$ pollution. Results were then aggregated to observe county and state level trends.

2.2 $PM_{2.5}$ exposure data

The particulate matter data used in this study came from a NASA-sponsored study on national PM pollution which used machine learning to generate daily $PM_{2.5}$ estimates at millions of locations across the United States (33). For the purposes of this study, the 2016 annual means from 1.2 million sites were used.

To estimate air pollution levels across Texas, census tracts were geospatially mapped and compared to the coordinates of the PM2.5 estimates. The $PM_{2.5}$ estimates – which are spaced approximately 1 km apart - overlapped with 5,189 of 5,265 (98.6%) census tracts. An average $PM_{2.5}$ estimate was assigned to each of these tracts using all contained point estimates. For the 76 tracts with no $PM_{2.5}$ intersections, the nearest $PM_{2.5}$ estimate was determined, and that single value was treated as the tract average.

2.3 Population data

The population data used in this study are from the US Census website. The population dataset used was from 2016 and age-stratified. Age estimates were given in percentages of the total population, so exact figures for age were determined prior to any other calculations. Age was the only demographic factored into this study, as the exposure-response functions used did not vary on other demographic data.

2.4 Health effects data

Eight health outcomes were investigated in this study: all-cause mortality, ischemic heart disease mortality, lung-tracheal-bronchial cancer mortality, non-fatal lung cancers, strokes, new onset asthma, new onset Alzheimer's, and low birth weight babies. These health effects were selected based on access to previous research and the ability to obtain incidence rate data. All datasets were applicable to 2016.

Data for all-cause mortality, ischemic heart disease mortality, lung-tracheal-bronchial cancer mortality, and low birth weight babies were obtained from the Texas Department of State Health Services (34, 36). Death counts were compared to the 2016 census population data to generate population-weighted incidence rates, while cases of low birthweight were compared to the total number of births. As all data were available at the county level, disease incidence rates were calculated by county.

The other health outcomes came from a variety of sources. Non-fatal lung cancer data were based on statewide incidence rates from 2015 to 2019 (37). Stroke data were based on 2016 prevalence in a multi-year analysis (38). New onset Alzheimer's data were based on national records of age-based Alzheimer's incidence (39). Asthma incidence was calculated from the statewide prevalence of childhood asthma in Texas (36). Data for these health outcomes were not available at the county level and were assumed to be constant throughout the state.

Studies for each of these health outcomes were identified as sources for health impact functions. The functions used and sources are listed in Table 1.

2.5 Statistical analyses

In generating the estimated exposure-response relationships, this study always assumed a log-linear model. This model factored population and incidence data with interpolated logarithmic measures of $PM_{2.5}$ exposure to generate health-impact estimates for each census tract. This estimated the number of excess health outcomes due to $PM_{2.5}$ air pollution based on previously calculated Beta coefficients. The formula for the log-linear model is below where Pop is the study population, BI is the baseline incidence, ΔPM is the annual particulate matter concentration in μg/m^3, and β is the beta coefficient.

$$\Delta Y = \left(1 - \frac{1}{e^{\beta * \Delta PM}}\right) * BI * Pop$$

The EPA's BenMAP-CE software was used to combine these datasets into health-impact estimations. BenMAP output an Excel file for each health-impact estimate. These files were treated as the results of the experiment.

3 Results

In 2016, the estimated total population of Texas was 26,956,435. Of this population, approximately 15,115,696 (56.1%) were 30 or older and 7,122,868 (26.4%) were below the age of 18. Estimated deaths and non-fatal lung cancers attributable to PM2.5 were examined for people 30–99 and estimated new onset asthma cases attributable to PM2.5 were examined for people 0–17. Thus, 22,238,564 people (82.5%) were included in this study's at-risk population. Additionally, stroke and new onset Alzheimer's cases attributable to PM2.5 were examined for people age 65–99. Approximately 3,096,174 people (11.4%) were above the age of 65. In 2016, there were 5,265 census tracts in Texas.

Air pollution estimates were created using daily $PM_{2.5}$ pollution averages from 2016. Of the 5,265 census tracts, 5,227 had people in the at-risk population. The other 38 tracts contained airports, bodies of water, and other uninhabited or barely inhabited areas. This study estimated that of the 5,227 relevant census tracts, the minimum and maximum annual $PM_{2.5}$ concentrations were 2.4 μg/m^3 and 12.4 μg/m^3, respectively. Of these tracts, 5,154 had $PM_{2.5}$ levels that exceeded the WHO health recommendation of 5 μg/m^3. These census tracts contained 98.9% of the population (26,664,944 people). 2,640,478 people (9.8%) resided in one of the 452 tracts that had annual $PM_{2.5}$ levels greater than 10 μg/m^3, and 19,053 (0.07%) resided in one of the four census tracts that exceeded the EPA standard of 12 μg/m^3. The eastern part of the state had some of the highest air pollution levels, particularly around the Houston metropolitan area. The western parts of the state, which are generally less populated, contained most of the low-pollution census tracts. Figure 1 shows a tract-by-tract map of all estimated $PM_{2.5}$ levels.

This study estimates that there were 8,405 (5,674, 11,033) premature deaths due to $PM_{2.5}$ air pollution in Texas in 2016. Of the causes investigated, ischemic heart disease had the largest

TABLE 1 Studies and references used for exposure-response functions.

Study Author	Health outcome	Year	Beta	Standard deviation	Ages
Krewski et al. (16)	Mortality, all cause	2009	0.0058268	0.0009628	30–99
Krewski et al. (16)	Mortality, ischemic heart disease	2009	0.021511	0.0020584	30–99
Krewski et al. (16)	Mortality, lung tracheal and bronchial cancer	2009	0.013103	0.0037945	30–99
Kloog et al. (21)	Stroke	2012	0.00343	0.00127	65–99
Ghosh et al. (23)	Low birthweight	2021	0.01094	0.00227	0–0
Gharibvand et al. (22)	Non-fatal lung cancer	2017	0.03784	0.01312	30–99
Kioumourtzoglou et al. (26)	New Onset Alzheimer's	2016	0.13976	0.01775	65–99
Tetreault et al. (20)	New onset asthma	2016	0.044	0.0009	0–17

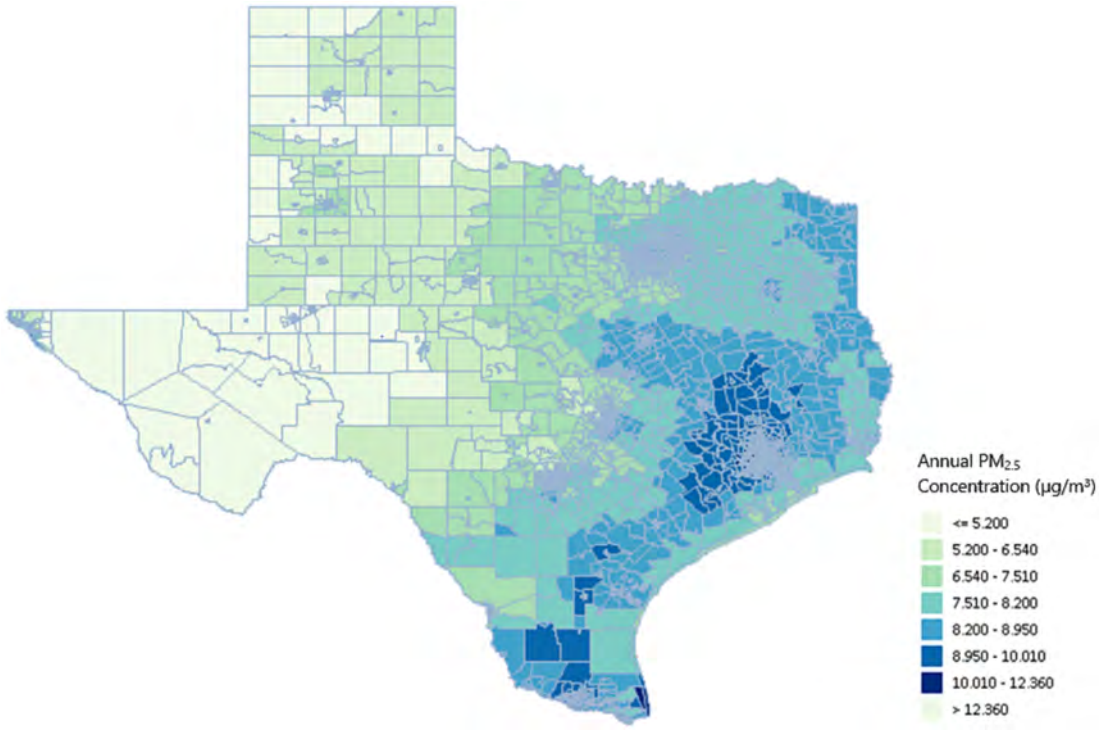


FIGURE 1
Texas $PM_{2.5}$ concentrations (µg/m³) by census tract.

TABLE 2 Statewide estimates for health effects attributable to $PM_{2.5}$.

Health Effect Attributable to $PM_{2.5}$	Beta coefficient	Age range	Statewide estimate	Statewide confidence interval
Mortality, all cause	0.0058268	30–99	8,405	(5,674, 11,033)
Mortality, ischemic heart disease	0.021511	30–99	3,657	(3,009, 4,273)
Mortality, lung tracheal and bronchial cancer	0.013103	30–99	755	(329, 1,152)
Stroke	0.00343	65–99	2,209	(576, 3,776)
Low birthweight	0.01094	0–0	2,841	(1,696, 3,925)
Non-fatal lung cancers	0.03784	30–99	636	(219, 980)
New onset Alzheimer's[a]	0.13976	65–99	24,575	(20,800, 27,540)
New onset asthma	0.044	0–17	7,823	(7,557, 8,079)

[a]Based on national incidence rate data.

pollution-related incidence rate. There were an estimated 3,657 (3,009, 4,273) deaths due to ischemic heart disease and an estimated 755 (329, 1,152) deaths due to lung cancer attributable to air pollution.

Additional statewide estimates were generated for stroke (2,209 – CI: [576, 3,776]), low birthweight (2,841 – CI: [1,696, 3,925]), non-fatal lung cancers (636 – CI: [219, 980]), new onset Alzheimer's* (24,575 – CI: [20,800, 27,540]), and new onset asthma (7,823 – CI: [7,557, 8,079]). Since these estimates were statewide, they were able to assess overall trends with PM2.5 data, but cannot measure local hotspots of disease. All statewide data for all health effects are listed in Table 2.

Data for death and low birthweight were estimated at the county level. In a county-by-county analysis, Harris County had the largest number of estimated premature deaths at 1,368 (925, 1794). This is expected, as Harris County has nearly double the population of the next largest county. Dallas (673 – CI: [450, 880]), Bexar (541 – CI: [360, 710]), and Tarrant (561 – CI: [380, 740]) counties all had estimates of over 500 deaths per county.

Harris County also had the largest number of estimated low birthweight babies attributable to $PM_{2.5}$ (623 – CI: [370, 850]). Dallas (265 – CI: [160, 360]), Bexar (203 – CI: [120, 280]), and Tarrant (194 – CI: [120, 270]) counties were the next largest (Table 3).

TABLE 3 Top 10 county estimates for vital health effects attributable to $PM_{2.5}$.

County	Mortality, all cause	Mortality, lung tracheal and bronchial cancer	Mortality, ischemic heart disease	Low birth weight
Harris County	1,370 (925 to 1,790)	144 (62.5 to 217)	629 (518 to 731)	623 (371 to 854)
Dallas County	674 (454 to 883)	68.5 (29.5 to 104)	298 (245 to 348)	265 (157 to 365)
Bexar County	562 (378 to 736)	43.4 (18.7 to 65.8)	242 (199 to 283)	203 (120 to 279)
Tarrant County	541 (364 to 709)	65.5 (28.2 to 99.3)	215 (176 to 251)	194 (115 to 268)
Travis County	244 (164 to 320)	24.0 (10.3 to 36.3)	91.7 (75.3 to 107)	109 (64.7 to 150)
El Paso County	227 (153 to 297)	14.9 (6.43 to 22.6)	93.2 (76.6 to 109)	91.9 (54.6 to 127)
Hidalgo County	209 (141 to 273)	14.6 (6.31 to 22.1)	132 (109 to 154)	128 (76.3 to 176)
Collin County	191 (129 to 250)	20.4 (8.82 to 30.9)	83.1 (68.3 to 96.9)	78.9 (46.9 to 109)
Montgomery County	190 (128 to 248)	26.2 (11.4 to 39.5)	71.1 (58.5 to 82.7)	54.2 (32.3 to 74.3)
Fort Bend County	163 (110 to 214)	14.8 (6.4 to 22.3)	62.4 (51.4 to 72.6)	82.9 (49.4 to 114)

BenMAP also provided estimates for non-vital statistics at the county level. For example, Harris County experienced an estimated 1,520 (1,470 to 1,570) new asthma cases, 122 (42.0 to 181) non-fatal lung cancers, 355 (92 to 603) strokes, and 3,470 (2,980 to 3,810) new Alzheimer's cases attributable to $PM_{2.5}$ in 2016. All county-by-county data for vital and non-vital health effects can be found in the Supplementary Table S1.

4 Discussion

The main finding of this study is that air pollution by fine airborne particulate matter ($PM_{2.5}$) is a major cause of disease and premature death in the state of Texas, despite the fact that most $PM_{2.5}$ levels are below the US EPA standard of 12 $\mu g/m^3$. These findings indicate that improving air quality in Texas could save thousands of lives from disease, disability, and premature death.

We found that there were 8,405 (5,674, 11,033) premature deaths due to $PM_{2.5}$ pollution in Texas in 2016, comprising 4.3% of all deaths in the state. Harris, Dallas, Tarrant, and Bexar counties had air-pollution-related death tolls of 500–1,400. Statewide increases in air-pollution-related morbidity and mortality were seen for stroke (2,209 – CI: [576, 3,776]), low birthweight (2,841 – CI: [1,696, 3,925]), non-fatal lung cancers (636 – CI: [219, 980]), new onset Alzheimer's (24,575 – CI: [20,800, 27,540]), and new onset asthma (7,823 – CI: [7,557, 8,079]).

A second key finding is that nearly 99% of census tracts across Texas had average annual $PM_{2.5}$ concentrations over 5 $\mu g/m^3$, a level that is associated with multiple adverse health effects and that the World Health Organization has declared dangerous. The highest levels of air pollution were seen in Harris County, which contains Houston. Harris County is highly industrialized and by far the most heavily populated county in Texas. The next highest annual $PM_{2.5}$ estimates were seen in Fort Bend County, Waller County, and Montgomery County respectively, all of which share long borders with Harris County. These findings demonstrate that air pollution can cross political boundaries from one county to another and therefore requires large-scale, regional solutions that encompass entire airsheds.

This study has several limitations. The first is in the exposure data. The NASA daily $PM_{2.5}$ dataset that we used to calculate air pollution exposures in the census tracts of Texas is a very highly verified source. It is based on a machine-learning model trained on daily data from across the state and country and is arguably the best available dataset. However, there are large, remote portions of the state of Texas that lack $PM_{2.5}$ monitoring stations, and there is a degree of uncertainty in the estimates for those regions.

A second limitation is that all datasets used in this study were from 2016, 7 years prior to the conduct of the present analysis.

A third limitation is that we had to rely on non-localized data sources for information on health outcomes other than low birthweight and death. Incidence rate data for non-fatal lung cancers, strokes, and new onset asthma, were calculated from state-wide statistics and assumed to be evenly distributed throughout the state. This significantly reduced our ability to identify local hotspots of disease given the uneven distribution of $PM_{2.5}$ concentrations (2.4–12.4 $\mu g/m^3$). The incidence data for Alzheimer's disease came from a national study, as there were no state-wide sources to be found.

5 Conclusion

While air pollution levels in most Texas counties comply with the current EPA standard for $PM_{2.5}$ of less than 12 $\mu g/m^3$, air pollution is

nonetheless responsible for significant disease and death across the state. This finding indicates that the EPA standard is not protective of human health and will need to be reduced.

Data availability statement

The original contributions presented in the study are included in the article/Supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

LB: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Software, Visualization, Writing – original draft, Writing – review & editing. PL: Funding acquisition, Methodology, Resources, Supervision, Writing – original draft, Writing – review & editing.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fpubh.2023.1286755/full#supplementary-material

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From:	Grace Smith
To:	tceqamnp
Cc:	Gabriel Pacyniak; Kylie Rosabal; Joshua Smith; Elizabeth Lieberknecht
Subject:	Comments on TCEQ Draft 2025 Annual Monitoring Network Plan
Date:	Wednesday, May 14, 2025 4:50:53 PM
Attachments:	image001.png EDF et al Comments TCEQ Air Monitoring Network Plan_5_14_25.pdf

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Hi,

Attached please find comments and exhibits on TCEQ's 2024 draft 2025 Annual Monitoring Network Plan submitted on behalf of Environmental Defense Fund, Citizens Caring for the Future, Hispanic Access Foundation, New Mexico and El Paso Interfaith Power and Light, Texas Permian Future Generations, and Sierra Club.

We appreciate the opportunity to provide comments on TCEQ's draft plan. If you have any questions or would like to discuss further, please let me know.

Thank you,
Grace Smith

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May 14, 2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Texas Commission on Environmental Quality
P.O. Box 13087
Attention: Holly Landuyt, MC-165
Austin, Texas 78711-308

tceqamnp@tceq.texas.gov

Submitted via email

Re: Public comment and public hearing request on proposed 2025 Annual Monitoring Network Plan by Environmental Defense Fund, Citizens Caring for the Future, Hispanic Access Foundation, New Mexico and El Paso Interfaith Power and Light, Texas Permian Future Generations, and Sierra Club.

On behalf of our members and supporters who live, work, and recreate in Texas and New Mexico, the undersigned ("Commenters") respectfully submit these comments regarding the Texas Commission on Environmental Quality's ("TCEQ") proposed 2025 Annual Monitoring Network Plan ("AMNP") providing for recommended federal monitoring network changes from July 1, 2024 through December 31, 2026.[1]

A robust air monitoring network is critical as it allows regulators and communities to efficiently take action to protect public health from harmful air pollutants like ozone. While Commenters agree with aspects of TCEQ's proposed AMNP, Commenters encourage TCEQ to provide additional monitoring. West Texas communities in the Permian Basin know they are subject to ozone pollution but lack air quality data to protect their health and require stronger protections from polluting industries. Until TCEQ monitors ozone in the region, its network will not satisfy the Clean Air Act and federal standards requiring states to operate air monitoring networks that sufficiently measure and address air pollution.

Because the proposed 2025 AMNP is a revision to Texas's State Implementation Plan, it should be subject to notice-and-comment rulemaking. Commenters request that TCEQ remand the proposal and allow the public to provide additional comments on the agency's network plan through the notice-and-comment rulemaking process. Further, Commenters request that TCEQ hold public hearings on the proposed AMNP in Midland-Odessa. Additionally, because the comment process for the AMNP will be the only opportunity for Commenters to have their positions meaningfully heard by TCEQ prior to development of the Five-Year Assessment ("FYA"),[2] we encourage TCEQ to consider these comments in finalizing its 2025 AMNP and in developing its FYA.

[1] TCEQ, Draft Air Monitoring Network Plan, 8, https://www.tceq.texas.gov/downloads/air-quality/air-monitoring/network/draft-2025-amnp.pdf/draft-2025-amnp.pdf. (April 15, 2025).
[2] While TCEQ has historically provided an opportunity to comment on FYAs, the comment period has been set for a 30-day period leading up to TCEQ's deadline to submit the FYA to EPA. As a result, TCEQ does not have time to

I. Background

A. The Clean Air Act requires TCEQ to maintain a complete air monitoring network.

Under the federal Clean Air Act, the U.S. EPA ("EPA") has established National Ambient Air Quality Standards ("NAAQS") for six criteria pollutants: ozone (O3), particulate matter (PM2.5 and PM10), carbon monoxide (CO), lead (Pb), sulfur dioxide (SO2) and nitrogen dioxide (NO2). The EPA has established NAAQS for ozone limiting 8-hour concentrations to no more than 0.070 parts per million ("ppm").

Section 110 of the Clean Air Act requires that each state submit a state implementation plan ("SIP") that "provide[s] for implementation, maintenance, and enforcement" of the NAAQS. 42 U.S.C. § 7410. SIPs must "provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor, compile, and analyze data on ambient air quality and upon request, make such data available" to the EPA. *Id.* at (a)(2)(B).

Resting on Section 110, EPA promulgated standards for federal monitoring networks ("network regulations"). To determine whether an area meets a NAAQS, EPA compares monitoring data to the NAAQS using air monitoring networks established under 110(a)(2)(B) and the network regulations. 42 U.S.C. § 7410(a); 40 C.F.R. § 58.10 App. D ¶ 1.1(a)-(b). Areas that fail to meet the NAAQS are subject to more stringent public health protections.

EPA's network regulations require states to submit AMNPs to EPA's regional offices that "shall provide for the documentation of the establishment and maintenance of an air quality surveillance system that consists of a network of" state-run monitors. 40 C.F.R. § 58.10. The monitoring network plan must include detailed information about the network's design and "a statement of whether the operation of each monitor meets the requirements of appendices A, B, C, D, and E" of EPA's network regulations. *Id*. They must also be designed to meet three basic monitoring objectives: (1) "[p]rovide air pollution data to the general public in a timely manner"; (2) "support compliance with ambient air quality standards and emission strategy development, including 'comparing an area's air pollution levels against the NAAQS'"; and (3) "support [] air pollution research studies." 40 C.F.R. § 58.10 App. D ¶1.1(a)-(b).

To meet these objectives, a state's network must include a variety of monitors to inform the state about peak air pollution levels, air pollution transported into and outside of a city or region, and air pollution levels near specific sources. These monitors include those that:

- measure typical concentrations in areas of high population density;
- determine the impact of significant sources or source categories on air quality;
- determine general background concentration levels;
- determine the extent of regional pollutant transport among populated areas; and
- measure air pollution impacts on visibility, vegetation damage, and other welfare-based impacts.

Id. At ¶1.1.1.

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incorporate comments from AMNPs into upcoming FYAs.

Additionally, as part of the second objective (support compliance with the NAAQS) EPA's network regulations provide that plans should include sites that "[monitor in] locations near major air pollution sources" to give "insight into how well industrial sources are controlling their pollutant emissions";[3] "sites located to determine the impact of significant sources or source categories on air quality";[4] and sites that help "track the spatial distribution of air pollution," including placing monitors "near political boundaries or between urban or industrial areas [in order to] characterize[e] transport of pollutants between jurisdictions."[5] Furthermore, AMNPs must include the identification of sites intended to address pollution "in an at-risk community where there are anticipated effects from sources in the area." 40 C.F.R. § 58.10(b)(14).

EPA's network regulations also require agencies to submit FYAs. The FYAs must "determine, at a minimum, if the network meets the monitoring objectives defined in Appendix D [and] whether new sites are needed." 40 C.F.R. § 58.10(d). They must also "consider the ability of existing and proposed sites to support air quality characterization for areas with relatively high populations of susceptible individuals (*e.g.,* children with asthma) and other at-risk populations." *Id*. When the FYA is complete, the state must develop a network modification plan "that addresses the findings of the [five-year] network assessment . . . required by § 58.10(d)" and the updates must be "submitted as part of the [following year's] Annual Network Monitoring Plan." 40 C.F.R. § 58.14(a).

B. Exposure to ozone and ozone precursors harms human health.

One of the six criteria air pollutants designated by EPA for regulation under the Clean Air Act and compliance with the NAAQS is ozone. Ozone forms when VOCs and oxides of nitrogen (NOx) react in the presence of sunlight. While ozone forms throughout the year, it becomes more pronounced in the summertime.

A longstanding body of scientific research, including numerous EPA assessments, demonstrates that exposure to ground-level ozone negatively impacts public health. EPA has linked short-term exposure to ozone (defined as hours, days, or weeks)[6] with premature death,[7] respiratory mortality,[8]increased risk of out-of-hospital cardiac arrest and stroke hospitalization.[9] EPA has

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[3] *Id*.
[4] *Id*.
[5] EPA, Ambient Air Monitoring Network Assessment Guidance, 2-3 (February 2007), https://www.epa.gov/sites/default/files/2020-01/documents/network-assessment-guidance.pdf ("EPA Guidance").
[6] *Id* U.S. EPA, EPA/600/R-10/076F, *Integrated Science Assessment (ISA) of Ozone and Related Photochemical Oxidants*, at 1-4 (2013), *available at* https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=247492 ("2013 *ISA*").
[7] 2013 *ISA* at 1-14 (concluding that there is "likely to be a causal relationship between short-term exposures to [ozone] and total mortality").

[8] EPA, *National Ambient Air Quality Standards for Ozone*, 80 Fed. Reg. 65,292, 65,307 (Oct. 26, 2015); *see also* 2013 *ISA* 6-220 to 6-221.
[9] Wing JJ, Adar SD, Sánchez BN, Morgenstern LB, Smith MA, Lisabeth LD, *Short-term exposures to ambient air pollution and risk of recurrent ischemic stroke*, Environmental Research, Jan. 2017, 152:304-7 (finding elevated risk of having a first stroke with higher ozone concentrations in the preceding 2 days). Shah, Anoop SV, et al., *Short term exposure to air pollution and stroke: systematic review and meta•analysis*, BMJ 350 (2015): h1295; Yang, Wan-Shui, et al., *An evidence-based appraisal of global association between air pollution and risk of stroke*, International Journal of Cardiology 175.2 (2014): 307-313.

also determined that long-term exposure to ozone, measured in months to years,[10] is associated with stroke, chronic obstructive pulmonary disease, lung cancer, heart failure,[11] death,[12] and respiratory effects like asthma.

According to the Centers for Disease Control and Prevention (CDC), 24 million Americans currently have asthma.[13] Asthma results in 1.6 million emergency room visits, 9.8 million visits to the physician,[14] and 188 thousand hospitalizations.[15] Asthma costs the U.S. economy more than $80 billion annually in medical expenses, missed work and school days, and deaths.[16] Multiple studies across various states have found that changes in ozone concentrations were associated with higher asthma emergency room visits, most at concentrations below the current standard.[17] It is estimated that up to 11% of all asthma emergency room visits in the United States are attributed to ozone.[18]

Ozone pollution is particularly harmful for vulnerable populations, such as school-aged children, people with respiratory illness, older adults, and people who are active outdoors, especially outdoor workers.[19] Of the 24 million Americans with asthma, 5.5 million are children. EPA has found that long-term exposure to ozone increases the risk that asthma will develop in children.[20] Additionally, once children are diagnosed with asthma, they face heightened risks from ozone exposure.[21]

Ozone exposure can also result in health complications for mothers, newborns, and the elderly. Elevated exposure during pregnancy is associated with higher risk of pre-term birth[22] and can result in Autism Spectrum Disorder among children.[23] Additionally, a review of epidemiological research found age has the strongest influence on ozone sensitivity, with risks increasing as

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[10] 2013 ISA at 1-4.
[11] Yazdi, Mahdieh Danesh, et al., *Long-term exposure to PM2. 5 and ozone and hospital admissions of Medicare participants in the Southeast USA*, Environment International 130 (2019): 104879.
[12] 2013 *ISA* at 1-8.
[13] CDC, *Fast Stats: Asthma*, https://www.cdc.gov/nchs/fastats/asthma.htm (last visited May 10, 2025).
[14] *Id.*
[15] CDC, *Most Recent National Asthma Data*, https://www.cdc.gov/asthma/most_recent_data.htm (last visited May 10, 2025).
[16] Tursynbek Nurmagambetov, Robin Kuwahara, Paul Garbe, *The Economic Burden of Asthma in the United States, 2008 -2013*, Annals of the American Thoracic Society, 2018.
[17] Stephanie Holm, John Balmes, Ananya Roy, *Human Health Effects of Ozone: The State of Evidence Since EPA's Last Integrated Science Assessment*, EDF 2018.
[18] Susan C. Anenberg et al., *Estimates of the Global Burden of Ambient PM2.5, Ozone, and NO2 on Asthma Incidence and Emergency Room Visits*, Environmental Health Perspectives, 2018; 126 (10): 107004.
[19] 2013 *ISA* at 1-8; 2013 *ISA* at 7-2.
[20] 2013 *ISA* at 7-2.
[21] K. Mortimer et al., *The Effect of Air Pollution on Inner-City Children with Asthma*, 19 EUR. RESPIRATORY J. 699 (2002), 2013 *ISA*, 6-120-21, 6-160.
[22] Laurent O, Hu J, Li L, et al., *A statewide nested case-control study of preterm birth and air pollution by source and composition: California, 2001-2008*, Environ Health Perspect. 2016;124(9):1479-1486; Ha S, Hu H, Roussos-Ross D, Haidong K, Roth J, Xu X, *The effects of air pollution on adverse birth outcomes*, Environ Res. 2014;134:198-204.
[23] Becerra, Tracy Ann et al., *Ambient air pollution and autism in Los Angeles County, California*, Environmental Health Perspectives 121.3 (2012) 380- 386; Volk HE, Lurmann F, Penfold B, Hertz-Picciotto I, McConnell R, *Traffic- related air pollution, particulate matter, and autism*, JAMA Psychiatry (Jan. 1, 2013) 70(1):71-7.

individuals get older.[24] Ozone exposure can accelerate cognitive decline in the early stages of dementia[25] and has been associated with adverse neural effects in the elderly.[26]

Studies show a direct link between oil and gas sector emissions, including ozone, and health complications. A study by Buonocore et al.[27] found that air pollution in 2016 from the oil and gas sector in the U.S. resulted in 410,000 asthma exacerbations, 2200 new cases of childhood asthma and 7500 excess deaths, with $77 billion in total health impacts. NO2, ozone, and PM2.5 were the main contributors to health impacts. Further, according to a study by Tran et al.[28] in 2016, the state of Texas led the country with the number of deaths and asthma incidences that can be attributed to air pollution from oil and gas flaring and venting.

High levels of ozone are not the only concern to public health – cumulative exposure to ozone precursors can drive health risks. A recent cumulative human health risk assessment in Colorado found that for communities located near unconventional oil and natural gas (UONG) during pre-production in an ozone non-attainment area, respiratory risks surpassed EPA thresholds due to the contribution from not only ozone, but VOC precursors.[29]

II. TCEQ Must Increase Ozone Monitoring in the Permian Basin.

The Permian Basin is one of the world's most prolific oil and natural gas producing regions. In 2022, the Permian Basin comprised 43% of the United States' crude oil production and 17% of its natural gas production.[30] The number of new horizontal wells has dramatically increased in the Permian since 2010 due to unconventional oil and natural gas (UONG) extraction techniques, such as horizontal drilling and hydraulic fracturing, with 4,524 new UONG wells alone in 2021 (compared to 350 in 2010).[31] These advancements have driven a rapid increase in extraction in the Permian, contributing to substantial increases in emissions, including methane, NOx and VOCs that act as precursors to the formation of ozone.[32]

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[24] Bell, Michelle L, Antonella Zanobetti, and Francesca Dominici. "Who Is More Affected by Ozone Pollution? A Systematic Review and Meta-Analysis." American journal of epidemiology 180.1 (2014): 15–28. Web.
[25] Galkina Cleary et al., *Association of Low-Level Ozone with Cognitive Decline in Older Adults*, 61 J. ALZHEIMERS DISEASE 1, 67-78 (2018).
[26] Qu, Rongrong et al. "Short-Term Ozone Exposure and Serum Neural Damage Biomarkers in Healthy Elderly Adults: Evidence from a Panel Study." The Science of the total environment 905 (2023): 167209–167209. Web.
[27] Buonocore et al., *Air pollution and health impacts of oil & gas production in the United States*, 2023 *Environ. Res.: Health* **1** 021006, https://iopscience.iop.org/article/10.1088/2752-5309/acc886.
[28] Tran et al., GeoHealth (2024), *Air Quality and Health Impacts of Onshore Oil and Gas Flaring and Venting Activities Estimated Using Refined Satellite-Based Emissions*, https://doi.org/10.1029/2023GH000938.
[29] Wesiner et al., *Cumulative Human Health Risk Assessment of Regional Ozone and Volatile Organic Compounds from Unconventional Oil and Gas Sites in Colorado's Front Range*, EHP Publishing (April 2025), https://ehp.niehs.nih.gov/doi/10.1289/EHP16272.
[30] U.S. Energy Information Administration, Advances in technology led to record new well productivity in the Permian Basin in 2021 (September 2022), https://www.eia.gov/todayinenergy/detail.php?id=54079.
[31] *Id*.
[32] Francoeur, Colby B et al. "Quantifying Methane and Ozone Precursor Emissions from Oil and Gas Production Regions across the Contiguous US." *Environmental science & technology* 55.13 (2021): 9129–9139. Web. https://doi.org/10.1021/acs.est.0c07352.

For three consecutive years, EPA has recommended that TCEQ deploy one or more monitors in the Permian Basin for NOx, VOCs, and ozone, "to ensure that the impacts of the increased oil and gas production are accurately monitored and recorded."[33] There is substantial evidence that ozone in the area exceeds the NAAQS and that the area should be monitored for ozone and its precursors including the significant oil and gas activity in the region, the sector's contribution to ozone precursor emissions, emissions inventories for the Permian, and direct ozone measurement data in nearby states. TCEQ's failure to monitor runs counter to the Clean Air Act, which requires states to establish adequate monitoring networks to support compliance with the NAAQS. Additionally, it has placed the burden of monitoring air pollution on communities, which is unacceptable.

A. Oil and gas activity in the Permian Basin has increased rapidly over the years.

Oil and gas extraction in the Permian has expanded rapidly, increasing by a factor of 5 between 2012 and 2022, with daily production exceeding 5 million barrels of oil and 600 million m^3 of natural gas as of October 2023.[34] In 2024, the Permian produced more crude oil than any other U.S. region.[35] In Texas in particular, oil and gas production in the Permian has skyrocketed in the last decade, as shown in Tables 1 and 2. According to Enverus data, oil and gas production in the Texas Permian has increased 250%-350% between 2014 and 2024 (Table 1). The Railroad Commission of Texas estimates approximately the same increase during this time period (Table 2).

Table 1: Oil and Gas Production in the Permian Basin in Texas

	Oil and Condensate Production Volume (BBL)	**Gas and Casinghead Production Volume (MCF)**
January 2014	36,803,586	117,586,324
January 2024	127,339,611	510,205,149
Percent increase	246.00%	333.90%

Source: Enverus Production dataset.

[33] EPA's 2024 Response: https://www.tceq.texas.gov/downloads/air-quality/air-monitoring/network/historical/epa-response-to-2024-amnp.pdf; EPA's 2023 Response: https://www.tceq.texas.gov/downloads/air-quality/air-monitoring/network/historical/epa-response-to-2023-amnp.pdf; EPA's 2022 Response: https://www.tceq.texas.gov/downloads/air-quality/air-monitoring/network/historical/epa-response-to-2022-amnp.pdf.

[34] Marvasin et al., *Summertime Ozone Production at Carlsbad Caverns National Park, New Mexico: Influence of Oil and Natural Gas Development* , JGR Atmosphere (July 2024), https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2024JD040877#jgrd59642-bib-0088; *see also* Jeremy Nichols, "Petition to Designate Permian Basin of Southeast New Mexico a Nonattainment Area Due to Ongoing Violations of Ozone Health Standards," March 2, 2021, https://pdf.wildearthguardians.org@pdf.wildearthguardians.org/support_docs/2021-3-2%20FINAL%20Permian%20Basin%20Ozone%20Nonattainment%20Petition.pdf.

[35] EIA, https://www.eia.gov/todayinenergy/detail.php?id=65024 (April 16, 2025).

Table 2: Oil and Gas Production in the Permian Basin in Texas

	Oil Production Volume (BBL)	Casinghead Production Volume (MCF)	Gas Production Volume (MCF)	Condensate Production Volume (BBL)
January 2014	35,733,593	77,830,186	38,424,669	1,070,772
January 2024	107,266,084	345,595,955	160,307,512	18,021,617
Percent increase	200.18%	344.04%	317.20%	1583.05%

Source: Railroad Commission of Texas, Permian Basin Historical Production (2014 data) and Current Annual Production (2024 data), accessed 5/1/2025, https://www.rrc.texas.gov/oil-and-gas/major-oil-and-gas-formations/permian-basin/.

B. The oil and gas sector is a significant source of ozone and ozone precursors.

The oil and natural gas sector is a substantial source of smog- forming emissions. According to EPA' s most recent National Emissions Inventory (NEI), "Oil and Gas Production" is the largest source of human- caused VOCs nationally and a major contributor to NOx emissions, both of which are ozone precursors.[36]

Regional analyses underscore the significant ozone-forming emissions from the oil and gas sector, including in the Uinta Basin in Utah,[37] the Barnett Shale in Texas,[38] the Upper Green River Basin in Wyoming,[39] and in Colorado.[40] A recent study by NOAA scientists at the

[36] Calculation based on EPA, *National Emissions Inventory (NEI) Sector Data*, *available at* https://www.epa.gov/air-emissions-inventories/2017-national- emissions-inventory-nei-data; see also EPA, "Basic Information about Oil and Natural Gas Air Pollution Standards," Other Policies and Guidance, September 20, 2016, https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-operations/basicinformation-about-oil-and-natural.

[37] Warneke, C. et al., *Volatile organic compound emissions from the oil and natural gas industry in the Uintah Basin, Utah: oil and gas well pad emissions compared to ambient air composition*, 14 Atmos. Chem. Phys., 10977-10988 (2014), *available at* www.atmos-chem-phys.net/14/10977/2014/; ENVIRON, *Final Report: 2013 Uinta Basin Winter Ozone Study* (Mar. 2014), *available at* https://deq.utah.gov/locations/U/uintahbasin/ozone/docs/2014/06Jun/UBOS2013FinalReport/Title_Contents_UBOS_2013.pdf.

[38] David T. Allen, *Atmospheric Emissions and Air Quality Impacts from Natural Gas Production and Use*, Annu. Rev. Chem. Biomol. Eng. 5:55-75 (2014), *available at* https://www.annualreviews.org/doi/abs/10.1146/annurev-chembioeng- 060713-035938.

[39] *See* B. Rappengliick et al., *Strong wintertime ozone events in the Upper Green River basin*, Wyoming, Atmos. Chem. Phys. (2014), *available at* https://doi.org/10.5194/acp-14-4909-2014.

[40] Helmig, D., *Air quality impacts from oil and natural gas development in Colorado*, 8,4 Elem Sci. Anth. (2020), *available at* https://doi.org/10.1525/elementa.398; Brantley et al., *Assessment of volatile organic compound and hazardous air pollutant emissions from oil and natural gas well pads using mobile remote and onsite direct measurements*, Journal of the Air & Waste Management Association 1096-2247 (Print) 2162-2906 (Online) (2015); Petron, G. et al., *A new look at methane and non-methane hydrocarbon emissions from oil and natural gas operations in the Colorado Denver-Julesburg Basin*, 119 J. Geophys. Res. Atmos., 6836-6852 (2014), *available at* http://onlinelibrary.wiley.com/doi/10.1002/2013JD021272/full.

Cooperative Institute for Research in Environmental Sciences (CIRES) found that, on high ozone days on Colorado's Northern Front Range, oil and gas operations contribute roughly 50% to regional VOC reactivity and that these activities are responsible for approximately 20% of ozone produced locally in the nonattainment area.[41]

The contribution of UONG on ozone formation has been quantified in North Texas, where mean values of all meteorologically adjusted ozone was 8% higher at monitoring sites located within the shale gas region than in the non-shale gas region.[42] Directional analysis in North Texas also found that when winds were from areas with high shale gas activity, higher ozone downwind occurred.

C. Ozone concentrations in the Texas Permian are likely significant.

NOx and VOC emissions in the Permian Basin are dominated by the oil and gas sector and are specifically linked to the intensity of operations in the region, including frequent flaring and leaking facilities.[43] Based on EPA's National Emissions Inventory data from 2017, oil and gas exploration and production activities in the Permian Basin were responsible for 12,793 tons of NOx and 82,442 tons of VOCs.[44] This made oil and gas the single largest source of NOx and VOCs in the region, responsible for twice as much anthropogenic NOx pollution as all mobile sources (e.g., cars, trucks, trains, planes, etc.) and for more VOCs than all other anthropogenic sources combined.

Particular counties in the Permian Basin experience heightened levels of ozone precursors from the oil and gas sector. For example, out of all oil and gas producing counties in the Texas

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[41] McDuffie, E. E., et al. (2016), *Influence of oil and gas emissions on summertime ozone in the Colorado Northern Front Range*, J. Geophys. Res. Atmos., 121, 8712- 8729, doi:10.1002/2016JD025265, *available at* http://onlinelibrary.wiley.com/doi/10.1002/2016JD025265/abstract; *see also* Gilman, J. B., B. M. Lerner, W. C. Kuster, and J. A. de Gouw (2013), *Source signature of volatile organic compounds from oil and natural gas operations in northeastern Colorado*, Environ. Sci. Technol., 47(3), 1297-1305, *available at* http://pubs.acs.org/doi/abs/10.1021/es304119a (finding 55% of VOC reactivity in the metro-Denver area is due to nearby oil and natural gas operations and calling these emissions a "significant source of ozone precursors"); Cheadle, LC et al., *Surface ozone in the Colorado northern Front Range and the influence of oil and gas development during FRAPPE/DISCOVER-AQ in summer 2014*, Elementa (2017), *available at* http://doi.org/10.1525/elementa.254 (finding on "individual days, oil and gas O3 precursors can contribute in excess of 30 ppb to O3 growth and can lead to exceedances" of the EPA ozone standards).

[42] Ahmadi, M., and K. John. 2015. Statistical evaluation of the impact of shale gas activities on ozone pollution in North Texas. Sci. Total Environ. 536:457–67. doi:10.1016/j.scito tenv.2015.06.114.

[43] Adkins, Sarah B, and Michael S Zavada. "A Review of the Status of Air Quality Monitoring in the Permian Basin, USA, and Its Implications for Effective Long-Term Monitoring of Industrial Operations." *Palynology* 48.4 (2024): n. pag. Web. ; *See also* Benedict, K.B., A.J. Prenni, M.M. H. El-Sayed, A. Hecobian, Y. Zhou, K.A. Gebhart, B.C. Sive, B.A. Schichtel, and J.L. Collett. 2020. Volatile organic compounds and ozone at four national parks in the southwestern United States. Atmos. Environ. 239:117783. doi:10.1016/j.atmosenv.2020.117783; Dix, B., J. de Bruin, E. Roosenbrand, T. Vlemmix, C. Francoeur, A. Gorchov-Negron, B. McDonald, M. Zhizhin, C. Elvidge, P. Veefkind, et al. 2020. Nitrogen oxide emissions from U.S. Oil and gas production: Recent trends and source attribution. Geophys. Res. Lett. 47(1): e2019GL085866. doi:10.1029/2019GL085866 (linking oil and gas production that occurs in the Permian Basin to increased emissions of ozone precursors in the region).

[44] Emissions data queried from EPA's 2017 National Emissions Inventory Data, available online at https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data (last accessed Feb. 26, 2021).

Permian, the top three highest emitters of VOC and NOx emissions in 2020 were the counties of Reeves, Loving, and Midland, respectively (see Table 3).

Table 3: Total Emissions (tons per year) of NOx and VOC from O&G Production in the Texas Permian in 2020[45]

County	VOC emissions	NOx emissions
Reeves	163,020	15,773
Loving	93,147	5,452
Midland	86,016	8,943
Pecos	26,057	3,522
Winkler	18,604	2,678
Ector	14,009	2,894
Crane	3,560	7,544

Data demonstrating the abundance of ozone precursors in the Permian Basin suggests that ozone is likely high in the Basin as well. The accumulation of ozone precursors and formulation of ozone is strongly influenced by spatial and temporal patterns of NOx and VOC emissions, and it is widely accepted that proximity of UONG to population centers can affect National Ambient Air Quality Standards (NAAQS) for ozone exceedances.[46] Additionally, research finds that respiratory risks exceed U.S. EPA thresholds when UONG pollutants are emitted into communities within an ozone nonattainment area.[47]

In addition to the presence of ozone precursors, monitors that directly measure ozone in and near the Texas Permian demonstrate the region is likely exceeding the ozone NAAQS.[48]

The Guadalupe Mountains National Park ozone monitor (AQS ID 481090002) in Culberson County is the only government-run ozone monitoring site on the Texas side of the Permian Basin. Though the monitor stopped collecting data in 2022, the most recent design values demonstrate ozone exceedances and an increasing trend – both for the highest and 4th highest MDA8_O3 values each year. The American Lung Association's 2024 State of the Air report gave Culberson County an "F" grade for ozone as a result of these measurements.

[45] Exhibit A, University of North Carolina Chapel Hill, *Assessing Permian Basin's Contributions to Ozone Nonattainment at Carlsbad, New Mexico* (July 31, 2023)*;* Exhibit B, University of North Carolina Chapel Hill, *Assessing Permian Basin's Contributions to Ozone Nonattainment at Carlsbad, New Mexico, Supplemental Information.*

[46] Modi, Mrinali et al. "Fine Scale Spatial and Temporal Allocation of NOx Emissions from Unconventional Oil and Gas Development Can Result in Increased Predicted Regional Ozone Formation." *ACS ES&T air* 2.2 (2025): 130–140. Web. https://doi.org/10.1021/acsestair.4c00077?urlappend=%3Fref%3DPDF&jav=VoR&rel=cite-as

[47] Weisner et al.

[48] A violation of the National Ambient Air Quality Standard (NAAQS) for 8-hour ozone (8HO3) is triggered when the three-year average of the annual fourth highest daily maximum (MDA8_O3) reading exceeds the NAAQS. The 2015 form of the ozone NAAQS sets this threshold at 70 ppb or 0.070 ppm.

Table 4: Design Values at Guadalupe Mountains National Park Monitor[49]

Year	1st Highest	2nd Highest	3rd Highest	4th Highest	Design Value
2019	0.073	0.072	0.07	0.068	-na-
2020	0.074	0.074	0.072	0.072	-na-
2021	0.078	0.072	0.071	0.071	0.070
2022	0.076	0.076	0.074	0.071	0.071

The most recent design values at regulatory monitors on the New Mexico side of the Permian Basin, a mere 40 miles from the NM-TX border, also demonstrate ozone exceedances.

Table 5: Design Values at Ozone Monitors in Southeast New Mexico[50]

Monitor	ODV 2017 - 2019	ODV 2018-2020	ODV 2019 - 2021	ODV 2020 - 2022	ODV 2021 - 2023
Carlsbad 350151005 (Eddy County)	0.079	0.078	0.077	0.077	0.078
Hobbs 350250008 (Lea County)	0.071	0.068	0.066	0.066	0.071
Carlsbad Caverns[51] 350150010 (Eddy County)	N/A	N/A	0.074	0.077	0.078

EPA's Air Data is only available through June 30, 2024 as of now, so ODVs for 2024 are not yet available. However, the current standing 4th highest Ozone 8-hour average at AQS sites at Carlsbad, Carlsbad Caverns, and Hobbs are 0.073, 0.082, and 0.067 ppm, respectively.[52] If these 4th highest Ozone 8-hour average values hold through 2024, the corresponding 2024 ODVs for these three sites would be 0.076, 0.082, and 0.071, respectively.

Because the most recent complete three consecutive calendar year Design Values at these regulatory monitors show Design Values exceeding the ozone NAAQS limit of .70 ppb, the area

[49] This presents top 4 highest Ozone 8-hour average, as obtained from EPA's Air Data. (https://aqs.epa.gov/aqsweb/airdata/download_files.html), during the ozone season in 2019 – 2022, based on which the "Design Values" were calculated (i.e., average for 4th highest values in three consecutive years). No data beyond 2022 is available.

[50] Design Values were obtained from "Table5. Site Status" from the Ozone Design Values Excel workbook downloaded from EPA's Air Quality Design Values (https://www.epa.gov/air-trends/air-quality-design-values).

[51] This monitor is operated by the National Park Service.

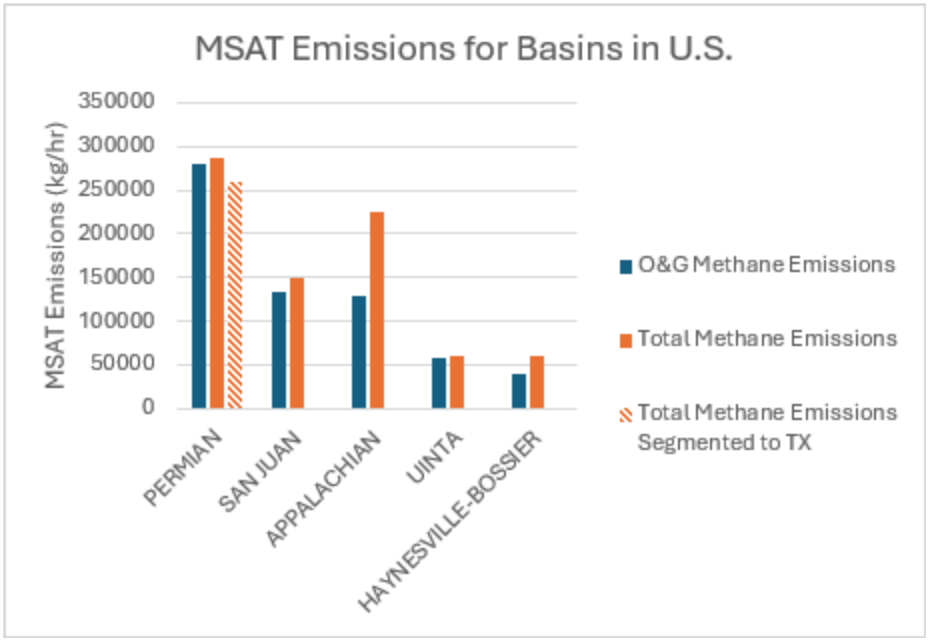
[52] Design values were obtained from EPA's Air Data site (https://aqs.epa.gov/aqsweb/airdata/download_files.html).

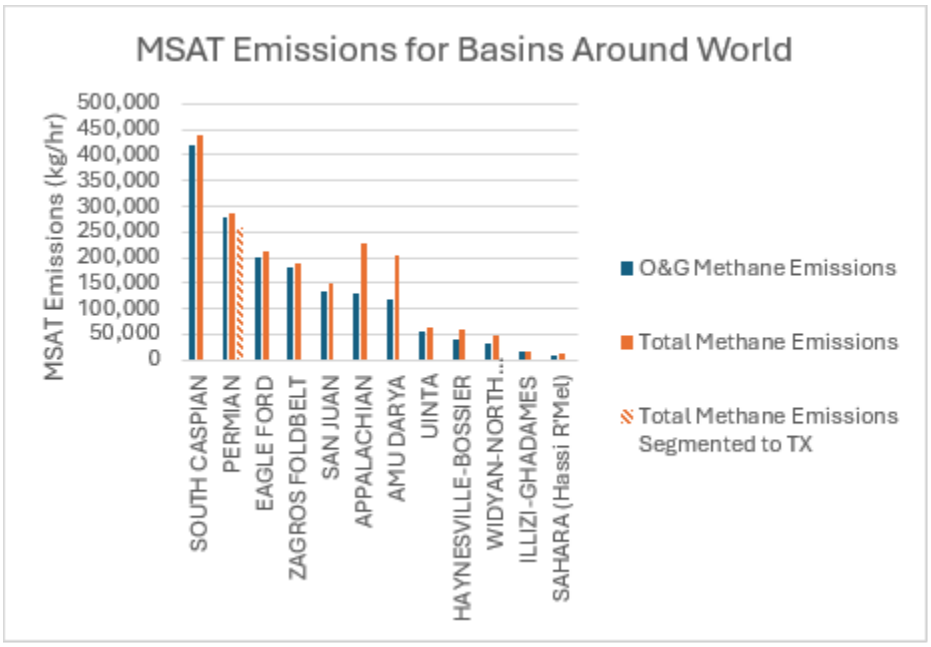
is in violation of the NAAQS and should be designated by EPA as nonattainment. These exceedances also indicate that ozone concentrations in the Texas Permian might also exceed the NAAQS.

Private monitoring data in Midland County further supports this assumption. Texas Permian Future Generations, a local environmental advocacy group, purchased a purple air monitor to monitor ozone in Midland County. That monitor's ozone data shows an average of 146 parts per billion on most days. While the data is not collected in accordance with federal requirements, TCEQ should consider it as it provides a direct data point for Midland County. It also demonstrates how communities have resorted to private monitoring to provide for data in TCEQ's absence and the need for regulatory monitoring in the county.

Lastly, recent collections from MethaneSAT[53] developed by EDF, demonstrate the relative scale of methane emissions from the Permian Basin, suggesting that smog-forming emissions are relatively high compared to other regions. MethaneSAT delivers comprehensive and precise emissions data at the basin scale, including detections of smaller, dispersed sources of methane, identifying where emissions are coming from, how much is being emitted, and how those emissions change over time. Collections from 2024 show that the Permian Basin's methane emissions are the highest of those yet measured in the United States and among the highest in the world. For example, a September 2024 image of the Permian Basin[54] estimated oil and gas methane emissions of 280 metric tons per hour (roughly four times higher than EPA's latest emissions inventory estimate).[55] By comparison, the San Juan Basin's oil and gas methane emissions were 133 MT/hr and the Appalachian's were 129 MT/hr. To further demonstrate the relative importance of emissions from the Texas side of the Permian, the September 2024 Permian MethaneSAT collection was split across the TX-NM state line. Even after removing emissions from the New Mexico side of the Permian, total methane emissions from the Basin as a whole remain higher than U.S. basins already collected by MethaneSAT, demonstrating the Texas Permian alone leads the country in methane emissions.[56] Globally, these 2024 observations show the Permian's oil and gas methane emissions were the second highest in the world of those already collected, behind the South Caspian Basin in Turkmenistan at 418 MT/hr.

[53] https://www.methanesat.org/satellite.
[54] See MethaneSAT, New data reveal previously undetectable methane emissions, https://www.methanesat.org/project-updates/new-data-reveal-previously-undetectable-methane-emissions (March 7, 2025).
[55] *See* EPA, U.S. Gridded Methane Emissions, https://www.epa.gov/ghgemissions/us-gridded-methane-emissions (last updated November 22, 2024).
[56] Though the segmentation was done for total methane emissions and not oil and gas methane emissions, oil and gas methane emissions dominate for the Permian.





D. Current monitoring data shows contributions from the Texas Permian to Carlsbad exceedances.

A 2023 study conducted by the University of North Carolina at Chapel Hill investigated the cause of exceedances at the Carlsbad ozone monitor in New Mexico and found that oil and gas sources in the Texas Permian Basin are contributing to exceedances at the site.[57]

[57] *See* Exhibits A and B.

To identify specific regions that may have contributed to exceedances, UNC employed the Hybrid Single-Particle Lagrangian Integrated Trajectory (HYSPLIT) model v5.2.3 (Stein et al., 2015) from NOAA to calculate trajectories of airmasses that reached the monitor on high ozone days. UNC also conducted an emissions inventory analysis for oil and gas production in New Mexico and Texas in 2020 using data from the New Mexico Environmental Department (NMED) and TCEQ.

The results of UNC's report show that high ozone days (i.e., MDA8O3 > 70 ppb) at the Carlsbad monitor are associated with airmasses passing through counties in the southeast and southwest regions of the Permian Basin. The relative impact of counties can be assessed by ranking their contribution. In the table below, we provide data for the counties in the Permian Basin that rank high in oil and gas NOx and VOC emissions and the concentration of trajectories contributing to exceedances at the Carlsbad monitor (Table 6).

Table 6: County Contribution to Ozone Exceedances at the Carlsbad Monitor[58]

County	**Rank in Contribution Factors**
Eddy (Carlsbad Monitor)	#2 NOx emissions #5 VOC emissions
Lea (Hobbs Monitor)	#1 NOx emissions #2 VOC emissions #6 Minor point source VOC #7 Large point source VOC
Culberson	#6 NOx emissions #8 VOC emissions #8/10 Trajectories
Reeves	#1 VOC emissions #3 NOx emissions #3 Minor point source NOx and VOC #4-6 Trajectories
Loving	#3 VOC emissions #5 NOx emissions #1 Trajectories
Winkler	#5 Minor point source NOx #3 Large point source NOx #9 Large point source VOC #3 Trajectories
Ward	#10 VOC #9 Minor point source VOC #2 Trajectories
Crane	#2 Large point source NOx #4 Large point source VOC #3-5 Trajectories
Ector	#4 +7 Trajectories

[58] This chart was created by combining several tables and findings in Exhibits A and B.

	#7 Large point source NOx #10 Large point source VOC
Midland	#4 NOx #4 VOC #4 Minor point source VOC #4 Minor point source NOx #5 Large point source VOC #6 Large point source NOx #8 Trajectories
Martin	#6 OG VOC #8 OG NOx #9 Trajectories (100 m)
Upton	#7 Minor point source NOx #9 NOx #9 VOC #8-10 Trajectories
Pecos	#2 Large point source VOC #3 Large point source NOx #6 Minor point source NOx #10 Minor point source VOC
Howard	#7 OG VOC #6 Trajectories (100 m) #9 Minor point source NOx
Chaves (NM)	#5 Minor point source VOC #8 Large point source VOC #10 Large point source NOx

As these results show, certain counties – including Loving, Reeves, Crane, Ward, Winkler, Ector and Midland Counties in Texas – are relatively high in their VOC and NOx pollution and have a relatively high number of trajectories reaching Carlsbad on ozone-exceedance days.[59] UNC's study concludes that these combined factors demonstrate that Texas counties are contributing to NAAQS exceedances at the Carlsbad monitor.

E. At-risk populations in the Permian Basin, including children with asthma, disproportionately live in proximity to oil and gas sites emitting ozone pollution.

EDF analyzed the demographics of populations living near oil and gas sites in the Texas Permian using Enverus Prism and U.S. Census Bureau tract data.[60] Our analysis shows that a large

[59] While significant increases in oil and gas VOC and NOx emissions have occurred in both the TX and NM areas of the Permian, the majority of airmass trajectories associated with high ozone days passed through the east and southeast regions of the Permian.

[60] EDF analyzed the number and demographics of the populations living in close proximity to oil and gas wells using the methodology described in Proville et al (2022). We first identified active oil and gas well sites with reported production in 2023 using Enverus Prism. By identifying active oil and gas sites, we are also able to identify the local communities that are impacted by the air pollution from these well sites. Using the US Census Bureau's American Community Survey 5-year estimates for 2017-2021 and health data from the Centers for Disease Control and Prevention's Places dataset, we were able to estimate the populations

percentage of the population, including the elderly, children, and those with health conditions, live intimately close to oil and gas sites emitting harmful smog-forming pollution.

Of the nearly 600,000 people living in one of the 14 counties identified above, well over half live within one mile of an active oil or gas well. In Loving and Martin counties, one hundred percent of the population lives within a mile of a site, and in Ward and Winkler counties, over 90% of the population lives within a mile of an active site. When looking at populations living even closer to these wells (Table 7), almost 200,000 people live within a half-mile of an active oil or gas well. Over a third of the population in Ector and Midland counties live within a half-mile of an active site, and 93% of people in Martin County live within a half-mile.

Table 7: Populations Living Within a Half-Mile of an Oil or Gas Well

County	State	Total Population within 1/2 mile of an active oil or gas well	County Total Population	% of Population within 1/2 mile of an active oil or gas well
Chaves	**New Mexico**	800	65,000	1%
Eddy	**New Mexico**	22,000	58,000	38%
Lea	**New Mexico**	24,000	70,000	35%
Andrews	**Texas**	6,400	18,000	35%
Crane	**Texas**	2,600	4,800	55%
Culberson	**Texas**	110	2,200	5%
Ector	**Texas**	56,000	160,000	35%
Loving	**Texas**	70	100	70%
Martin	**Texas**	5,300	5,600	93%
Midland	**Texas**	65,000	170,000	39%
Pecos	**Texas**	1,100	16,000	7%

living within a half mile radius of the previously identified wells using areal apportionment. This method (Proville et al 2022) determines the area encompassed within a half mile buffer radius of all active wells, and overlays those buffers onto census tracts to calculate the percentage of each tract comprised of buffers (i.e. the area of each tract within a half mile of an affected well). Because the areal apportionment method assumes that populations are spread evenly across a given census tract (excluding water bodies), we are able to estimate the populations at a census tract level of those living within a half mile or a mile of a well.

Upton	**Texas**	2,000	3,700	56%
Ward	**Texas**	7,900	12,000	68%
Winkler	**Texas**	5,700	7,900	72%

People living in these counties, and especially those living in close proximity to oil and gas sites, are comprised of historically vulnerable populations, such as people living in poverty, people of color, young children, the elderly, and those with existing health conditions that could be exacerbated by air pollution from oil and gas operations. Below is a table summarizing these populations in the 14 counties (Table 8).

Of the counties analyzed, Ector and Midland counties have the highest concentration of elderly adults, people in poverty, and people of color. These counties also have the highest concentration of children under the age of 5 living within a half-mile of an oil or gas site, exceeding counties with the next highest count by a factor of three.

Additionally, certain populations are disproportionately closer to oil and gas wells when compared to the county's population at large. For example, in Ector County, 13% more people in poverty live near wells when compared to the rest of the county. In Eddy, Lea, Pecos, and Upton counties, 20-50% more Native Americans live near wells than the county populations as a whole. In Midland and Ector counties, as well as Lea, Pecos, Ward and Winkler, there are increased rates of children under the age of 5 living within a half-mile of a well when compared to the rest of the county.

Table 8: Demographics of Populations Living Within a Half-Mile of an Oil or Gas Well

County Name	Pop within ½ mile Living in Poverty	County Living in Poverty	People of Color within ½ mile	County People of Color	Children Under 5 within ½ mile	County Children Under 5	Adults 65 and Over within ½ mile	County Adults 65 and Over
Ector	7,500	19,000	40,000	110,000	5,400	15,000	4,600	15,000
Midland	6,000	16,000	34,000	92,000	6,100	15,000	5,700	17,000
Lea	4,100	11,000	16,000	45,000	1,900	5,500	2,700	7,800
Eddy	2,800	8,300	11,000	31,000	1,500	4,200	3,200	8,300
Ward	990	1,400	4,800	7,000	590	850	1,100	1,600
Winkler	860	1,200	3,800	5,100	460	620	650	910

Andrews	510	1,600	3,600	11,000	520	1,600	630	1,800
Martin	440	470	2,400	2,600	430	460	640	680
Upton	280	500	1,200	2,200	140	260	340	610
Crane	210	380	1,800	3,300	210	380	360	650
Chaves	80	12,000	270	40,000	20	4,400	60	10,000
Pecos	80	2,000	560	12,000	60	1,000	110	2,000
Culberson	30	650	80	1,700	10	230	20	330
Loving	10	20	10	20	10	20	20	20

EDF's analysis also finds that there are larger populations of adults with CHD, COPD or who have had a stroke compared to the state averages in Chaves, Culberson, Loving, Martin, Pecos, Upton, Ward, and Winkler counties.[61]

Table 9: People with Health Conditions Living within a Half-Mile of an Oil or Gas Well

	Within 1/2 mile of an active well					County Total				
County	Adults with Asthma	Adults with CHD	Adults with COPD	Adults with Stroke	Adults with Cancer	Adults with Asthma	Adults with CHD	Adults with COPD	Adults with Stroke	Adults with Cancer
Midland	3,800	2,200	2,600	1,300	2,700	10,000	6,200	7,100	3,500	7,400
Ector	3,400	2,200	2,600	1,200	2,000	9,800	6,200	7,200	3,500	6,300
Lea	1,700	1,000	1,200	570	950	4,900	2,800	3,200	1,600	2,800
Eddy	1,500	960	1,000	520	1,100	4,000	2,600	2,800	1,400	2,900
Ward	500	400	450	220	390	740	590	660	320	570
Andrews	380	260	310	140	270	1,100	720	870	400	760
Winkler	350	270	310	150	250	490	370	430	200	340

[61] Health data from the CDC was not available for Loving County for the year analyzed.

Martin	310	230	260	120	230	340	240	280	130	250
Crane	160	110	120	60	110	280	200	230	110	200
Upton	130	110	120	60	100	230	190	210	100	180
Pecos	60	40	50	20	40	960	750	780	410	650
Chaves	30	20	20	10	20	4,600	3,400	3,500	1,800	3,100
Culberson	-	-	-	-	-	140	140	140	80	100
Loving	-	-	-	-	-	-	-	-	-	-

Lastly, the CDC and County Health Rankings (2022) provide data for some select health metrics including childhood asthma, infant mortality and child mortality.[62] Data was not available for all counties for infant mortality, and the childhood asthma rate is only available at the state level. Of all the 14 counties for which data was available, child mortality rates were highest in Culberson, Andrews, Lea, Ector and Pecos counties, all of which were above the state average child mortality rate. Additionally, although childhood asthma rates are only available at the state level, we estimate that the population of children with asthma is greatest in Ector and Midland counties based on a combination of factors including the state's asthma rate, census data, and the large number of children living near wells in those counties.[63]

F. The Clean Air Act requires TCEQ to place an ozone monitor in the Permian Basin.

i. High ozone and ozone precursors in the Texas Permian justify siting a monitor in the region.

The Clean Air Act requires that SIPs and air monitoring networks maintain and support compliance with and enforcement of the NAAQS. TCEQ's AMNP does not provide for ozone or ozone precursor monitoring from the country's leading source of ozone-forming VOCs[64] – the oil and gas industry – in the largest oil and gas producing basin in the world.[65] And it fails to

[62] University of Wisconsin Population Health Institute, County Health Rankings National Findings (2022), https://www.countyhealthrankings.org/reports/2022-county-health-rankings-national-findings-report.

[63] To estimate the number of children with asthma living in these counties, we combined the states' childhood asthma rate with census data on the number of children (those younger than 18) in each county as well as our estimate of the number of children within ½ mile of an active oil and gas well (using the methodology previously described).

[64] EPA, EPA Initiates New Review of the Ozone National Ambient Air Quality Standards to Reflect the Latest Science (August 2023), https://www.epa.gov/newsreleases/epa-initiates-new-review-ozone-national-ambient-air-quality-standards-reflect-latest.

[65] Enverus, Permian Basin Oil and Gas Overview, https://www.enverus.com/permian-basin/ (last visited May 14, 2025); Energy in Depth, The Permian Basin Is Now the Highest Producing Oilfield in the World (April 2019), https://www.energyindepth.org/the-permian-basin-is-now-the-highest-producing-oilfield-in-the-world/.

provide for such monitoring despite compelling evidence that ozone in the region is exceeding the NAAQS. TCEQ's AMNP thus fails to adhere to the spirit and text of the Clean Air Act.

EPA's network requirements provide clear guidance on complying with the Act. For example, they provide that a network must assess peak air pollution levels and monitor near "significant" and "major" sources of air pollution. 40 C.F.R. § 58.10 App. D ¶ 1.1. TCEQ's network clearly does not monitor for peak air pollution or significant sources of air pollution when it fails to monitor for ozone and ozone precursors in the Permian Basin.

TCEQ's network also does not adequately track the spatial distribution of air pollution or have the ability to characterize the transport of pollutants between jurisdictions when private data suggests such monitoring is necessary.[66] As the authors of the UNC report observed: "Additional ozone monitoring, especially in Texas counties of the Permian basin, would be beneficial in not only assessing the potential impacts of Permian on causing high ozone values [], but also in determining the spatial extent of ozone nonattainment in the Permian basin."[67]

For the same reasons, the plan fails to provide adequate and timely air pollution data to the public as required by the Act.[68] Data is essential for populations that live near significant sources of ozone pollution, such as the Permian Basin, to take action to protect their health.

Lastly, TCEQ's network currently fails "to support air quality characterization for areas with relatively high populations of susceptible individuals" including children with asthma and other at-risk populations. A high number of people with pre-existing conditions, elderly, children, children with asthma, people of color and people in poverty live close to oil and gas wells in the Texas Permian.[69] In 2020, TCEQ's response to comments on the FYA explained that TCEQ was unable to evaluate this factor because EPA's network requirements do not define "susceptible individuals." But EPA does provide guidance, citing children with asthma as an example. Even if it didn't, that does not remove TCEQ's obligation to assess this factor, which, as EDF's analysis has shown, is feasible. Particular populations are more susceptible to ozone and oil and gas pollution than others, and county-by-county data on the concentration of certain populations exists.[70]

ii. TCEQ must add additional monitors to the Midland-Odessa area based on 40 C.F.R. § 58, App'x D, Section 4.1.

Under 40 C.F.R. § 58, App'x D, Section 4.1, Metropolitan Statistical Areas ("MSA") or Combined Statistical Areas ("CSA"s) with more than 350,000 persons require at least one ozone monitor if the design value for that area is less than 85% of the NAAQS; and at least two monitors if the design value for the area is equal to or greater than 85% of the NAAQS. MSAs or CSAs with fewer than 350,000 people still require at least one ozone monitor if the design value

[66] *Supra* note 5.
[67] Exhibit A at 18.
[68] See 42 U.S.C. §§ 7410, 74714.
[69] *Supra* Section I(B) (ozone health impacts) and Section II(E) (demographics discussion).
[70] The plan also fails to address requirements for air quality control regions. Indeed, there are no ozone monitors at all in the Midland-Odessa-San Angelo Intrastate Air Quality Control Region established by C.F.R. § 81.137. With no ozone monitors, it is impossible for the State of Texas to fulfill its responsibility for assuring that the ozone NAAQS "will be achieved and maintained within each air quality control region" in the state. 42 U.S.C. § 7407(a).

for the area is equal to or greater than 85% of the NAAQS. *Id*. The regulations make clear that the monitoring network:

> must be designed to record the maximum concentration for that particular metropolitan area. More than one maximum concentration site may be necessary in some areas. Table D-2 of this appendix does not account for the full breadth of additional factors that would be considered in designing a complete O_3 monitoring program for an area. Some of these additional factors include geographic size, population density, complexity of terrain and meteorology, adjacent O_3 monitoring programs, air pollution transport from neighboring areas, and measured air quality in comparison to all forms of the O_3 NAAQS (i.e., 8-hour and 1-hour forms). Networks must be designed to account for all of these area characteristics.

Id.

The Midland-Odessa CSA is one of the fastest growing regions in the United States.[71] According to the U.S. Census Bureau, Midland had a population of 188,766 as of July 2024, while Odessa had a population of 170,022.[72] Accordingly, the combined population of this CSA is 358,788. Together, the Midland-Odessa CSA includes three counties—Martin, Midland, and Ector Counties—which have an area of about 2,700 square miles (much smaller than other areas in Texas subject to Table D-2). Odessa's north-east border (near Mission Blvd) is about 3 miles away from the Midland airport—which is incorporated within the city limits of Midland. About 20 miles separate the centers of each city. Under longstanding EPA regulations, Midland and Odessa are included in the same Intrastate Air Quality Control Region. *See* 40 C.F.R. § 81.137.

Where a metropolitan area is divided into multiple MSAs, EPA regulations require regulators to consider the entire CSA for purposes of designing the air quality monitoring network. *See* 40 C.F.R. § 58, App. D, ¶ 4.1(b) ("Within an O_3 network, *at least one O_3 site for each MSA, or CSA if multiple MSAs are involved*, must be designed to record the maximum concentration for that particular metropolitan area.") (emphasis added). Here, the combined population of the Midland-Odessa CSA exceeds the threshold above which an ozone monitor is required under Table D-2. Accordingly, under 40 C.F.R. § 58, App. D, ¶ 4.1(a)-(b), TCEQ must operate "at least one O_3 site for . . . [the] CSA" for the purpose of "record[ing] the maximum concentration for that particular metropolitan area."

Other metropolitan areas that span much greater distances are treated as a single unit for purposes of Table D-2. The Houston MSA spans nine counties and has an area of 9,444 square miles. One can drive for 110 miles along I-10 (from Sealy to Winnie) without leaving the MSA. The Dallas-Fort Worth-Arlington MSA is over 9,000 square miles. About 30 miles separate downtown Dallas from downtown Fort Worth. The San Antonio MSA includes eight counties

[71] U.S. Census Bureau Press Release, Growth in Metro Areas Outpaced Nation (Mar. 13, 2025), https://www.census.gov/newsroom/press-releases/2025/population-estimates-counties-metro-micro.html (from 2023 to 2024, Midland and Odessa experienced the eighth and ninth largest percentage growth, respectively, of any metropolitan areas in the nation, each growing by approximately 2.8 percent).
[72] *Id*.

and has an area of 7,340 square miles. It would be arbitrary and capricious to treat these large urban conglomerations as single units under Table D-2, while refusing to do the same for the much smaller Midland-Odessa CSA.

Even if TCEQ disagrees that Table D-2 requires an O3 monitor for the Midland-Odessa CSA, and treats Midland and Odessa as MSAs, the end result is the same: two ozone monitors must be added in the area (one in Midland and one in Odessa). Midland and Odessa have more than 50,000 people. Given that there is no monitor in Midland or Odessa, EPA's regulations suggest that TCEQ should look to representative monitors in the region to determine whether the area exceeds 85 percent of the NAAQS, and therefore warrants an additional monitor pursuant to Table D-2. The regulations indicate that, in general, "regional scale measurements would be most applicable to sparsely populated areas." 40 C.F.R. § 58, App. D, ¶ 4.7.1(c)(5) (design criteria for PM). Although that provision specifically addresses particulate matter, the regulations also make clear that for ozone, the "appropriate" scale for siting a representative monitor may entail looking at "areas with dimensions of as much as hundreds of kilometers." *See* 40 C.F.R. § 58, App. D, ¶ 4(c)(3). The nearest monitor is in Hobbs, New Mexico, which, like Midland-Odessa, is located in the Permian Basin region. The most recent, EPA-verified three-year design value (2021-2023) for this monitor is 0.071 ppm—more than 100 percent of the 2015 eight-hour ozone NAAQS.[73] Other nearby monitors in Carlsbad, NM, are also exceeding the NAAQS. Absent some other data for Midland-Odessa, TCEQ must use these as the best estimate available for Midland-Odessa's design value. If TCEQ does have other information about the likely design value, it must provide this information and allow the public the opportunity to comment on it.[74]

iii. TCEQ must consider whether plans meet the entirety of Appendix D, not just Table D-2's population-based requirements.

TCEQ's prior AMNPs and FYAs have relied solely on Table D-2's population-based requirements to justify plan adequacy. However, the Clean Air Act and EPA's regulations require that AMNPs and FYAs meet requirements beyond those outlined in Table D-2.

When determining where to place monitors, Table D-2 provides a starting point but not an ending point. As EPA has explained, it is expected that "[t]he total number of O3 sites needed to support the basic monitoring objectives of public data reporting, air quality mapping, compliance, and understanding O3-related atmospheric processes *will include more sites than these minimum numbers [in Table D-2] . . . .*" and that"[t]he total number of monitoring sites . . . *will be substantially higher* than these minimum requirements provide." 40 C.F.R. § 58, App. D, ¶ 1.1.2 (emphasis added). The regulations further provide that "[t]he total number of ozone sites needed to support the basic monitoring objectives of public data reporting, air quality mapping,

[73] *See* EPA 2023 Design Value Report, https://www.epa.gov/system/files/documents/2024-06/o3_designvalues_2021_2023_final_06_04_24.xlsx.

[74] In the past, TCEQ has suggested that Hobbs, New Mexico, is delineated by the OMB as a separate metropolitan statistical area and is not associated with the Midland or Odessa MSAs. TCEQ misunderstands the point. While Hobbs is not part of the Midland-Odessa metropolitan area, it contains the nearest ozone monitor and TCEQ must use the best available estimate of regional ozone values in applying Table D-2.

compliance, and understanding ozone-related atmospheric processes *will include* more sites than the minimum number required in Table D-2." *Id*. ¶ 4.1 (emphasis added).

Furthermore, Appendix D explicitly states that the "purpose of [the] appendix" is to do two things. First, it must "describe monitoring objectives and general criteria to be applied in establishing [monitoring stations] and for choosing general locations for additional monitoring sites." 40 C.F.R. § 58, App. D, ¶ 1. Second, and separately, the "appendix *also* describes specific requirements for the number and location of FRM and FEM sites for specific pollutants" including ozone. *Id*. (emphasis added). Table D-2 provides for the "specific requirements for the number and location of FRM and FEM sites." The rest of Appendix D is thus separate from the population-based requirements under Appendix D, section 4. Additionally, Appendix D 1.1.1 lists monitors in areas with large populations as just one of the six types of monitors that network plans should include, confirming that population is but one factor in assessing network adequacy. Thus, while siting determinations and network adequacy are based "in part" on population counts,[75] TCEQ must also ensure its plans achieve the objectives and requirements established elsewhere in Appendix D.

Other states have gone beyond Table D-2 when establishing their network plans for ozone. For example, Washington's network includes additional ozone monitors that exceed those required by Table D-2 to jointly monitor the Portland–Vancouver–Hillsboro Metropolitan Statistical Area with Oregon and to assess regional transport and background levels.[76] Illinois' network also includes additional sites to support not only public reporting and regulatory compliance, but also enhanced monitoring, air quality research, and mapping efforts.[77]

iv. TCEQ should consider the private monitoring data presented in this comment.

Because TCEQ and EPA do not manage a regulatory-grade ozone monitor in the Texas Permian, ozone levels are assessed by private entities and Commenters must rely on private data to illustrate the pressing need for adequate regulatory monitoring in the region.

While agencies may not be required to rely on private monitoring data to make non-attainment designations[78] or specific siting determinations,[79] no court has held agencies may ignore private data when determining whether to place a monitor at all in a region of the state when the data indicates NAAQS exceedances are likely. In fact, ignoring private data suggesting a region violates the NAAQS would be unreasonable and arbitrary and capricious. TCEQ has previously used private monitoring data to make siting determinations,[80] and, as discussed above, substantial evidence exists to imply that parts of the Texas Permian likely exceed the ozone NAAQS.[81]

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[75] *Miss. Comm'n on Envtl. Quality v. EPA*, 416 U.S. App. D.C. 69, 85, 790 F.3d 138, 154 (2015).
[76] Washington Dep't of Ecology, *2024 Ambient Air Monitoring Network Plan*, at 44–45.
[77] Illinois Envtl. Prot. Agency, *2024 Air Monitoring Network Plan*, at 12–14.
[78] *See Miss. Comm'n on Envtl. Quality v. EPA*, 790 F.3d 138, 154 (D.C. Cir. 2015).
[79] *See* Berks Cnty. v. EPA, 619 F. App'x 179, 182 (3d Cir. 2015).
[80] *See, e.g.*, TCEQ, Response to Comments on 2020 Five-Year Assessment at 1, https://www17.tceq.texas.gov/tamis/index.cfm?fuseaction=home.welcome (non-regulatory monitors did not meet requirements to compare to NAAQS, but supported TCEQ's air monitoring decisions).
[81] *See Sw. Pa. Growth All. v. Browner*, 121 F.3d 106, 115 (3d Cir. 1997) (when EPA has information that a region is

v. TCEQ should place at least one monitor in Midland-Odessa.

Per EPA's network requirements, states should site monitors close to specific source hot spots and for secondary pollutants, such as ozone, in areas of maximum precursor emissions. 40 C.F.R. § 58, App'x D, ¶ 4.1. Moreover, when deciding where to place a new monitor, TCEQ must consider the objectives in Appendix D—including the presence of high-density populations, at-risk populations, and the goal of assessing ozone transport between jurisdictional boundaries.

Applying these factors, Commenters urge TCEQ to place an ozone monitor in the Midland-Odessa region. Midland county has the fourth-highest ozone precursor emissions in the Permian Basin (for both NOX and VOCs) and has a high number of trajectories contributing to non-attainment at the Carlsbad monitor in New Mexico.[82] Ector county is in the top 10 for large oil and gas point source VOC and NOX emissions in the Permian, and has the 4th highest number of trajectories contributing to non-attainment at Carlsbad. Placing a monitor in Midland-Odessa would assist Texas in assessing ozone transport issues.[83]

Additionally, the population in the Midland-Odessa region is significant compared to others in the Permian, including large at-risk populations that live next to oil and gas activity. In Martin County, nearly 100% of the population lives within a mile of an oil or gas well and 94% live within a half-mile.[84] Martin county also has some of the highest rates of CHD, COPD, and stroke compared to the rest of Texas.[85] Additionally, over a third of the population in Ector and Midland counties live within a half-mile of an oil or gas site. Of all the counties in the Texas Permian, Midland and Ector have the highest concentration of children under the age of 5 living within a half-mile of an oil or gas well.[86]

III. The public process afforded to the proposed AMNP violates the Clean Air Act.

TCEQ's proposed Monitoring Network Plan is a SIP revision that should be subject to notice and comment rulemaking. The CAA and its implementing regulations make clear that a state's monitoring plan is part of its SIP.[87] The implementing regulations explicitly state they are authorized by section 110 mandating SIPs.[88] Additionally, 40 C.F.R. § 58.2(b) states that "the

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potentially in non-attainment, including data from private monitors, it cannot designate that areas as "attainment"); Miss. Comm'n on Envtl. Quality v. EPA, 790 F.3d 138, 154 (D.C. Cir. 2015) (private data, even if unverified, implied that a NAAQS violation was possible.).

[82] *Supra* Section II(C).

[83] *Id*.

[84] *Supra* Section II(E).

[85] *Id*.

[86] *Id*.

[87] *See* 42 U.S.C. § 7410(A)(2)(b) (each SIP must "provide for establishment and operation of . . . systems . . . necessary to . . . monitor, compile, and analyze data on ambient air quality"); 40 C.F.R. § 51.17(b)(1)-(6) (each SIP "shall include a description of the . . . proposed air quality surveillance system, which shall set forth," among other things: the exact location of the monitors; how each monitor operates; and the timetable for installing any equipment needed to complete the monitoring system").

[88] *See* 71 Fed. Reg. 61303, 61243 at note 8 (Oct. 2006) stating that the regulations "derive[]" from Clean Air Act "Section 110(a)(2)(B) [42 U.S.C.A 7410(a)] [which] provides that each State implementation plan shall provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor, compile, and analyze data on ambient air quality and upon request make such data available to the Administrator."

requirements pertaining to provisions for an air quality surveillance system *in the SIP* are contained" in the standards establishing AMNP and FYA requirements, and the requirements in § 58.10 pertain to the "surveillance system", the same term used in § 58.2(b). Because an update to the monitoring plan is a SIP revision, federal law requires TCEQ to provide notice-and comment and undertake a public hearing before promulgating the plan.[89]

IV. Conclusion

Commenters urge TCEQ to enhance ozone and ozone precursor monitoring in the Permian Basin. There is considerable data indicating ozone in the region likely exceeds the NAAQS and is harming the health of vulnerable populations living near oil and gas facilities. TCEQ's failure to monitor is putting the health of communities at risk and runs counter to the Clean Air Act. We look forward to working with TCEQ on this issue in the future and thank TCEQ for the opportunity to comment.

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[89] *See Hall v. EPA*, 273 F.3d 1146, 1162 (9th Cir. 2001) ("The Act requires that SIP revisions 'be adopted by the State after reasonable notice and public hearing.'") (quoting 42 U.S.C. § 7410(l)).

Exhibit A

UNC | INSTITUTE FOR THE ENVIRONMENT

Assessing Permian Basin's Contributions to Ozone Nonattainment at Carlsbad, New Mexico

Final Report

Submitted to:
Environmental Defense Fund

Submitted by:

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July 31, 2023

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Background

Emissions from oil and gas activities in the Permian basin (PMB) have been implicated for contributing to high ozone levels in the Texas and New Mexico region. Under this study, the UNC Institute for the Environment (UNC-IE) performed two specific analyses (HYSPLIT back-trajectory modeling and emissions inventory analyses) to assess if emissions from the PMB contributed to ozone nonattainment at specific monitors in New Mexico. This report presents outcomes of these analyses performed by UNC-IE.

Task 1: HYSPLIT Modeling and Analyses

Review of historical Ozone at Carlsbad monitoring site

The Carlsbad (AQS Site ID 350151005) ozone monitor, situated in Eddy county in Southeast New Mexico is maintained by the New Mexico Environment Department (NMED). Recent observations in the past few years have shown Carlsbad to record higher ozone levels than in the past. A violation of the National Ambient Air Quality Standard (NAAQS) for 8-hour ozone (8HO3) is triggered when the three-year average of the annual fourth highest daily maximum (MDA8_O3) reading exceeds the NAAQS. The 2015 form of the ozone NAAQS sets this threshold at 70 ppb or 0.070 ppm[1]. This three-year average is considered the "Design Value" (DV) for a monitor, and recent data have shown that the DV for Carlsbad has been continuously rising, and there is concern that the Carlsbad region can be potentially designated to be in nonattainment of the NAAQS for ozone. According to the U.S. Census Bureau[2], the 2020 population in Eddy county is 62,314, and the population in Carlsbad city is 32,238. The city of Carlsbad is part of the Carlsbad-Artesia micropolitan statistical area (μSA).

Note that there is another ozone monitor at the Carlsbad Caverns National Park (CAVE) (AQS Site ID: 350150010) also in Eddy county, which also has recorded high ozone levels in the recent past. In the year 2022, Carlsbad recorded 22 exceedances of the ozone NAAQS through September, CAVE recorded 21, while Houston, Texas, and Dallas – Fort Worth, Texas (top 4 locations with high ozone in EPA Region 6) recorded 25 and 38 exceedances respectively. The rest of this report only discusses the Carlsbad site.

Figure 1 presents daily maximum 8-hour average of ozone concentration (MDA8_O3) and number of days when MDA8_O3 above 70 ppb (hereafter referred as ozone exceedances) at Carlsbad. As shown in this Figure (bottom-right), ozone exceedances typically occurred during May through September at Carlsbad monitoring site. July is the month with highest number of exceedances. During the period 2017 – 2022, the highest number of annual exceedances is 23, and seen during both 2021 and 2022. Lowest number of exceedances in 2020 is due to technical issue at the monitoring site[3] and therefore does not represent typical ozone

[1] https://www.epa.gov/criteria-air-pollutants/naaqs-table
[2] https://www.census.gov/quickfacts/eddycountynewmexico
[3] https://www.currentargus.com/story/news/local/2020/08/13/nmeds-ozone-air-monitor-carlsbad-shut-down-most-july/3338346001/

conditions in 2020. The number of ozone exceedances increased from 2017 (10 exceedances) to 2022 (23 exceedances). Figure 1 (bottom-left) also suggests an increasing trend of MDA8_O3 at Carlsbad since 2017. Increases in MDA8_O3 and ozone exceedances are also observed at CAVE monitoring site (Figure S1 and Figure S2).

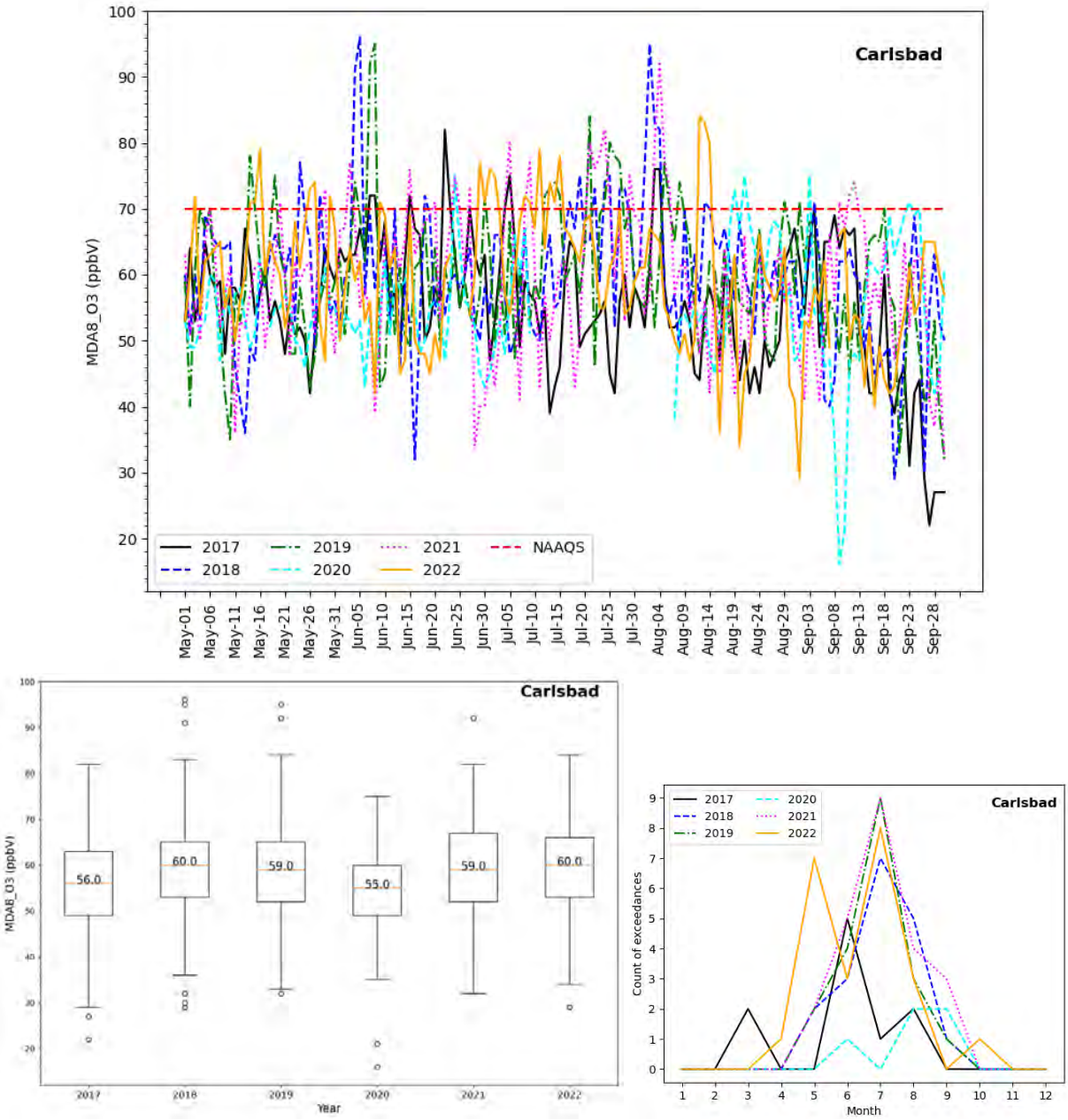


Figure 1. (Top) Daily distribution and (bottom-left) box and whisker plot of MDA8_O3 during May – September, and (bottom-right) number of ozone exceedances when MDA8_O3 was above 70 ppb at Carlsbad monitoring site during 2017 – 2022 period. Caution should be made in interpreting MDA8_O3 in 2020 due to incomplete monitoring data at Carlsbad during this year.

Table S2 presents summary statistics of observed MDA8_O3 at 8 monitoring sites throughout 2017 – 2022 within and near the Permian basin (see Figure 2 for locations). On the New Mexico side of the Permian basin, besides Carlsbad and CAVE, ozone exceedances were also commonly observed at Hobbs in Lea county. Guadalupe, Culberson county is the only ozone monitoring site on the Texas side of the Permian basin and observed ozone exceedances during 2019-2021, the three years when data at this site are available and showing an increasing trend – both for the highest and 4th highest MDA8_O3 values each year. There is lack of additional ozone monitoring in Texas counties of the Permian basin where ozone exceedances are likely to be seen. The three monitoring sites (San Antonio, Camp Bullis, Calaveras) within the San Antonio ozone nonattainment area (Figure 2) also frequently observed ozone exceedances during May – September each year. Likewise, ozone exceedances were observed at several ozone monitoring sites within the Dallas Forth Worth (not shown in Table S2). Causes of ozone exceedances in San Antonio and Dallas Forth Worth are not discussed here.

HYSPLIT model configuration

To identify specific emissions source regions that may have contributed to ozone exceedances at Carlsbad, we employ the Hybrid Single-Particle Lagrangian Integrated Trajectory (HYSPLIT) model v5.2.3 (Stein et al., 2015) from the National Oceanic and Atmospheric Administration (NOAA) to calculate trajectories of airmasses that reached Carlsbad monitoring site on high ozone days. We reviewed prior applications of HYSPLIT for regulatory purposes, particularly in designation of nonattainment areas for common best practices (summarized in Table S1). Based on results from this review and from EPA's recommendations on HYSPLIT application(U.S. EPA, 2016), we set up the HYSPLIT model with the following configurations:

- The MDA8_O3 above 70 ppb threshold is used as the criterion to determine high ozone days.
- For each of the above exceeding MDA8_O3 values, the eight hours based on which the 8HO3 was determined from (base hours) are identified. HYSPLIT is then applied to simulate 48-hour back trajectories starting from each of the eight identified base hours.
- Input meteorological data for HYSPLIT are processed from the High-Resolution Rapid Refresh (HRRR) meteorological model[4] (Dowell et al., 2022; James et al., 2022). HRRR data is approximately 3 km x 3 km in horizontal resolution and available hourly.
- The 48-hour back trajectories are estimated for four elevation levels above Carlsbad: 100, 200, 500 and 1,000 meters.
- Vertical motion is extracted directly from HRRR model.

We examined observed ozone during May through September from 2017 to 2022 to identify the hours for which HYSPLIT back trajectories are estimated. Table 1 presents exceedance counts of MDA8_O3, 8HO3 and the total of base hours for each year. Due to incompleteness of HRRR input data at times, back trajectories were not estimated for certain base hours of the MDA8_O3. Overall, 48-hour back trajectories were estimated for 636 hours (simulated-hours) out of 664 base-hours (equivalent to 96% completeness) during this six-year period.

[4] https://rapidrefresh.noaa.gov/hrrr/

We also conducted HYSPLIT simulations for low ozone days which are identified as days when MDA8_O3 are below 10th percentile (pctl) and 25th pctl of all values during May – September, 2017 – 2022. They are determined to be 46 ppb and 51 ppb, respectively (see Table S3 for distribution of MDA8_O3 at Carlsbad. The number of base hours for each scenario are presented in Table 1. Note that 70 ppb threshold is approximately 90 pctl (or 68 ppb) of all MDA8_O3 values during May – September, 2017 – 2022 (see Table S3).

Table 1. Number of base-hours for HYSPLIT back trajectory simulations when MDA8_O3 exceeded 70 ppb, less than 46 ppb and 51 ppb.

	2017	***2018***	***2019***	***2020[1]***	***2021***	***2022[2]***	***Total***
MDA8_O3 < 46 ppb (10th pctl)	*26*	*13*	*13*	*15*	*17*	*3*	*87*
# of base-hours (trajectories)	*208*	*104*	*101*	*115*	*136*	*24*	*688*
MDA8_O3 < 51 ppb (25th pctl)	*48*	*28*	*34*	*39*	*37*	*12*	*198*
# of base-hours (trajectories)	*384*	*224*	*259*	*283*	*296*	*96*	*1,542*
MDA8_O3 > 70 ppb (90th pctl)	*10*	*18*	*19*	*5*	*23*	*10*	*83*
# of base-hours (trajectories)	*64*	*144*	*132*	*32*	*184*	*80*	*636*

[1] Ozone data for 2020 is incomplete due to technical issues in monitoring equipment[5]

[2] At the time of conducting HYSPLIT back trajectory analyses, ozone data in 2022 was not completed and thus number of MDA8_O3 > 70 ppb shown in this Table is less that what was shown in Figure 1

Trajectory analyses

We conducted a heatmap analysis to identify footprint of source regions that may contribute to ozone at Carlsbad. We first identify a domain comprised of grid-cells at a 3 km x 3 km horizontal resolution centered on the Carlsbad monitoring site. This domain covers a surface area of 1,200 x 1,200 km (or 400 x 400 grid-cells) to ensure that all HYSPLIT-simulated trajectories are captured (Figure 2). We also divided the counties in Permian basin into four groups – Northeast, Northwest, Southeast, and Southwest (referred to as NE, NW, SE, and SW, respectively) as shown in Figure 2 for ease of analyses and discussions later. Heatmap value of each grid-cell represents number of trajectory passages over that grid-cell and divided by total number of trajectories during a defined period and under specific condition (e.g., high vs. low ozone days; see below for more details). We also conducted heatmap analyses at the county-level (# of times the trajectory goes through a county) to facilitate a direct comparison to county-level emissions (source regions) from Oil and Gas productions in New Mexico and Texas.

[5] https://www.currentargus.com/story/news/local/2020/08/13/nmeds-ozone-air-monitor-carlsbad-shut-down-most-july/3338346001/

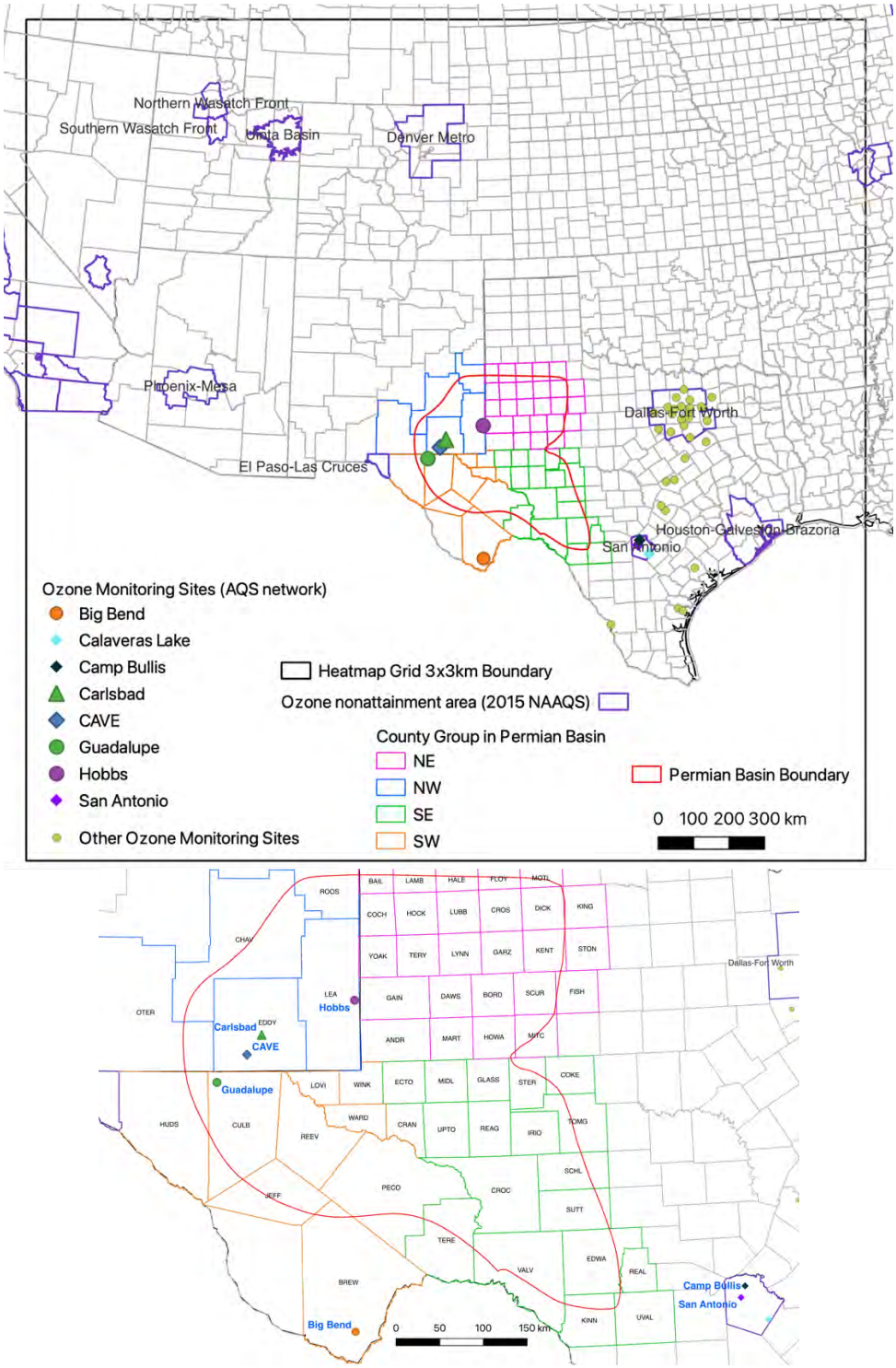


Figure 2. (Top) Layout of 3 km x 3 km domain for heatmap analyses and (bottom) zoom-in of ozone monitoring sites within the PMB. In this figure, locations of other ozone monitoring sites outside PMB and current ozone nonattainment areas are shown; pink, green, orange, and blue polygons depict counties designated as northeast (NE), southeast (SE), southwest (SW) and northwest (NW), respectively, of the PMB.

Figure 3 presents actual HYSPLIT 48-hour back trajectories for the base hours described in Table 1 (e.g., when MDA8_O3 > 70 ppb) reaching Carlsbad at 4 levels above ground level. We found the trajectory patterns to be consistent throughout 2017 – 2022. For trajectories that ended at 100 m and 200 m above Carlsbad, most of them passed through the counties located in east and southeast of Carlsbad. Trajectories passing through counties located in northeast and southwest of Carlsbad are found more frequently among those ended at 500 m and 1000 m above Carlsbad.

Figure 4 presents percentage of total number of trajectories (heatmap value) of 3 km x 3 km grid-cells (Figure 2) as they are mapped to the trajectories in Figure 3. There are several aspects to be noted in our heatmap analyses:

- Because all trajectories arrive at the grid-cell where Carlsbad site is in, the heatmap value for this cell is 100%.
- Consequentially, top heatmap values are also found for grid-cells in Eddy county (EDDY) as they are on the dominant path of trajectories.
- Furthermore, the farther away a grid-cell is from Carlsbad, the more likely that its heatmap value decreases.

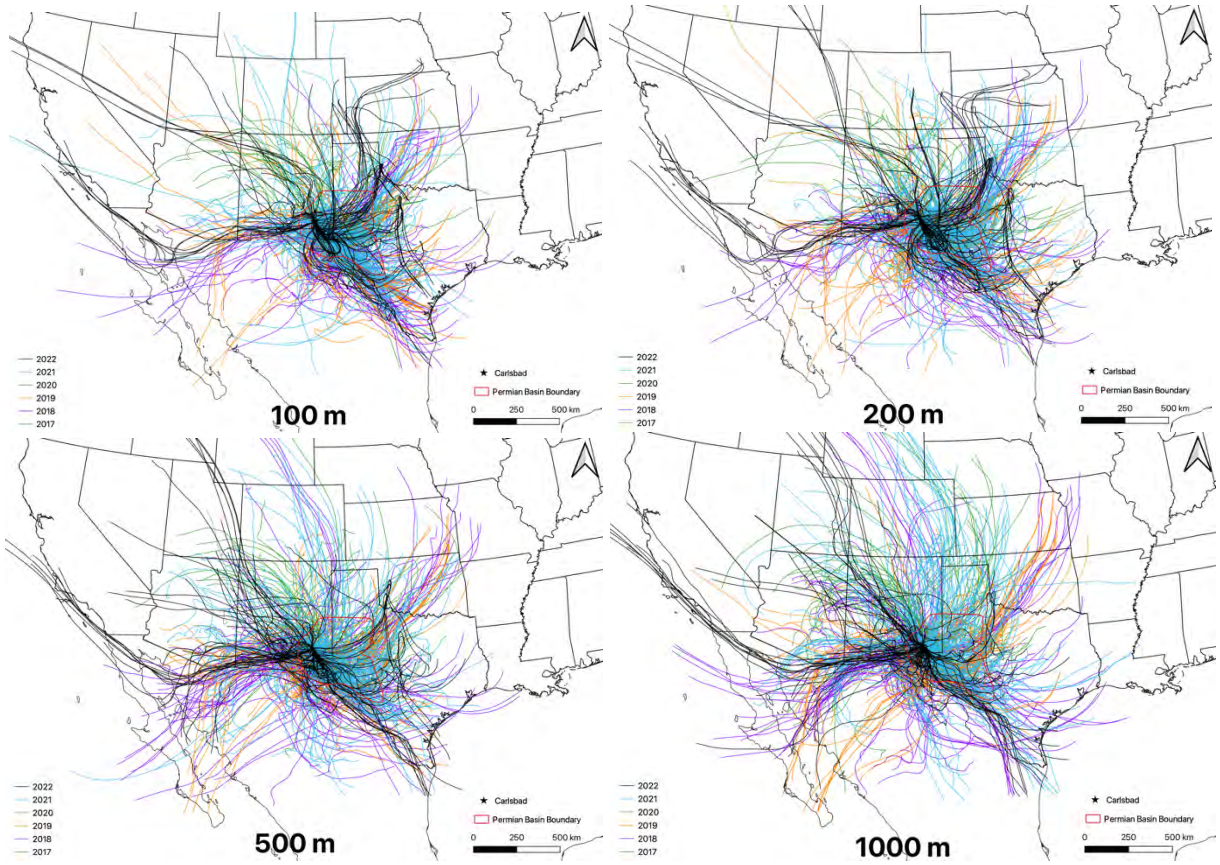


Figure 3. HYSPLIT 48-hour back trajectories ending at 100 m, 200 m, 500 m, and 1000 m above Carlsbad on days when MDA8_O3 was above 70 ppb.

As shown in Figure 4, greater than 4% of trajectories passing through the SW and SE regions (counties LOVI, WARD, REEV, PECO; see Table S5 for full names of all county abbreviations) of PMB. Meanwhile, fewer number of trajectories (below 2%) passed through NW and NE regions of PMB implying rather insignificant impact of emissions sources located within these regions on Carlsbad (Figure 4).

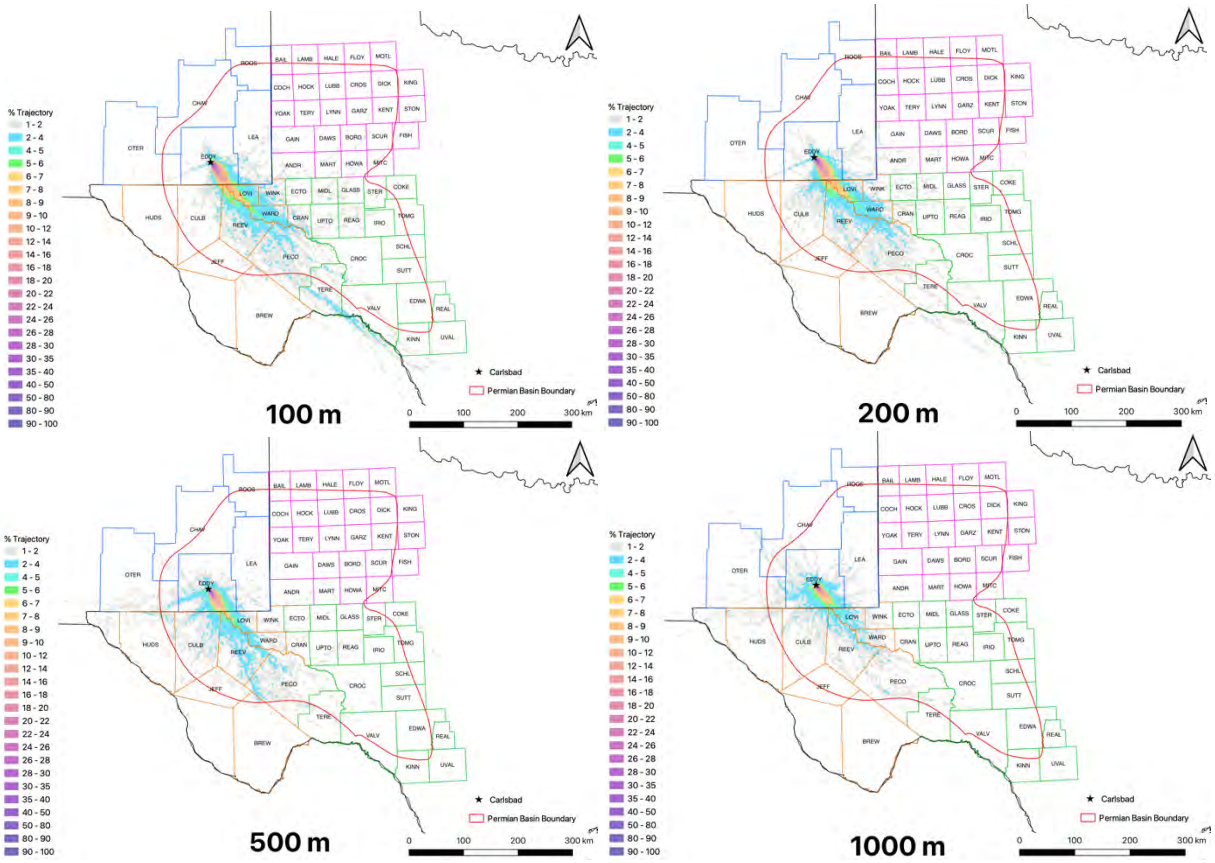


Figure 4. HYSPLIT 48-hour back trajectories presented as heatmap values (% of trajectory) ending at 100 m, 200 m, 500 m, and 1000 m above Carlsbad on days when MDA8_O3 was above 70 ppb.

As shown in Figure 5, heatmap values above 5% are found for grid-cells toward northeast and southwest of Carlsbad (associated with trajectories passing though counties LEA, CHAV and OTER in NW region) during low ozone days which is a rather distinctive difference from Figure 4. This finding implies that trajectories passing though these counties (and NE region of PMB) are typically associated with low ozone at Carlsbad. Furthermore, grid-cells with high heatmap values (above 5%) are also found in counties toward southeast of Carlsbad (Figure 5). This implies airmasses passing through these counties could either cause high or low ozone at Carlsbad. However, we find from this analysis that airmasses passing through counties in SW and SE regions of PMB are those that always lead to high ozone at Carlsbad.

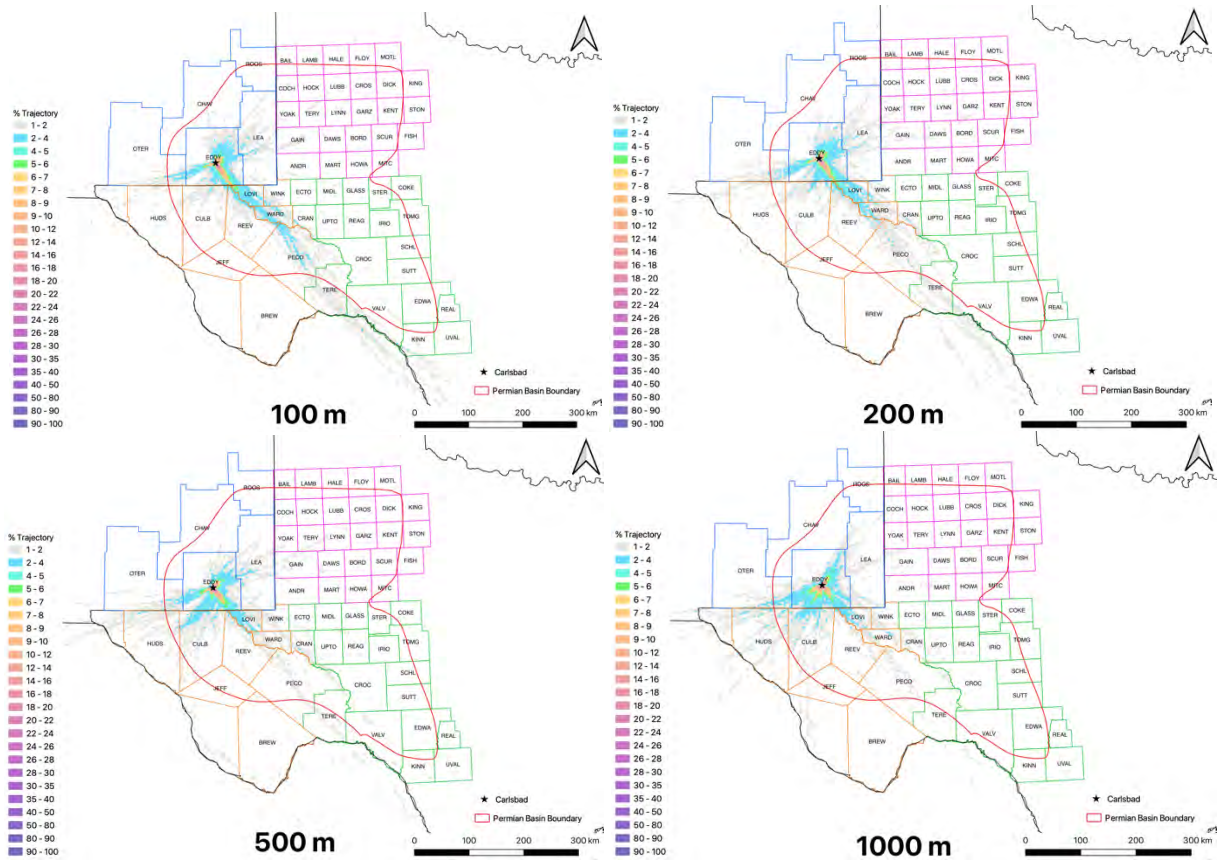


Figure 5. HYSPLIT 48-hour back trajectories presented as heatmap values (% of trajectory) ending at 100 m, 200 m, 500 m, and 1000 m above Carlsbad in days when MDA8_O3 was below 46 ppb (10th percentile).

Figure S4 and S5 present heatmap values evaluated at county-level. Note that it is more likely for a larger county in area to have more trajectories pass through it than for a smaller county if they are at equal distance from Carlsbad. To account for this potentially misleading insight, we further normalized the county-level heatmap value by the county area and the results are shown in Figure 6 and Figure 7 for high and low ozone days, respectively. Figure 6 shows that top heatmap values are found in LOVI, WARD, WINK, and CRAN counties during high ozone days (see Tables S5 and S6 for numerical values).

To better identify the source regions that may contribute to high ozone days at Carlsbad, we subtracted the heatmap values associated with low ozone days when MDA8_O3 < 46 ppb (Figure 5) from the heatmap values associated with high ozone days when MDA8_O3 > 70 ppb (Figure 4). The results are shown in Figure 8 for 3 km x 3 km grid-cells and in Figure 9 for counties in the PMB. Negative heatmap values in these figures indicate grid-cells/counties that are typically associated with low ozone days, and vice versa.

Figure 8 clearly indicates two groups of sources regions: the source regions between east and south of Carlsbad are often associated with high ozone days; the source regions toward northeast and southwest of Carlsbad are often associate with low ozone days. Similar finding is

also found in Figure 9 where trajectories passing through counties that are in SE (e.g., ECTO , MIDL, STER, GLASS , COKE, CULB, REEV, LOVI, WARD, CRAN, PECO, TERE, UPTO, REAG, IRIO), SW (e.g., WINK, LOVI, WARD, REEV) and a few counties in NE but close to SE (e.g., ANDR, MART, HOWA, MITC) of the Permian Basin are associated with high ozone days at Carlsbad. These counties listed above have large number of oil and gas wells (Figure S3) and also are among the top counties in NOx and VOC emissions from O&G (Figure 11 and Figure 12; Table S8). On the other hand, trajectories passing through counties that are northeast (e.g., YOAK, TERY, LYNN, COCH, HOCK, LUBB, CROS, ROOG, BAIL, LAMB, HALE) and southwest (e.g., HUDS, OTER) of Carlsbad are often associated with low ozone days (Figure 9). NOx and VOC emissions from O&G in these counties are lower than in other counties in PMB (Figure 11 and Figure 12; Table S8).

Note that in Figure 9, difference in heatmap value of EDDY county is zero since all trajectories on low and high ozone days arrive at this county that contains the Carlsbad monitor.

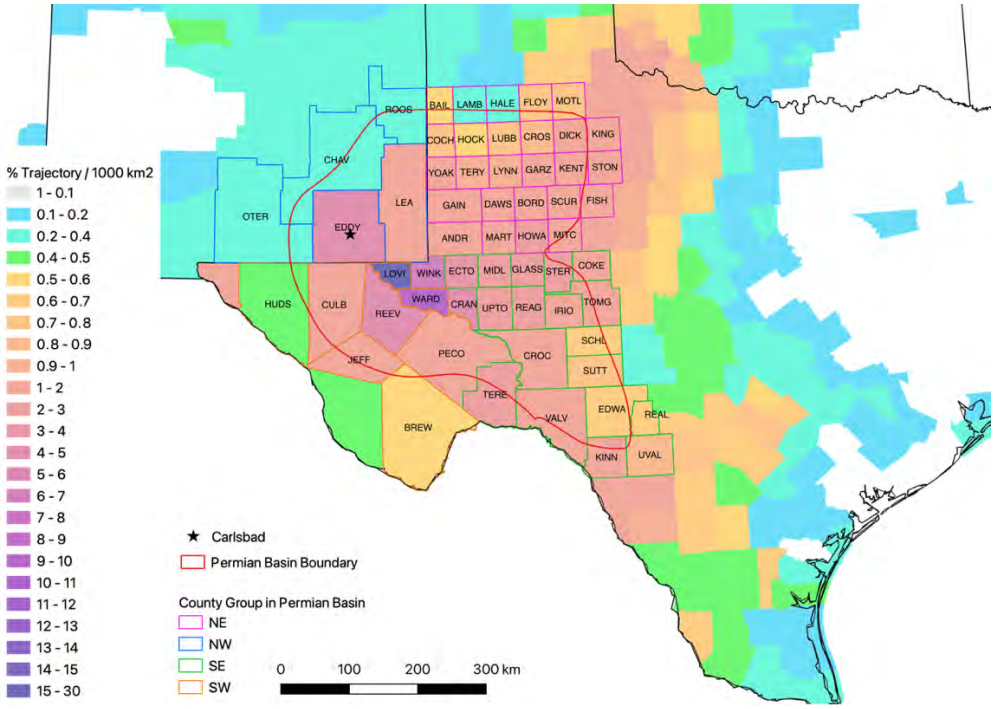


Figure 6. County heatmap normalized by number of trajectories and county area for high ozone days (MDA8_O3 > 70 ppb)

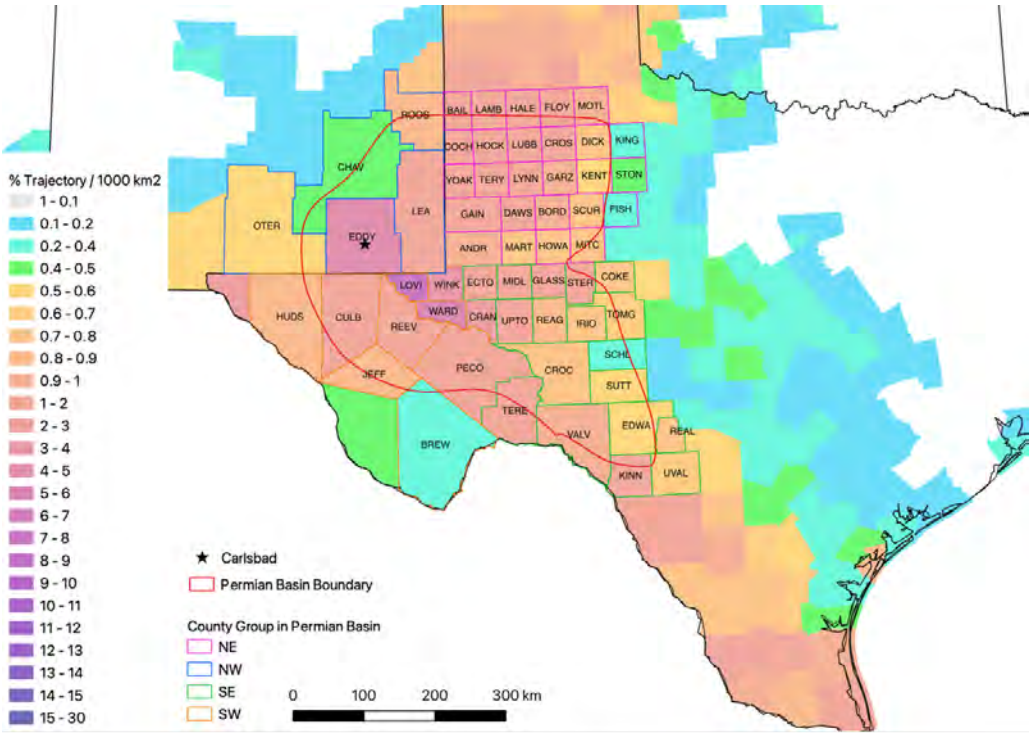


Figure 7. County heatmap normalized by number of trajectories and county area for low ozone days (MDA8_O3 < 46 ppb)

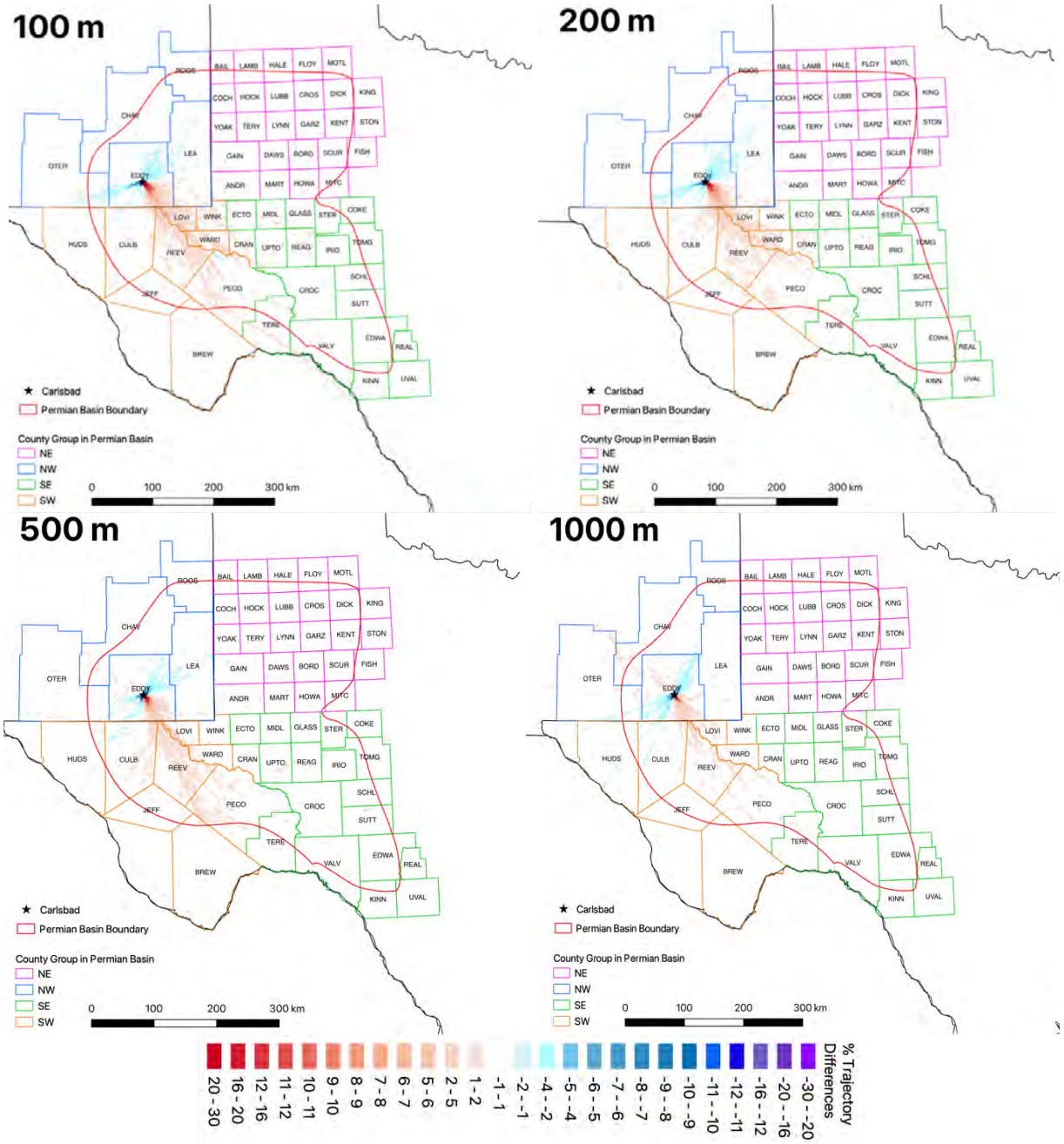


Figure 8. Differences in heatmap values between high (MDA8_O3 > 70 ppb) and low (MDA8_O3 < 46 ppb) ozone days for 3 km x 3 km grid-cells.

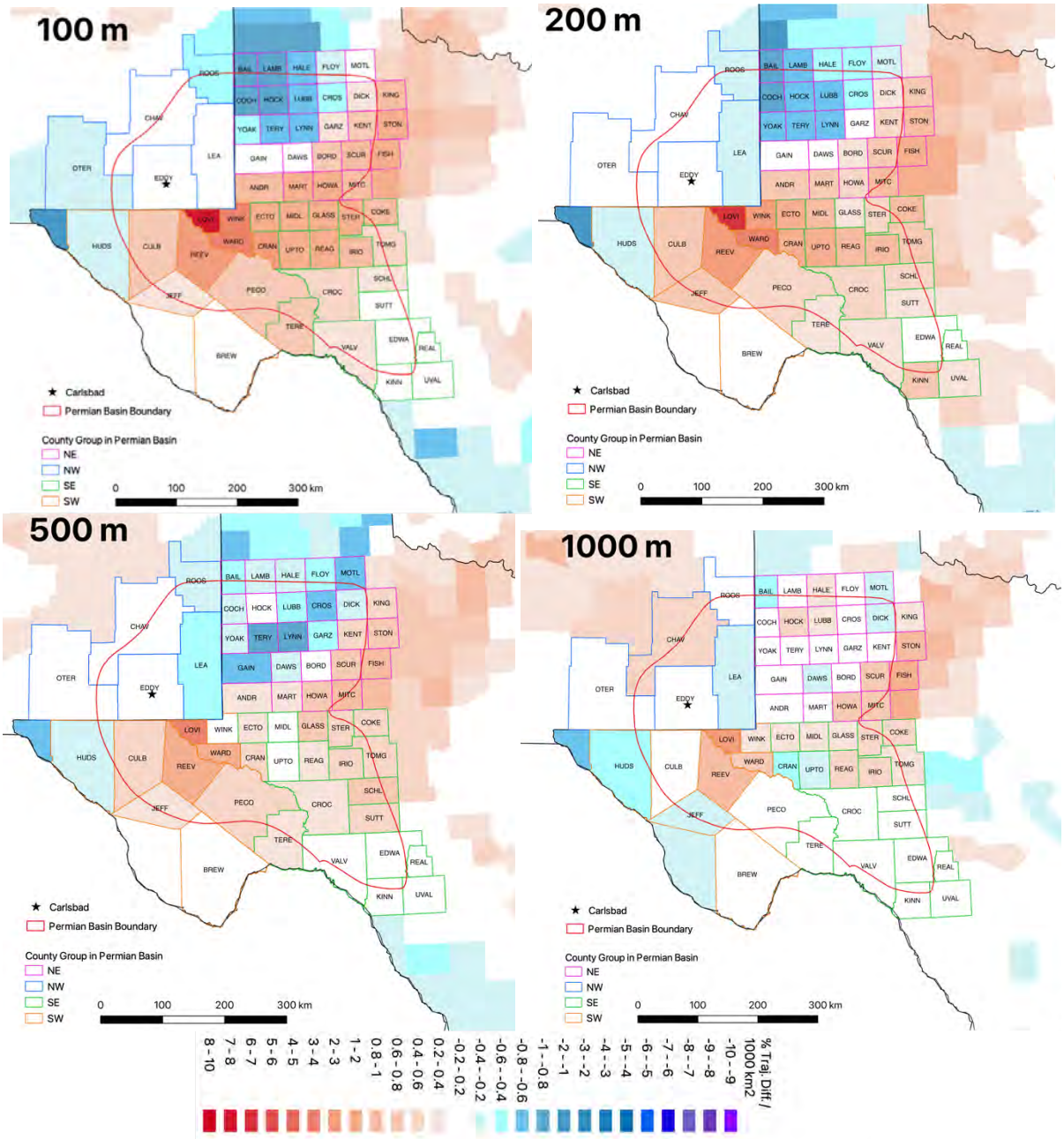


Figure 9. Differences in heatmap values between high (MDA8_O3 > 70 ppb) and low (MDA8_O3 < 46 ppb) ozone days for counties in Permian basin.

Task 2: Emissions Inventory Analyses

We obtained emissions inventory data from New Mexico Environmental Department (NMED) and from the Texas Commission on Environmental Quality (TCEQ) for oil and gas (O&G) production in New Mexico and Texas in 2020. We also obtained oil and gas emissions data in 2017, 2018 and 2019 from the EPA's National Emission Inventories (NEI). Note that unlike the typical triennial NEI such as NEI 2017 and NEI 2020 which are released every three years and incorporated emissions data developed by state, tribal and local agencies, EPA developed the NEI 2018 and NEI 2019 based on NEI 2017 with some updates to represent emissions in year 2018 and 2019[6].

Table S7 summaries data sources for O&G emissions in New Mexico and Texas in 2017 – 2020. In general, O&G emissions in the triennial NEI 2017 and NEI 2020 in Texas were developed by TCEQ, whereas in New Mexico emissions from point O&G sources were developed by NMED and emissions from non-point O&G were developed using EPA's O&G Tool.

Our O&G emissions analyses for New Mexico and Texas as presented in the following sections are based on the best emission data we obtained at this time. EPA and state/local agencies may revise their O&G emission inventories in future releases.

At the state level, emissions of NOx and VOC from O&G increase by 19% and 45%, respectively, in New Mexico and by -1% and 33%, respectively, in Texas in 2020 as compared to 2017 (Figure 10). Changes in VOC emissions are much stronger than changes in NOx emissions. There is also significant increase in SO_2 emission from O&G in 2020 in New Mexico due to updated emission factor which is a result of a recent oil and gas survey by states belong to Wester Regional Air Partnership (WRAP) with includes New Mexico but excludes Texas (EPA 2022, personal communication). This significant increase of SO_2 emission is applicable to source classification code (SCC) 2310010200 (O&G Exploration & Production / Crude Petroleum / Oil Well Tanks – Flashing & Standing / Working / Breathing) and 2310011001 (On Shore Crude Oil Production All Processes). (Note SO_2 emissions are not relevant to ozone pollution at Carlsbad).

Table S8 shows total emissions of NOx and VOC from O&G productions in counties within the PMB in inventory years 2017 and 2020. Figure 11 through Figure 14 compare total NOx and VOC emissions at county level from oil and gas productions between inventory years 2017 and 2020. Table 2 summarizes the emissions by four regions in the PMB.

As shown in Figure 11 and Figure 12, counties within the PMB have high amount of emissions from O&G. Figure S6 indicates that O&G emissions in these counties account for more than 90% of total anthropogenic emissions. There are also high O&G emissions in counties in the Western Gulf basin (southeast of PMB) and in counties in the San Juan basin (northwest of PMB), but they are far away from Carlsbad and the HYSPLIT trajectories suggest insignificant impact from these counties on Carlsbad (Figure 3).

[6] https://gaftp.epa.gov/Air/emismod/2019/2018_2019_platform_Eyth_seminar_01262022.pdf

Figure 13 shows that while decreases in O&G NOx emissions are observed at most counties in PMB, there are large increases in some counties especially in EDDY (196%), LEA (271%), CHAV (68%) and REEV (40%) in 2020 (Table 2). O&G VOC emissions increased in most counties in PMB with strongest increases observed in counties that have high ozone day heatmap values (Figure 4) including EDDY (108%), LEA (127%), CULB (99%), REEV (165%), WINK (193%), WARD (122%), PECO (120%) (Figure 14). In 2017 and over the entire Permian basin, REEV, MILD and LOVI (all in Texas) are the top three counties with O&G NOx emissions; REEV, MILD (Texas) and LEA (New Mexico) are the top three counties with O&G VOC emissions (Table S8). While O&G VOC emissions do not change appreciably in 2020 (REEV, LEA and LOVI are the top three), there are significant changes in O&G NOx emissions ranking where LEA and EDDY, followed by REEV (ranked 10^{th}, $8^{th,}$ and 1^{st}, respectively, in 2017) are the top three counties. In fact, LEA and EDDY observe the largest changes in O&G NOx emissions over the entire Permian basin.

Figure 15 and Figure 16 show locations of major and minor point sources in the PMB. Here the point sources are considered due to their potential long-range impacts on Carlsbad, and the point sources are not necessarily associated with O&G wells (whose emissions are typically represented as nonpoint sources in the NEI). Most point sources outside PMB boundary are at great distances from Carlsbad. Combined with HYSPLIT trajectory analyses, we expect impact of point sources outside PMB on Carlsbad to be insignificant except some major point sources at the southwest corner of OTER (Figure 15).

While we observed increase in ozone concentration at Carlsbad in 2020 and in 2021 compared 2017 (Figure 1) which corresponds with an associated increase in O&G emissions, to understand the causal pathways of specific emissions source regions/magnitudes that impact ozone at Carlsbad requires a full photochemical modeling analysis with source apportionment techniques (zero-out approach, or sensitivity approach like direct decoupled method (DDM) or source apportionment modeling like integrated source apportionment method (ISAM)). Earlier modeling study (Ramboll, 2021) suggests that ozone in Carlsbad region tends to be NOx-sensitive. Dix et al. (2020) shows that NO_2 atmospheric column over the PMB drastically increased in 2018 in comparison to earlier years (Figure S7), which implies rapid changes in the underlying emissions. Changes in emissions in counties with highest heatmap value certainly have the most implication on ozone at Carlsbad. To quantify impacts from O&G emissions in each of these counties requires a detailed source apportionment modeling study.

Additional ozone monitoring, especially in Texas counties of the Permian basin, would be beneficial in not only assessing the potential impacts of Permian on causing high ozone values in those counties, but also in determining the spatial extent of ozone nonattainment in the Permian basin. There are 1.1% of trajectories per 1000 square km (comparable to heatmap values of JEFF,VALV and CROC in Permian basin) passing through El Paso-Las Cruces ozone nonattainment area before reaching Carlsbad (Figure 6 and Figure 7). Since the Guadalupe site in Culberson (CULB) county of Texas shows increasing high ozone from 2019 – 2021 (See SI Table S2) concurrent with increasing trend in Carlsbad, it is possible that the ozone plume in the NM/TX border region around Carlsbad due to O&G emissions from PMB may span a larger area, and thus adversely affecting the public health of more people than currently known.

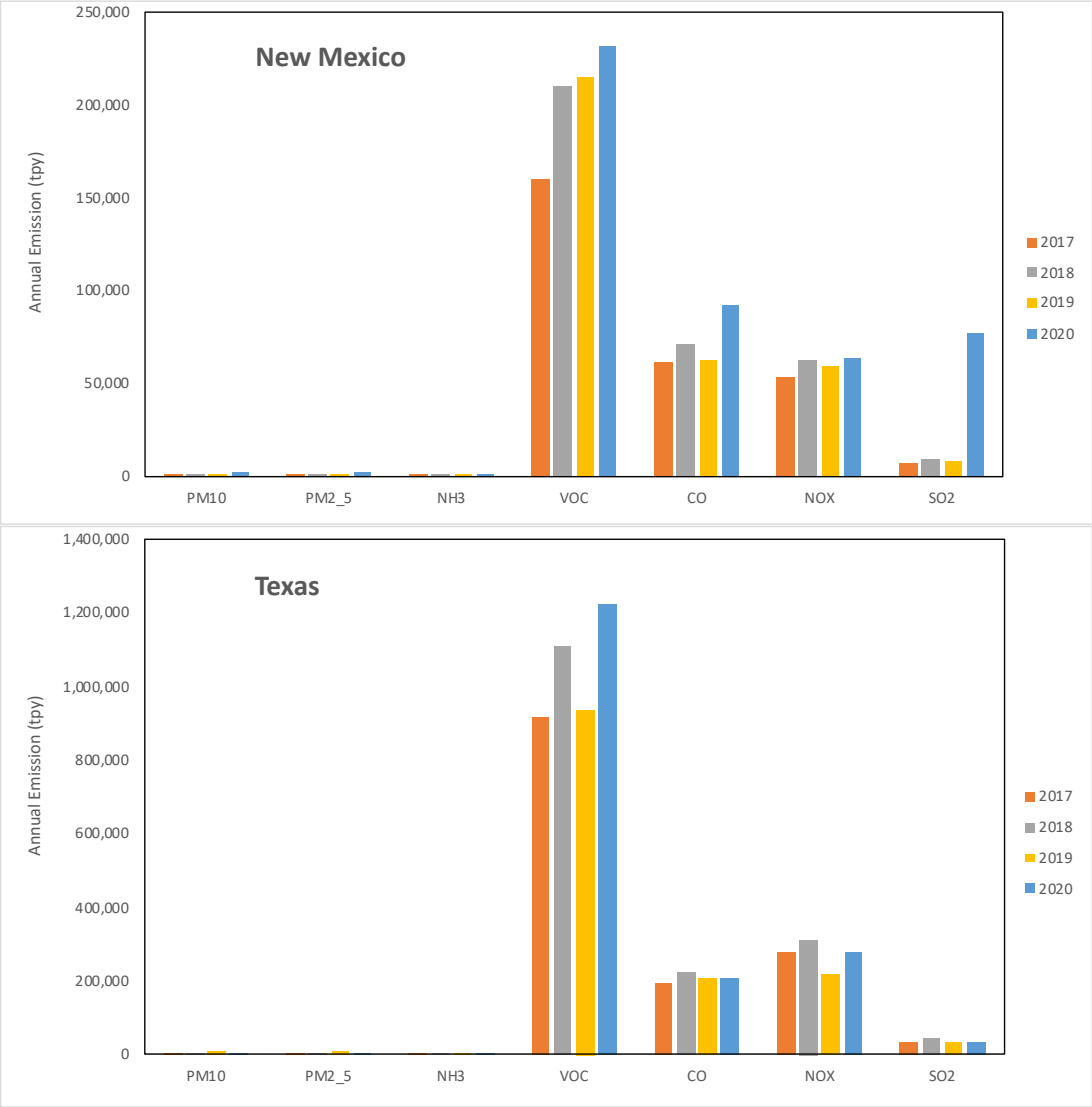


Figure 10. Annual emissions of criteria pollutants from total O&G production in New Mexico and Texas from 2017 – 2020.

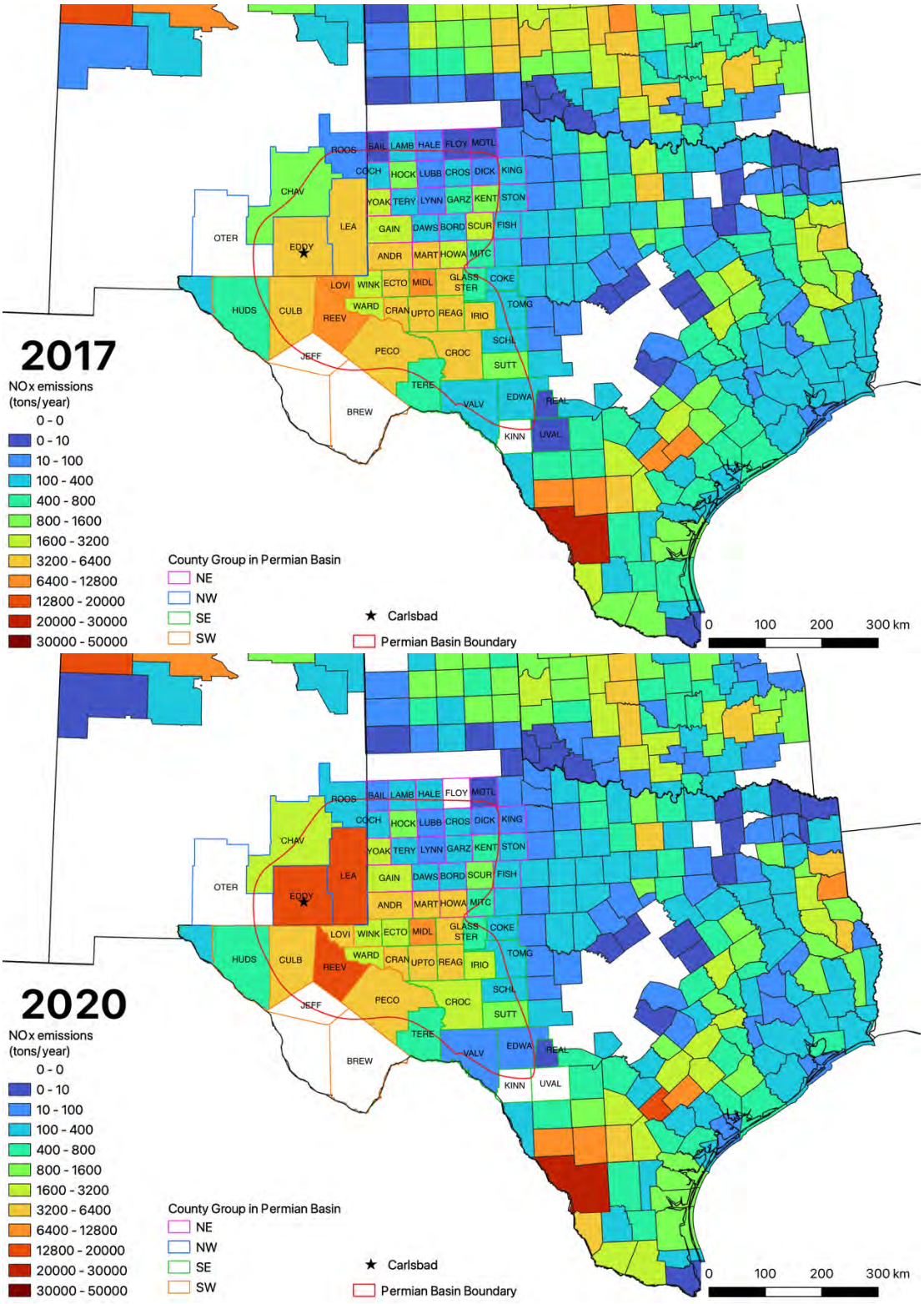


Figure 11. NOx emissions from O&G production in New Mexico and in 2017 and 2020 (Permian basin boundary shown).

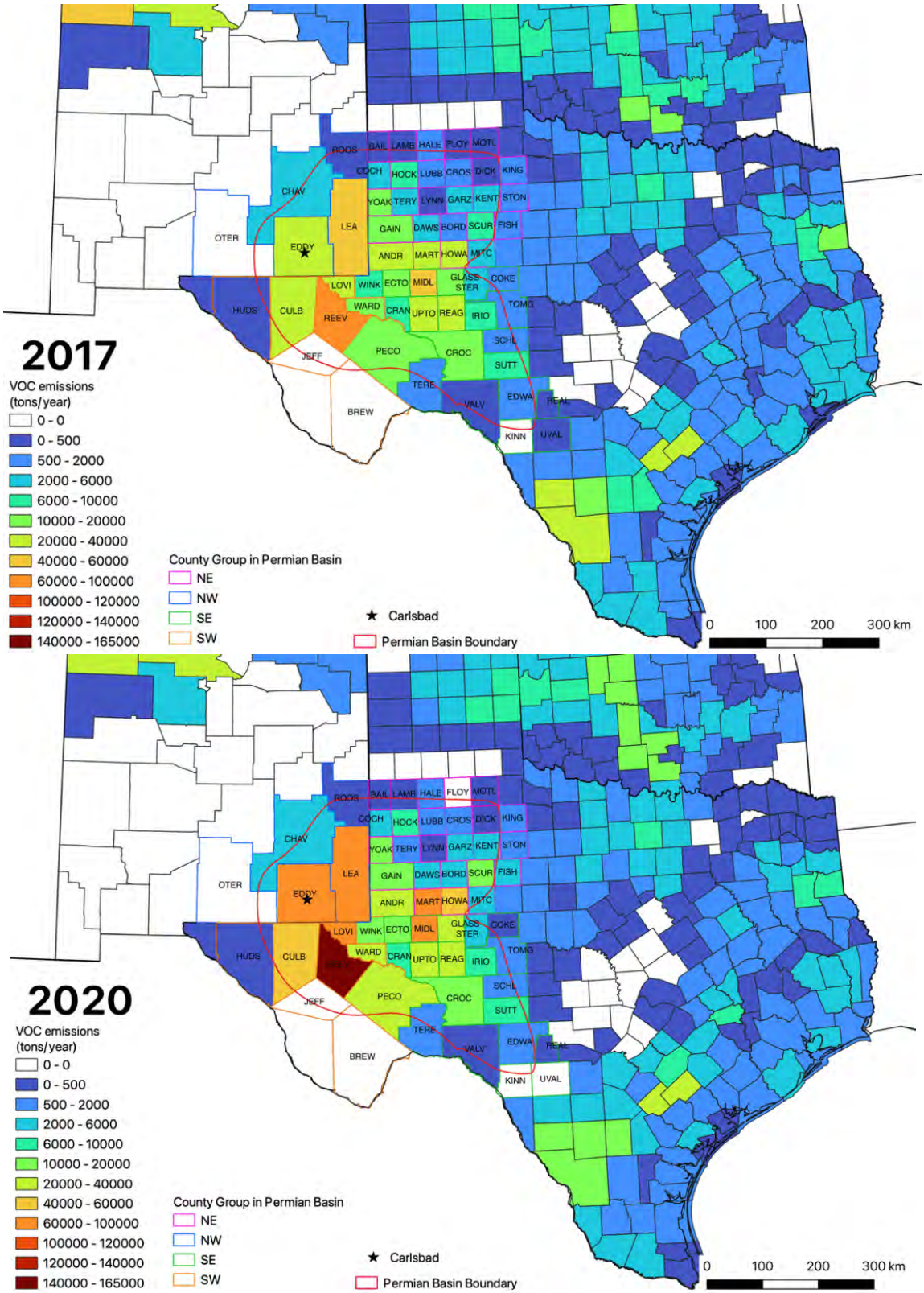


Figure 12. VOC emissions from O&G production in New Mexico and Texas in 2017 and 2020 (Permian basin boundary shown).

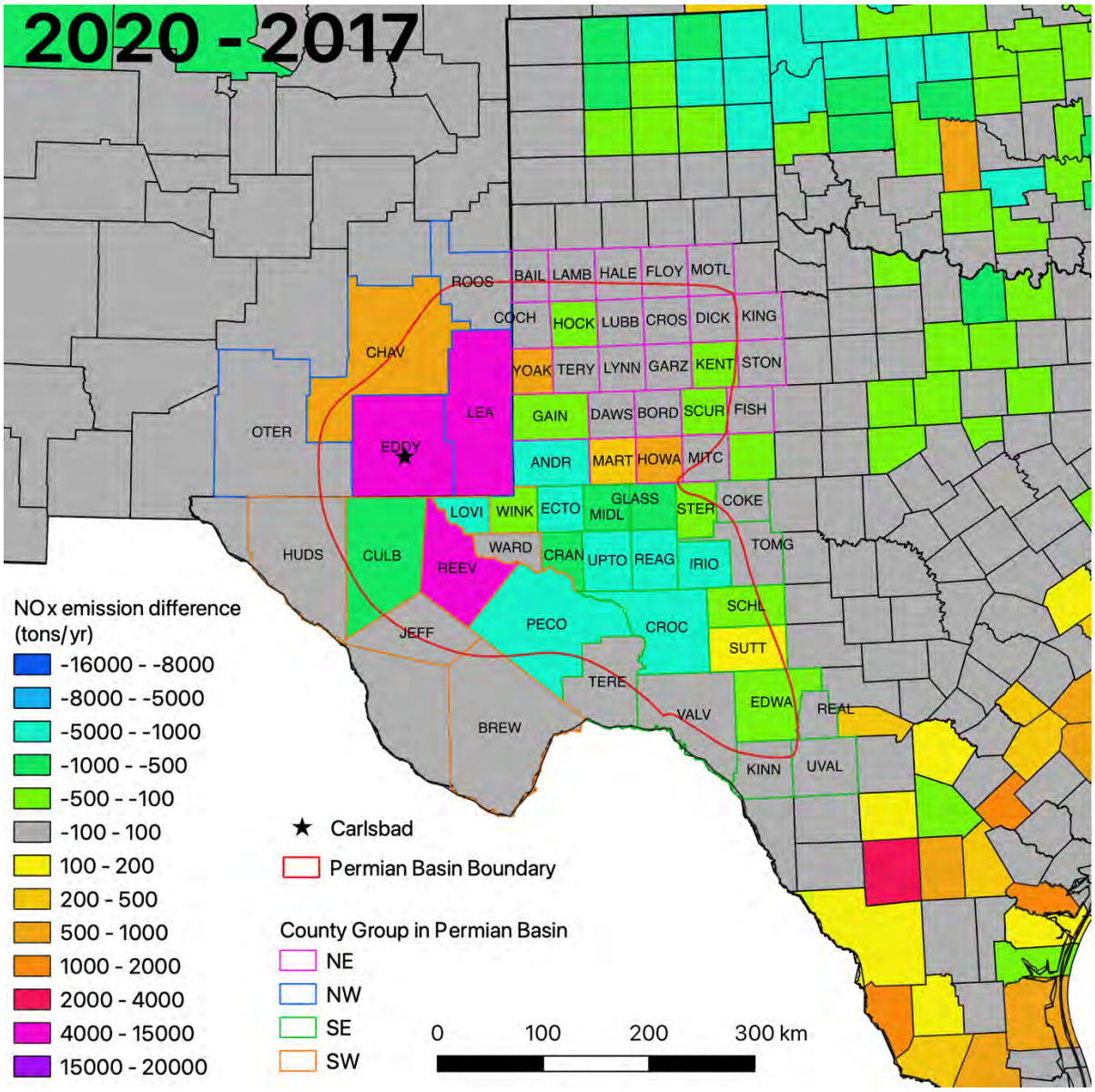


Figure 13. Changes in NOx emissions from O&G production in the Permian Basin in 2020 from 2017

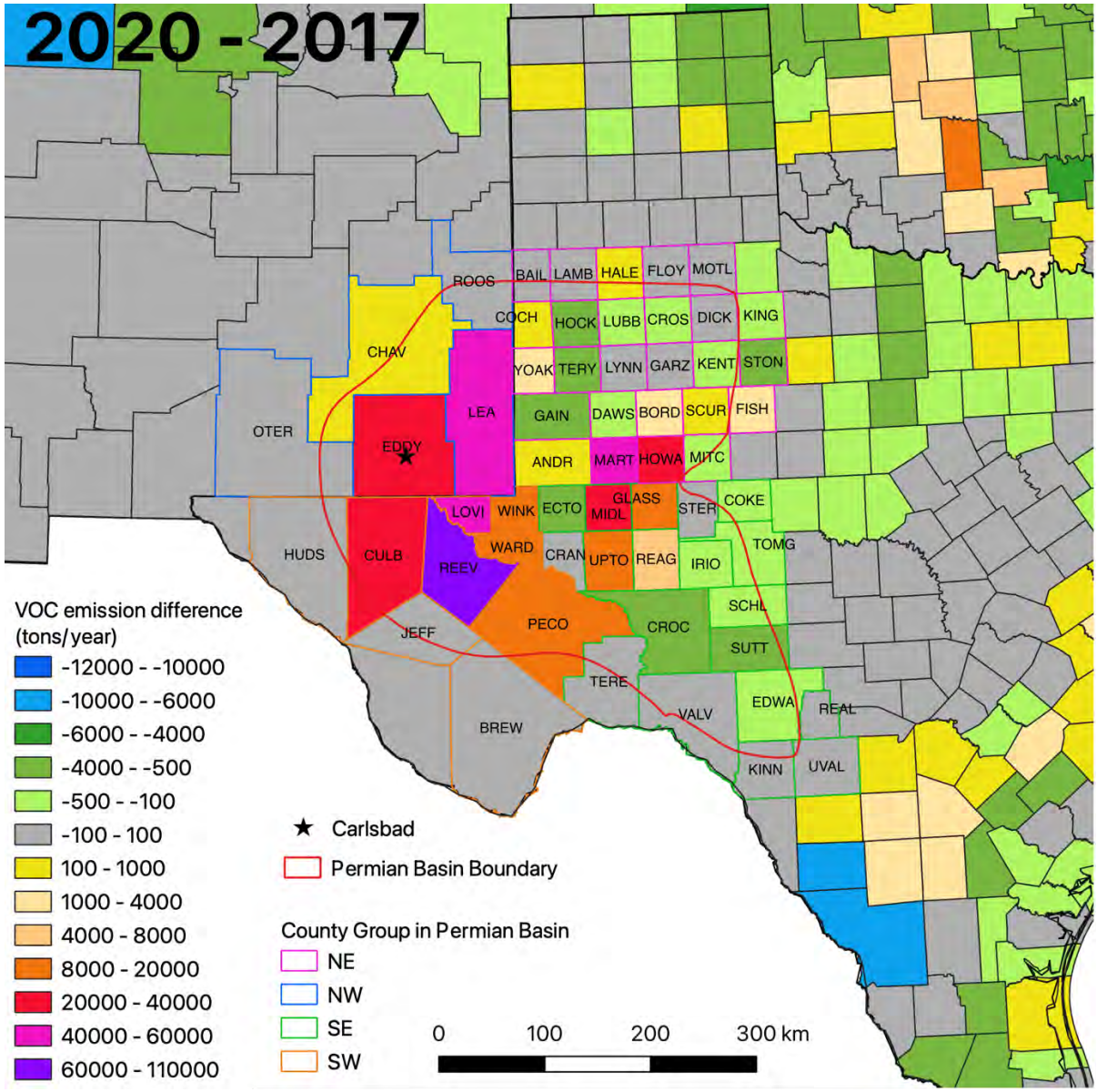


Figure 14. Changes in VOC emissions from O&G production in the Permian Basin in 2020 from 2017

Table 2. Total emissions (tons per year) of NOx and VOC from O&G productions in four regions of the PMB

Regions	2017				2020			
	NOx		VOC		NOx		VOC	
	(tons per year)	Top 3 counties[1]	(tons per year)	Top 3 counties[1]	(tons per year) [2]	Top 3 counties[3]	(tons per year) [2]	Top 3 counties[3]
NW	12,317	EDDY (4.8%) LEA (4.5%) CHAV (1.1%)	81,560	LEA (7.7%) EDDY (6.3%) CHAV (0.6%)	38,633 (214%)	LEA (15%)*(271%)* EDDY (13%)*(196%)* CHAV (2%)*(68%)*	174,054 (113%)	LEA (9.7%)(127%) EDDY (7.3%)(108%) CHAV (0.4%)(7%)
NE	23,901	ANDR (4.7%) MART (3.5%) HOWA (2.3%)	147,030	MART (5.2%) ANDR (4.6%) HOWA (3.7%)	22,151 (-7%)	MART (3%)(12%) HOWA (3%)(21%) ANDR (2%)(-42%)	216,246 (47%)	MART (7.1%)(142%) HOWA (4.8%)(133%) ANDR (2.6%)(1%)
SE	45,552	MILD (8.2%) REAG (5.3%) UPTO (4.8%)	177,693	MILD (9.4%) UPTO (5.0%) REAG (3.8%)	35,599 (-22 %)	MILD (7%)(-8%) REAG (4%)(-23%) UPTO (3%)(-26%)	227,860 (28%)	MILD (8.6%)(64%) UPTO (3.7%)(32%) REAG (2.6%)(21%)
SW	36,158	REEV (9.5%) LOVI (5.9%) PECO (4.9%)	153,290	REEV (11%) LOVI (6.5%) CULB (4.0%)	35,451 (-2%)	REEV (12%)(40%) LOVI (4%)(-22%) CULB (4%)(-14%)	377,723 (146%)	REEV (16.4%)(165%) LOVI (9.4%)(155%) CULB (4.5%)(99%)
Total	117,928		559,572		131,834 (12%)		995,884 (78%)	

[1] Numbers in parentheses are emissions in the respective county in relative to total emissions from all counties in PMB.

[2] Numbers in parentheses are changes in emissions in the respective region in 2020 relative to 2017.

[3] Numbers in 1st parenthesis are emissions in the respective county relative to total emissions from all counties in PMB; numbers in 2nd parenthesis are changes in emissions in the respective county in 2020 relative to 2017.

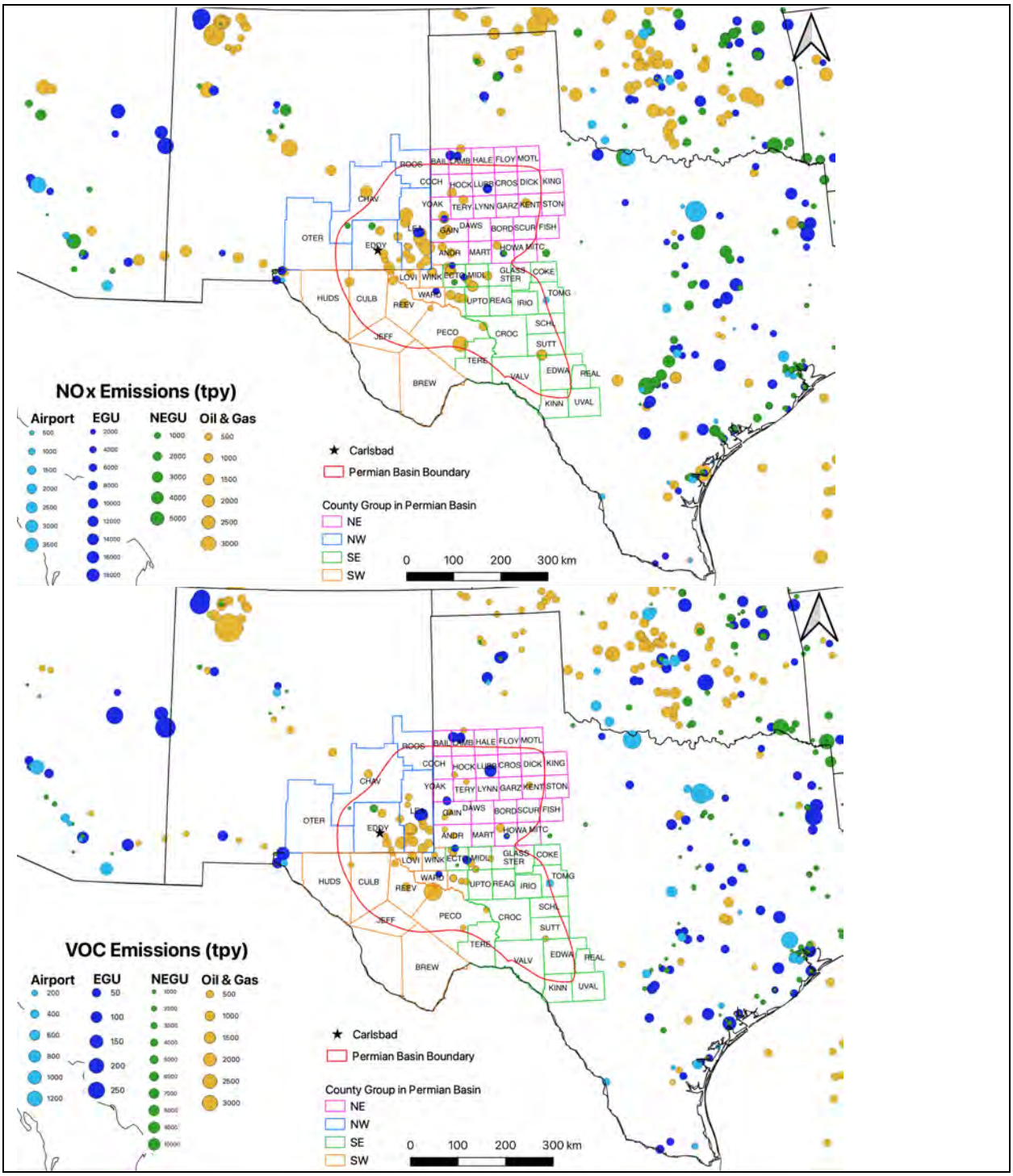


Figure 15. NOx and VOC Emissions from major point sources (> 100 tpy) in New Mexico and Texas in 2020. EGU indicates electric generating unit (e.g., power plant); NEGU indicates non-electric generating unit (e.g., boilers, heaters).

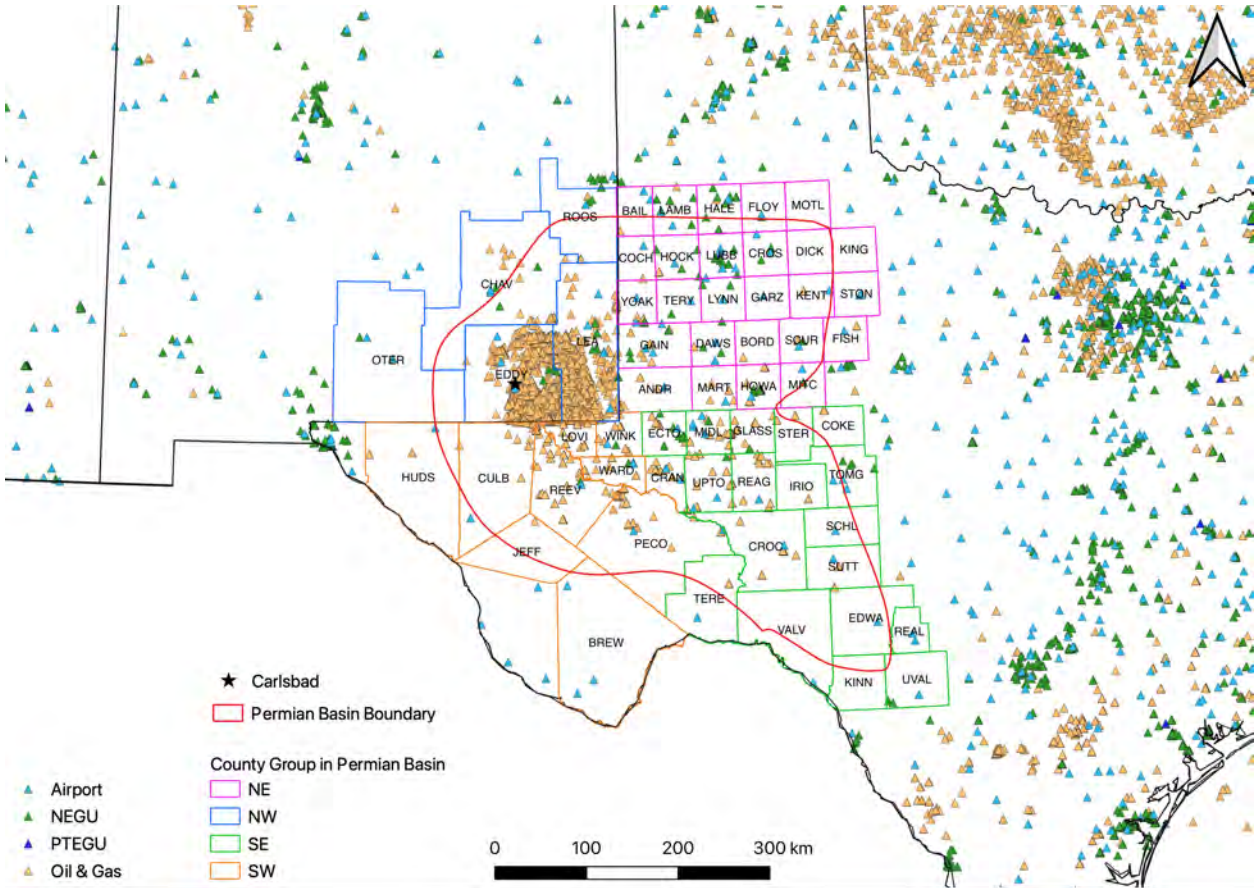


Figure 16. Locations of minor point sources (< 100 tpy in both NOx and VOC) in 2020.

Conclusions

Based on the HYSPLIT modeling of back trajectories and detailed analyses, we found the majority of airmass trajectories associated with high ozone days (MDA8 Ozone > 70 ppbV) passed through east and southeast regions of the Permian basin which are associated with high magnitudes of oil and gas emissions. Although trajectories passing through these regions were also associated with low ozone days, we find that high ozone days at Carlsbad are always associated with airmasses passing through counties in southeast and southwest regions of PMB. On the other hand, trajectories passing through west, southwest and northeast regions of the Permian basin are often associated with days having MDA8 Ozone < 43 ppbV.

There were significant increases in VOC emissions from Oil & Gas in 2020 in comparison to 2017 (45% for New Mexico, 33% for Texas, state-wide) and the increases in O&G VOC emissions are observed in majority of counties in the PBM. Changes in O&G NOx emissions are to a relatively lesser extent (19% in New Mexico and -1% in Texas, state-wide) but there are significant increases in some counties in PMB (e.g., EDDY, LEA, REEV) that are in the immediate vicinity of Carlsbad. These counties are often the ones that have high heatmap values (e.g., most trajectories passed through) associated with high ozone days. Therefore, changes in O&G emissions in these counties and in PMB in recent years have significant impacts on ozone at Carlsbad. Impacts of other (non-O&G) point and non-point sources outside the PMB on Carlsbad are expected to be marginal, based on their distance from Carlsbad, and the trajectory analyses presented here.

Determining boundary for potential Carlsbad ozone nonattainment area may be supported by additional analyses besides what have been performed in this study. Such additional analyses could include targeted analysis recommended by the EPA in its 5-factor approach (U.S. EPA, 2016) such as identifying the relationship between meteorological conditions (e.g., temperature, wind speed and wind direction, barometric pressure) and ozone level at Carlsbad; geography and topography analysis to understand mountain ranges or other physical features that may influence transport of emissions of ozone precursors to Carlsbad.

Further comprehensive photochemical modeling study with ozone source apportionment technique could be performed on PMB to quantify impact of O&G emissions from each county to Carlsbad ozone, and to understand if preferentially controlling NO_X vs. VOC would result in reduction of ozone levels at Carlsbad to improve air quality in the region. Though these analyses are not required for EPA to determine the non-attainment boundary, it could provide additional support for boundary determinations.

Understanding how O&G emission changes across specific O&G source categories (e.g., oil and condensate tanks, compressor stations, well drilling and completions, etc.) from 2017 to a recent year is critical for developing modeling scenarios for source apportionment analyses, as well as for developing emission control strategies in the future. We attempted to conduct such analyses with the 2020 emission data that we gathered from NMED, TCEQ and the EPA. We

found the results, however, incomplete for interpretation due to mismatched source classification codes (SCC) NEI 2017 and interim 2020 for a direct comparison. We recommend that this analysis be performed when the NEI 2020 becomes officially available from the EPA.

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Exhibit B

Assessing Permian Basin's Contributions to Ozone Nonattainment at Carlsbad, New Mexico

Final Report

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Table S1. Previous applications of HYSPLIT model for regulatory purposes

State	Date	Trajectory Type	Height level (m)	Application	Reference
Exceptional Event Demonstration					
Louisiana	March 2018	24-hour back trajectories, each hour of the day of exceedances and the day prior	Not specified	Ozone exceptional event demonstration	https://www.epa.gov/sites/default/files/2018-08/documents/ldeq_ee_demonstration_final_w_appendices.pdf
California	September 2021	36-hour forward trajectory starting from fire locations	Not specified	Ozone exceptional event demonstration	https://ww2.arb.ca.gov/sites/default/files/2021-09/2018_Southern_California_EE_Full_Demo_3.pdf
		48-hour back trajectory	100, 500, 1000		
Ohio	November 2021	48-hour back trajectories	10, 500	Ozone exceptional event demonstration	https://epa.ohio.gov/static/Portals/27/sip/ozone/USEPA_EELtr_11-22-21.pdf
		120-hour forward trajectories	1000		
Michigan	March 2021	48-hour back trajectories	10, 500	Ozone exceptional event demonstration	https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Programs/AQD/State-Implementation-Plan/recent-aq-planning-actions-and-documents/ozone-exceptional-events-demo-west-mi-august-2020-episode.pdf
		120-hours forward trajectories	500, 1500, 2000		
Arizona	March 2019	36-hour forward and backward trajectories	Between 1,500 – 3,000	June 2015 ozone exceptional even demonstration	https://static.azdeq.gov/aqd/ee/2019addendum_2015wildfireEE.pdf
Illinois	December 2020	120-hour forward trajectories	1000, 1500, 2000	Ozone exceptional event demonstration	https://www2.illinois.gov/epa/topics/air-quality/planning-reporting/Documents/Chicago%202008%20NAA%20EE%20Demo%20Final%20Draft%20For%20Public%20Notice%2012-21-20.pdf https://www2.illinois.gov/epa/public-notices/Documents/General%20Notices/2021/Wildfire%20Exceptional%20Events%20Demonstration%20for%20Ground-Level%20Ozone%20in%20the%202008%20Ozone%20Nonattainment%20Area.pdf
		48-hour backward trajectories	10, 100, 500		
Non-Attainment Area Demonstration/Designation					
Colorado	February 2021	24-hour back trajectory, each of the 8 hours contributing to MDA8 O3 of the 4th highest in each year in 2016-2019	100	Ozone nonattainment Area Boundary Assessment for Denver Metro/Northern Front Range	https://downloads.regulations.gov/EPA-HQ-OAR-2017-0548-0484/attachment_2.pdf
Washington	February 2018	12-hour back trajectory	10, 75, 300	Assessing contribution of emissions in Washington to PM2.5 air quality in other state	https://apps.ecology.wa.gov/publications/documents/1802004.pdf
Texas	July 2021	24-hour back trajectories, starting from a single hour of	100, 500	Ozone nonattainment assessment for El Paso County	https://www.tceq.texas.gov/downloads/air-quality/sip/ozone/designations/naaqs-2015/elp_2015ozonedesignation_120-day_response-to-epa_07262021.pdf

		daily maximum O3 on days when MDA8 O3 > 70 ppb			
Wisconsin	September 2017	72-hour back trajectory, starting at hours 1 ,3, 5, 7 of the MDA8 O3 > 65 ppb threshold	Unspecified	Sheboygan county, Wisconsin 2008 8-hour ozone nonattainment area	https://www.ladco.org/wp-content/uploads/Documents/Reports/TSDs/O3/LADCO_Ozone_TSD_FINA_Feb_3_2017.pdf
California	January 2018	24-hour back trajectories, starting from 18:00 local time on days of MDA8 O3 > 70 ppb	100, 500, 1000	Intended Area Designations for the 2015 Ozone NAAQS, multiple nonattainment areas as shown in Table 1 of this TSD	https://www.epa.gov/sites/default/files/2017-12/documents/ca_120d_tsd_combined_final.pdf
Pennsylvania	August 2016	24-hour back trajectories	Unspecified	O3 nonattainment designation (multiple area)	https://files.dep.state.pa.us/air/AirQuality/AQPortalFiles/Regulations%20and%20Clean%20Air%20Plans/attain/Ozonedes/2015_NAAQS_Ozone_Designation_Recommendations.pdf
Utah	May 2021	120-hour back trajectories, starting from last hour of the MDA8 O3	Assuming line source with particle distributed uniformly between 100 and 1000 m over receptor	Demonstration for Ozone nonattainment area for Utah's Northern Wasatch Front	https://documents.deq.utah.gov/air-quality/planning/air-quality-policy/DAQ-2021-005764.pdf
Illinois	October 2013	24-hours back trajectories	100	Recommended annual $PM_{2.5}$ nonattainment designations in Illinois	http://www.epa.state.il.us/public-notices/2013/pm25-nonattainment/Chi_annualPM25_Oct_23_2013.pdf
Maine	June 2018	48-hour back trajectories (HYSPLIT performed by the State), starting from every hour of the 8-hour ozone > 70 ppb	10	Ozone nonattainment area analyses	https://legacy-assets.eenews.net/open_files/assets/2018/06/28/document_gw_01.pdf
		24-hour back trajectories (HYSPLIT performed by EPA)	100, 500, 1000		
Virginia, Maryland, Washington DC	2018?	24-hour back trajectories, for each exceedance day (MDA8 O3 > 70 ppb) (unclear starting from what hour)	100, 500, 1000	Baltimore, MD and Washington, DC-MD-VA Ozone Nonattainment Areas	https://www.epa.gov/sites/default/files/2018-05/documents/wash-dc-va-md_and_baltimore_tsd_final.pdf

New Mexico	February 2021	72-hour back trajectories, starting at every hour of the MDA8 O3	100, 500, 1000	Ozone nonattainment demonstration for Paso del Norte Airshed	https://www.cccjac.org/uploads/9/1/9/2/91924192/jac_179b-_nmed__1_.pdf
South Carolina	March 2009	24-hour back trajectories, starting from 19:00 or 20:00 local time on days when MDA8 O3 > 75 ppb.	500	Ozone Nonattainment Boundary Recommendation	https://scdhec.gov/sites/default/files/docs/HomeAndEnvironment/Docs/Ozone%20Boundary%20Recommendations%203-12-09%20Final.pdf
Cross State Impact Analyses					
Arkansas	April 2022	72-hour back trajectories		Cross state impact analyses	https://www.adeq.state.ar.us/air/planning/sip/pdfs/2015/2015-O3-Transport-Disapproval_Comments_AR_Final_4-22-22.pdf
EPA	August 2016	96-hour back trajectories	250, 500, 750, 1000		https://www.epa.gov/sites/default/files/2017-05/documents/aq_modeling_tsd_final_csapr_update.pdf
EPA	March 2020	HYSPLIT is no longer discussed in this updated CSAPR rule			https://www.epa.gov/sites/default/files/2021-03/documents/air_quality_modeling_tsd_final_revised_csapr_update.pdf

*Table S2. Summary statistics of observed ozone in Permian basin region**

Site Code	Site Name	County	2017		2018		2019		2020		2021		2022	
			1st and 4th highest (ppb ; date)	95th/75th/ 50th percentile	1st and 4th highest (ppb ; date)	95th/75th/ 50th percentile	1st and 4th highest (ppb ; date)	95th/75th/ 50th percentile	1st and 4th highest (ppb ; date)	95th/75th/ 50th percentile	1st and 4th highest (ppb ; date)	95th/75th/ 50th percentile	1st and 4th highest (ppb ; date)	95th/75th/ 50th percentile
350151005	Carlsbad	Eddy	82 (06/22) 76 (08/03)	67/58/49	96 (06/05) 83 (08/03)	70/60/50	95 (06/08) 80 (07/25)	71/59/51	75 (06/24) 73 (08/19)	66/54/46	92 (08/04) 80 (07/21)	72/59/50	79 (05/16) 73 (04/30)	71/60/51
350150010	CAVE	Eddy	69 (07/05) 65 (08/31)	62/55/49	99 (06/04) 80 (07/25)	70/61/56	82 (07/25) 74 (08/05)	69/56/46	74 (08/18) 72 (09/03)	67/56/49	85 (08/04) 77 (07/21)	69/57/50	85 (07/08) 78 (07/01)	71/60/52
350250008	Hobbs	Lea	80 (09/13) 69 (09/12)	63/55/46	83 (06/04) 76 (08/01)	67/57/47	82 (06/07) 70 (06/05)	64/55/47	62 (09/25) 60 (09/20)	55/48/42	86 (07/24) 68 (08/04)	62/51/45	75 (06/29) 70 (05/26)	60/53/46
481090002	Guadalupe	Culberson					73 (07/27) 68 (08/06)	62/52/47	74 (07/31) 72 (08/23)	71/61/55	78 (08/04) 71 (08/03)	67/56/50		
480430101	Big Bend	Brewster	66 (06/05) 63 (04/21)	59/50/44	69 (04/21) 65 (05/19)	60/49/42	68 (07/26) 64 (05/20)	59/50/43	64 (06/13) 60 (05/07)	54/49/43	63 (07/20) 61 (07/21)	57/50/44	66 (05/20) 63 (07/06)	58/52/46
480290032	San Antonio	San Antonio	80 (06/08) 73 (08/04)	62/49/41	83 (08/02) 72 (07/26)	62/46/38	78 (06/13) 75 (07/26	59/49/42	71 (08/20) 69 (04/30)	63/50/41	76 (09/10) 70 (09/23)	63/48/41	79 (06/29) 65 (05/27)	59/51/45
480290052	Camp Bullis	San Antonio	89 (06/08) 72 (08/01)	64/50/43	83 (05/07) 73 (07/26)	64/48/41	76 (07/26) 69 (07/25	59/51/44	81 (04/30) 74 (10/07)	70/54/45	84 (09/10) 78 (09/23	70/53/44	75 (06/29) 67 (07/01)	64/54/47
480290059	Calaveras	San Antonio	69 (09/12) 65 (06/07)	59/49/41	79 (08/01) 71 (05/07)	62/45/38	64 (07/26) 63 (06/13)	57/49/42	73 (08/19) 66 (10/07)	59/49/42	68 (09/10) 66 (10/06)	60/48/40	78 (06/29) 61 (03/25)	54/46/41

** Values in red indicate MDA8_O3 above 70 ppb.*

Note: Guadalupe, operated by NPS was established in 2019, but no data available for 2022.

Table S3. Distribution of MDA8 Ozone at Carlsbad monitoring station during May - September

Percentile	2017	2018	2019	2020	2021	2022	allYears
10	43	48	47	46	45	48	46
20	48	52	51	48	50	51	50
25	50	53	53	49	52	53	51
50	56	60	59	55	60	60	58
75	63	65	65	60	67	67	65
80	64	67	68	62	68	69	66
85	65	69	70	64	70	71	68
90	67	71	72	67	73	71	71
95	70	75	76	69	77	73	75
99	76	93	88	75	81	78	82

Table S4. Distribution of MDA8 Ozone at CAVE monitoring station during May - September

Percentile	2017	2018	2019	2020	2021	2022	allYears
10	NA	NA	44	48	43	51	46
20			47	50	49	53	50
25			50	50	51	55	51
50			56	54	57	60	57
75			64	60	63	68	63
80			65	62	64	69	65
85			68	64	66	71	67
90			70	67	69	71	70
95			73	70	72	74	72
99			81	74	79	83	80

*Table S5. Normalized heatmap values (% of trajectory) by counties in the Permian Basin (PMB) during high (MDA8_O3 > 70 ppb) and low (MDA8_O3 < 46 ppb) ozone days**

County	State	Abbr.	PMB Region	Area (10^3 km^2)	Normalized heatmap value (%) on high ozone day				Normalized heatmap value (%) on low ozone day			
					100 m	200 m	500 m	1000 m	100 m	200 m	500 m	1000 m
Eddy	NM	EDDY	NW	21.6	100	100	100	100	100	100	100	100
Lea	NM	LEA	NW	22.7	30.7	26.9	24.1	26.4	33	34.4	33.7	31.4
Chaves	NM	CHAV	NW	31.4	11.8	15.1	18.7	24.8	15.7	14.1	12.9	11.9
Otero	NM	OTER	NW	34.3	10.5	16.2	24.4	27.8	19.5	19.8	22.4	25.4
Roosevelt	NM	ROOS	NW	12.7	4.7	5.8	4.9	5.5	10.9	10.2	8	6.7
Andrews	TX	ANDR	NE	7.8	13.8	13.5	10.2	9.7	7.1	7.8	8.4	8.3
Gaines	TX	GAIN	NE	7.8	11	10.8	6.9	9.3	9.9	11.8	11.9	9.6
Howard	TX	HOWA	NE	4.7	9.7	6	6.8	6.4	3.5	4.1	3.9	3.6
Martin	TX	MART	NE	4.7	9	8.2	7.2	5	3.8	4.5	5.7	5.1
Scurry	TX	SCUR	NE	4.7	8	6.3	7.2	5.7	3.6	3.1	3.6	2.5
Mitchell	TX	MITC	NE	4.7	7.7	6.8	7.9	6.1	3.5	2.3	3.8	2.5
Borden	TX	BORD	NE	4.6	7.5	6.6	4.4	4.9	4.5	5.2	4.4	4.4
Fisher	TX	FISH	NE	4.7	7.1	7.4	6.9	7.4	1.3	2.3	2.8	2
Stonewall	TX	STON	NE	4.7	7.1	6	5.5	6.3	2.2	1.9	2.5	1.6
Dawson	TX	DAWS	NE	4.7	6.6	7.5	5.2	4.4	6.4	7.4	6.7	6.1
King	TX	KING	NE	4.7	6.1	4.9	4.7	3.3	1.7	1.6	2.2	1.7
Kent	TX	KENT	NE	4.7	5.8	5.8	6	3.8	2.6	3.5	3.5	3.3
Garza	TX	GARZ	NE	4.6	5.5	5.3	2.5	3.9	4.2	5.8	4.9	4.8
Dickens	TX	DICK	NE	4.7	5.2	5.5	3	2.4	3.5	4.4	3.9	3.3
Yoakum	TX	YOAK	NE	4.1	5.2	4.7	4.4	5.2	7.4	7.3	5.8	4.9
Lynn	TX	LYNN	NE	4.6	4.4	4.2	3	4.4	7.3	7.6	7.1	5.2
Terry	TX	TERY	NE	4.6	4.2	4.1	3.6	6	7.3	7	7.6	5.4

County	State	Abbr.	PMB Region	Area (10^3 km^2)	Normalized heatmap value (%) on high ozone day				Normalized heatmap value (%) on low ozone day			
					100 m	200 m	500 m	1000 m	100 m	200 m	500 m	1000 m
Crosby	TX	CROS	NE	4.7	3.9	3.1	1.7	3.8	6	5.7	5.4	3.6
Floyd	TX	FLOY	NE	5.1	3.8	2	1.4	3.9	5.7	4.5	4.4	2.9
Motley	TX	MOTL	NE	5.1	3.8	3.8	2.2	2.2	4.8	5.5	5.4	3.3
Lubbock	TX	LUBB	NE	4.6	3.6	2.8	2.7	4.9	7	6.1	5.2	3.2
Cochran	TX	COCH	NE	4	3.1	2.8	3.5	4.4	6.8	6.5	4.5	4.5
Bailey	TX	BAIL	NE	4.3	2.5	2	2.5	3.9	6.1	6	4.5	5.7
Hockley	TX	HOCK	NE	4.7	2.5	2.4	3.3	4.2	6.4	6	4.1	2.3
Hale	TX	HALE	NE	5.2	2	2.2	1.7	3.8	5.2	5.1	3.8	2.6
Lamb	TX	LAMB	NE	5.3	1.4	2.2	2.2	3.6	5.7	6	4.1	3.5
Terrell	TX	TERE	SE	12.2	26.3	20.4	17.1	13.7	18.6	15.8	14.1	13.2
Val Verde	TX	VALV	SE	16.3	20.9	15.7	12.6	9.7	15.1	11.8	12.6	8.7
Crane	TX	CRAN	SE	4.1	19.8	15.6	12.9	9	10.2	9.9	11.2	10.9
Crockett	TX	CROC	SE	14.5	17.9	17.1	15.6	14	11.5	10.8	11.2	12.2
Upton	TX	UPTO	SE	6.4	16	14.6	11.3	8.8	7.1	8.1	10.9	10.3
Ector	TX	ECTO	SE	4.7	14.2	12.9	9.6	8.5	6.7	7	8.4	6.8
Midland	TX	MIDL	SE	4.7	13.4	11.2	6.9	6.3	6.1	6.5	6.4	5.2
Reagan	TX	REAG	SE	6.1	13.4	11.6	9.7	8.3	4.9	5.7	7.4	5.2
Glasscock	TX	GLASS	SE	4.7	11.6	7.7	7.4	6.1	4.8	6.3	4.1	4.9
Kinney	TX	KINN	SE	7	10.8	9.9	5.8	5.2	9.4	5.4	6.5	4.2
Sterling	TX	STER	SE	4.8	10.5	7.4	8	7.1	5.7	5.1	5.2	4.4
Tom Green	TX	TOMG	SE	7.9	9.4	10.8	10.1	8.3	5.2	5.4	6.8	6.4
Irion	TX	IRIO	SE	5.4	8.6	8.6	7.4	7.2	3.9	3.5	5.1	4.2
Coke	TX	COKE	SE	4.7	7.4	6.9	6.1	6.4	3.3	3.1	3.8	3.8
Edwards	TX	EDWA	SE	11	6.9	7.4	7.4	5.7	6.3	5.5	5.7	4.7

County	State	Abbr.	PMB Region	Area (10^3 km^2)	Normalized heatmap value (%) on high ozone day				Normalized heatmap value (%) on low ozone day			
					100 m	200 m	500 m	1000 m	100 m	200 m	500 m	1000 m
Uvalde	TX	UVAL	SE	8	6.8	6.8	4.7	3.9	5.4	4.2	3.9	3.9
Sutton	TX	SUTT	SE	7.5	5.7	6	7.5	3.9	4.4	4.1	3.5	3.6
Schleicher	TX	SCHL	SE	6.8	4.2	6.3	7.1	3.9	2.5	2.8	2.9	4.5
Real	TX	REAL	SE	3.6	2.4	2.4	2.4	2.5	2.8	3.1	2.2	2.5
Reeves	TX	REEV	SW	13.7	55.3	52.4	44.2	31.8	26.5	25	20.9	18.5
Loving	TX	LOVI	SW	3.5	52.7	47.2	32.7	25.6	26.6	25.6	21.8	18
Pecos	TX	PECO	SW	24.7	43.6	37.9	33	24.8	26.3	23.8	20.5	21.1
Ward	TX	WARD	SW	4.3	40.3	35.4	21.5	18.1	23	20.3	16.9	14.8
Culberson	TX	CULB	SW	19.7	35.7	39.2	39.9	33.5	23.8	25.3	30.4	34.6
Winkler	TX	WINK	SW	4.4	27.7	22.3	12.7	13.8	13.4	13.1	13.1	12.2
Brewster	TX	BREW	SW	32	16.5	15.9	14	8	10.8	11.9	13.2	12.2
Jeff Davis	TX	JEFF	SW	11.7	13.2	18.6	17.3	11.9	10.5	10.9	12.6	15.1
Hudspeth	TX	HUDS	SW	23.7	11.6	15.9	21.5	21.4	19.8	22.1	28.8	31.8

**Heatmap values in this table are grouped by 4 regions (NW, NE, SE, SW) and then sorted by heatmap value on high ozone day at 100 m in descending order for each region.*

*Table S6. Normalized heatmap values (% of trajectory per 1000 km^2) by counties in the Permian Basin (PMB) during high (MDA8_O3 > 70 ppb) and low (MDA8_O3 < 46 ppb) ozone days**

County	State	Abbr.	PMB Region	Area (10^3 km^2)	Normalized value on high ozone day				Normalized value on low ozone day			
					100 m	200 m	500 m	1000 m	100 m	200 m	500 m	1000 m
Eddy	NM	EDDY	NW	21.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Lea	NM	LEA	NW	22.7	1.3	1.2	1.1	1.2	1.5	1.5	1.5	1.4
Chaves	NM	CHAV	NW	31.4	0.4	0.5	0.6	0.8	0.5	0.4	0.4	0.4
Roosevelt	NM	ROOS	NW	12.7	0.4	0.5	0.4	0.4	0.9	0.8	0.6	0.5
Otero	NM	OTER	NW	34.3	0.3	0.5	0.7	0.8	0.6	0.6	0.7	0.7
Howard	TX	HOWA	NE	4.7	2.1	1.3	1.4	1.4	0.7	0.9	0.8	0.8
Martin	TX	MART	NE	4.7	1.9	1.7	1.5	1.1	0.8	1	1.2	1.1
Andrews	TX	ANDR	NE	7.8	1.8	1.7	1.3	1.3	0.9	1	1.1	1.1
Scurry	TX	SCUR	NE	4.7	1.7	1.3	1.5	1.2	0.8	0.7	0.8	0.5
Mitchell	TX	MITC	NE	4.7	1.6	1.4	1.7	1.3	0.7	0.5	0.8	0.5
Borden	TX	BORD	NE	4.6	1.6	1.4	0.9	1	1	1.1	0.9	0.9
Fisher	TX	FISH	NE	4.7	1.5	1.6	1.5	1.6	0.3	0.5	0.6	0.4
Stonewall	TX	STON	NE	4.7	1.5	1.3	1.2	1.3	0.5	0.4	0.5	0.3
Gaines	TX	GAIN	NE	7.8	1.4	1.4	0.9	1.2	1.3	1.5	1.5	1.2
Dawson	TX	DAWS	NE	4.7	1.4	1.6	1.1	0.9	1.4	1.6	1.4	1.3
King	TX	KING	NE	4.7	1.3	1	1	0.7	0.4	0.3	0.5	0.4
Yoakum	TX	YOAK	NE	4.1	1.3	1.1	1.1	1.3	1.8	1.8	1.4	1.2
Kent	TX	KENT	NE	4.7	1.2	1.2	1.3	0.8	0.6	0.7	0.7	0.7
Garza	TX	GARZ	NE	4.6	1.2	1.2	0.5	0.8	0.9	1.3	1.1	1
Dickens	TX	DICK	NE	4.7	1.1	1.2	0.6	0.5	0.7	0.9	0.8	0.7
Lynn	TX	LYNN	NE	4.6	1	0.9	0.6	1	1.6	1.6	1.5	1.1
Terry	TX	TERY	NE	4.6	0.9	0.9	0.8	1.3	1.6	1.5	1.6	1.2
Crosby	TX	CROS	NE	4.7	0.8	0.7	0.4	0.8	1.3	1.2	1.2	0.8

County	State	Abbr.	PMB Region	Area (10^3 km^2)	Normalized value on high ozone day				Normalized value on low ozone day			
					100 m	200 m	500 m	1000 m	100 m	200 m	500 m	1000 m
Lubbock	TX	LUBB	NE	4.6	0.8	0.6	0.6	1.1	1.5	1.3	1.1	0.7
Cochran	TX	COCH	NE	4	0.8	0.7	0.9	1.1	1.7	1.6	1.1	1.1
Floyd	TX	FLOY	NE	5.1	0.7	0.4	0.3	0.8	1.1	0.9	0.8	0.6
Motley	TX	MOTL	NE	5.1	0.7	0.7	0.4	0.4	0.9	1.1	1	0.7
Bailey	TX	BAIL	NE	4.3	0.6	0.5	0.6	0.9	1.4	1.4	1.1	1.3
Hockley	TX	HOCK	NE	4.7	0.5	0.5	0.7	0.9	1.4	1.3	0.9	0.5
Hale	TX	HALE	NE	5.2	0.4	0.4	0.3	0.7	1	1	0.7	0.5
Lamb	TX	LAMB	NE	5.3	0.3	0.4	0.4	0.7	1.1	1.1	0.8	0.7
Crane	TX	CRAN	SE	4.1	4.9	3.8	3.2	2.2	2.5	2.4	2.8	2.7
Ector	TX	ECTO	SE	4.7	3	2.8	2.1	1.8	1.4	1.5	1.8	1.5
Midland	TX	MIDL	SE	4.7	2.9	2.4	1.5	1.3	1.3	1.4	1.4	1.1
Upton	TX	UPTO	SE	6.4	2.5	2.3	1.8	1.4	1.1	1.3	1.7	1.6
Glasscock	TX	GLASS	SE	4.7	2.5	1.7	1.6	1.3	1	1.3	0.9	1.1
Reagan	TX	REAG	SE	6.1	2.2	1.9	1.6	1.4	0.8	0.9	1.2	0.9
Sterling	TX	STER	SE	4.8	2.2	1.5	1.7	1.5	1.2	1.1	1.1	0.9
Terrell	TX	TERE	SE	12.2	2.1	1.7	1.4	1.1	1.5	1.3	1.2	1.1
Irion	TX	IRIO	SE	5.4	1.6	1.6	1.4	1.3	0.7	0.6	0.9	0.8
Coke	TX	COKE	SE	4.7	1.6	1.5	1.3	1.4	0.7	0.6	0.8	0.8
Kinney	TX	KINN	SE	7	1.5	1.4	0.8	0.7	1.3	0.8	0.9	0.6
Val Verde	TX	VALV	SE	16.3	1.3	1	0.8	0.6	0.9	0.7	0.8	0.5
Crockett	TX	CROC	SE	14.5	1.2	1.2	1.1	1	0.8	0.7	0.8	0.8
Tom Green	TX	TOMG	SE	7.9	1.2	1.4	1.3	1.1	0.7	0.7	0.9	0.8
Uvalde	TX	UVAL	SE	8	0.8	0.8	0.6	0.5	0.7	0.5	0.5	0.5
Sutton	TX	SUTT	SE	7.5	0.8	0.8	1	0.5	0.6	0.5	0.5	0.5
Real	TX	REAL	SE	3.6	0.7	0.7	0.7	0.7	0.8	0.8	0.6	0.7

County	State	Abbr.	PMB Region	Area (10^3 km^2)	Normalized value on high ozone day				Normalized value on low ozone day			
					100 m	200 m	500 m	1000 m	100 m	200 m	500 m	1000 m
Edwards	TX	EDWA	SE	11	0.6	0.7	0.7	0.5	0.6	0.5	0.5	0.4
Schleicher	TX	SCHL	SE	6.8	0.6	0.9	1	0.6	0.4	0.4	0.4	0.7
Loving	TX	LOVI	SW	3.5	15.2	13.6	9.4	7.4	7.7	7.4	6.3	5.2
Ward	TX	WARD	SW	4.3	9.3	8.2	5	4.2	5.3	4.7	3.9	3.4
Winkler	TX	WINK	SW	4.4	6.4	5.1	2.9	3.2	3.1	3	3	2.8
Reeves	TX	REEV	SW	13.7	4.1	3.8	3.2	2.3	1.9	1.8	1.5	1.4
Pecos	TX	PECO	SW	24.7	1.8	1.5	1.3	1	1.1	1	0.8	0.9
Culberson	TX	CULB	SW	19.7	1.8	2	2	1.7	1.2	1.3	1.5	1.8
Jeff Davis	TX	JEFF	SW	11.7	1.1	1.6	1.5	1	0.9	0.9	1.1	1.3
Brewster	TX	BREW	SW	32	0.5	0.5	0.4	0.3	0.3	0.4	0.4	0.4
Hudspeth	TX	HUDS	SW	23.7	0.5	0.7	0.9	0.9	0.8	0.9	1.2	1.3

**Heatmap values in this table are grouped by 4 regions (NW, NE, SE, SW) and then sorted by heatmap value on high ozone day at 100 m in descending order for each region.*

Table S7. Data sources of Oil & Gas emissions inventories in New Mexico and Texas

NEI version	New Mexico		Texas	
	Non-point O&G	**Point O&G**	**Non-point O&G**	**Point O&G**
NEI 2017	EPA Oil & Gas Tool**	Including ~ 140 major sources (Title V) and estimated by NMED*	Estimated by TCEQ**	Estimated by TCEQ**
NEI 2018	Projected from NEI 2017 by EPA with representative data for 2018**			
NEI 2019	Projected from NEI 2017 by EPA with representative data for 2019**			
NEI 2020	EPA Oil & Gas Tool	Including ~ 5000 major sources (Title V) and estimated by NMED*	Estimated by TCEQ*	Estimated by TCEQ**

** Data retrieved from NMED and TCEQ through personal communications*

*** Data retrieved from EPA*

Table S8. Total emissions (tons per year) of NOx and VOC from O&G production in counties within the Permian basin in 2017 and 2020.

County[1]	State	Abbr.	PMB Region	2017				2020			
				NO_x[4]	NOx Rank[2,5]	VOC[4]	VOC Rank[2,5]	NO_x[3, 4]	NO_x Rank[2,5]	VOC[3, 4]	VOC Rank[2,5]
Eddy	NM	EDDY	NW	5,607	8 (4.8 %)	35,160	5 (6.3 %)	16,589 (196 %)	2 (12.6 %)	73,072 (108 %)	5 (7.3 %)
Lea	NM	LEA	NW	5,305	10 (4.5 %)	42,810	3 (7.7 %)	19,682 (271 %)	1 (14.9 %)	97,077 (127 %)	2 (9.7 %)
Chaves	NM	CHAV	NW	1,329	23 (1.1 %)	3,322	25 (0.6 %)	2,235 (68 %)	20 (1.7 %)	3,568 (7 %)	25 (0.4 %)
Roosevelt	NM	ROOS	NW	76	48 (0.1 %)	269	47 (0 %)	128 (68 %)	43 (0.1 %)	337 (25 %)	45 (0 %)
Otero	NM	OTER	NW	0	56 (0 %)	0	56 (0 %)	0	54 (0 %)	0	54 (0 %)
Andrews	TX	ANDR	NE	5,562	9 (4.7 %)	25,562	8 (4.6 %)	3,235 (-42 %)	14 (2.5 %)	25,883 (1 %)	12 (2.6 %)
Martin	TX	MART	NE	4,118	14 (3.5 %)	29,136	6 (5.2 %)	4,591 (11 %)	8 (3.5 %)	70,499 (142 %)	6 (7.1 %)
Howard	TX	HOWA	NE	2,755	18 (2.3 %)	20,684	11 (3.7 %)	3,343 (21 %)	13 (2.5 %)	48,116 (133 %)	7 (4.8 %)
Gaines	TX	GAIN	NE	2,206	20 (1.9 %)	14,297	15 (2.6 %)	1,910 (-13 %)	22 (1.4 %)	13,420 (-6 %)	18 (1.3 %)
Yoakum	TX	YOAK	NE	2,010	21 (1.7 %)	14,162	16 (2.5 %)	2,688 (34 %)	16 (2 %)	16,286 (15 %)	16 (1.6 %)
Scurry	TX	SCUR	NE	1,678	22 (1.4 %)	9,756	19 (1.7 %)	1,233 (-27 %)	24 (0.9 %)	10,352 (6 %)	20 (1 %)
Hockley	TX	HOCK	NE	1,281	24 (1.1 %)	9,068	20 (1.6 %)	1,142 (-11 %)	25 (0.9 %)	7,531 (-17 %)	22 (0.8 %)
Kent	TX	KENT	NE	825	26 (0.7 %)	2,390	30 (0.4 %)	553 (-33 %)	27 (0.4 %)	2,047 (-14 %)	33 (0.2 %)
Mitchell	TX	MITC	NE	527	30 (0.4 %)	2,865	26 (0.5 %)	484 (-8 %)	29 (0.4 %)	2,393 (-16 %)	28 (0.2 %)
Garza	TX	GARZ	NE	406	31 (0.3 %)	2,309	31 (0.4 %)	400 (-1 %)	31 (0.3 %)	2,226 (-4 %)	30 (0.2 %)
Cochran	TX	COCH	NE	395	32 (0.3 %)	2,477	28 (0.4 %)	386 (-2 %)	33 (0.3 %)	2,914 (18 %)	27 (0.3 %)
Dawson	TX	DAWS	NE	334	33 (0.3 %)	2,606	27 (0.5 %)	393 (18 %)	32 (0.3 %)	2,347 (-10 %)	29 (0.2 %)
Borden	TX	BORD	NE	298	34 (0.3 %)	1,887	33 (0.3 %)	281 (-6 %)	36 (0.2 %)	3,240 (72 %)	26 (0.3 %)
Terry	TX	TERY	NE	290	36 (0.2 %)	2,396	29 (0.4 %)	288 (-1 %)	35 (0.2 %)	1,710 (-29 %)	34 (0.2 %)
Lamb	TX	LAMB	NE	271	37 (0.2 %)	230	49 (0 %)	290 (7 %)	34 (0.2 %)	241 (5 %)	48 (0 %)
Fisher	TX	FISH	NE	218	38 (0.2 %)	881	40 (0.2 %)	262 (20 %)	37 (0.2 %)	2,164 (146 %)	31 (0.2 %)
Stonewall	TX	STON	NE	212	39 (0.2 %)	1,509	35 (0.3 %)	131 (-38 %)	40 (0.1 %)	949 (-37 %)	37 (0.1 %)
Crosby	TX	CROS	NE	146	43 (0.1 %)	1,137	37 (0.2 %)	112 (-23 %)	44 (0.1 %)	756 (-34 %)	40 (0.1 %)
King	TX	KING	NE	111	45 (0.1 %)	1,266	36 (0.2 %)	83 (-25 %)	45 (0.1 %)	903 (-29 %)	39 (0.1 %)

County[1]	State	Abbr.	PMB Region	2017				2020			
				NOx[4]	NOx Rank[2,5]	VOC[4]	VOC Rank[2,5]	NOx[3, 4]	NOx Rank[2,5]	VOC[3, 4]	VOC Rank[2,5]
Hale	TX	HALE	NE	99	46 (0.1 %)	1,007	38 (0.2 %)	161 (63 %)	38 (0.1 %)	1,118 (11 %)	36 (0.1 %)
Lubbock	TX	LUBB	NE	87	47 (0.1 %)	797	41 (0.1 %)	77 (-11 %)	46 (0.1 %)	638 (-20 %)	41 (0.1 %)
Dickens	TX	DICK	NE	41	49 (0 %)	321	46 (0.1 %)	37 (-10 %)	48 (0 %)	259 (-19 %)	47 (0 %)
Lynn	TX	LYNN	NE	24	50 (0 %)	244	48 (0 %)	20 (-17 %)	51 (0 %)	193 (-21 %)	49 (0 %)
Motley	TX	MOTL	NE	6	51 (0 %)	42	50 (0 %)	5 (-17 %)	52 (0 %)	53 (26 %)	50 (0 %)
Floyd	TX	FLOY	NE	0	54 (0 %)	0	55 (0 %)	0	54 (0 %)	0	54 (0 %)
Bailey	TX	BAIL	NE	0	53 (0 %)	1	54 (0 %)	45 (> 100%)	47 (0 %)	7 (600 %)	52 (0 %)
Midland	TX	MIDL	SE	9,710	2 (8.2 %)	52,445	2 (9.4 %)	8,943 (-8 %)	4 (6.8 %)	86,016 (64 %)	4 (8.6 %)
Reagan	TX	REAG	SE	6,285	4 (5.3 %)	21,243	10 (3.8 %)	4,852 (-23 %)	7 (3.7 %)	25,785 (21 %)	13 (2.6 %)
Upton	TX	UPTO	SE	5,698	7 (4.8 %)	28,083	7 (5 %)	4,238 (-26 %)	9 (3.2 %)	37,114 (32 %)	9 (3.7 %)
Ector	TX	ECTO	SE	4,398	11 (3.7 %)	16,586	13 (3 %)	2,894 (-34 %)	15 (2.2 %)	14,009 (-16 %)	17 (1.4 %)
Crane	TX	CRAN	SE	4,283	12 (3.6 %)	7,538	22 (1.3 %)	3,560 (-17 %)	11 (2.7 %)	7544 (0 %)	21 (0.8 %)
Glasscock	TX	GLASS	SE	4,235	13 (3.6 %)	16,705	12 (3 %)	3,654 (-14 %)	10 (2.8 %)	24,953 (49 %)	14 (2.5 %)
Crockett	TX	CROC	SE	4,015	15 (3.4 %)	13,721	17 (2.5 %)	2,273 (-43 %)	19 (1.7 %)	12,592 (-8 %)	19 (1.3 %)
Irion	TX	IRIO	SE	3,416	16 (2.9 %)	6,444	23 (1.2 %)	2,008 (-41 %)	21 (1.5 %)	6,266 (-3 %)	24 (0.6 %)
Sutton	TX	SUTT	SE	1,226	25 (1 %)	7,812	21 (1.4 %)	1,415 (15 %)	23 (1.1 %)	7,278 (-7 %)	23 (0.7 %)
Terrell	TX	TERE	SE	676	27 (0.6 %)	933	39 (0.2 %)	747 (11 %)	26 (0.6 %)	931 (0 %)	38 (0.1 %)
Sterling	TX	STER	SE	631	28 (0.5 %)	2,158	32 (0.4 %)	531 (-16 %)	28 (0.4 %)	2,100 (-3 %)	32 (0.2 %)
Schleicher	TX	SCHL	SE	295	35 (0.3 %)	1,553	34 (0.3 %)	131 (-56 %)	40 (0.1 %)	1,314 (-15 %)	35 (0.1 %)
Coke	TX	COKE	SE	210	40 (0.2 %)	695	43 (0.1 %)	157 (-25 %)	39 (0.1 %)	491 (-29 %)	44 (0 %)
Tom Green	TX	TOMG	SE	180	41 (0.2 %)	674	44 (0.1 %)	128 (-29 %)	42 (0.1 %)	524 (-22 %)	43 (0.1 %)
Edwards	TX	EDWA	SE	159	42 (0.1 %)	751	42 (0.1 %)	32 (-80 %)	50 (0 %)	620 (-17 %)	42 (0.1 %)
Val Verde	TX	VALV	SE	133	44 (0.1 %)	342	45 (0.1 %)	37 (-72 %)	49 (0 %)	321 (-6 %)	46 (0 %)
Real	TX	REAL	SE	2	52 (0 %)	8	52 (0 %)	0 (-100 %)	53 (0 %)	5 (-38 %)	53 (0 %)
Kinney	TX	KINN	SE	0	56 (0 %)	0	56 (0 %)	0	54 (0 %)	0	54 (0 %)

County[1]	State	Abbr.	PMB Region	2017				2020			
				NOx[4]	NOx Rank[2,5]	VOC[4]	VOC Rank[2,5]	NO_x[3, 4]	NO_x Rank[2,5]	VOC[3, 4]	VOC Rank[2,5]
Uvalde	TX	UVAL	SE	0	55 (0 %)	1	53 (0 %)	0	54 (0 %)	0 (-100 %)	54 (0 %)
Reeves	TX	REEV	SW	11,228	1 (9.5 %)	61,624	1 (11 %)	15,773 (40 %)	3 (12 %)	163,020 (165 %)	1 (16.4 %)
Loving	TX	LOVI	SW	6,994	3 (5.9 %)	36,565	4 (6.5 %)	5,452 (-22 %)	5 (4.1 %)	93,147 (155 %)	3 (9.4 %)
Pecos	TX	PECO	SW	5,837	5 (4.9 %)	11,840	18 (2.1 %)	3,522 (-40 %)	12 (2.7 %)	26,057 (120 %)	11 (2.6 %)
Culberson	TX	CULB	SW	5,759	6 (4.9 %)	22,376	9 (4 %)	4,936 (-14 %)	6 (3.7 %)	44,593 (99 %)	8 (4.5 %)
Winkler	TX	WINK	SW	3,135	17 (2.7 %)	6,340	24 (1.1 %)	2,678 (-15 %)	17 (2 %)	18,604 (193 %)	15 (1.9 %)
Ward	TX	WARD	SW	2,659	19 (2.3 %)	14,536	14 (2.6 %)	2,635 (-1 %)	18 (2 %)	32,291 (122 %)	10 (3.2 %)
Hudspeth	TX	HUDS	SW	545	29 (0.5 %)	10	51 (0 %)	455 (-17 %)	30 (0.3 %)	12 (20 %)	51 (0 %)
Brewster	TX	BREW	SW	0	56 (0 %)	0	56 (0 %)	0	54 (0 %)	0	54 (0 %)
Jeff Davis	TX	JEFF	SW	0	56 (0 %)	0	56 (0 %)	0	54 (0 %)	0	54 (0 %)

[1] Counties in this table are in highest-to-lowest order of their O&G NOx in 2017 and in their respective Permian region.

[2] NOx and VOC emissions are ranked with respect to all counties in the Permian basin.

[3] Values in parenthesis indicate changes in O&G NOx and VOC emissions (%) in 2020 from 2017.

[4] Values in blue and red indicate top 5 counties in NOx and VOC emissions, respectively, in the Permian basin.

[5] Numbers in parentheses indicate percentage of O&G emission over entire Permian basin

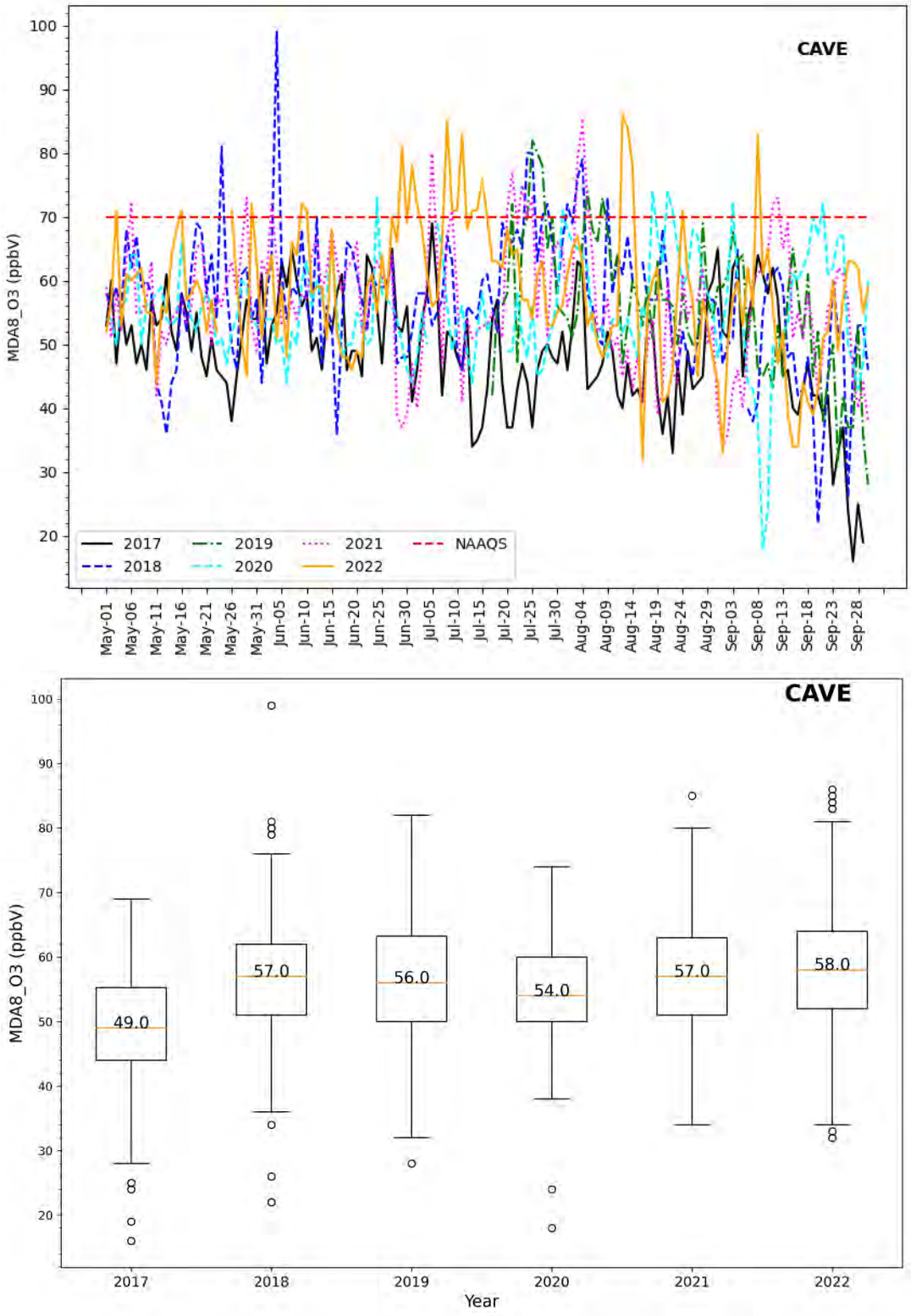


Figure S1. (Top) Daily distribution and (bottom) box and whisker plot of MDA8_O3 at CAVE monitoring station in May – September during 2017 – 2022 period.

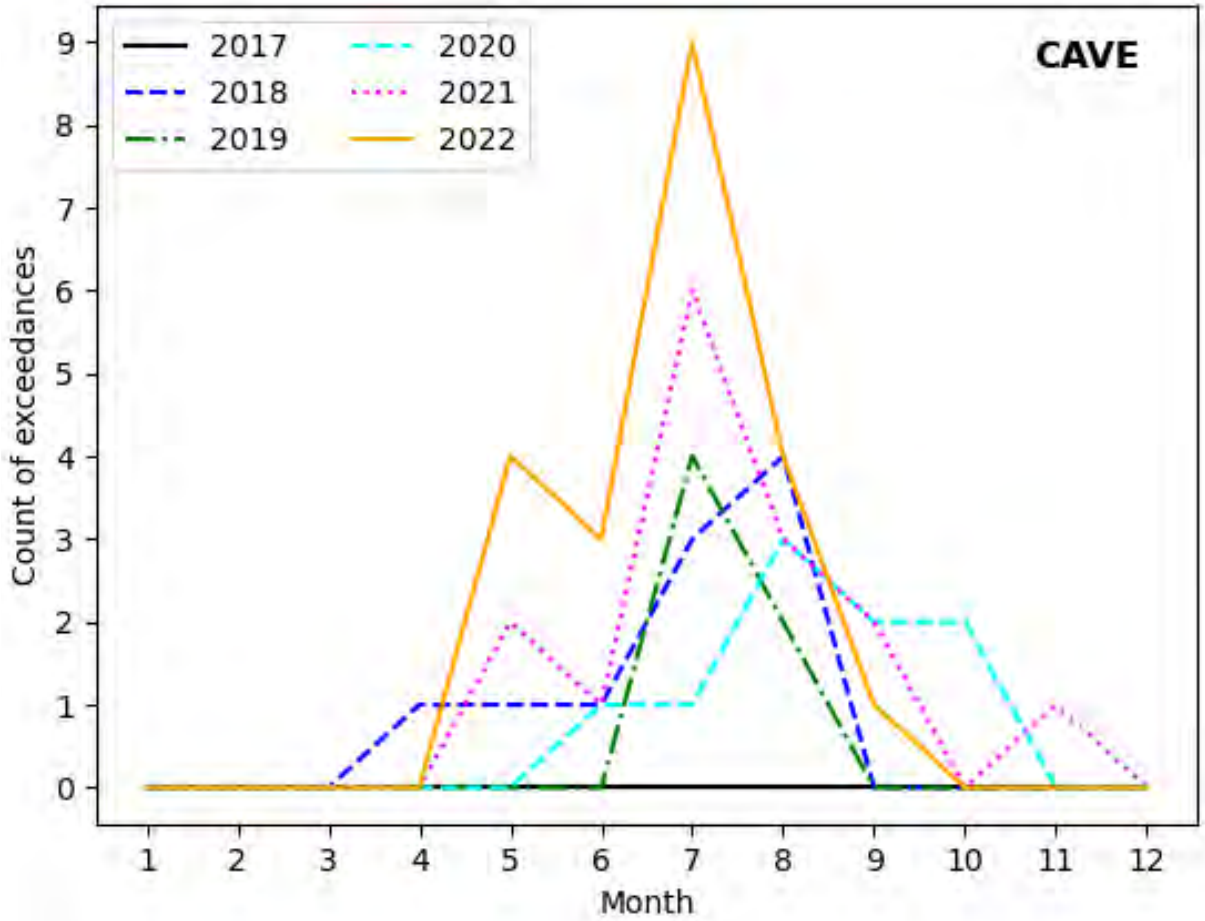


Figure S2. Distribution of MDA8_O3 exceedances at CAVE monitoring station

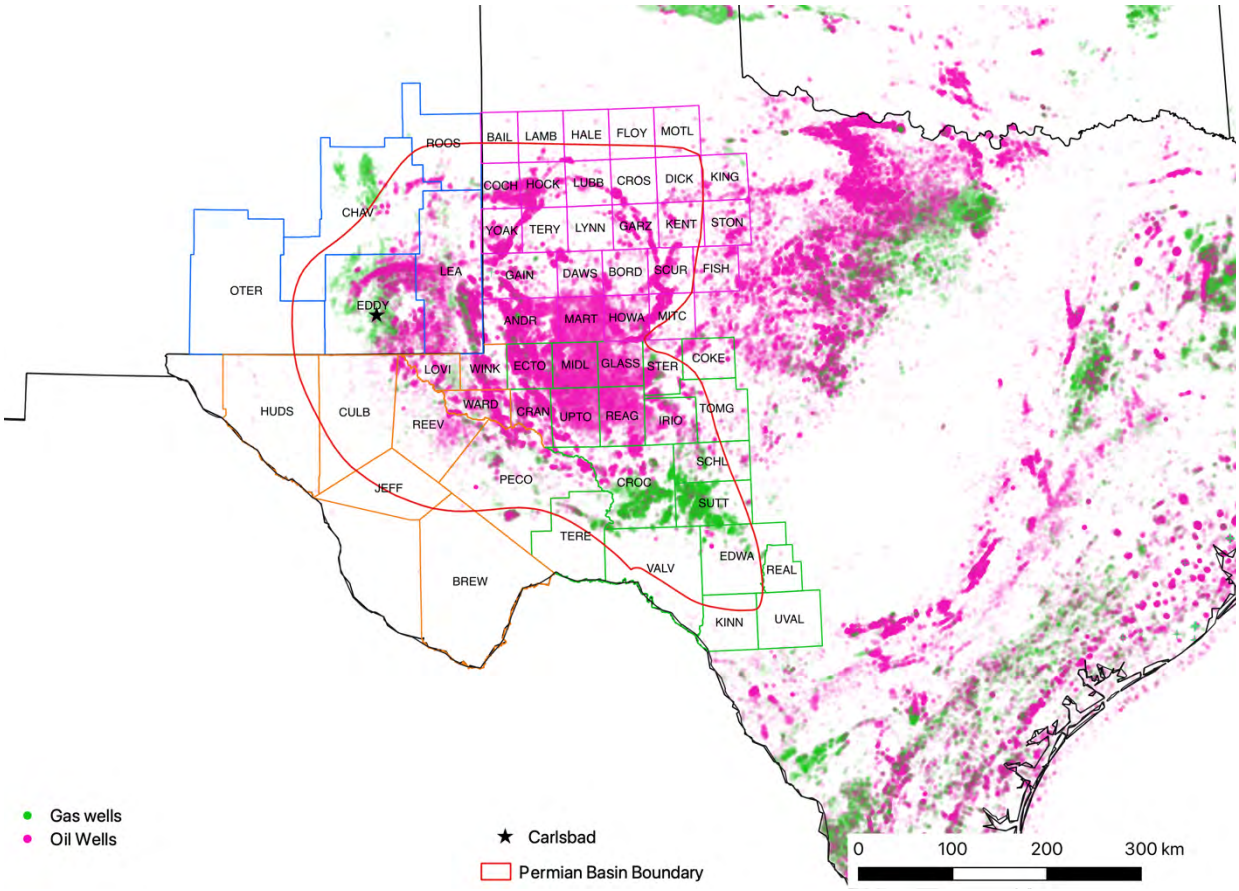


Figure S3. Locations of oil and gas wells in the Permian Basin

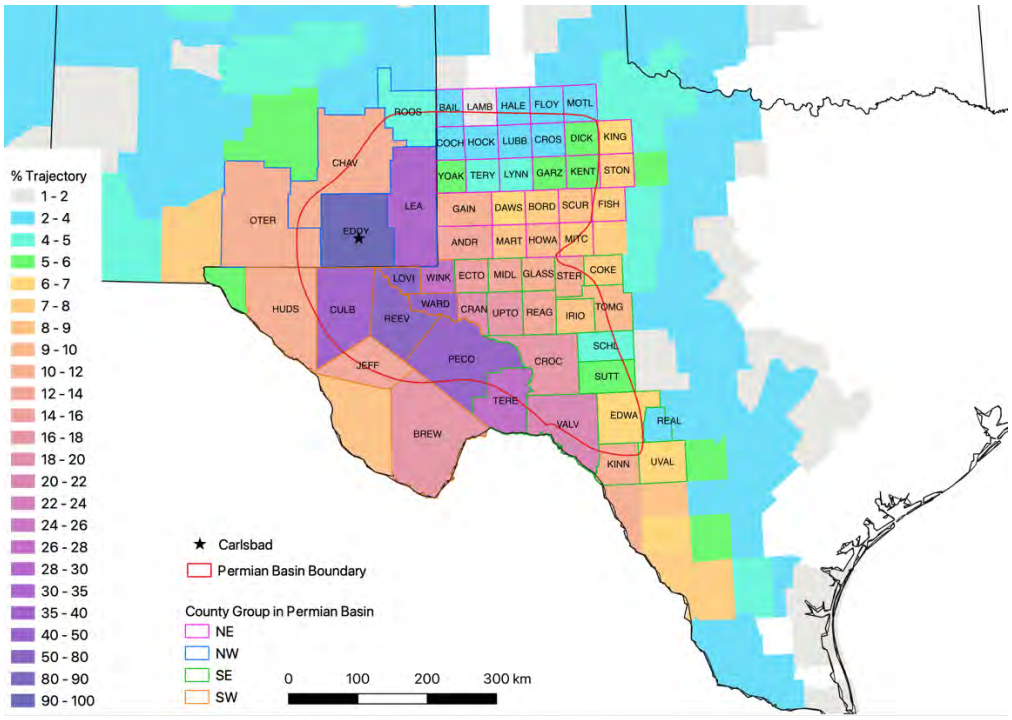


Figure S4. County heatmap normalized by number of trajectories for high ozone days (MDA8_O3 > 70 ppb).

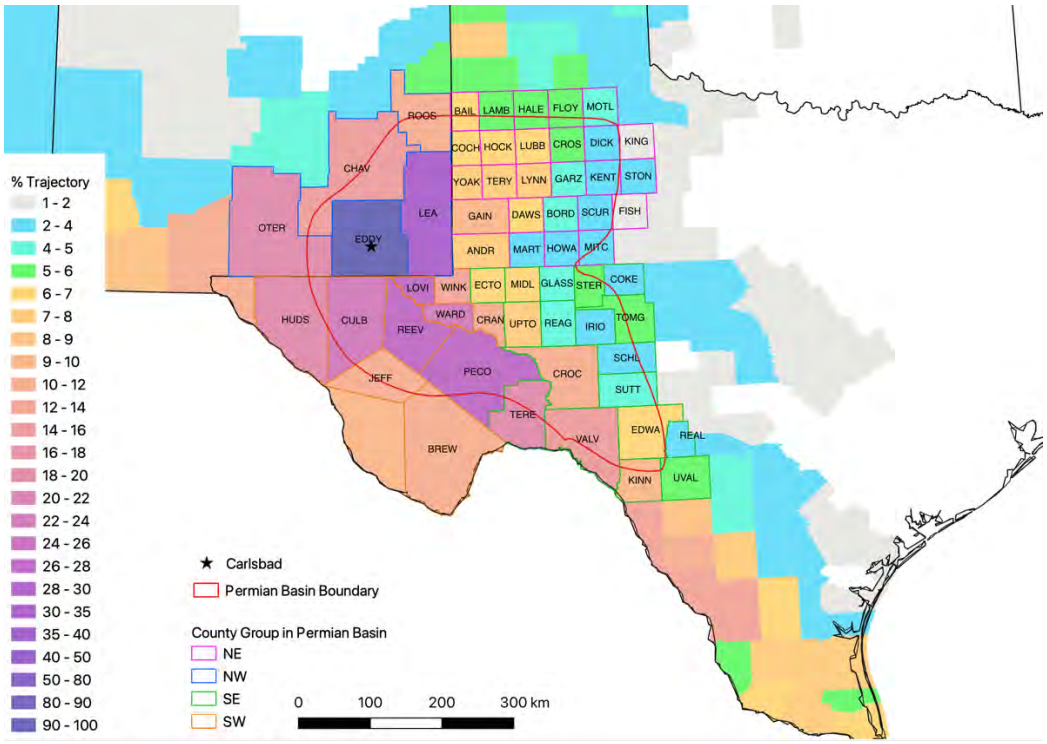


Figure S5. County heatmap normalized by number of trajectories for low ozone days (MDA8_O3 < 46 ppb).

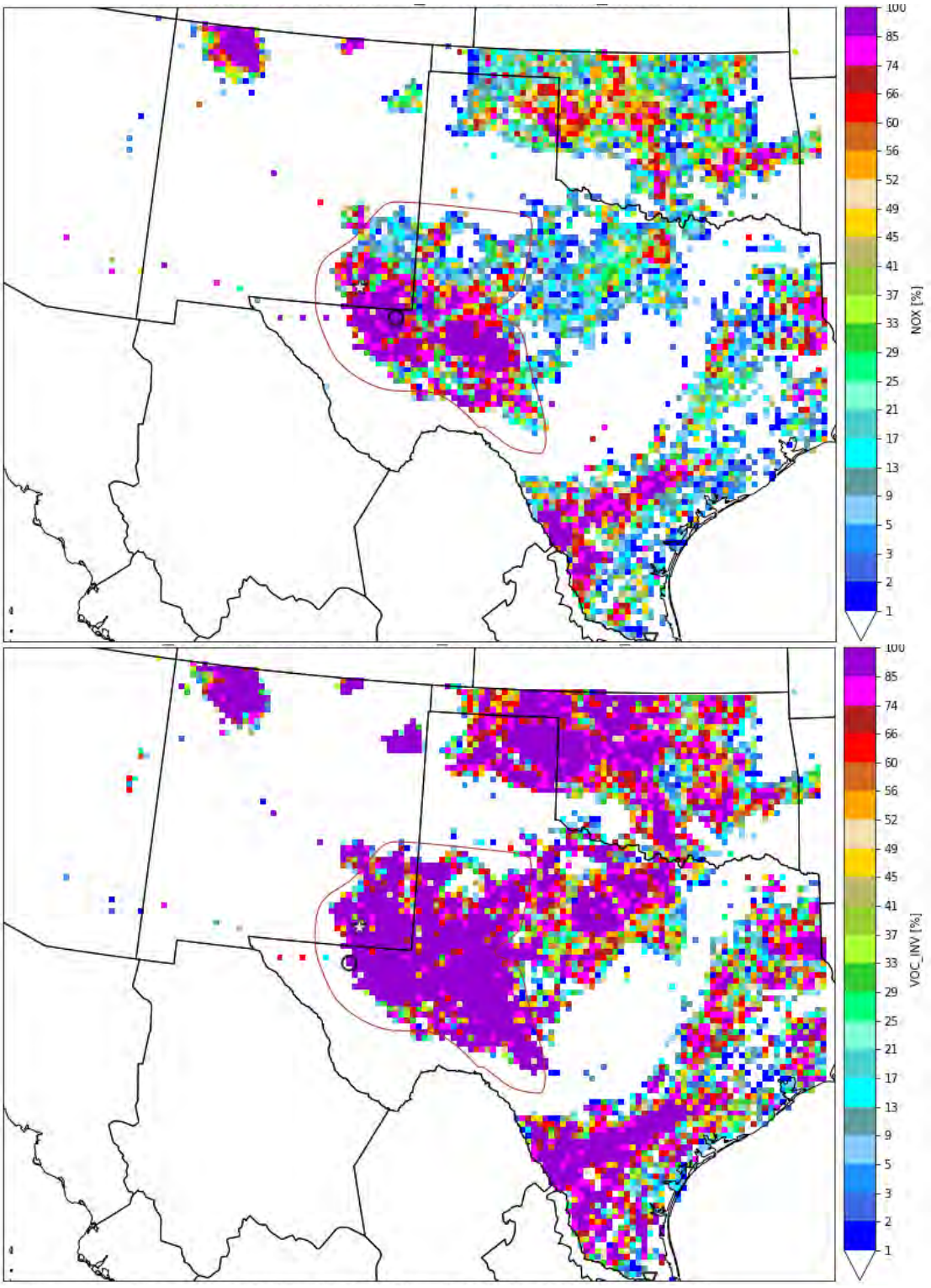


Figure S6. Contribution of NOx (top) and VOC (bottom) emissions (%) from oil and gas sector to the emissions from all anthropogenic sources. Star symbol indicates location of Carlsbad monitoring site. Emissions data were derived from EPA's NEI 2016v1.

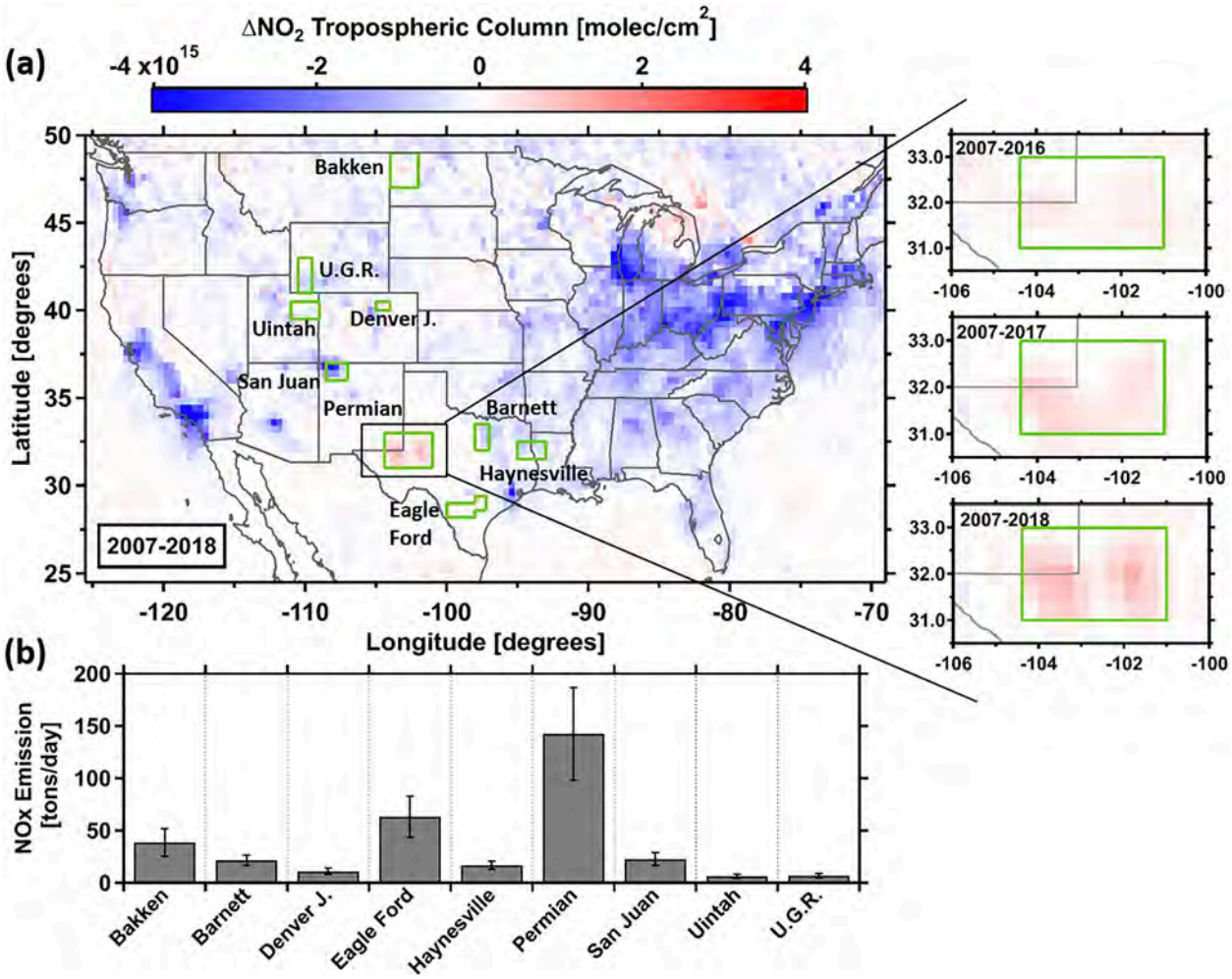


Figure S7. OMI NO_2 map and FOG NOx emission estimates by Dix et al. (2020). (a) Absolute changes in OMI tropospheric NO2 VCDs between 2007 and 2018 for the continental U.S. Green boxes denote major U.S. oil and gas production regions. The insets show the NO_2 VCD change between 2007 and 2016, 2017 and 2018, respectively, over the Permian basin. (b) 2015 FOG NOx emission estimates for the areas outlined in (a).

Reference:

Dix, B., de Bruin, J., Roosenbrand, E., Vlemmix, T., Francoeur, C., Gorchov- Negron, A., et al. (2020). Nitrogen oxide emissions from U.S. oil and gas production: Recent trends and source attribution. Geophysical Research Letters, 47, e2019GL085866. https://doi.org/10.1029/2019GL085866

From:	Amy Dinn
To:	tceqamnp; Holly Landuyt
Cc:	Chase Porter; Caroline Crow
Subject:	TCEQ - Comments on 2025 Draft AMNP Submitted by Lone Star Legal Aid
Date:	Wednesday, May 14, 2025 5:29:49 PM
Attachments:	2025-05-14 Comments on TCEQ AMNP 2025.pdf

Dear Sirs,

On behalf of its represented clients identified in the attached document, Lone Star Legal Aid submits the attached comments on the TCEQ's Draft Air Monitoring Network Plan for 2025.

Thank you for confirming receipt of these comments.

Amy Catherine Dinn
Litigation Director
Environmental Justice Project
Equitable Development Initiative
Lone Star Legal Aid
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Houston, Texas 77002
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Report pollution here: https://www.lonestarlegal.org/resource/community-pollution-reporter/

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May 14, 2025

VIA EMAIL tceqamnp@tceq.texas.gov
Texas Commission on Environmental Quality
P.O. Box 13087
Attention: Holly Landuyt, MC-165
Austin, Texas 78711-3087

Re: Draft Annual Air Monitoring Network Plan for 2025

Dear Sirs:

On behalf of its respective clients identified below and their represented communities, Lone Star Legal Aid (LSLA) submit these comments to the Texas Commission on Environmental Quality (TCEQ) regarding TCEQ's Draft 2025 Annual Monitoring Network Plan (2025 AMNP). The undersigned signatories appreciate the TCEQ's prompt response to these comments and hope these comments are reflected in the final version of the 2025 Air Monitoring Network Plan for Texas submitted to the U.S. Environmental Protection Agency (EPA).

I. COMMENTERS

A. Lone Star Legal Aid

LSLA's mission is to protect and advance the civil legal rights of the millions of Texans living in poverty by providing free advocacy, legal representation, and community education to ensure equal access to justice. LSLA's service area encompasses one-third of the State of Texas, including 72 counties in the eastern and Gulf Coast regions of the state. LSLA's Environmental Justice team focuses on the right to the fair distribution of environmental benefits and burdens and the right to equal protection from environmental hazards. LSLA advocates for these rights on behalf of impacted individuals and communities in LSLA's service area. These comments are

submitted on behalf of the following organizations which serve and represent low-income environmental justice communities and their residents:

a. Port Arthur Community Action Network;
b. Caring for Pasadena Communities;
c. Super Neighborhood 48 Trinity Gardens / Houston Gardens;
d. Pleasantville Area Super Neighborhood 57;
e. Progressive Fifth Ward Community Association;
f. Better Brazoria—Clean Air & Water;
g. Houston Department of Transformation
h. Gulfton Super Neighborhood Council

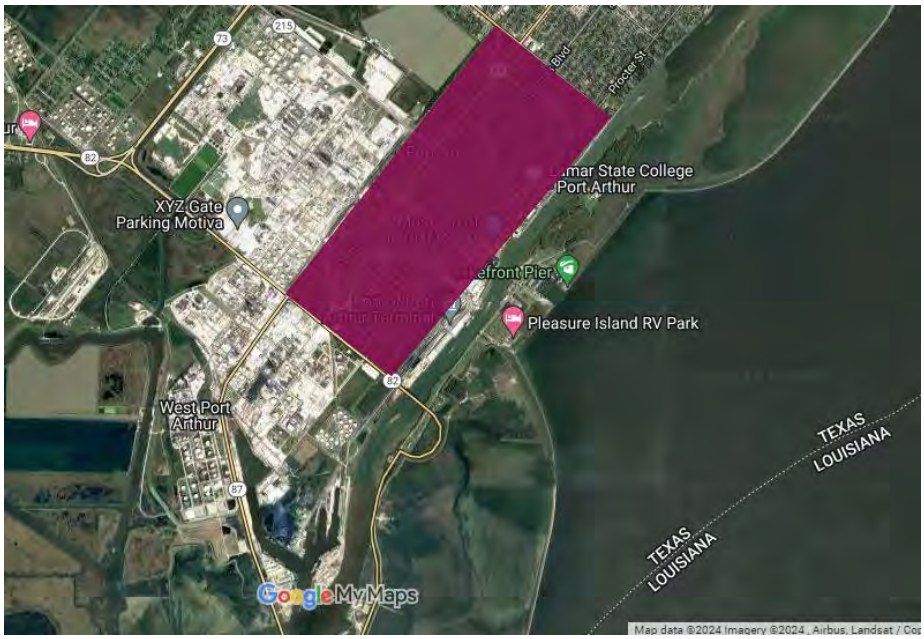
In submitting these comments, LSLA also represents an individual resident in the Channelview area of Harris County, Texas.

B. Community Organizations Represented by Lone Star Legal Aid

1. Port Arthur Community Action Network

The Port Arthur Community Action Network (PACAN) is a not-for-profit community-based organization in the West Port Arthur neighborhood of Port Arthur that mobilized in the immediate aftermath of Hurricane Harvey to address a slew of environmental releases and problems associated with the storm. The organization was responsible for hosting disaster relief legal clinics for the citizens of Port Arthur and advocated for a more effective response to the storm by local governmental authorities. In addition, PACAN has and remains active in reviewing, commenting, and challenging air permit applications in the West Port Arthur area that would compound existing issues with air and water quality in the neighborhood and larger city. PACAN is also active in commenting on statewide and federal plans regarding environmental protection and regulation, including several iterations of TCEQ's Annual Monitoring Network Plan. PACAN is committed to improving the quality of life of residents in Port Arthur, Texas. West Port Arthur is surrounded by major petrochemical and other large industrial facilities, the Port of Beaumont, and crisscrossed by railroads and truck routes related to those industrial sites. **Figure 1**, an image from Google Maps, shows the location of residential West Port Arthur in relationship to industrial development in the area.

Figure 1. Location of Residential West Port Arthur



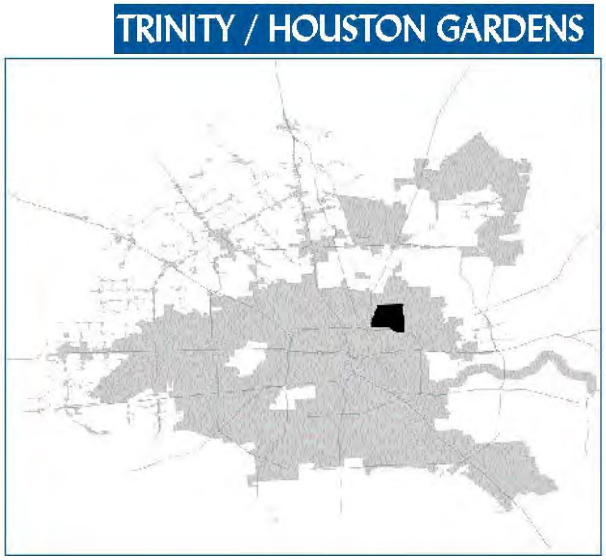
2. Caring for Pasadena Communities

Caring for Pasadena Communities (CPC) is a community-based nonprofit organization committed to raising awareness of environmental issues affecting residents of Pasadena and nearby communities along the Houston Ship Channel, where many of its members live and work. CPC is organized to advocate for these communities, improve public education on environmental issues, and to ensure equal treatment for low-income residents in environmental matters. This work has entailed direct involvement in the public participation process of numerous projects by highlighting environmental justice concerns for various permitting agencies that would otherwise go unnoticed and unaccounted for.

3. Super Neighborhood 48 – Houston Gardens / Trinity Gardens

Super Neighborhood 48 "Trinity / Houston Gardens" takes its name from two communities: Trinity Gardens and Houston Gardens in Houston, Texas, also known as the "Gardens." The City of Houston defines the area known as Super Neighborhood 48 by the geographic boundary shown below labeled as **Figure 2**, which is within City Council District B and comprises 4,395 acres (6.87 sq. miles) in the Northeastern part of the City of Houston, Texas:

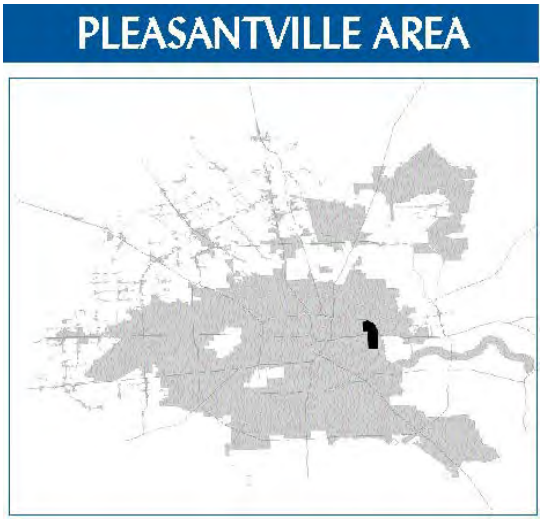
Figure 2. Location of Super Neighborhood 48 in Northeast Houston



4. Pleasantville Area Super Neighborhood 57

Pleasantville Area Super Neighborhood 57 is an organization in Houston, Texas representing individuals, civic clubs, and businesses located within two neighborhoods close to the Houston Ship Channel. Pleasantville was developed after World War II and remains a historic, predominantly Black community. Given its proximity to port-related activities, Super Neighborhood 57 and other community groups in the area like Achieving Community Tasks Successfully (ACTS) are extremely focused on environmental justice issues and air quality in the area. In the last few years, the Pleasantville neighborhood installed one of the first community-led air monitoring programs in the country.

Figure 3. Super Neighborhood 57 – Pleasantville



5. Progressive Fifth Ward Community Association

Progressive Fifth Ward Community Association (Progressive Fifth Ward) is an incorporated community association serving the Greater Fifth Ward of Houston, also known as Super Neighborhood 55. The City of Houston defines Greater Fifth Ward by the geographic boundary shown below in **Figure 4**, which comprises 3,192 acres (4.99 sq. miles) in the Northeastern part of the City of Houston:

Figure 4. Location of Greater Fifth Ward in Northeast Houston



As a community association, Progressive Fifth Ward's purposes include: promoting civic engagement of residents, encouraging improvements in the appearance of public and private properties in the area, and taking concerted actions in matters pertaining to the welfare of residents in the neighborhood. Progressive Fifth Ward has been and remains active in efforts to combat local sources of pollution within the community and highlighting these issues to governmental entities.

6. Better Brazoria - Clean Air & Water

Better Brazoria – Clean Air & Water (Better Brazoria) was formed to educate Freeport residents about environmental issues and to advocate for solutions to protect and improve air and water quality. To accomplish this mission, Better Brazoria holds community meetings to raise awareness about potentially harmful air and water pollution events in Freeport, Texas and Brazoria County. The group communicates with TCEQ and other state and local governmental entities to remain up to date on the latest developments in the area. Better Brazoria continues to

engage with the public participation component of the environmental permitting process by submitting comments, and engaging in hearings on air, water, and waste permits, and submitting comments, like these, on air monitors in the region. The group's goal is to encourage protection of public health through compliance with permitting schemes and environmental laws.

7. Houston Department of Transformation

The Houston Department of Transformation is a grassroots community-based nonprofit organization which operates in multiple neighborhoods in north-central Houston along the Interstate 45 and Hardy Toll Road corridors, as well as in communities in Northeast Houston such as East Aldine. The organization largely operates on a project-based basis, completing projects across northern Houston to improve the health and safety of neighborhoods, as well as promoting community cohesion and pride. As part of this work, the Houston Department of Transformation has previously worked with other organizations in the Houston area to develop local air monitoring networks to help gauge air quality in the area.

8. Gulfton Super Neighborhood Council

The Gulfton Super Neighborhood Council is a community-based organization which represents residents, businesses, and stakeholders in the Gulfton neighborhood of Houston. Gulfton is in the southwest of the City of Houston, at the intersection of Loop I-610 and I-69/US-59/Westpark Tollway. The organization is sanctioned and a participant in the City of Houston's Super Neighborhood scheme and exists "to encourage residents of neighboring communities to work together to identify, prioritize and address the needs and concerns of the broader community."[1]

9. Channelview

Channelview is on the east side of Harris County and receives its name from its location on the northeastern curve of the Houston Ship Channel. Specifically sited at the point where the San Jacinto River forms the Old River, Channelview is north of Interstate 10 and the Missouri Pacific Railroad and 15 miles (24 km) east of downtown Houston. Channelview is the home of the LyondellBasell Channelview Complex, which is one of the largest petrochemical facilities on the Gulf Coast, producing various chemicals like ethylene, propylene, and benzene. Because of its proximity to the ship channel, Channelview is also increasing a site of industrial buildout, including port-adjacent maritime service companies, such as barge fleet operators, mooring companies, wash out tank operators, and shipyards. Increasingly the community has become concerned about high benzene readings in the area as detailed in the podcast series, "Fumed", from Public Health Watch that focuses on the environmental and health impacts of the petrochemical industry on Channelview, Texas from the perspective of residents like Carolyn Stone.

[1] City of Houston Department of Neighborhoods, Super Neighborhoods, https://www.houstontx.gov/superneighborhoods/.

II. PLACEMENT OF AIR MONITORS IN ENVIRONMENTAL JUSTICE COMMUNITIES

Environmental justice is an ongoing struggle to remedy environmental discrimination in this country. The EPA defines environmental justice as follows:

> Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.[2]

The EPA defines "fair treatment" as ensuring "that no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations of programs and policies."[3]

Environmental discrimination and the uneven spread of environmental harms and risks have historically been evident in the process of selecting and building environmentally hazardous sites, including waste disposal, manufacturing, and energy production facilities. The locations of busy roads and railroads follow a similar pattern. The siting of such hazardous infrastructure in communities of color and/or low-income communities has had a disproportional negative impact on the overall health and well-being of those communities.

TCEQ must recognize the inclusion of "government…programs and policies" in the definition of fair treatment. A well designed and inclusive air monitoring program can be an effective tool to identify and alleviate risks and harms. An air monitoring program which does not sufficiently monitor the many air pollutants released into environmental justice communities has the potential to perpetuate the challenges faced by those communities. In other words, TCEQ should view the 2024 AMNP as an important opportunity to fulfill TCEQ's obligations under Title VI of the Civil Rights Act of 1964 as well as basic tenets equal protection.

Additionally, TCEQ has an obligation to monitor in "at-risk" communities, differently than those communities which are not categorically "at-risk."[4] According to the EPA, an "at-risk" community is defined as a community with an increased risk of related health effects caused by pollution sources of concern.[5] Those communities identified as "at-risk" should have

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[2] U.S. Environmental Protection Agency, Environmental Justice-Related Terms As Defined Across the PSC Agencies (05/13/2013), https://www.epa.gov/sites/production/files/2015-02/documents/team-ej-lexicon.pdf.
[3] *Id.*
[4] *See, e.g.*, 40 C.F.R. 58.10(b)(14).
[5] U.S. Environmental Protection Agency, Air Monitoring for Fine Particle Pollution (PM2.5) Fact Sheet, https://www.epa.gov/system/files/documents/2024-02/pm-naaqs-monitoring-fact-sheet.pdf.

monitoring stations sited near sources. Importantly, the communities represented in these comments are categorically at-risk.

The EPA's air monitoring regulations similarly require TCEQ consider "vulnerable and susceptible populations" in placement of monitors.[6] According to EPA research: [7]

> Residents of low-income neighborhoods and communities may be more vulnerable to air pollution because of proximity to air pollution sources such as factories, major roadways and ports with diesel truck operations. They also may be more susceptible to air pollution because of social and economic factors.

The communities described below all fit squarely into these agency definitions of "at-risk" and "vulnerable and susceptible." The represented communities are all proximate to air pollution sources and face social and economic factors which raise health and healthcare challenges.

A. Brazoria County

The American Lung Association recently issued its annual report card for air quality in the United States.[8] Brazoria County scored an F for its air quality for ozone based on a weighted annual total of 35 "orange days" for ozone where the ozone levels in the air were "unhealthy for sensitive groups" and 2 "red days" where the levels were "unhealthy" observed from 1996 to 2023.[9] The American Lung Association did not have enough data to grade the county for its particulate pollution.[10] Based on the demographic statistics available for 2023 used in the state of the Air Report, **Table 1** reflects Brazoria County population data for the following socially vulnerable populations:

Table 1: Brazoria County Population Demographics[11]

Total Population:	**398,938**
Children Under 18:	101,544
Adults 65 & Over:	52,042
Pediatric Asthma:	7,645

[6] *See, e.g.*, 40 C.F.R. 58.10(b)(12).
[7] U.S. Environmental Protection Agency, EPA Research: Environmental Justice and Air Pollution, https://www.epa.gov/ej-research/epa-research-environmental-justice-and-air-pollution#
[8] *See* American Lung Association, State of the Air Report, available at https://www.lung.org/research/sota.
[9] *See* American Lung Association, State of the Air Report, Scores for Brazoria County, Texas, available at https://www.lung.org/research/sota/city-rankings/states/texas/brazoria.
[10] Id.
[11] *Id.*; *see also* American Lung Association, State of the Air Report, Report Methodology, available at: https://www.lung.org/research/sota/about-the-report/understanding-the-grades.

Table 1: Brazoria County Population Demographics[11]	
Adult Asthma:	25,285
COPD:	14,841
Lung Cancer:	170
Cardiovascular Disease:	22,584
Pregnancy:	4,909
Poverty Estimate:	36,476
People of Color:	233,478

Freeport, Texas is a small industrial city on the Gulf Coast located in Brazoria County, Texas. A large percentage of Freeport's approximately 12,169 residents are minorities: over 64% are of Hispanic descent, while another 14% identify as Black or African American. Freeport has a higher minority population than 82% of American communities. Freeport is also in the 82nd percentile nationally for the proportion of low-income residents, with a per capita income of $19,277 and 55% of the population classified as low-income. Thirty-five percent of residents have less than a high school education, which is worse than 93% of American communities. And 10% are linguistically isolated, well above the national average of 4%. Freeport residents are closer to facilities handling hazardous waste than 92% of American communities.

Freeport residents also rank highly in proximity to Superfund sites, since nearly the entire population lives within five miles of the GulfCo Marine Maintenance Superfund site. GulfCo Marine Maintenance was the site of barge cleaning operations for three decades and became a Superfund site when evidence revealed that hazardous substances were migrating from the site and posing a threat to nearby drinking water supplies and downstream sensitive environments. And, Freeport residents are closer to facilities that discharge water pollution than 98% of American communities. Not only is water pollution a problem, but air quality remains a major concern.

This combination of a high concentration of minority and low-income residents in conjunction with a high concentration of large industrial polluters is indicative of a community overburdened by pollution and under-resourced. In Freeport, as along much of the Texas gulf coast, minority and low-income populations continue to bear a wildly disproportionate burden of the toxic pollution from the state's petrochemical industry, while being denied a share in the economic prosperity that the industry has brought to other parts of the state.

Concerns related to location & number of air monitors

Brazoria County's population and industrial operators in the region continue growing, but monitoring has not kept pace. According to U.S. Census estimates, Brazoria's population has

grown 46% since 2000[12], and Brazoria County's industrialization began in the 1900's and has continued on through present-day. The County's growth can be compared with NAAQS standards for $PM_{2.5}$ being lowered and Brazoria County falling further behind in attainment status.

Figure 5 and **Figure 6** below graph Brazoria County's population growth and a population growth forecast through 2040:

Figure 5. Population Growth in Brazoria County over the Years

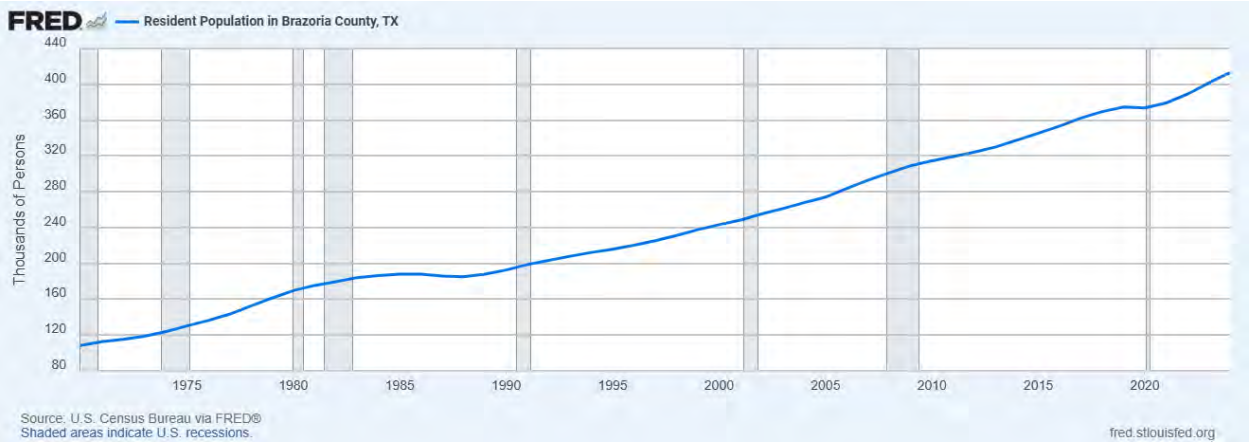
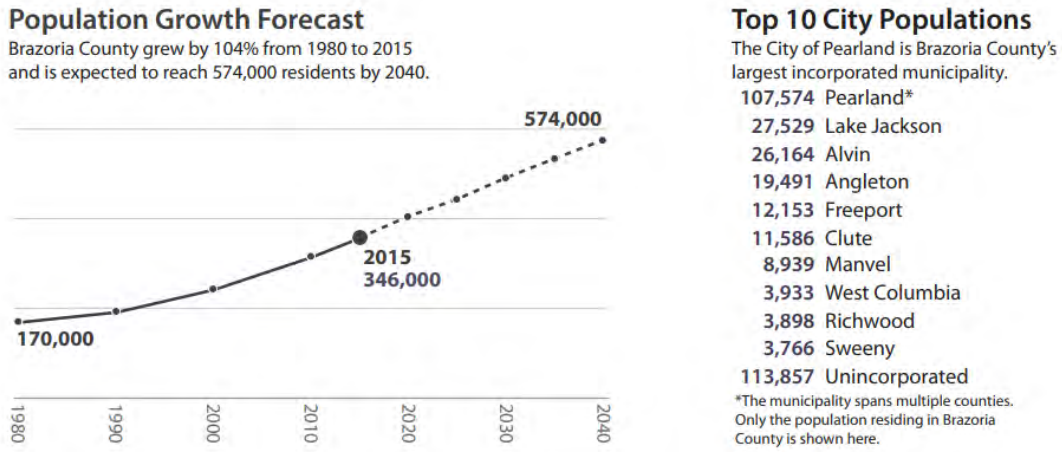


Figure 6. Population Growth Forecast



[12] Brazoria County Economic Resilience Profile, available at https://www.h-gac.com/getmedia/a3cdf958-e8bf-4a85-ae5a-6d094f01c211/7-Brazoria-County-Profile2.pdf at 2.

EPA revised ozone standards in 2008 and 2015. For the 2008 ozone standard, as of November 7, 2022, Brazoria County is classified as severe nonattainment and is currently subject to Clean Air Act Section 185 Fee Penalty Program. While TCEQ noted that "[f]rom 2014-2021, design value trends for the [Houston-Galveston-Brazoria] areas have not significantly increased or decreased,"[13] Brazoria County is concerned that these static design trends may be the result of TCEQ not strategically monitoring to accurately assess these design value trends. For example, the Port of Freeport is a significant source of air pollution, but it does not appear there is appropriate monitoring in place to evaluate the Port's emissions. Although the EPA found that diesel emissions at the Port make significant contributions to air pollution including fine particulate matter, nitrogen dioxides, air toxics and carbon dioxide,[14] the closest regulatory monitor on Avenue I does not monitor for ozone in the atmosphere, PM_{10}, heavy metals, VOCs, or NO_x. The nearest ozone monitoring site is in Lake Jackson. While this monitoring is important to the Lake Jackson community—the Avenue I monitor should also be monitoring for ozone in the atmosphere. Or, in the alternative, Better Brazoria requests (again) that ozone monitoring be reinstated at the Clute monitor. While Better Brazoria understands from TCEQ's 2024 Response to Comments[15] a work group chose to move the Clute monitoring to Lake Jackson in 2003, the community remains concerned that there is no regulatory monitoring for Ozone in the atmosphere near Port Freeport or the largely industrialized South side of Brazoria County. Better Brazoria, however, does recognize the importance of monitoring in Lake Jackson, which has concentrated residential populations.

Brazoria County also lacks VOC monitoring. None of the regulatory monitors in Brazoria County evaluate VOCs even though Brazoria County is home to some of the world's largest industrial complexes. For example, Freeport LNG, the seventh largest liquefication site in the world and the second largest in the United States.[16] Dow, BASF, Olin, Phillips 66 petroleum refinery, storage tanks that store VOC liquids are all also in Brazoria, which both emit significant VOCs. Accordingly, Better Brazoria requests regulatory VOC monitoring be added to the Avenue I monitoring.

Better Brazoria understands that the Oyster Creek monitoring evaluates a number of pollutants. However, because this monitor is not a regulatory monitor—this data cannot be used to assess NAAQS violations, ensure attainment, or support informed permitting decisions or provide a basis for enforcement, when necessary. Better Brazoria requests that the Oyster Creek monitor begin monitoring at federally equivalent standards, or, in the alternative, that the Avenue

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[13] 2 TCEQ Presentation, "Technical Information Meeting Houston-Galveston-Brazoria Eight-Hour Ozone Design Values," available at https://www.tceq.texas.gov/downloads/airquality/modeling/meetings/hgb/2022/20220728-hgb-designvalues-tceq-stashak.pd

[14] U.S. Environmental Protection Agency, Office of Transportation Air Quality, National Port Strategy Assessment: Reducing Air Pollution & Greenhouse Gases at U.S. Ports, Executive Summary, EPA-420-S-16-002 (Sept. 2016), available at: NATIONAL PORT STRATEGY ASSESSMENT: Reducing Air Pollution and Greenhouse Gases at U.S. Ports, Executive Summary (EPA-420-S-16-002, September 2016) at 2.

[15] TCEQ Annual Monitoring Network Plan, Appendix M (July 1, 2024) at M-45-6 (Comment 31 and Response 31).

[16] Brazoria County Petrochemical Council, Building the Industry: Brazoria County's Petrochemical Story (Apr. 14, 2025) available at: https://brazoria-county-petrochemical-council.com/2025/04/14/building-the-industry-brazoria-countys-petrochemical-story/

I monitor begin monitoring for these pollutants at federally equivalent standards.

Historically, Brazoria County had monitoring that tracked a significant number of pollutants near industrialized portions of the county, but, currently, Brazoria County lacks the robust monitoring it needs to track the numbers and types of industry in Brazoria. **Figure 7** below is an image of Brazoria County boundaries as compared with the historic monitoring in the County.

Figure 7. Brazoria County Boundaries

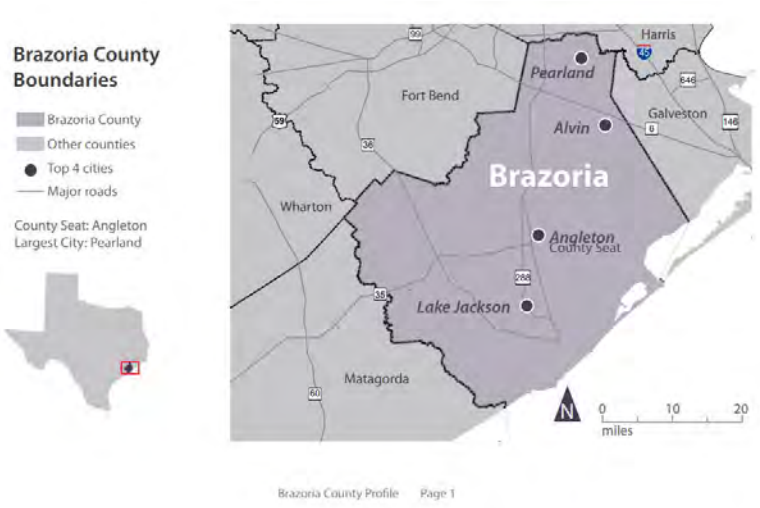


Figure 8. Historic Picture of Air Monitoring in Brazoria County

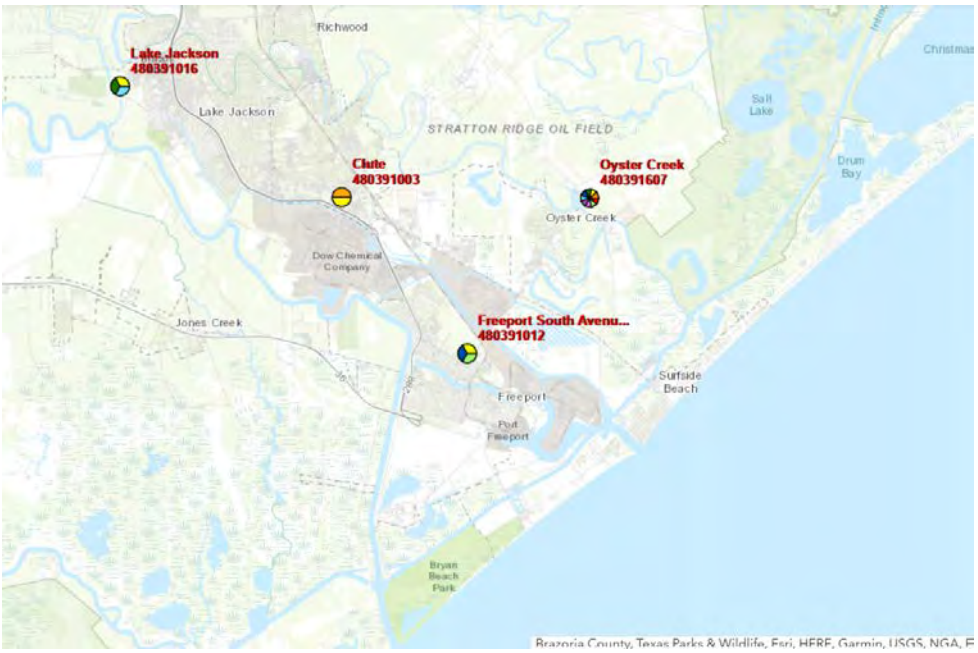


Table 2: Historic Monitors in Brazoria County

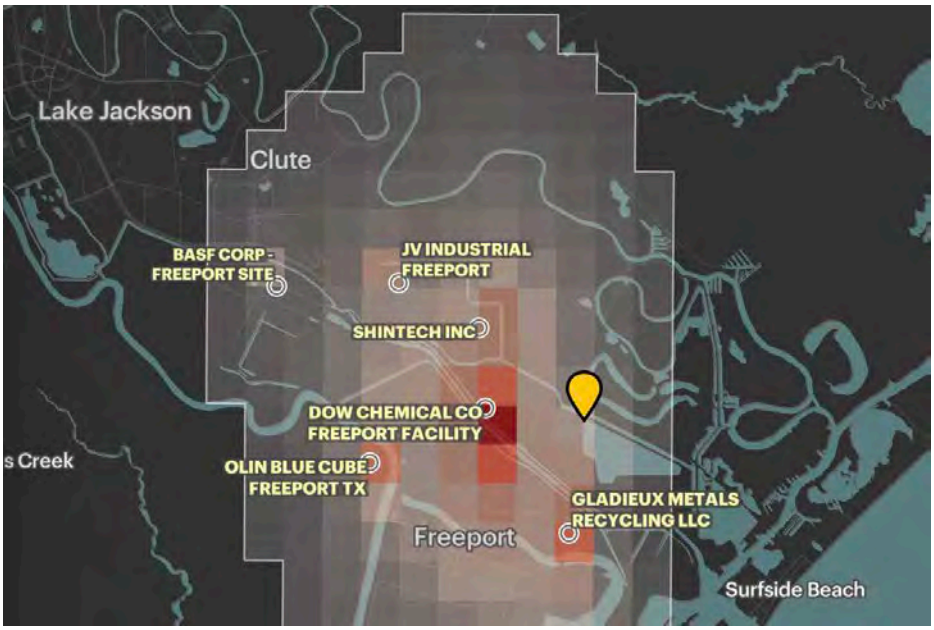
Monitor Location	Date Activated	Active (Y/N)	Pollutants Monitored
Lake Jackson (480391016)	6/10/2003	Y	NOx Ozone
Clute (480391003)	1/1/1974	N	VOC Cannister
Oyster Creek (480391607)	12/14/2016	Y (Nonregulatory Monitor)*	CO H_2S NO_x Ozone PM_{10} $PM_{2.5}$ SO_2
Freeport South (480391012)	5/25/2011	Y	SO_2 $PM_{2.5}$ (FRM/Speciated)

Air Toxics & Heavy Metal Air Pollution Concerns

ProPublica's study on cancer causing industrial air pollution in the United States, identified Freeport as a hot spot.[17] This analysis reviewed five years of modeled EPA data and identified more than 1,000 toxic hot spots across the country.[18] The map below in **Figure 9** illustrates the facilities in Freeport, Texas, and the dark red spots denote the most problematic areas.

Figure 9. Pro Publica Map of Facilities in Freeport, TX that Emit Toxic Chemical Emissions[19]

[17] Al Shaw and Lylla Younes, The Most Detailed Map of Cancer-Causing Industrial Air Pollution in the U.S., Pro Publica, (Nov. 2, 2021 updated Mar. 15, 2022), https://projects.propublica.org/toxmap/.
[18] Al Shaw and Lylla Younes, The Most Detailed Map of Cancer-Causing Industrial Air Pollution in the U.S., Pro Publica, (Nov. 2, 2021 updated Mar. 15, 2022), https://projects.propublica.org/toxmap/.
[19] Al Shaw and Lylla Younes, The Most Detailed Map of Cancer-Causing Industrial Air Pollution in the U.S., Pro Publica, (Nov. 2, 2021 updated Mar. 15, 2022), https://projects.propublica.org/toxmap/.



The major facilities contributing to toxic air emissions in Freeport include:

- Gladieux Metals Recycling: (responsible for emitting Cobalt compounds, Arsenic compounds and Nickel compounds); contributes to **47.3%** of the estimated ***excess*** cancer risk in Freeport;
- Nalco Champion: (responsible for emitting Ethylene oxide, Formaldehyde, Propylene oxide and 3 more carcinogens); contributes to 40.9% of the estimated ***excess*** cancer risk in Freeport; and
- Dow Chemical (responsible for emitting Ethylene oxide, Butadiene, 1,3-, Dichloroethane, 1,2- and 40 more carcinogens); contributes to 11% of the estimated ***excess*** cancer risk in Freeport.[20]

Dow is an additionally problematic facility. According to the Texas Attorney General's (OAG) lawsuit against Dow in 2021[21], the OAG alleges that the Dow Plant has experienced "continuing problems associated with errors and equipment malfunctions resulting in emissions events that emit unauthorized contaminants into the environment."[22] And, during 2016-2021,

[20] Al Shaw and Lylla Younes, The Most Detailed Map of Cancer-Causing Industrial Air Pollution in the U.S., Pro Publica, (Nov. 2, 2021 updated Mar. 15, 2022); https://projects.propublica.org/toxmap/
[21] Cause No. D-1-GN-21-002123, State of Texas v. Dow Chemical Company, Travis County District Court, 250th Judicial District; Original Petition and Application for Injunctive relief (May 10, 2021) at 8.
[22] Cause No. D-1-GN-21-002123, State of Texas v. Dow Chemical Company, Travis County District Court, 250th Judicial District; Original Petition and Application for Injunctive relief (May 10, 2021) at 8.

TCEQ entered six administrative orders against Dow for air emission violations.[23]

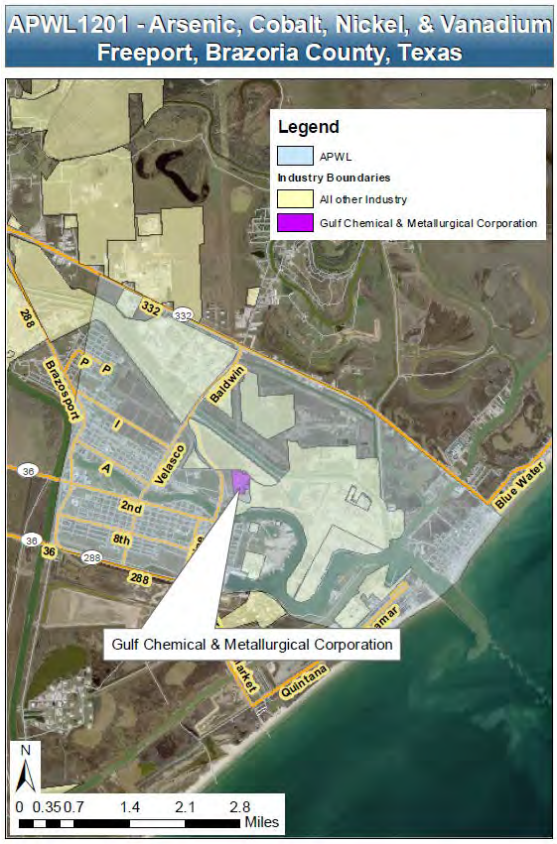
While Dow remains an ongoing air quality concern, the Gladieux Facility (f/k/a Gulf Chemical and Metallurgical) also has a sordid criminal environmental history that continues to cause the local Freeport community and Brazoria County ongoing concerns about metal emissions in the air. Notably, in 2005, the area around the Gladieux Facility was added to the Air Pollutant Watchlist as a result of elevated short-term Arsenic, Cobalt, Nickel, and Vanadium levels, which exceeded their respective air monitoring comparison values (AMCVs).[24] AMCV is a collective term used to describe chemical-specific air concentrations used to evaluate air monitoring data that are set to protect human health and welfare. Short-term AMCVs are based on data concerning acute health effects, odor potential, and acute vegetation effects.

TCEQ defined a large area where short-term exposure from this air pollution may cause respiratory symptoms and worsen existing medical conditions. As shown on the following map labeled as **Figure 10**, this area covers nearly the entire city of Freeport.

[23] *See*, Orders entered into the following dockets: Docket No. 2014-1053-AIR-E on May 23, 2015; Docket No. 2014-1881-AIR-E on Oct. 1, 2015; Docket No. 2015-1242-AIR-E on Jul. 13, 2016; Docket No. 2015-1671-AIR-E on Nov. 8, 2016; Docket No. 2017-0378-AIR-E on Feb. 27, 2018; and Docket No. 2016-1940-AIR-E on May 30, 2018.

[24] *See* Texas Commission on Environmental Quality's Air Pollutant Watch List Area Map of 1201, Freeport, Texas.

Figure 10. TCEQ Air Pollutant Watchlist Map showing all of Freeport affected[25]



Gladieux purchased the Gulf Chemical facility out of bankruptcy in 2017, and the facility is not yet fully operational. As the TCEQ issues Gladieux more permits to begin and expand its operations in Freeport, the community remains concerned about metal emissions and about SO_2 emissions in the community. The community is especially concerned because Gladieux has applied for permits with de minimis air emission limits, and the facility in the process of obtaining its Title V permit.

NO_x & SO_2 Air Emission Concerns

Freeport is additionally already home to the Freeport LNG terminal. This LNG terminal emits tons of pollutants, like sulfur dioxide, which can damage lungs.[26] Moreover, an explosion and fire occurred at the Freeport LNG facility on June 8, 2022 (Incident No. 381194) releasing 476,698 lbs. of CO and 55,592 lbs. of NOx (Incident No. 381191). The direct cause of the June 2022 explosion is the subject of a full investigative report by IFO Group for the Pipeline and

[25] Texas Commission on Environmental Quality, Air Pollutant Watch List Area Map of 1201, Freeport, Texas.
[26] Environmental Integrity Project, Troubled Waters for LNG: The COVID-19 Recession and Overproduction derail Dramatic Expansion of Liquefied Natural Gas Terminals (Oct. 5, 2020); https://environmentalintegrity.org/wp-content/uploads/2020/10/LNG-REPORT-10.5.20.pdf

Hazardous Materials Safety Administration (PHMSA),[27] and this incident resulted in a $163,054 fine by EPA.

Moreover, Brazoria County is home to many major sources of NO_x that are detailed in **Table 3** below. Major stationary sources are defined in 30 Texas Administrative Code Section 116.12 and are based upon actual or potential emissions. The major stationary source threshold in severe ozone nonattainment areas is 25 tons per year (tpy) of either actual or potential emissions of ozone precursors, NOx and VOCs.[28] According to the TCEQ's 2022 Emissions Inventory the following facilities are major sources of NOx in Brazoria County, per their reported actual emissions:

Table 3: Major Sources of NOx in Brazoria County according to TCEQ's Actual Emission Inventory

RN NUMBER	COMPANY	SITE	NOx (TPY)
RN100213198	SHINTECH INCORPORATED	SHINTECH FREEPORT PLANT	28.6632
RN106481500	FREEPORT LNG DEVELOPMENT LP	FREEPORT LNG PRETREATMENT FACILITY	31.2892
RN106603970	PHILLIPS 66 COMPANY	OLD OCEAN NGL FRACTIONATION PLANT	32.8244
RN106492325	INDORAMA VENTURES OXIDES LLC	LAB CHOCOLATE BAYOU PLANT	44.2969
RN110471240	LINDE INC	SWEENY HYDROGEN PRODUCTION PLANT	45.86
RN102607884	ENERGY TRANSFER FUEL LP	SWEENY COMPRESSOR STATION	56.0257
RN100218999	SI GROUP INC	SI GROUP TX OPERATIONS	83.7411
RN100238682	ASCEND PERFORMANCE MATERIALS OPERATIONS LLC	ASCEND PERFORMANCE MATERIALS CHOCOLATE BAYOU PLANT	276.0023
RN100223122	FREEPORT	OYSTER CREEK	376.0823

[27] IFO Group, Freeport LNG, Quintana Island, Texas, June 8, 2022 - Loss of Primary Containment, Incident Investigation Report (October 30, 2022). A heavily redacted version of the published report is available here: https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2022-11/IFO-Group-RCFA-Report-final-redacted.pdf.
[28] 30 TEX. ADMIN. CODE § 116.12, Table 1.

RN NUMBER	COMPANY	SITE	NOx (TPY)
	POWER LIMITED	COGENERATION POWER UNIT 8	
RN100218049	BASF CORPORATION	FREEPORT SITE	468.0822
RN100217033	SWEENY COGENERATION LP	SWEENY COGENERATION FACILITY	502.9137
RN101619179	PHILLIPS 66 COMPANY	SWEENY REFINERY PETROCHEM	506.0627
RN108772245	BLUE CUBE OPERATIONS LLC	BLUE CUBE OPERATIONS FREEPORT	561.7876
RN100238708	INEOS USA LLC	CHOCOLATE BAYOU PLANT	898.4758
RN100825249	CHEVRON PHILLIPS CHEMICAL COMPANY LP	SWEENY OLD OCEAN FACILITIES	1113.2323
RN100225945	THE DOW CHEMICAL COMPANY	DOW TEXAS OPERATIONS FREEPORT	1454.4506

According to TCEQ's 2022 Emissions Inventory the following facilities are major sources of Volatile Organic Compounds (VOCs) in Brazoria County, per their actual reported emissions:

Table 4: Major Sources of VOCs in Brazoria County according to TCEQ's Actual Emission Inventory

RN NUMBER	COMPANY	SITE	VOC (TPY)
RN100215425	DENBURY ONSHORE LLC	MANVEL FIELD CENTRAL COMPRESSOR STATION	24.5534
RN100221134	PHILLIPS 66 COMPANY	FREEPORT TERMINAL	26.716
RN100217033	SWEENY COGENERATION LP	SWEENY COGENERATION FACILITY	28.8907
RN102037959	TEXAS BARGE & BOAT INC	TEXAS BARGE & BOAT	32.5224
RN100218999	SI GROUP INC	SI GROUP TX OPERATIONS	34.8584
RN106603970	PHILLIPS 66 COMPANY	OLD OCEAN NGL FRACTIONATION PLANT	42.9465

RN NUMBER	COMPANY	SITE	VOC (TPY)
RN102200482	CHEVRON PHILLIPS CHEMICAL COMPANY LP	CLEMENS TERMINAL	51.9994
RN106302508	BRASKEM AMERICA INC	BRASKEM AMERICA	54.8827
RN100213198	SHINTECH INCORPORATED	SHINTECH FREEPORT PLANT	59.257
RN100238682	ASCEND PERFORMANCE MATERIALS OPERATIONS LLC	ASCEND PERFORMANCE MATERIALS CHOCOLATE BAYOU PLANT	69.6687
RN108772245	BLUE CUBE OPERATIONS LLC	BLUE CUBE OPERATIONS FREEPORT	81.9446
RN100237668	EQUISTAR CHEMICALS LP	CHOCOLATE BAYOU POLYMERS	120.493
RN100218049	BASF CORPORATION	FREEPORT SITE	174.938
RN100238708	INEOS USA LLC	CHOCOLATE BAYOU PLANT	359.3506
RN101619179	PHILLIPS 66 COMPANY	SWEENY REFINERY PETROCHEM	397.3113
RN100825249	CHEVRON PHILLIPS CHEMICAL COMPANY LP	SWEENY OLD OCEAN FACILITIES	459.47
RN100225945	THE DOW CHEMICAL COMPANY	DOW TEXAS OPERATIONS FREEPORT	575.4314

Ozone Concerns

While metal emissions and SO_2 emissions are a major concern, Freeport has significant ozone emission concerns as well. With the EPA's redesignation of the Houston-Galveston-Brazoria County area from "serious" to "severe" is cause for concern in the Freeport community. This concern about ozone pollution and air quality justifies adequate monitoring in the region to apprise the local community of their air quality. According to Better Brazoria's members, the Clute monitor was originally thoughtfully placed and brought online in 1974 to address regional concerns. Because a monitor was already carefully placed in Clute and previously measured ozone pollution, it would make sense for the TCEQ to add this constituent of concern, back to the Clute monitor to capture the region's ozone emissions more wholistically. Better Brazoria requests that ozone monitoring be reinstated at this monitor, given the EPA's recent significant concerns about NAAQS compliance for ozone in the region.

Figures 11 and 12 below illustrate the ozone burdens on the communities in Brazoria

County.

Figure 11. Brazoria County Ozone as Compared with National Percentiles

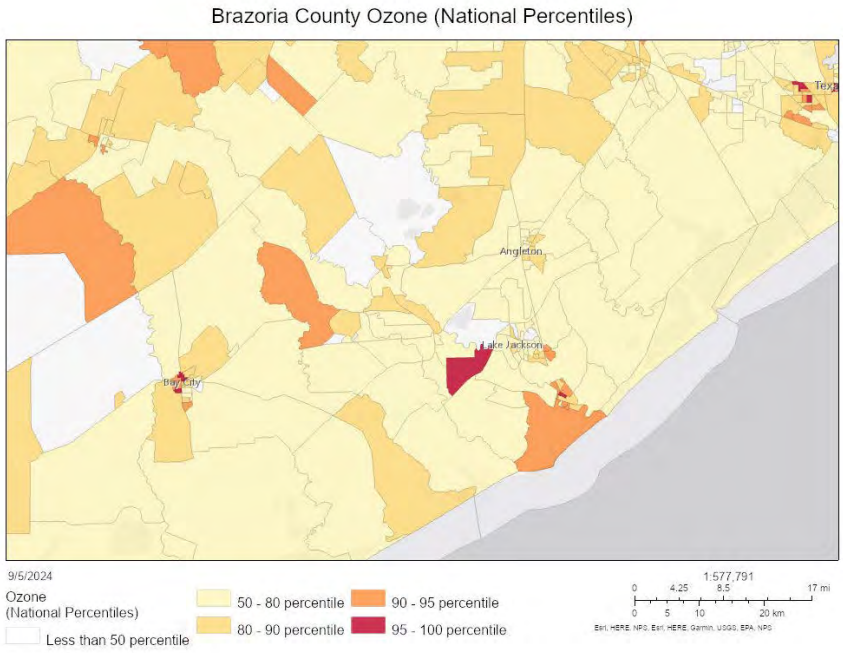
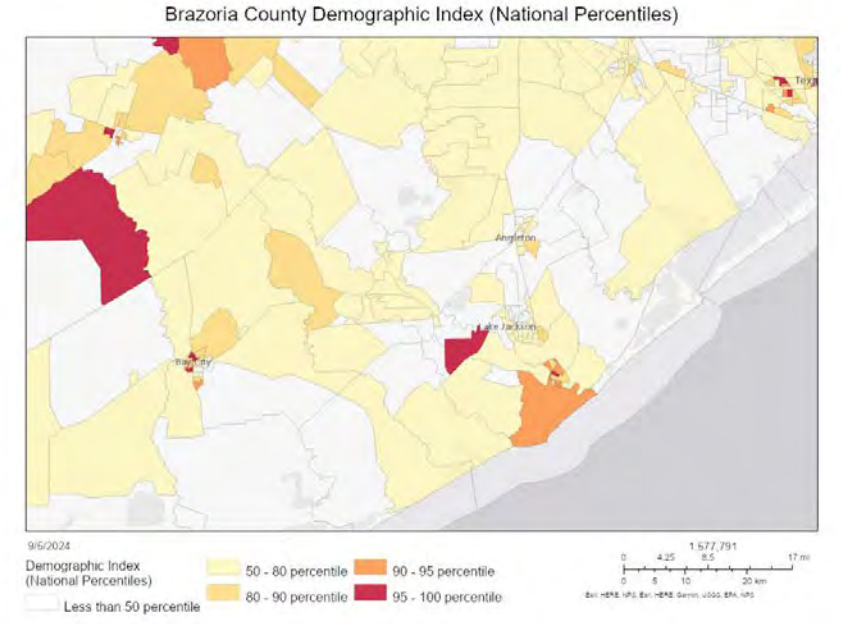


Figure 12. Brazoria County Demographic Index



There are an unusually high number of pipelines in the area, and the town is bordered on one side by Dow Chemical and BASF plants. These plants are both major suppliers of polyurethane raw materials and systems—which contribute major emissions that increase ozone pollution. According to local residents, the air in Freeport, and all of Brazoria County, will often irritate residents' eyes on a windy day—other times there are noxious chemical clouds. All of these industries contribute to ozone pollution, and the community is concerned that additional ozone monitoring is needed with thoughtful placement. The community is requesting that the historic Clute monitor (EPA site number: 48-039-1003) located at 426 Commerce Street, Clute, Texas 77531 that previously measured ozone be reinstated, given the EPA's redesignation of the region from "serious" to "severe."

For these reasons, Better Brazoria requests that historic Clute monitor be reinstated to adequately evaluate the region's compliance with NAAQS.

B. Jefferson County

In the above-referenced Stat of the Air Report, the American Lung Association graded Jefferson County an "F" for its air quality for ozone based on a weighted annual total of 4 "orange days" for ozone where the ozone levels in the air were "unhealthy for sensitive groups" observed from 1996 to 2003.[29] For particulate pollution, the county received a grade of C for its 24-hour pollution rates based on a weighted annual total of 2 "orange days" for particulates where the particulate pollution levels in the air were "unhealthy for sensitive groups" and 1 "red day" where particulate pollution was "unhealthy" from 1996 to 2003.[30] Based on the demographic statistics available for 2023 used in the state of the Air Report, **Table 5** reflects Jefferson County population data for the following socially vulnerable populations:

Table 5: Jefferson County Population at Risk[31]	
Total Population:	251,496
Children Under 18:	61,829
Adults 65 & Over:	40,050
Pediatric Asthma:	4,655
Adult Asthma:	16,239
COPD:	10,102
Lung Cancer:	108
Cardiovascular Disease:	15,553

[29] *See* American Lung Association, State of the Air Report, Scores for Jefferson County, Texas, available at https://www.lung.org/research/sota/city-rankings/states/texas/jefferson.
[30] Id.
[31] *Id.*; *see also* American Lung Association, State of the Air Report, Report Methodology, available at: https://www.lung.org/research/sota/about-the-report/understanding-the-grades.

Table 5: Jefferson County Population at Risk[31]	
Pregnancy:	2,763
Poverty Estimate:	47,706
People of Color:	159,577

Air pollution is a major concern for residents of Port Arthur, Texas. West Port Arthur is a historically Black and low-income neighborhood located in south/southwest Port Arthur. West Port Arthur is a US EPA Region 6 "Environmental Justice Showcase Community" due to its legacy of environmental and public health challenges.[32] The neighborhood is home to "many facilities including chemical plants, refineries and a hazardous waste incinerator."[33]

Residential West Port Arthur, also known as the "West Side" of Port Arthur, is a neighborhood that is predominantly a low-income, community of color. The neighborhood is bisected and surrounded by major industrial facilities, many of which are among Texas' largest emitters of criteria pollutants. **Figure 13 below** shows a satellite image of the area. Residential West Port Arthur can be seen along the right side of the image while the areas numerous, and massive, industrial cites largely appear white or grey across the center of the image. In addition, the Port of Beaumont and railways cut along the Sabine Neches Canal to the left of residential West Port Arthur. Point sources plus truck, rail, and ship traffic all combine to make West Port Arthur one of the most vulnerable communities to air pollution in Texas.

[32] U.S. Environmental Protection Agency, Region 6 EJ Showcase Community: Port Arthur, TX, https://archive.epa.gov/environmentaljustice/grants/web/html/ej-showcase-r06.html.
[33] *Id.*

Figure 13. Satellite Image of Residential and Industrial West Port Arthur



West Port Arthur has one of highest rates of poverty and one of the highest proportions of people of color in the entire country.[34] It is not surprising that West Port Arthur faces significant health challenges.[35] The community has high rates of asthma and notably low life expectancy. Most of West Port Arthur is in the 95th or higher national percentile for asthma.[36] West Port Arthur is also mostly in the 95th or higher national percentile for low life expectancy.[37]

1. Sulfur Dioxide Monitoring Concerns

It is crucial that West Port Arthur have accurate and appropriate air monitoring due to its vulnerability and susceptibility to air pollution harms. PACAN maintains and reiterates its longstanding concerns about SO_2 monitoring near the Oxbow Calcining facility located just

[34] U.S. Environmental Protection Agency, EJScreen: Environmental Justice Screening and Mapping Tool, https://www.epa.gov/ejscreen.
[35] U.S. Environmental Protection Agency, EJScreen: Environmental Justice Screening and Mapping Tool, https://www.epa.gov/ejscreen.
[36] U.S. Environmental Protection Agency, EJScreen: Environmental Justice Screening and Mapping Tool, https://www.epa.gov/ejscreen.
[37] U.S. Environmental Protection Agency, EJScreen: Environmental Justice Screening and Mapping Tool, https://www.epa.gov/ejscreen.

south and upwind of residential West Port Arthur.

SO_2 is an air toxic associated with a variety of negative health effects. Short term exposures to SO_2 can harm the respiratory system and cause a variety of symptoms making breathing difficult.[38] Children and people with existing pulmonary issues such as asthma are especially vulnerable to the negative effects of SO_2.[39] Additionally, SO_2 can react with other compounds in the air to form particulate matter, another criteria pollutant and potent respiratory irritant discussed below. [40]

According to the EPA, the largest source of SO_2 in the atmosphere is the burning of fossil fuels by power plants and other industrial facilities.[41] Other lesser sources of SO_2 emissions include: industrial processes such as extracting metal from ore; natural sources such as volcanoes; and locomotives, ships and other vehicles and heavy equipment that burn fuel with a high sulfur content.

One of the largest SO_2 emitters in all of Texas is located in West Port Arthur and of immense concern to residents in that environmental justice community. Based on the National Emissions Inventory, the Oxbow Calcining facility, located due south of residential Port Arthur at 3901 Coke Dock Road, emits 11,500 tons of SO_2 per year in 2017 and 9,359 tons per year of SO_2 in 2021.[42] These emissions are higher than those of the majority of facilities listed in Appendix F of the Draft AMNP.[43] Moreover, this single facility is listed as 9,227 tons per year of SO_2 emissions in the NEI 2020, which appears to account for 77% of 11,981 tons per year of the total point source emissions in Jefferson County identified in the 2020 NEI cited in Appendix E-2 of the Draft AMNP.[44] **Table 6**, using data from the 2020 NEI, reflects that Oxbow disproportionately emits more SO_2 than any other polluter in Jefferson County. For this reason, TCEQ should be monitoring this facility and making sure that air monitoring resources in this area are sufficient and properly located to capture these emissions.

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[38] U.S. Environmental Protection Agency, Sulfur Dioxide Basics, What are the harmful effects of SO_2, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#effects.
[39] U.S. Environmental Protection Agency, Sulfur Dioxide Basics, What are the harmful effects of SO2, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#effects.
[40] U.S. Environmental Protection Agency, Sulfur Dioxide Basics, What are the harmful effects of SO_2, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#effects.
[41] U.S. Environmental Protection Agency, Sulfur Dioxide Basics, What are the harmful effects of SO_2, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics#effects.
[42] U.S. Environmental Protection Agency, Air Emissions Inventories, National Emissions Inventory, https://www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei. 2023 data is not yet available.
[43] Draft AMNP at F-1 to F-2.
[44] Draft AMNP at E-2.

Table 6: Sulfur Dioxide Emissions in TPY Ranked for Jefferson County According to 2020 National Emissions Inventory (NEI) for Facilities Emitting > 1 tpy of SO_2

Company Name	Site Name	City	Total Sulfur Dioxide Emissions TPY
Oxbow Calcining LLC	Port Arthur Tx Calcining Plant	Port Arthur	9227
ExxonMobil Oil Corporation	Beaumont Refinery	Beaumont	795
TotalEnergies Petrochemicals & Refining USA Inc	Port Arthur Refinery	Port Arthur	356
Motiva Enterprises LLC	Port Arthur Refinery	Port Arthur	338
Arkema Inc	Arkema Beaumont Plant	Beaumont	322
Premcor Refining Group Inc	Valero Port Arthur Refinery	Port Arthur	321
Jefferson Terminal South LLC	Beaumont Site	Nederland	236
Air Products LLC	Air Products Port Arthur Facility	Port Arthur	50
Chemtrade Refinery Services Inc	Beaumont Facility	Beaumont	24
DCP Operating Company LP	Port Arthur Gas Plant	Port Arthur	15
Chevron Phillips Chemical Company LP	Port Arthur Plant	Port Arthur	9
Motiva Enterprises LLC	Port Arthur Chemicals	Port Arthur	8
Energy Transfer Nederland Terminal LLC	Nederland Terminal	Nederland	8
Indorama Ventures Oxides LLC	Port Neches Operations	Port Neches	6
ExxonMobil Oil Corporation	Beaumont Chemical Plant	Beaumont	5
BASF Total Petrochemicals LLC	BASF Total Nafta Region Olefins Complex	Port Arthur	5
Goodyear Tire & Rubber Company	Beaumont Chemical Plant	Beaumont	3
Phillips 66 Pipeline LLC	Beaumont Terminal	Nederland	2
		TOTAL	11,730

It is not clear, given these sizeable emissions, why TCEQ does not include this facility in its annual report in Appendix F. Amongst the state's largest emitters, Oxbow Calcining is uniquely situated near a relatively dense urban area. Oxbow Calcining's emissions should

therefore be recognized as a serious public health concern and an environmental justice concern.

PACAN has and continues to advocate for better emissions controls and air monitoring from Oxbow Calcining. Despite known concerns, Oxbow Calcining has for decades refused to install modern pollution controls. Rather, Oxbow Calcining has modified its plant to attempt to avoid NAAQS exceedances at the Port Arthur 7th Street Gate 2 SO_2 monitor, which ostensibly is supposed to detect peak SO_2 concentrations under the 2015 Data Requirements Rule (DRR) for the 1-hour SO2 NAAQS.[45]

To better understand the dispersion of SO_2 emissions from Oxbow Calcining and to hopefully assist TCEQ in best locating an SO_2 monitor(s) in and around Oxbow Calcining and West Port Arthur, PACAN commissioned an expert, I2M Associates, LLC, to conduct an SO_2 air quality analysis for Port Arthur. The modeling results raised concerns, including that:[46]

> Oxbow's SO2 emissions at their permitted rates are predicted, based on AERMOD modeling of Oxbow hot stacks using Oxbow's emission point input parameter values, to result in significant numbers of exceedances of the SO2 NAAQS one-hour standard in Port Arthur, Texas and Jefferson County. The modeling results are consistent with the ambient monitoring data for local monitors, substantiating the exceedances of the SO2 NAAQS one-hour standard in Jefferson County.

Results of the I2M modeling are reflected below in **Figure 14** and **Figure 15**. Specifically, **Figure 14** shows concentrations up to 10km from Oxbow. **Figure 15** shows the area where modeling receptors were predicted to exceed the SO_2 NAAQS one-hour standard of 196 ug/m3 (75 ppb) based on 2017 information from the EPA's NEI.

[45] Texas Commission on Environmental Quality, 2024 Draft Air Monitoring Network Plan, at 15; 40 C.F.R. Part 51, Subpart BB.

[46] I2M Associates, Report of Findings, Port Arthur Industrial Source Sulfur Dioxide (SO2) Air Quality Modeling—Oxbow SO2 Emissions Assessment, Jefferson County, Texas (July7, 2021), at 23.

Figure 14. Modeled Concentrations of SO_2 Near the Oxbow Calcining Facility in West Port Arthur[47]

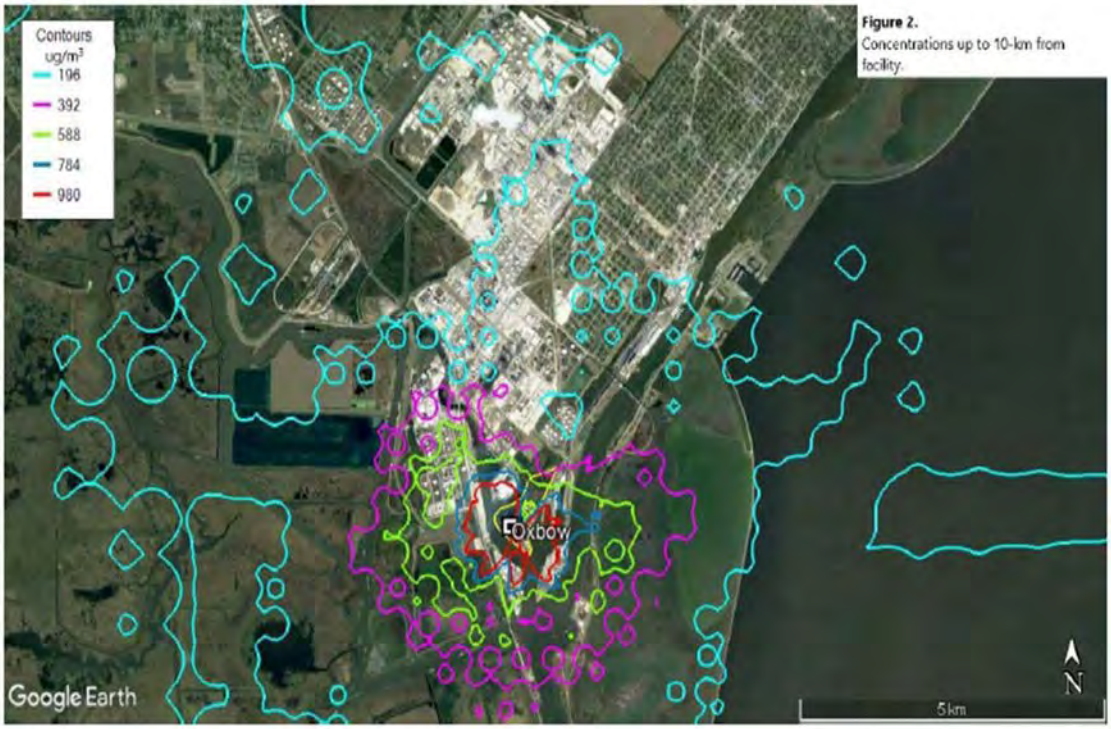


Figure 15. Modeled Locations of One-Hour NAAQS Exceedances for SO_2 Near the Oxbow Calcining Facility in West Port Arthur[48]

Figure 16 shows the 10 top receptor locations based on the frequency of 1-hour exceedances and high normalized values per modelling and analysis performed by TCEQ itself. To comply with the DRR and ensure SO_2 levels in Port Arthur are not exceeding the NAAQS, TCEQ must include a better placed monitor(s) near and around Oxbow to fully reflect the reality of emissions in the area.

[47] I2M Associates, Report of Findings, Port Arthur Industrial Source Sulfur Dioxide (SO2) Air Quality Modeling—Oxbow SO2 Emissions Assessment, Jefferson County, Texas (July7, 2021), at 19.
[48] I2M Associates, Report of Findings, Port Arthur Industrial Source Sulfur Dioxide (SO2) Air Quality Modeling—Oxbow SO2 Emissions Assessment, Jefferson County, Texas (July7, 2021), at 21.

Figure 16. Top Modeling Receptors Near the Oxbow Calcining Facility in West Port Arthur[49]



PACAN has repeatedly raised concern that the Port Arthur West 7th Street Gate 2 monitor used to fulfill its DRR requirements vis a vis Oxbow Calcining is not adequately capturing the highest SO_2 levels, particularly in light of Oxbow Calcining's modifications to its plant. The monitor is not located at one of the highest ranked receptors noted in **Figure 16.**

2. Large Particulate Matter (PM_{10}) Air Monitoring in Port Arthur/ Beaumont

Particulate matter (PM) refers to microscopic particles in the atmosphere that are hazardous to human health. PM, sometimes referred to in everyday language as soot, dust, or smoke, consists of very small solid particles or liquid droplets suspended in the air.[50] While some PM can be seen with the naked eye, some are so small that they can only be seen by an electron

[49] Texas Commission on Environmental Quality, PA Report, Air Modeling for 2019 Air Monitoring Network Plan (June 21, 2019)
[50] U.S. Environmental Protection Agency, Particulate Matter Basics, What Are the Harmful Effects of PM, https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#effects.

microscope.[51] The smaller the particles, typically the more threatening they are to human health—smaller particles are more capable and likely to penetrate deep into the respiratory system and lodge themselves into a person's lungs.[52] Recent studies indicate PM can have many effects on the human body, including:

- Cause lung irritation, leading to increased permeability in lung tissue;
- Aggravate the severity of lung disease, causing rapid loss of airway function;
- Cause inflammation of lung tissue, resulting in the released of chemical which can negatively impact heart function;
- Cause changes in blood chemistry that can result in clots which may lead to heart attacks; and
- Increase susceptibility to viral and bacterial pathogens leading to pneumonia in vulnerable persons unable to clear those pathogens and infections.

The NAAQS regulate both $PM_{2.5}$ and PM_{10}. $PM_{2.5}$—those with a diameter of 2.5 micrometers or less—are considered of greatest health concern. Still, PM_{10}—those with a diameter of 10 micrometers or less—are considered inhalable and can negatively impact human health. PM can also get into a person's bloodstream. TCEQ must ensure its monitoring plan adequately monitors both $PM_{2.5}$ and PM_{10}.

PM is also the main cause of reduced visibility in the United States. Just as other criteria pollutants are precursors of O_3, including SO_x, NO_x, VOCs, these criteria pollutants are precursors of PM. Other chemicals such as ammonia are also considered precursors to PM. Thus, while facilities may directly emit PM, PM may be formed by other emissions and TCEQ must be mindful of this when it anticipates or models future PM concentrations.

TCEQ is required to place 0-1 PM_{10} monitors in the Beaumont-Port Arthur area.[53] The Draft AMNP proposes 0 such monitors in the area as part of the plan, rather than electing to place at least 1. A PM_{10} monitor should be located at the Beaumont-Port Arthur area or a new near-road monitor located near Interstate-10. As noted in the regulations, '[p]eople moving through downtown areas or living near major roadways or stationary sources, may encounter particle pollution that would be adequately characterized by measurements" at the middle scale. Neighborhood scale monitors can be appropriate for "areas where people commonly live and work for extended periods."[123] The East Side of Beaumont, for example, meets these criteria. Interstate 10 through downtown Beaumont is one of the state's busier roadways and the area has numerous other PM sources including many railroads, the Port of Beaumont, and major industrial facilities. Additionally, the residents of Beaumont's East Side are particularly susceptible and vulnerable to health issues.

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[51] U.S. Environmental Protection Agency, Particulate Matter Basics, What Are the Harmful Effects of PM, https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#effects.
[52] U.S. Environmental Protection Agency, Particulate Matter Basics, What Are the Harmful Effects of PM, https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#effects.
[53] TCEQ, 2025 Draft Air Monitoring Network Plan, at J-2.

C. Harris County

In the American Lung Association's State of the Air Report Card, Harris County rated an "F" for its air quality for ozone based on a weighted annual total of 71 "orange days" for ozone where the ozone levels in the air were "unhealthy for sensitive groups" observed and 21 "red days" where ozone pollution was "unhealthy" from 1996 to 2003.[54] For particulate pollution, the county received a grade of C for its 24-hour pollution rates based on a weighted annual total of 4 "orange days" for particulates where the particulate pollution levels in the air were "unhealthy for sensitive groups" from 1996 to 2003.[55] In addition, Harris County received a failing grade for particulate pollution as it is not meeting the current national standard for $PM_{2.5,}$ i.e., the county is above 9.1 $\mu g/m^3$ for annual $PM_{2.5}$. Based on the demographic statistics available for 2023 used in the state of the Air Report, **Table 7** reflects Harris County population data for the following socially vulnerable populations:[56]

Table 7: Harris County Population Demographics	
Total Population:	4,835,125
Children Under 18:	1,239,210
Adults 65 & Over:	586,125
Pediatric Asthma:	93,301
Adult Asthma:	303,648
COPD:	172,540
Lung Cancer:	2,063
Cardiovascular Disease:	260,118
Pregnancy:	62,795
Poverty Estimate:	764,979
People of Color:	3,529,941

1. Pasadena, Channelview, and Surrounding Communities near the Houston Ship Channel

a. More air monitors are needed in Pasadena to be proportional to monitoring in smaller, more affluent whiter communities like Deer Park.

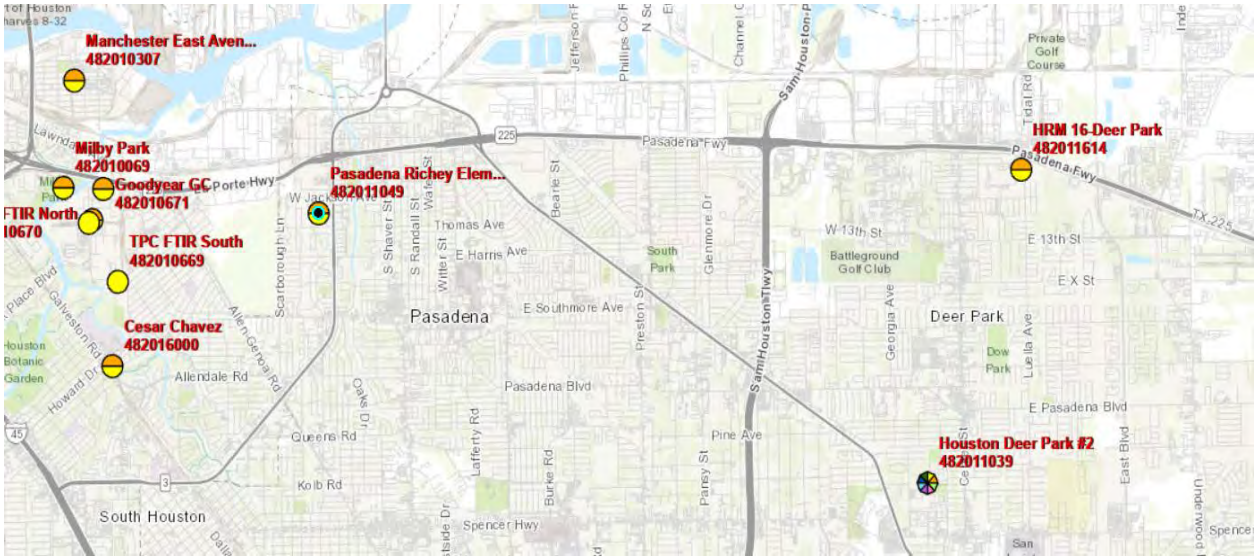
As shown below in **Table 8** and **Figure 17**, TCEQ only has one air monitor in the City of Pasadena, Pasadena Richey Elementary (#482011049), a VOC monitor located at 610 2/3 South

[54] *See* American Lung Association, State of the Air Report, Scores for Harris County, Texas, available at https://www.lung.org/research/sota/city-rankings/states/texas/harris.
[55] Id.
[56] *Id.*; *see also* American Lung Association, State of the Air Report, Report Methodology, available at: https://www.lung.org/research/sota/about-the-report/understanding-the-grades.

Richey Street, Pasadena, Texas. This monitor is insufficient for monitoring air quality for Pasadena residents for a number of reasons.

Table 8: Pasadena Air Monitor			
EPA Site No.	Monitor Name	Location	Pollutant(s) Monitored
482011049	Pasadena Richey Elementary School	610 2/3 South Richey Street	VOCs

Figure 17. Air Monitors in Pasadena[57]



First, Pasadena is a city covering 44.74 square miles with a population of 146,716 in 2024.[58] Pasadena is the 20th most populous city in Texas, and the second largest city in Harris County, Texas. Given the city's large size, the Pasadena Richey Elementary monitor, located in the upper northwestern corner of Pasadena, cannot accurately capture air quality for much of the city. By comparison, the neighboring city of Deer Park, Texas is a quarter of Pasadena's size in area (10.57 square miles) and population (33,176),[59] yet it has two monitors: (1) a VOC monitor, HRM 16-Deer Park (#482011614), and (2) a more comprehensive monitor, Houston Deer Park #2 (#482011039), which tracks VOCs, nitrogen, $PM_{2.5}$ and PM_{10}, O_3, SO_2, NO_2, NO_y, CO, and carbonyl. Both Pasadena and Deer Park are highly industrial regions; however, Deer Park has a monitor for every 5.285 square miles (or a monitor per 16,734 people), whereas Pasadena has

[57] Texas Commission on Environmental Quality, Air Monitoring Sites, GeoTAM Map Viewer, https://www.tceq.texas.gov/airquality/monops/sites/air-mon-sites.
[58] U.S. Census Bureau, Quick Facts, Pasadena city, Texas, available at https://www.census.gov/quickfacts/fact/table/pasadenacitytexas/PST045219.
[59] U.S. Census Bureau, Quick Facts, Deer Park city, Texas, available at https://www.census.gov/quickfacts/fact/table/deerparkcitytexas/PST045224.

one monitor for 44.74 square miles (or a monitor per 147,662 people). Even if TCEQ does not install an air monitor to cover every five square miles in Pasadena, the discrepancy between Pasadena and Deer Park demonstrates that one air monitor is not enough.

Second, the Pasadena Richey Elementary monitor's location is likely deficient because the wind in Pasadena often blows from the southeast. As **Figure 18** shows, many facilities that are part of the U.S. EPA's Toxics Release Inventory (TRI) program in Pasadena are in the southeastern part of the city. TCEQ should place another air monitor in Pasadena that can better capture the air quality impacts of these facilities specifically on Pasadena residents.

Figure 18. Wind Direction in Pasadena

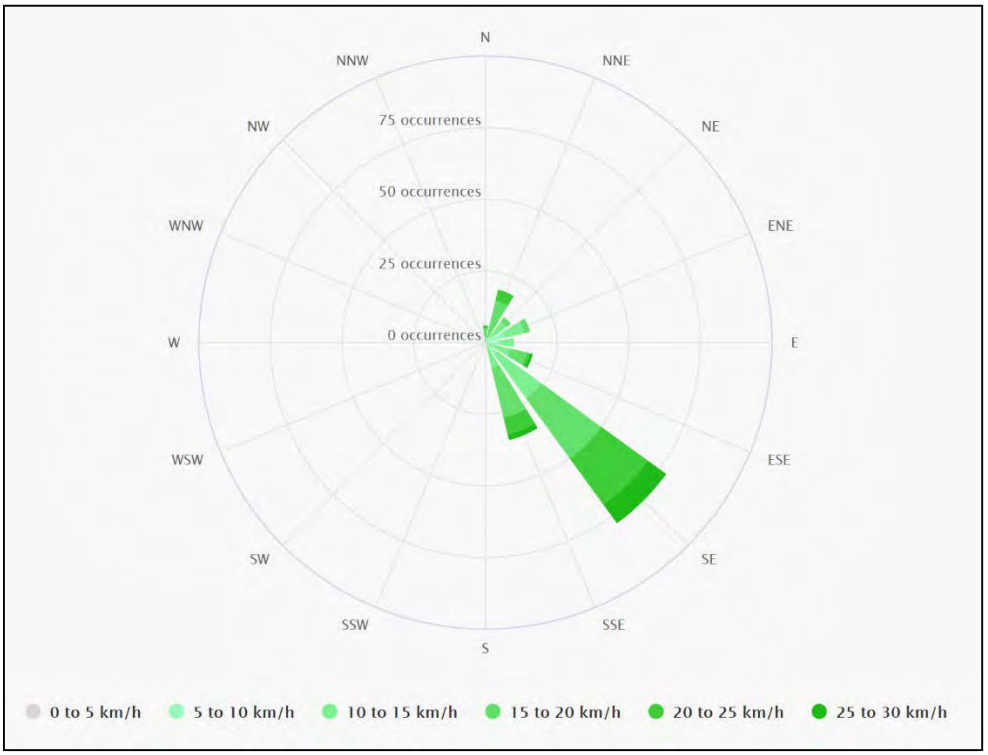
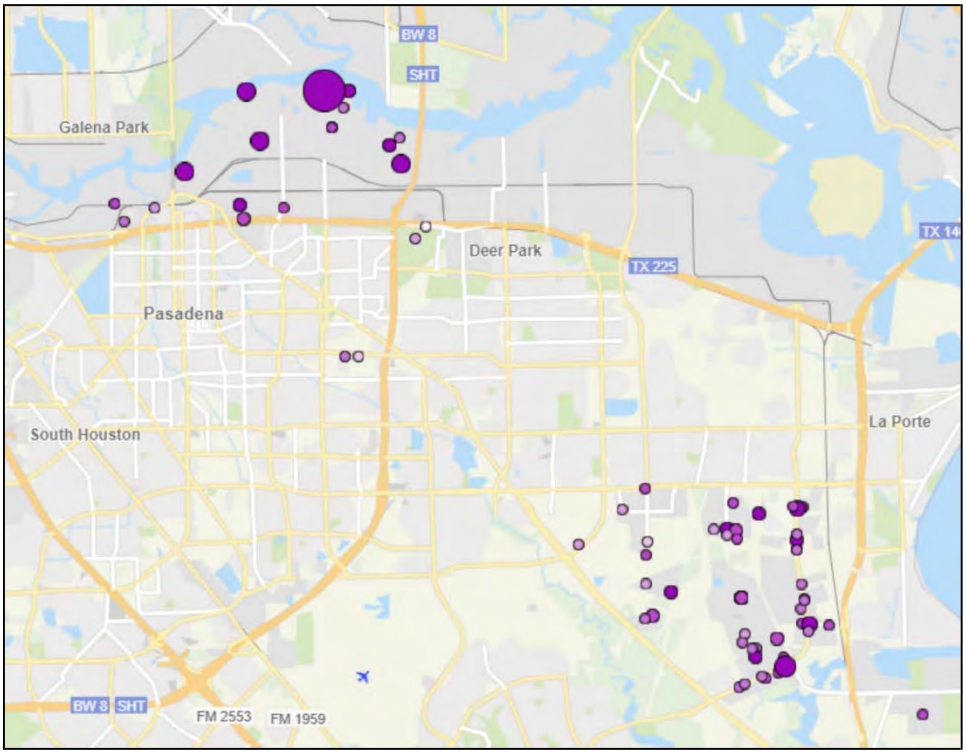


Figure 19. TRI Facilities in Pasadena



Third, Pasadena Richey Elementary only tracks VOCs. There are at least 62 facilities located in Pasadena, Texas registered with the EPA and regularly making TRI reports. These facilities report not only VOCs, but also other chemicals, including ammonia and heavy metal compounds—such as cobalt, nickel, and zinc compounds. In addition, other types of facilities, including five concrete batch plants, emit particulate matter. TCEQ should install additional monitors in Pasadena that can better capture non-VOC chemicals and particulate matter.

CPC recognizes that there are other air monitors in municipalities surrounding Pasadena, such as Deer Park, Houston, Shore Acres, Seabrook, and League City that measure other air pollutants in addition to VOCs. However, these monitors listed in **Table 9** do not reflect the air pollutants inside the Pasadena community. Accordingly, the presence of monitors around Pasadena do not guarantee that air quality is being adequately monitored in Pasadena, nor that the public has a complete picture of air pollutants in Pasadena.

Table 9: Air Monitors Around the Houston Ship Channel

EPA Site No.	Monitor Name	Location	Pollutant(s) Monitored
482016000	Cesar Chavez	4829A Galveston Rd (Houston)	VOC

Table 9: Air Monitors Around the Houston Ship Channel			
EPA Site No.	**Monitor Name**	**Location**	**Pollutant(s) Monitored**
482011035	Clinton	9525 1/2 Clinton Dr. (Houston)	NO_x, O_3, $PM_{2.5}$, PM_{10}, SO_2, VOC
482010671	Goodyear GC	9728 West Road (Houston)	VOC
482010673	Goodyear Houston Site #2	2000 Goodyear Dr. (Houston)	VOC
482010062	Houston Monroe	9726 1/2 Monroe St. (Houston)	O_3, PM_{10}
482010307	Manchester East Avenue N	9415 East Avenue N (Houston)	VOC
482010069	Milby Park	2201A Central St. (Houston)	VOC
482010416	Park Place	7421 Park Place Blvd (Houston)	NO_x, O_3, SO_2
482010669	TPC FTIR South	8600 Park Place Blvd (Houston)	VOC
482011039	Houston Deer Park #2	4514 1/2 Durant St. (Deer Park)	O3, $PM_{2.5}$, SO_2, VOC
482010057	Galena Park	1713 2nd St.	VOC
		(Galena Park)	
482010061	Shore Acres	3903 ½ Old Hwy 146 (La Porte)	VOC
482011050	Seabrook Friendship Park	4522 Park Rd (Seabrook)	NO_x, O_3, $PM_{2.5}$
482011614	HRM 16-Deer Park	600-658 Luella Ave (Deer Park)	VOC

Fourth, even though the Pasadena Richey Elementary monitor tracks VOCs, the monitor does not ensure accurate monitoring for the many facilities in Pasadena emitting VOCs. For example, CPC has commented on permit applications submitted by Intercontinental Terminals Company's Pasadena facility (ITC Pasadena), located at 1030 Ethyl Road, Pasadena, Texas. In 2021, TCEQ approved ITC Pasadena's New Source Review permit, which treated the facility as a minor source for VOCs, even though the aggregate VOC emissions from the facility, as a whole, would exceed the major source threshold. Given ITC Pasadena's VOC emissions, CPC would expect TCEQ to monitor the facility. However, the Pasadena Richey Elementary monitor is five miles away from ITC Pasadena. Moreover, the monitor is located southwest of ITC Pasadena, which means the monitor is not in the range of prevailing winds.

Finally, Pasadena residents form an environmental justice community surrounded by hazards from existing and new facilities regulated by TCEQ. As **Figure 20** below shows, most northern Pasadena residents are people of color and low-income. Pasadena residents are in the 85th percentile nationally for being at risk of air toxics cancer; 98th percentile for Risk Management Plan site proximity—or proximity to facilities that use extremely hazardous substances; and 86th percentile for exposure to higher levels of $PM_{2.5}$ pollution. By comparison, the residents of neighboring Deer Park, which has two air monitors, are not an environmental justice community. TCEQ must ensure stronger air monitoring in Pasadena that recognizes this environmental justice community and protects Pasadena residents who bear disproportionate air pollution harms.

Figure 20. EJScreen Map of Pasadena by People of Color

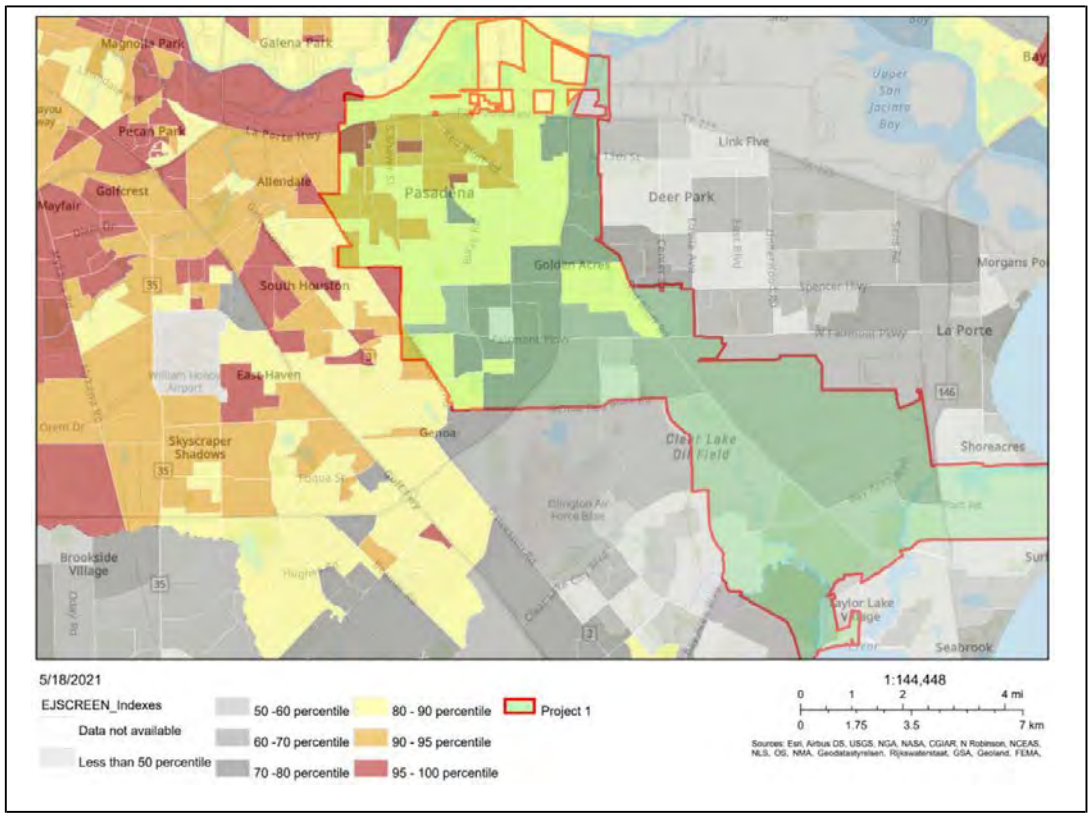
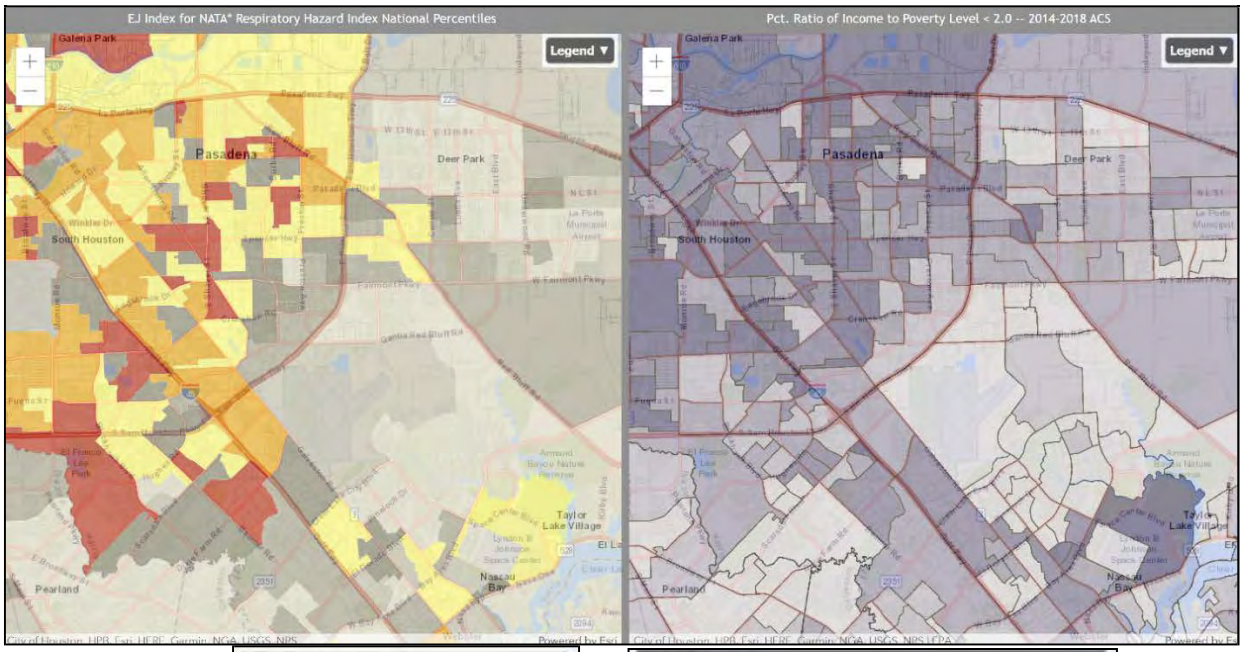
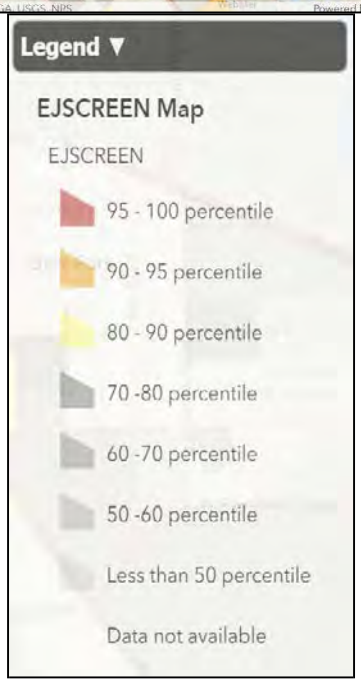
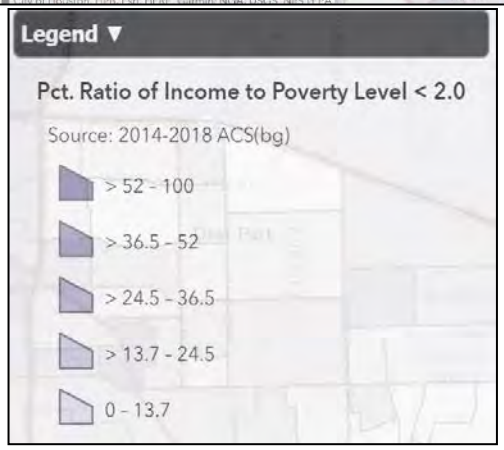


Figure 21. Side-by-Side Maps Comparing the Respiratory Hazard Index with the Ratio of Income to Poverty Level in Pasadena[60]

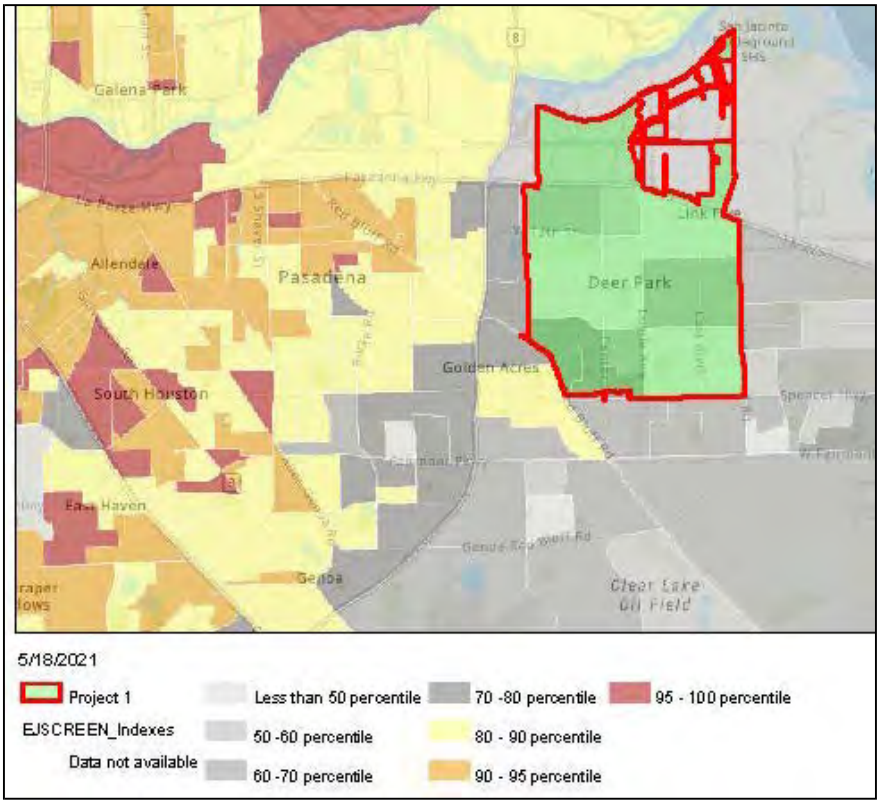






[60] U.S. Environmental Protection Agency, EJScreen: Environmental Justice Screening and Mapping Tool, https://www.epa.gov/ejscreen.

Figure 22. EJScreen Map of Deer Park by People of Color



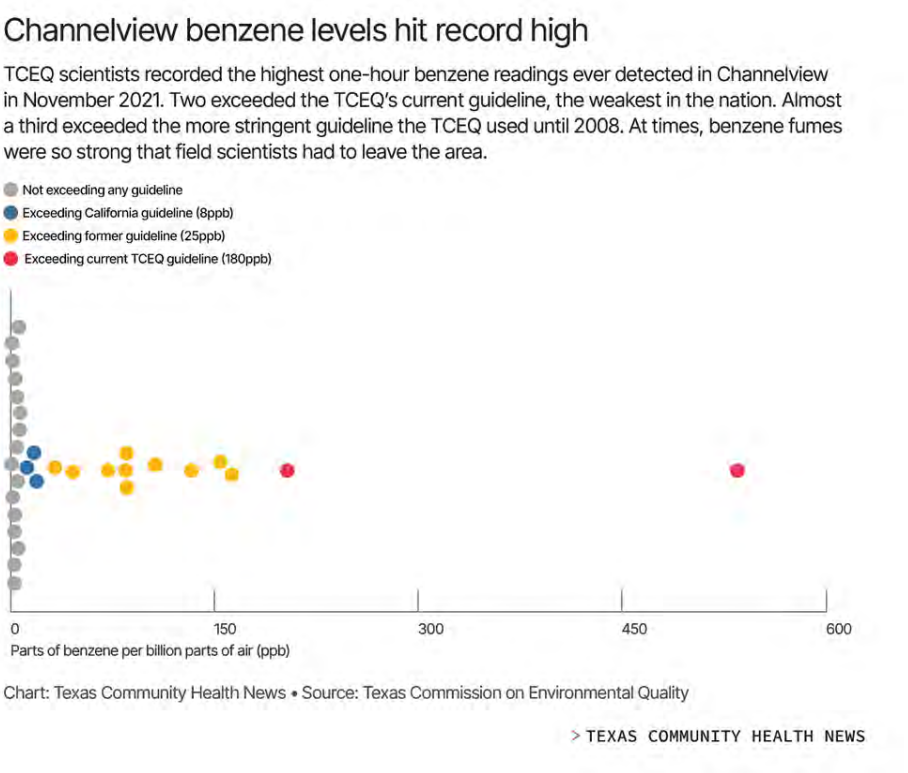
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More monitors would help protect fence line communities in and around Pasadena who bear the brunt of exposure to VOC emissions whenever nearby industrial facilities malfunction or weather a disaster. During Hurricane Harvey, for example, elevated benzene readings were measured by the EPA and a private monitoring firm hired by Environmental Defense Fund and Air Alliance Houston, who both did mobile monitoring in the Manchester area in early September 2017 after the nearby Valero Refinery suffered a damaged storage tank during the storm. After reviewing the air monitoring results, the EPA acknowledged Valero had significantly underestimated the amount of benzene that leaked out and had failed to fully report the community's exposure. Placing VOC monitors in the ship channel communities and Pasadena is important to making sure that these readings are captured, and the community and regulatory agencies are fully informed of these impacts. The 2025 Draft Plan does not propose any additional air monitors for Pasadena. For the reasons mentioned above and further explained in Section IV, TCEQ should site additional air monitors in Pasadena.

b. Documented Benzene readings in Channelview raise community concerns and calls for more air monitoring

Recent news reports[61] have highlighted the growing awareness of severe benzene pollution in the Channelview area. State regulators began warning of this problem over 20 years, and recent mobile monitoring readings by TCEQ in the area have tracked readings that were three times the Texas hourly guideline.[62] The readings also exceeded what is considered safe by the City of Houston, which created its own benzene guidelines in 2020. If the levels found in Channelview had been recorded there, residents would have received one evacuation order, eight shelter-in-place orders and eight alerts. Channelview residents, an unincorporated community in East Harris County, are suffering the impacts of benzene releases and other chemicals without proper protections from the state agency. Additional air monitoring in the area would assist the community in learning more about these ongoing exposures in their area. **Figure 23** below shows the measurements taken in Channelview by TCEQ in November 2021.[63]

Figure 23: TCEQ Mobile Monitoring in Channelview from November 2021 Reveal High Benzene Levels[64]



[61] Savannah Strott, *Levels of Cancer-Causing Benzene Reached New Heights in Beleaguered Channelview, Texas. Regulators Never Told Residents*, PUBLIC HEALTH WATCH (Dec. 12, 2024), available at https://publichealthwatch.org/2024/12/12/houston-air-pollution-benzene-cancer/.
[62] *Id.*
[63] *Id.*
[64] *Id.*

The spikes the TCEQ monitoring team found in 2021 and 2022 are especially alarming because they weren't recorded by the state's closest stationary monitor, whose annual readings are used to gauge residents' cancer risk.[65] Public Health Watch discovered the discrepancy when it compared hourly readings collected by the field scientists with hourly readings from the stationary monitor.[66] The analysis done by Public Health Watch suggests that the TCEQ monitors are not capturing benzene emissions from Channelview's southeastern corner, which would be a reason to put another VOC monitor in this location. The only air monitor listed by TCEQ in the Draft AMNP located in Channelview is at 1405 Sheldon Road, which monitors for NOx, O3 and speciated VOCs,[67] which is shown in **Figure 24** below.

Figure 24. TCEQ-Regulatory Monitors Near Channelview, Texas



Reportings from the speciated VOC cannisters deployed at Channelview Drive Water Tower Monitor (482010036), located at 15913 Channelview Drive, further partially confirms these high

[65] *Id.*
[66] *Id.*
[67] 2005 Draft AMNP at B-23.

mobile monitoring benzene readings in November 2021observed by TCEQ and reported on by Public Health Watch.

Table 10: Ranking of Maximum Daily Benzene Readings from Channelview Drive Water Tower Monitor in November 2021[68]

Day of Monitoring Observation	Max Value (ppb)	Second Highest Value (ppb)	Avg Value (ppb)
November 19, 2021	387.76	12.11	18.81
November 30, 2021	23.39	16.49	4.05
November 10, 2021	15.18	2.72	1.44
November 8, 2021	13.41	3.13	1.78
November 9, 2021	9.54	7.80	2.59
November 21, 2021	8.17	6.13	1.35

According to TCEQ, the value highlighted orange indicates the measured value of the compound exceeds the Short-Term Health Air Monitoring Comparison Value. TCEQ's Long-Term Health Air Monitoring Comparison Value is 8.4 ppb.[69] However, the public was never notified of this or other dangerous health exceedances observed in these monitoring efforts.

Based on ongoing community monitoring efforts and investigations, these monitored events do not appear to be isolated incidents and should require more investigation by the agency or additional monitoring in the Southeast Area of Channelview. Notably, the highest monitored benzene level during the 2019 ITC Deer Park fire at the Lynchburg Ferry station (482011015) was 196.94 parts per billion (ppb) on March 30, 2019, according to a study published by Mary Ann Liebert, Inc during the ITC fire in Deer Park in April 2019.[70] These recent reports are attracting more mobile monitoring efforts in the area, such as monitoring done by Texas A&M University (TAMU) Superfund Research Center, in the summer 2024 as part of an ongoing research project on

[68] TCEQ, Air Monitoring Data from Channelview Drive Water Tower Monitor (482010036) for November 2021, available at https://www.tceq.texas.gov/cgi-bin/compliance/monops/agc_monthly_summary.pl.
[69] *Id.*
[70] Gretchen T. Goldman, Anita Desikan, Richard Morse, Casey Kalman, Taryn MacKinney, Daniel S. Cohan, Genna Reed, and Juan Parras, *Assessment of Air Pollution Impacts and Monitoring Data Limitations of a Spring 2019 Chemical Facility Fire*, ENVIRONMENTAL JUSTICE (Dec. 12, 2022), available at https://www.liebertpub.com/doi/full/10.1089/env.2021.0030.

Mobile Response to Air Pollution in Disasters.[71] On June 30, 2024, the TAMU team recorded benzene hotspots on Lakeside Dr., Market Road, and DeZavala near the residential subdivision of Lakeview Homes in Channelview ranging 180 ppb to 300 ppb. The TAMU research team reported its recent findings out to the local community on April 24, 2025, commenting that its mobile monitor readings would trigger a need for secondary monitoring in the area.

FluxSense Inc., hired by TCEQ to periodically monitor chemical levels in Harris County, including Channelview, filed a report in 2023 which concluded a facility identified only as "Site A" was a source of "persistent and significant" emissions of benzene and several other chemicals that attack the nervous system.[72]

Figure 25. FluxSense Inc.'s Documentation of Benzene Plume from Site A (Sept. 23, 2022)[73]



Based on the map above identified as **Figure 25**, "Site A" is the immediate area around K-Solv's operations in Channelview. Emissions peaked at 1068 parts of benzene per billion (ppb) parts of air and traveled through neighboring homes.[74] TCEQ has allowed K-Solv to expand four times since

[71] Texas A&M University, Superfund Research Center Project Information, available at https://superfund.tamu.edu/research-projects/project-2/.
[72] Fluxsense Report 2023, available at https://www.documentcloud.org/documents/25451984-fluxsense-2023-report/#document/p1.
[73] *Id.*
[74] *Id.*

the agency discovered high levels of benzene near the facility in 2005.[75] K-Solv can now legally release almost 20 times more volatile organic compounds — which include benzene — than it did in 2005.[76] Last year, TCEQ allowed K-Solv to open a second, smaller business in Channelview, which washes trucks that haul chemicals.[77] It, too, releases volatile organic compounds into the air, according to its permit. K-Solv has been the source of a recent large fire in the area in April 2021 involving xylene, another VOC and HAP, described further below.[78] .

Benzene, like other volatile organic compounds or VOCs, is a gas which may adversely affect the health of those exposed to them in the short and long-term.[79] VOCs combine with nitrogen oxides and sunlight to create ground-level ozone and smog; breathing ground-level ozone is harmful for any person, but especially for the elderly, children, and those with health issues like asthma. VOCs also directly cause breathing difficulty and irritation to the respiratory system. Short encounters with high levels of benzene can cause drowsiness, dizziness and unconsciousness, while chronic exposure has long been linked to leukemia and other blood cancers. Recent studies also link the chemical to diabetes and reproductive problems. Finally, VOCs encompass many harmful toxic or carcinogenic pollutants that are also regulated as HAPs, discussed below.

Hazardous Air Pollutants (HAPs) are known as toxic air pollutants or air toxics which cause or may cause cancer or other serious health effects such as "damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory and other health problems." Examples of HAPs include benzene, perchloroethylene, methylene chloride, and xylene. These four chemicals are all volatile organic compounds also known as VOCs. HAPs/VOCs are significant challenges across Channelview and other communities represented in these comments. VOCs react with nitrogen oxide and can form ozone.[145] Sources of VOCs include car exhaust, gasoline powered lawn equipment, gas stations, industrial coating operations, printing shops, paints, chemical manufacturing, refineries, factories, and metal production.[80] Because of the historic and more recently mobile monitoring results identified

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[75] Savannah Strott, *Levels of Cancer-Causing Benzene Reached New Heights in Beleaguered Channelview, Texas. Regulators Never Told Residents*, PUBLIC HEALTH WATCH (Dec. 12, 2024), available at https://publichealthwatch.org/2024/12/12/houston-air-pollution-benzene-cancer/.

[76] Savannah Strott, *Levels of Cancer-Causing Benzene Reached New Heights in Beleaguered Channelview, Texas. Regulators Never Told Residents*, PUBLIC HEALTH WATCH (Dec. 12, 2024), available at https://publichealthwatch.org/2024/12/12/houston-air-pollution-benzene-cancer/.

[77] Savannah Strott, *Levels of Cancer-Causing Benzene Reached New Heights in Beleaguered Channelview, Texas. Regulators Never Told Residents*, PUBLIC HEALTH WATCH (Dec. 12, 2024), available at https://publichealthwatch.org/2024/12/12/houston-air-pollution-benzene-cancer/.

[78] Click2Houston, *Here's what we know about K-solv, owner of the Channelview facility on fire* (April 7, 2021), available at https://www.click2houston.com/news/local/2021/04/08/heres-what-we-know-about-k-solv-owner-of-the-channelview-facility-on-fire/ ; *see also* EPA, K-Solv Response Site, available at *https://response.epa.gov/site/site_profile.aspx?site_id=2918*

[79] U.S. Environmental Protection Agency, Volatile Organic Compound Exemptions, https://www.epa.gov/ground- level-ozone-pollution/volatile-organic-compound-exemptions

[80] U.S. Environmental Protection Agency, Technical Overview of Volatile Organic Compounds, https://www.epa.gov/indoor-air-quality-iaq/technical-overview-volatile-organic-compounds

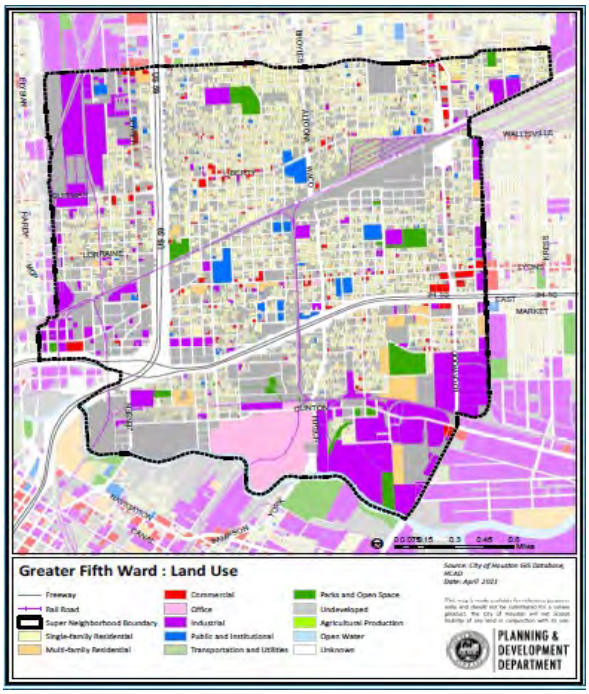
above, Channelview residents want more answers from the state agency on these impacts and more robust monitoring in the area to protect public health.

2. Houston Communities Inside the I-610 Loop: Fifth Ward and Pleasantville

a. Fifth Ward

Progressive Fifth Ward advocates on behalf of Fifth Ward, which is an often neglected and low-income minority community, with 94% of the population identifying as either Black or Hispanic. It is one of Houston's residential neighborhoods with substantial industrial land use surroundings, as shown below in purple in **Figure 26**:

Figure 26. Land Use within the boundaries of Fifth Ward



Industrial uses include the inundation of concrete batch plants (CBPs). **Table 11** below lists CBPs affecting Fifth Ward:

Table 11. Concrete Batch Plants Affecting Fifth Ward

Concrete Batch Plant	Location within Fifth Ward
Texas Concrete Enterprise	3506 Cherry St. (77026)
Texas Concrete Enterprise	3508 Cherry St. (77026)
TexCon Ready Mix	3315 Carr St. (77026)
Cemex Rothwell Concrete Batch Plant	1902 Rothwell St (77020)

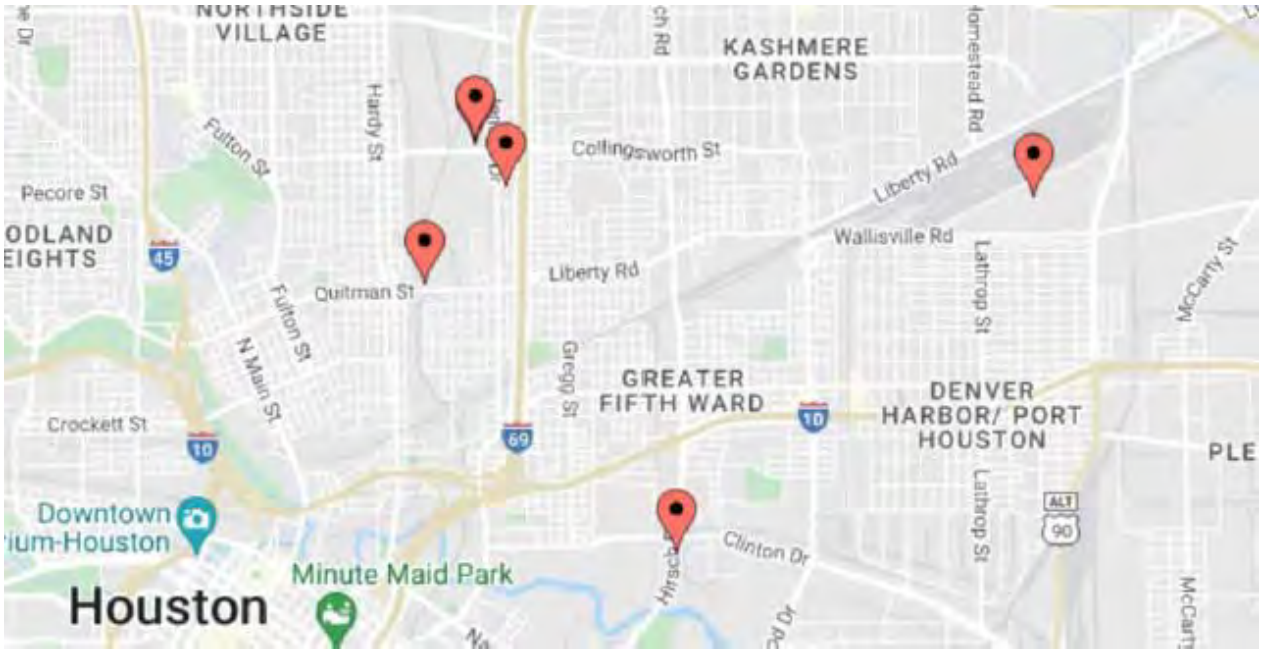
Cemtech Ready Mix Inc.	3116 Jensen Drive (77026)

Metal recycling facilities are also disproportionately located in or around the Fifth Ward **Table 12** below lists recycling facilities affecting Fifth Ward:

Table 12. Metal Recycling Facilities Affecting Fifth Ward

Metal Recycling Facility	Location within Fifth Ward
Derichebourg Recycling USA	7501 Wallisville Rd. (77020)
CMC Recycling	2015 Quitman St. (77026)
Sims Metal	90 Hirsch Rd. (77020)

Figure 27. Map of Industrial Sites Affecting Fifth Ward



As the map in **Figure 27** above demonstrates, there are several industrial sites near Fifth Ward, which is highly burdensome for a community of less than 5 square miles. Both CBPs and metal recycling facilities are known emitters of air pollutants, including particulate matter, crystalline silica, lead, and other VOCs. When inhaled, these pollutants can cause a range of health issues, including respiratory and cardiovascular diseases. With a dense population of approximately 20,000, or 4,000 people per square mile47, it is imperative that the proposed monitors are placed in locations that accurately reflect the community's dire situation with respect to air pollution caused by these industries.

Progressive Fifth Ward is particularly concerned about their most sensitive populations, such as children and older adults. In 2019, the City of Houston determined 25% of Fifth Ward's population was under 17 years, and 11% of the population was 65 year or older.48 Several schools, day care centers, and senior centers are all located in proximity to culprits of toxic air pollutants. For example, Sims Metal

recycling facility is approximately only 1 mile from East Orange Ame Church Day Care, Phillis Wheatley High School, and YES Prep Secondary School. Both Cemtech Concrete Ready Mix and CMC Recycling are a little over 1 mile from Dogan Elementary School. These industrial facilities are also close to JW Peavy Senior Center and Community Fellowship's Senior Citizens Center, both within the Fifth Ward area.

Progressive Fifth Ward is further concerned about individuals with health issues that are both brought on and further exacerbated by the industrial polluters in the community. For example, both the EPA's EJ Screen Mapping Tool and the Houston Health Department (HHD) confirm that Fifth Ward falls within the worst 25% of neighborhoods in Texas with respect to prevalence of asthma in adults, a health condition in which a person's air passages become inflamed, and the narrowing of the respiratory passages makes it difficult to breathe.49 Nearly 11% of all adults in the Fifth Ward area have been told by a healthcare provider that they currently have asthma.50 Similarly, Fifth Ward falls within the worst 25% of neighborhoods in Texas with respect to prevalence of coronary heart disease in adults, with more than 8% of adults receiving a diagnosis of heart disease.51 The proposed air monitoring should ensure that the concerns regarding these sensitive populations are adequately addressed.

Progressive Fifth Ward appreciates that TCEQ acknowledges Fifth Ward needs more air monitoring. In 2022-2024, TCEQ's AMNP proposed a PM10 FEM continuous monitor, a PM2.5 FEM continuous monitor, a canister to measure VOCs every sixth day, and meteorological monitors to measure wind speed, wind direction, and outdoor temperatures, in Fifth Ward. For years (2020-2024), residents and advocates for Fifth Ward have submitted comments on TCEQ's AMNP, and TCEQ has responded to these concerns by allocating air monitors to the area. However, it has taken an exceptionally long time to see the monitors installed. The 2025 Draft AMNP now states that these monitors will be deployed by December 31, 2025, at Houston Finnegan Park.

Fifth Ward needs these regulatory monitors to be installed as soon as possible. Progressive Fifth Ward also notes that prior to TCEQ's proposal of FEM monitoring in Fifth Ward, the City of Houston initiated limited community air monitoring in the area. As highlighted in our 2024 AMNP comments, the City of Houston installed a Clarity air monitor to evaluate PM2.5, and this monitor is mere steps from Texas Concrete Ready Mix, a BARC animal shelter, and near a local park named Brewster Park. **Table 13** shows that over 66% of the days from May 13, 2023 to May 13, 2024 that there were exceedances of the old NAAQS for $PM_{2.5}$ at this monitor.

Table 13. $PM_{2.5}$ from Clarity Monitor Near Fifth Ward—3300 Carr St. (77026)[81]

[81] Data available at https://openmap.clarity.io/.

Date	$\underline{PM_{2.5}}$ ($\mu g/m^3$)
05/08/2024	34.54
12/31/2023	32.13
05/07/2024	27.94
06/06/2023	26.07
11/22/2023	26.03
06/16/2023	25.59
11/18/2023	25.58
11/28/2023	25.27
03/14/2024	25.15
03/31/2024	25.05
02/18/2024	25.02
04/16/2024	24.53
04/17/2024	24.46
04/08/2024	24.43
05/06/2024	24.15
04/26/2024	23.6
03/27/2024	23.55
06/14/2023	23.48
05/23/2023	23.38
01/21/2024	23.34
07/26/2023	23.32
04/18/2024	23.15
05/22/2023	23.12
07/16/2023	22.87
06/15/2023	22.78
04/27/2024	22.77
07/15/2023	21.97
06/19/2023	21.77
02/27/2024	21.74
07/27/2023	21.67
06/20/2023	21.6
05/21/2023	21.29
05/26/2023	21.19
07/25/2023	20.84
06/22/2023	20.76
07/28/2023	20.64
08/24/2023	20.29
04/15/2024	20.2
12/14/2023	20.18
04/19/2024	20.14
08/31/2023	20.11
09/17/2023	19.86
07/14/2023	19.79
[illegible]	[illegible]

Date	$\underline{PM_{2.5}}$ ($\mu g/m^3$)
03/01/2024	19.73
04/01/2024	19.6
03/07/2024	19.55
04/07/2024	19.45
12/02/2023	19.35
02/26/2024	19.28
01/22/2024	19.18
05/25/2023	18.89
06/13/2023	18.87
03/23/2024	18.73
07/18/2023	18.73
06/05/2023	18.67
07/09/2023	18.56
06/18/2023	18.53
01/06/2024	18.46
10/17/2023	18.46
11/23/2023	18.37
11/30/2023	18.36
09/10/2023	18.18
05/05/2024	18.12
07/13/2023	18.12
05/24/2023	18.12
12/05/2023	18.11
08/30/2023	18.01
08/23/2023	17.97
07/19/2023	17.94
10/27/2023	17.93
11/24/2023	17.85
03/13/2024	17.84
01/17/2024	17.78
08/25/2023	17.68
02/01/2024	17.67
03/22/2024	17.62
03/16/2024	17.55
01/18/2024	17.54
10/25/2023	17.47
05/27/2023	17.43
05/20/2023	17.43
03/03/2024	17.25
01/05/2024	17.24
06/01/2023	17.22
12/01/2023	17.09
04/06/2024	16.99
[illegible]	[illegible]

Date	$\underline{PM_{2.5}}$ ($\mu g/m^3$)
05/09/2024	16.89
04/28/2024	16.89
12/21/2023	16.87
09/01/2023	16.69
07/11/2023	16.56
07/17/2023	16.47
11/17/2023	16.38
04/25/2024	16.37
02/09/2024	16.34
01/11/2024	16.29
05/14/2023	16.28
02/10/2024	16.22
08/22/2023	16.12
06/17/2023	16.07
03/24/2024	16.03
07/29/2023	16.03
01/07/2024	16.02
08/21/2023	15.99
12/22/2023	15.96
07/20/2023	15.94
12/20/2023	15.92
12/17/2023	15.92
08/12/2023	15.84
06/21/2023	15.81
10/16/2023	15.8
01/14/2024	15.77
08/29/2023	15.75
12/04/2023	15.67
12/26/2023	15.65
03/05/2024	15.64
03/04/2024	15.63
12/16/2023	15.6
09/13/2023	15.51
08/20/2023	15.45
04/03/2024	15.38
02/05/2024	15.28
09/27/2023	15.24
02/22/2024	15.21
01/31/2024	15.19
04/09/2024	15.18
10/03/2023	15.16
11/14/2023	15.14
02/08/2024	15.1
09/26/2023	15.06

Date	$\underline{PM_{2.5}}$ ($\mu g/m^3$)
07/31/2023	14.99
12/10/2023	14.98
12/30/2023	14.81
08/11/2023	14.81
06/08/2023	14.78
08/13/2023	14.74
09/14/2023	14.73
05/01/2024	14.7
05/04/2024	14.69
02/23/2024	14.68
03/30/2024	14.65
12/18/2023	14.65
02/19/2024	14.64
08/27/2023	14.64
12/12/2023	14.61
02/25/2024	14.56
01/25/2024	14.5
01/03/2024	14.44
09/28/2023	14.43
11/16/2023	14.39
05/17/2023	14.39
05/31/2023	14.38
10/01/2023	14.37
07/10/2023	14.35
06/26/2023	14.35
07/06/2023	14.33
09/11/2023	14.32
11/02/2023	14.23
05/30/2023	14.2
12/06/2023	14.19
08/09/2023	14.19
08/28/2023	14.16
03/02/2024	14.14
03/15/2024	14.12
05/03/2024	14.09
09/09/2023	13.92
07/12/2023	13.92
10/24/2023	13.9
08/26/2023	13.85
08/04/2023	13.83
02/21/2024	13.8
04/29/2024	13.71
11/04/2023	13.7
03/13/2024	13.69

Date	$PM_{2.5}$ ($\mu g/m^3$)
11/03/2023	13.68
08/19/2023	13.64
10/26/2023	13.62
04/14/2024	13.6
12/15/2023	13.59
05/02/2024	13.58
10/02/2023	13.55
12/08/2023	13.48
06/02/2023	13.48
11/12/2023	13.46
02/06/2024	13.4
12/24/2023	13.39
01/02/2024	13.36
06/04/2023	13.31
07/23/2023	13.3
08/14/2023	13.29
09/16/2023	13.27
07/30/2023	13.21
05/11/2024	13.15
07/02/2023	13.13
08/16/2023	13.12
08/10/2023	13.12
08/02/2023	13.12
07/08/2023	13.1
04/24/2024	13.09
06/23/2023	13.02
10/19/2023	13.01
07/21/2023	12.98
12/13/2023	12.97
04/30/2024	12.96
02/13/2024	12.93
05/18/2023	12.92
11/25/2023	12.86
[illegible]	[illegible]

Date	$PM_{2.5}$ ($\mu g/m^3$)
01/01/2024	12.82
03/12/2024	12.78
11/29/2023	12.78
11/01/2023	12.74
01/12/2024	12.7
01/10/2024	12.64
12/11/2023	12.64
09/25/2023	12.63
08/06/2023	12.63
12/29/2023	12.61
10/28/2023	12.58
03/09/2024	12.56
01/20/2024	12.53
09/12/2023	12.5
09/02/2023	12.48
08/08/2023	12.47
07/04/2023	12.45
06/24/2023	12.44
11/11/2023	12.42
01/29/2024	12.41
12/28/2023	12.37
04/04/2024	12.36
09/19/2023	12.34
05/29/2023	12.28
01/30/2024	12.27
08/07/2023	12.27
08/01/2023	12.24
09/04/2023	12.22
08/17/2023	12.21
09/08/2023	12.17
10/10/2023	12.11
[illegible]	[illegible]

The data obtained at this monitor from 2023-2024, which recorded 242 days out of 365 days where the monitor registered above 12.0 $\mu g/m^3$ for $PM_{2.5}$ further demonstrates the need for monitoring industrial sites, such as concrete batch plants, located in residential communities. Accordingly, Progressive Fifth Ward reiterates its appreciation of TCEQ's commitment to air monitoring in Fifth Ward and requests an update from TCEQ regarding the timeline for the installation of the monitors at Finnegan Park. Progressive Fifth Ward has been monitoring the progress closely and has been informed by the City of Houston that all permits have been approved for the site, so TCEQ's contractor should be able to begin construction shortly. Hopefully, the recent meeting on May 1, 2025 between the City,

TCEQ and its contractor confirmed a construction plan to ensure installation of this monitor before the deadline stated in this year's AMNP.

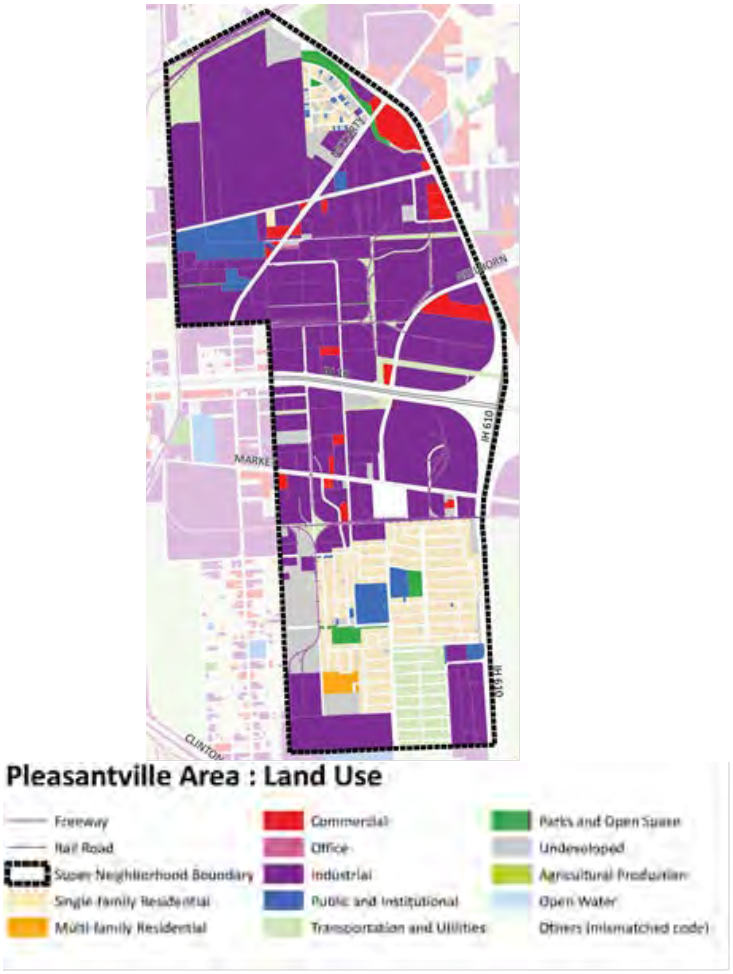
b. Pleasantville Concerns

The Pleasantville Area, designated as part of Houston's Super Neighborhood 57, includes many industrial areas, as well as two distinct residential areas. Groveland Terrace is a small residential area in the north, and south of Interstate 10 (East Freeway) is the Pleasantville subdivision. The high homeownership rate and strong neighborhood identity in Pleasantville has staved off deterioration even as the residential area has been surrounded by warehouses and industries.

The Pleasantville neighborhood is predominantly Black/African American and Latino/Hispanic, with 64% of Pleasantville Elementary School's 301 students identified as Black/African American, 34% as Latino/Hispanic, and 2% as white or mixed race. Ninety-five percent of Pleasantville Elementary students qualify for free or reduced-price lunch and 15% are learning as English as a second language.

A map created by the City of Houston Planning and Development Department of Neighborhood 57 and the related land usage in the area is shown below:

Figure 27: Land Use in the Pleasantville Area



As shown in the map above, most of the land use in Super Neighborhood 57 is industrial. There are a few pockets of single-family residential properties found in the Super Neighborhood boundaries: Groveland Terrace, at the northern end of the Super Neighborhood, and Pleasantville in the southern part. Despite the industrial presence in the neighborhood, the single-family homes in this area are no less deserving of protection from contamination caused by their industrial neighbors. Air monitoring is critical to ensure that the air they breathe is not contaminated with pollution from the ship channel facilities and truckyards nearby.

Super Neighborhood 57 has advocated for air monitoring within its borders because of the proximity to the Houston Ship Channel and various port-related activities. These organizations have worked to implement community-led air monitoring program in the neighborhood with at least one continuous air monitor installed in 2020 utilizing funding through available through the Environmental Defense Fund. The Pleasantville community continues to have concerns that air pollution levels may exceed health based and regulatory standards within their neighborhood. Without the new TCEQ monitoring instruments promised in the past several AMNPs installed, it is difficult to fully understand the levels and associated risk. Since 2019,

ACTS has been operating a first-in-the-state community-led air monitoring network. Results of those monitors show that in 2023, four of six monitors in the neighborhood exceeded the updated $PM_{2.5}$ NAAQS standard of 9 µg/m3. ACTS recently added a total VOC measurement and plans to conduct additional air toxics monitoring to better understand those risks as well.

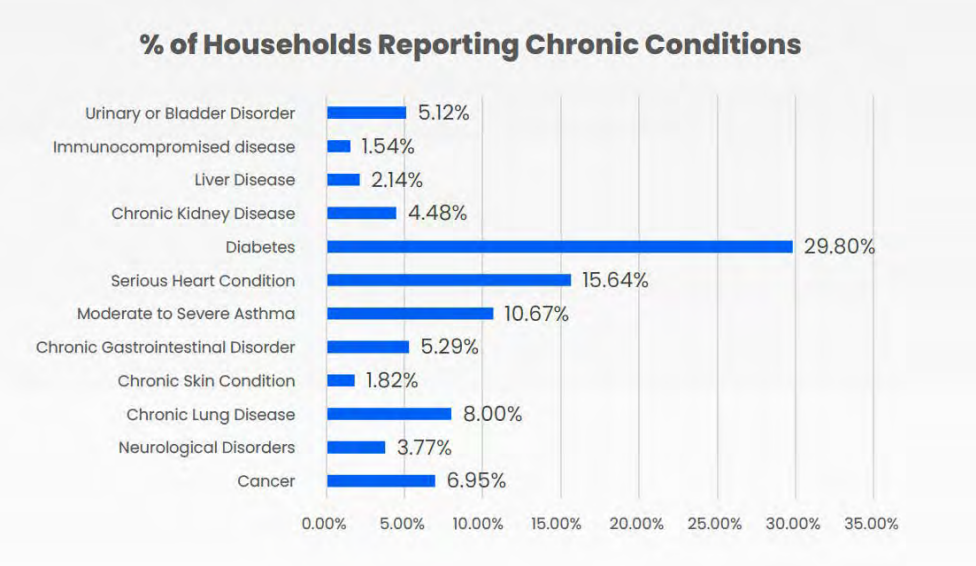
Table 14: Mean $PM_{2.5}$ readings from community-based monitors in Pleasantville for 2023.

Monitor	Mean $PM_{2.5}$ ($\mu g/m^3$)	Mean AQI
1	11.5	45.6
2	5.6	28.5
3	13.6	51.7
5	13.9	60.6
6	7.4	30.5
7	12	47.1

Highlighted cells represent monitors indicating exceedance of updated NAAQS standard.

The Pleasantville community participated in a health survey recently, which found high rates of chronic conditions exacerbated by air pollution. Within the community 15.6% of residents have serious heart conditions, 10.7% have moderate to serious asthma, and 8% have chronic lung disease. Community members express concerns about health conditions in the community and continue to need additional air monitoring data in order to protect vulnerable community members during high pollution events.

Figure 28: Rates of chronic health conditions among Pleasantville residents.



The community is also concerned about a lack of monitoring data while there is an increase in industrial activity and emissions planned in the years to come, including a planned expansion of the 610 freeway and increased emissions from Project 11 ship channel dredging material being brought into the community. It will be essential to have enough baseline air monitoring data *prior* to these activities beginning to ensure that their impacts can be accurately measured.

For all of these reasons, Super Neighborhood 57 is pleased that the TCEQ still plans to install air monitors at Pleasantville Elementary in Pleasantville by December 31, 2025. These VOC and PM monitors will help the community assess its exposure to particulate matter from the industrial build out in the area, particularly truck traffic along Loop Interstate- 610 related to port operations nearby. SN57 is anxious to see these monitors installed, having been waiting for almost 3 years for their installation. TCEQ's contractor needs to complete this work to get the monitors installed at Pleasantville Elementary this year as promised. We also encourage TCEQ to work to keep LSLA, SN57 and other community partners, like ACTS, updated on progress of the monitor installation process.

Unfortunately, TCEQ's 2025 draft AMNP includes language that threatens to undercut monitoring data in these communities before it is even collected. In the Draft AMNP, TCEQ references to 40 CFR § 58.30, titled "Special considerations for data comparisons to the NAAQS". TCEQ emphasizes that only certain PM2.5 monitors will be used for compliance with the annual PM2.5 NAAQS. TCEQ plans to only include monitors representative of 'area-wide' air quality will be in its annual PM2.5 NAAQS compliance and emphasize that monitors gathering data on 'middle-scale impact sites' would not be included.

First, the referenced section of the Clean Air Act never explicitly defines what constitutes an "area-wide' source." Moreover, TCEQ's draft AMNP does not provide any guidance on how

the agency will evaluate or designate monitors that collect 'area-wide' data. The lack of a clear process for evaluating which monitors fall under this category leaves open the door for cherry-picking of data and exclusion of data collected in communities facing serious PM2.5 pollution concerns. To those who have fought for years to get data on air quality in their overburdened communities, this seems like an effort to undercut monitoring data from new sites coming online in communities like Pleasantville and Fifth Ward.

Second, in addition to murkiness about the process for designating monitors to use in annual PM2.5 NAAQS calculations, TCEQ also ignores important sections of the CFR statutes they reference. Importantly, 40 CFR Appendix-D-to-Part-58(b) states (emphasis added):

> "Specific Design Criteria for PM2.5. The required monitoring stations or sites must be sited to represent area-wide air quality. These sites can include sites collocated at PAMS. These monitoring stations will typically be at neighborhood or urban-scale; however, micro-or middle-scale PM2.5 monitoring sites that represent many such locations throughout a metropolitan area are considered to represent area-wide air quality."[82]

New monitors in Pleasantville and Fifth Ward will be representative of the many communities across Houston that face similar air pollution sources and concerns, exactly as this section describes. TCEQ should, therefore, use the Pleasantville and Fifth Ward monitors in their annual PM2.5 NAAQS compliance.

Further, in areas requiring additional SLAMS monitoring, including the Houston/Harris County area, 40 CFR Appendix-D-to-Part-58(b)(3) states that:[83]

> "...a monitoring station is to be sited in an at-risk community with poor air quality, particularly where there are anticipated effects from sources in the area (e.g., a major industrial area, point source(s), port, rail yard, airport, or other transportation facility or corridor)."

This requirement is not mentioned in the Draft AMNP, and it is not clear if this guidance is being followed in the Harris County area. The monitoring locations in both Pleasantville and Fifth Ward would meet this criteria and should be used to ensure compliance with this guidance.

PM2.5 measurement data from all eligible monitors are comparable to the 24-hour PM2.5 NAAQS. PM2.5 measurement data from all eligible monitors that are representative of area-wide air quality are comparable to the annual PM2.5 NAAQS. When PM2.5 monitoring sites collectively identify a larger region of localized high ambient PM2.5 concentrations, such sites would be considered representative of an area-wide location and, therefore, eligible for comparison to the annual PM2.5 NAAQS. However, according to 40 CFR § 58.30, PM2.5 measurement data from monitors that are not representative of area-wide air quality but rather of relatively unique micro-scale, localized hot spot, or unique middle-scale impact sites are not

[82] https://www.ecfr.gov/current/title-40/appendix-Appendix%20D%20to%20Part%2058#p-Appendix-D-to-Part-58(b)
[83] https://www.ecfr.gov/current/title-40/part-58#p-Appendix-D-to-Part-58(b)(3)

eligible for comparison to the annual PM2.5 NAAQS but would remain eligible for comparison to the 24-hour PM2.5 NAAQS. For example, if a micro- or middle-scale PM2.5 monitoring site is adjacent to a unique dominating local PM2.5 source, then the PM2.5 measurement data from such a site would only be eligible for comparison to the 24-hour PM2.5 NAAQS.

3. Comments on behalf of Houston Department of Transformation and Gulfton Super Neighborhood Council

TCEQ proposes to reclassify the Houston North Loop monitor as "not suitable for comparison with the annual $PM_{2.5}$ NAAQS."[84] The Houston Department of Transformation and Gulfton Super Neighborhood Council strongly oppose this proposal.

First, TCEQ's recommendation to reclassify the Houston North Loop monitor is a conspicuous reaction to the EPA's recent lowering of the primary, health-based annual $PM_{2.5}$ NAAQS from 12 $\mu g/m^3$ to 9 $\mu g/m^3$.[85] The Houston North Loop monitor was approved in December, 2014.[86] It has operated for approximately a decade as a comparable monitor to the annual $PM_{2.5}$ monitor and TCEQ had declined over that decade to question whether the monitor was suitable under the terms of 40 C.F.R. § 58.30. While EPA, in its response to TCEQ's 2024 AMNP, reminded TCEQ of its obligation to review monitors, it did not refer to any particular monitor and in any event, 40 C.F.R. § 58.30 has been "on the books" since at least 2006 and was last revised in 2013, prior to the approval of the Houston North Loop monitor.

Now, soon after the EPA's NAAQS change, TCEQ proposes to remove it from the equation, retroactively to April 13, 2015. TCEQ should not move forward with what appears to be a transparent attempt to help avoid conflict with the NAAQS.

Second, TCEQ's reasoning—that the Houston North Loop site is "not representative of area-wide air quality in the Houston CBSA"—is unsubstantiated and falls short of justifying an arbitrary change for the Houston North Loop monitor.

When considering and deciding to lower the annual $PM_{2.5}$ NAAQS standards, the EPA noted specifically that vehicle traffic on major roads is "an important emissions source."[87] The placement of near-road monitors such as the Houston North loop monitor are key to measuring that important emissions source.[88] Further, the new annual $PM_{2.5}$ standards were set having taken into account that "monitored areas will generally have higher concentrations compared to areas without monitors."[89] Any concern that the Houston North Loop monitor site reports higher $PM_{2.5}$ levels than might be expected in locations further from the interstate is tempered by this fact.

TCEQ claims "[t]he Houston North Loop site is not representative of most other

[84] Draft 2025 AMNP at 29.
[85] U.S. EPA, Final Reconsideration of the National Ambient Air Quality Standards for Particulate Matter (PM), https://www.epa.gov/pm-pollution/final-reconsideration-national-ambient-air-quality-standards-particulate-matter-pm.
[86] Draft 2025 AMNP at 34.
[87] 89 Fed. Reg. 16202 (March 3, 2024), https://www.federalregister.gov/documents/2024/03/06/2024-02637/reconsideration-of-the-national-ambient-air-quality-standards-for-particulate-matter.
[88] Id.
[89] Id.

interstate areas since that location was chosen near one of the highest AADTs." This is wrong. The Houston North Loop monitor is near Traffic Station 102SP157 which, in 2023, had an average annual daily trip (AADT) amount of 196,933. There are no less than 50 other traffic stations in Harris County which have as many AADTs. As **Figure 29** shows, these traffic stations with as many AADTs are found across dozens of miles of interstate across central, north, west, south Harris County.[90] In other words, the Houston North Loop monitor is an example of numerous traffic corridors in Harris County; "traffic corridors "are often considered line and/or area sources."[91] Even if the Houston North Loop monitor is properly considered micro- or middle-scale, such monitors often "are identified as being representative of many such locations in the same Metropolitan Statistical Area."[92]

Figure 29. Traffic Stations with AADTs Above ~196,300 in Harris County, Texas

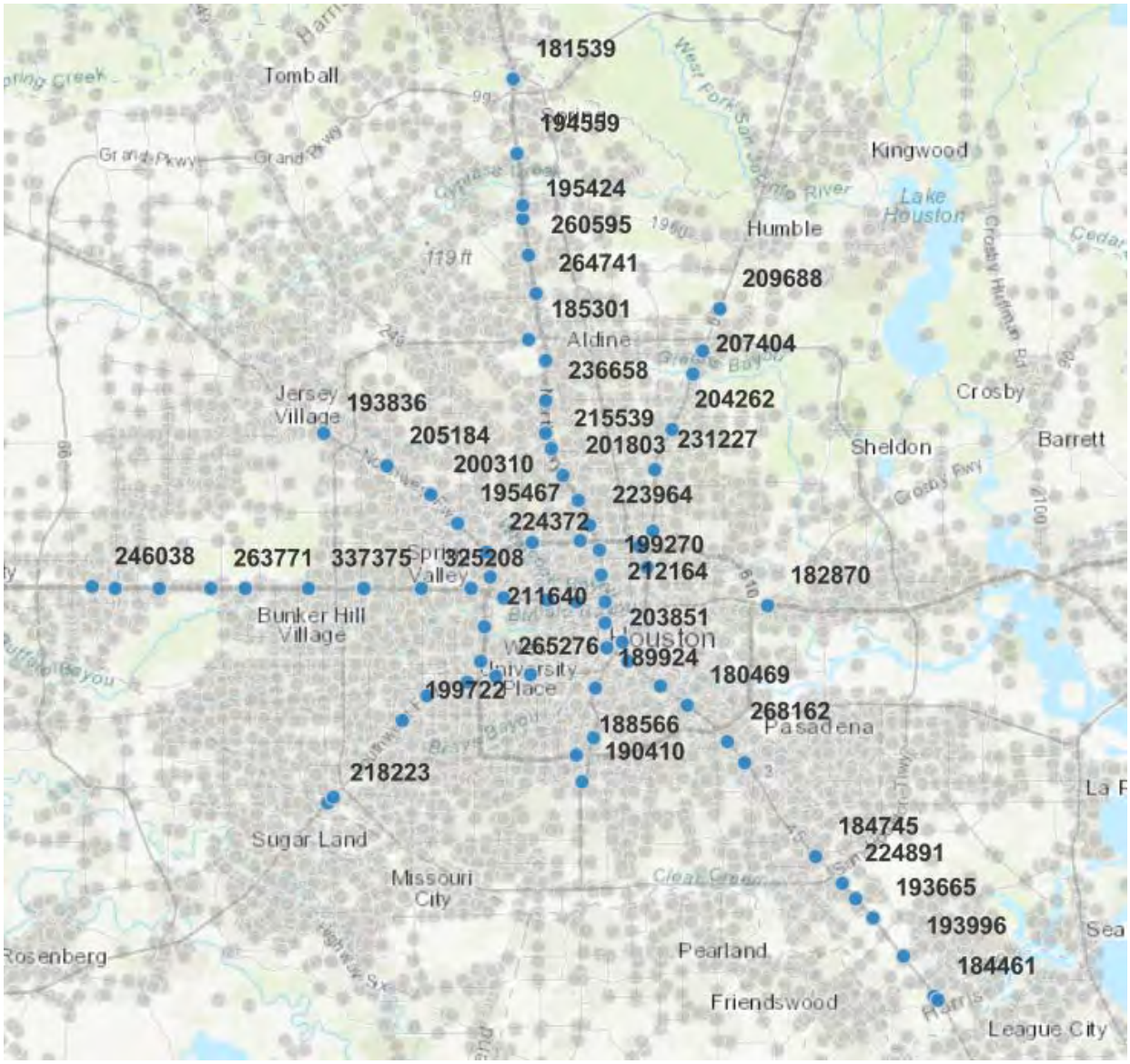


If one lowers the AADT threshold only to 180,000 AADT, then most of I-45, I-10, I-

[90] Texas Department of Transportation, TxDOT TPP Annual AADT Data (SPM View), https://gis-txdot.opendata.arcgis.com/datasets/TXDOT::txdot-tpp-annual-aadt-data-spm-view/about.
[91] 89 Fed. Reg. 16202 (March 3, 2024), https://www.federalregister.gov/documents/2024/03/06/2024-02637/reconsideration-of-the-national-ambient-air-quality-standards-for-particulate-matter.
[92] Id.

69/US-59, TX-288, and Loop I-610 are included[93]:

Figure 30. Traffic Stations with AADTs Above ~180,000 in Harris County, Texas



The exposure pathways and opportunity to $PM_{2.5}$ levels like those found at the Houston North Loop monitor are numerous and located across Harris County. Hundreds of thousands if not millions of Harris County residents live, work, attend school, or recreate at parks along or adjacent to these highways, and they of course spend time commuting along them each day. For example, Downtown Houston is surrounded by interstates with AADTs of 189,000 or more[94]:

[93] Texas Department of Transportation, TxDOT TPP Annual AADT Data (SPM View), https://gis-txdot.opendata.arcgis.com/datasets/TXDOT::txdot-tpp-annual-aadt-data-spm-view/about.
[94] Id.

Figure 31. Traffic Stations Near Downtown Houston

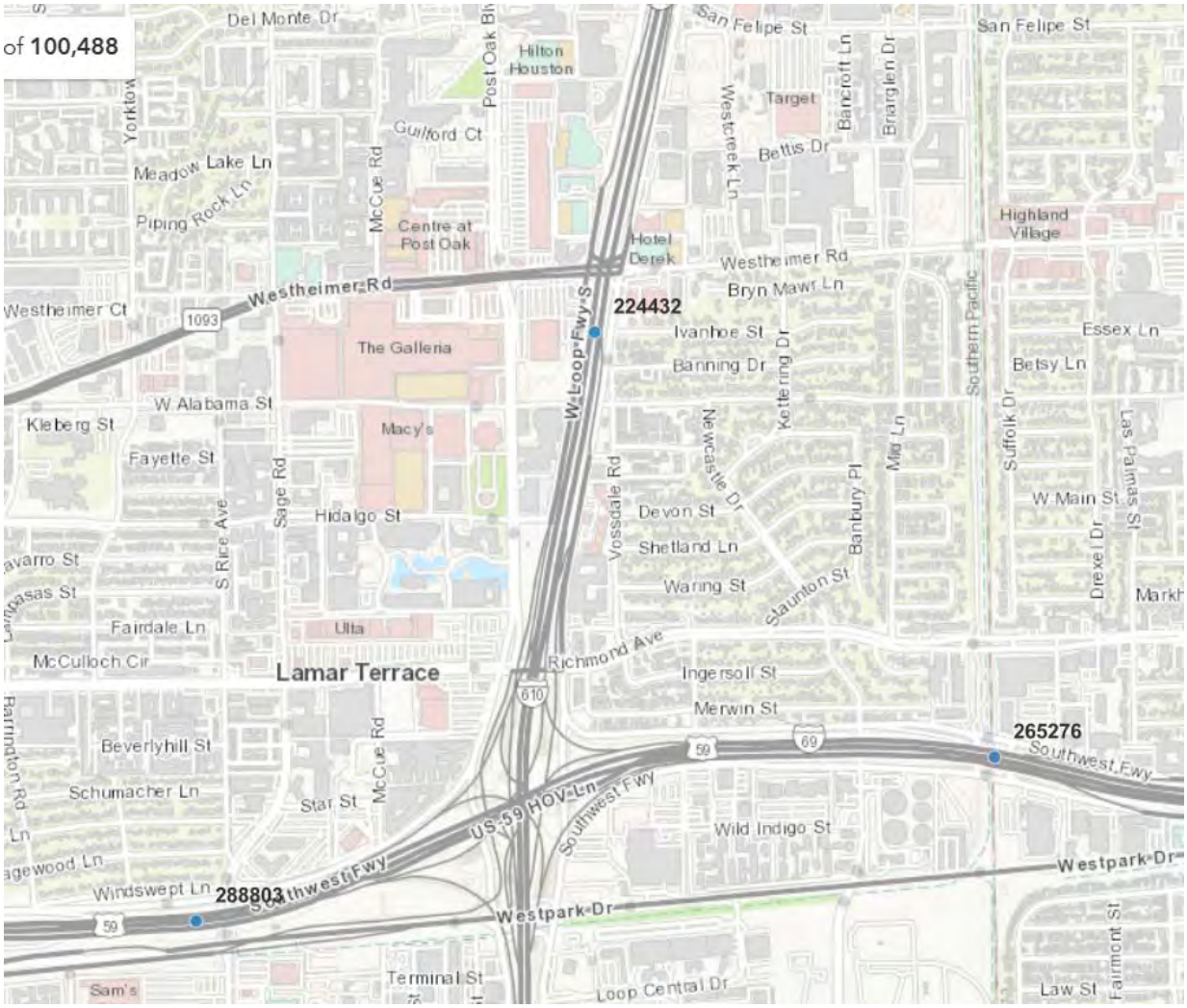


The Houston Galleria area, with a major mall with over 30 million annual visitors[95], other shopping districts, and numerous high-rise office buildings, is another major commercial area directly along Loop I-610 and I-69/US-59, which has AADT values significantly *higher than*

[95] Houston First Corporation, The Galleria Overview, https://www.visithoustontexas.com/listings/the-galleria/19488/.

those found at the Houston North Loop site[96]:

Figure 32. Traffic Stations Near the Houston Galleria

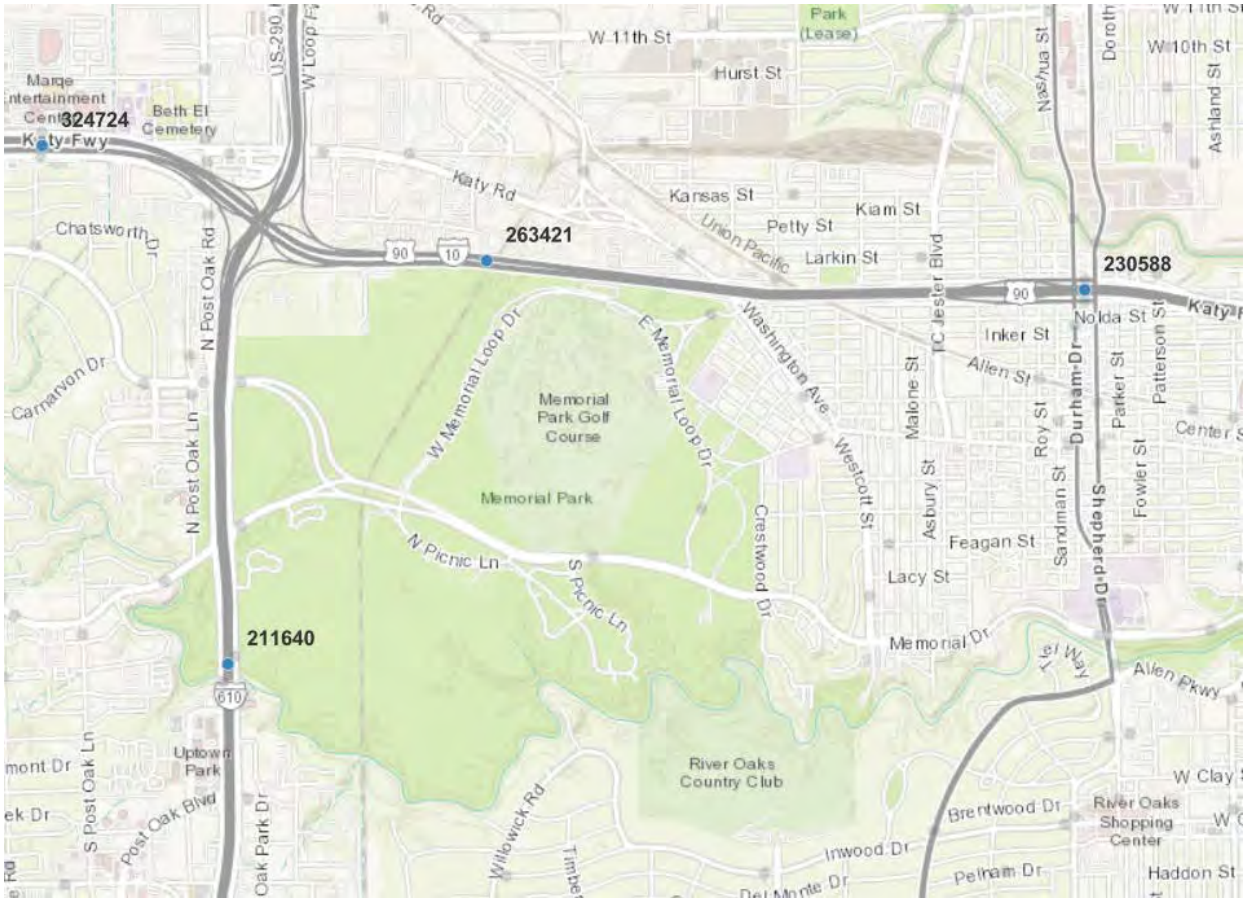


Houston's Memorial Park, which has over 2.4 million annual visitors[97], is directly adjacent to portions of I-10 and Loop I-610 which also have significantly *higher* AADTs than those at Houston North Loop. Recreating "in polluted air is a two-edged sword — physical exercise in low air pollution areas is cardioprotective but detrimental for the heart in high air pollution areas" as one study has found.[98] The following figure shows the location of Memorial Park, which has sports fields, tennis courts, a popular running trail, and other recreational facilities along its north side within feet of I-10 as well as running trails, bike trails, and other

[96] Texas Department of Transportation, TxDOT TPP Annual AADT Data (SPM View), https://gis-txdot.opendata.arcgis.com/datasets/TXDOT::txdot-tpp-annual-aadt-data-spm-view/about.
[97] Memorial Park Conservancy, About the Conservancy, https://www.memorialparkconservancy.org/about/.
[98] Muenzel, Thomas, et. al., Running in polluted air is a two-edged sword — physical exercise in low air pollution areas is cardioprotective but detrimental for the heart in high air pollution areas, 42(25) European Heart Journal 2498, May 8, 2021, https://pmc.ncbi.nlm.nih.gov/articles/PMC8248992/.

facilities elsewhere around the park and near busy interstates[99]:

Figure 33. Traffic Stations Near Houston's Memorial Park



These are just several examples of large centers of activity directly adjacent to busy interstates in Harris County. Residents served by the Houston Department of Transformation, Gulfton Super Neighborhood Council, and other commenting groups frequent these locations, as well as others in Harris County. The ubiquitous nature of high AADT highways across Harris County and near and through major commercial and recreational areas as well as through residential neighborhoods support the idea that the Houston North Loop monitor was correctly, for a decade, deemed comparable to the annual $PM_{2.5}$ NAAQS. The exposure opportunities are numerous and spread across much of Harris County.

The Houston Department of Transformation primarily serves residents who live between I-45, northern Loop I-610, and I-69/US-59. It has also done projects and served residents who live just outside this corridor, such as residents in Houston's Near Northside located between Loop I-610, downtown Houston and I-10, I-45, and I-69/US-59 or those in Independence Heights, located north of Loop I-610 North and the neighborhood in which the Houston North Loop Monitor is located. As the following two figures show, these areas are surrounded by busy

[99] Texas Department of Transportation, TxDOT TPP Annual AADT Data (SPM View), https://gis-txdot.opendata.arcgis.com/datasets/TXDOT::txdot-tpp-annual-aadt-data-spm-view/about.

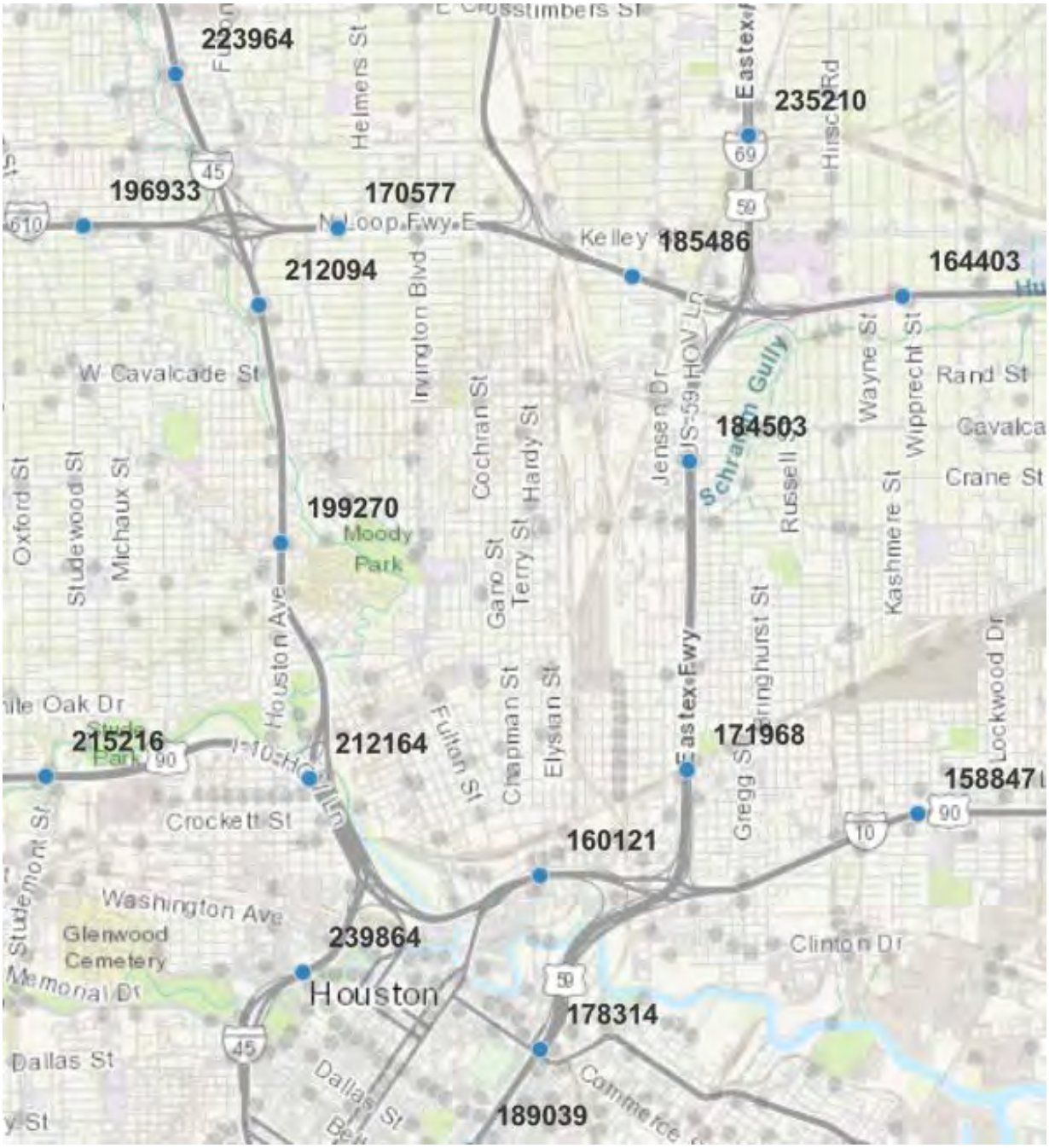
interstates with high AADTs comparable if not greater than those found at the Houston North Loop site[100]:

Figure 34. Traffic Stations with Highest AADT in North Central Houston



Figure 35. Traffic Stations with Highest AADT in Houston's Near Northside

[100] Texas Department of Transportation, TxDOT TPP Annual AADT Data (SPM View), https://gis-txdot.opendata.arcgis.com/datasets/TXDOT::txdot-tpp-annual-aadt-data-spm-view/about.



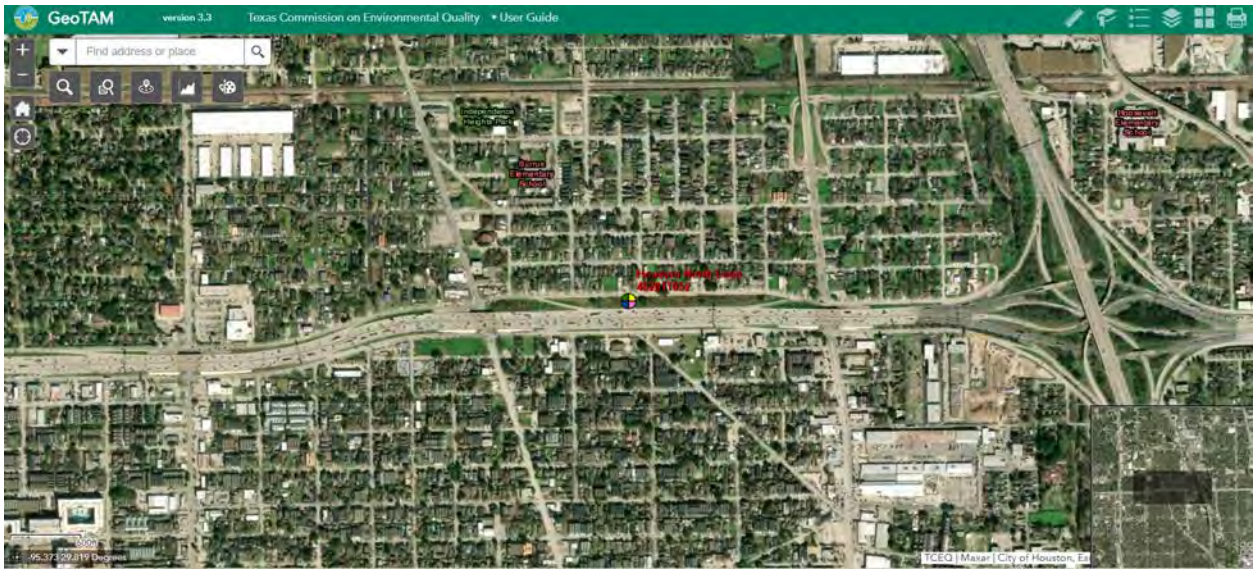
Residents in these areas regularly drive on or spend time near these busy interstates, at their homes, schools, parks, churches, places of work, and elsewhere.

40 C.F.R. § 58.30 states $PM_{2.5}$ monitors may be excluded from comparisons to the annual $PM_{2.5}$ NAAQS if they are located at "relatively unique micro-scale, or localized hot spot, or unique middle-scale impact sites." As noted above, micro-scale and middle-scale monitors often are representative of many other locations in a region. Only *unique* micro- and middle-scale monitors are not applicable to the annual NAAQS. For a decade, the Houston North Loop monitor was accepted as comparable to the annual $PM_{2.5}$ NAAQS. No circumstances have

changed to support a sudden change of mind by TCEQ. As explained above, busy interstates are ubiquitous across Harris County and are adjacent to many neighborhoods and major commercial and cultural areas. Indeed, the growth of Harris County and increased congestion in Harris County suggests the Houston North Loop monitor is *more* representative of regional air quality than it was when approved in 2014 or installed in 2015.[101] The Houston North Loop monitor is not unique and therefore is comparable to the annual $PM_{2.5}$ NAAQS.

The Houston North Loop monitor itself is located across the street from single family residents, in the Independence Heights neighborhood, a residential area but one with several commercial and industrial sites such as a large business park and multiple warehouses.

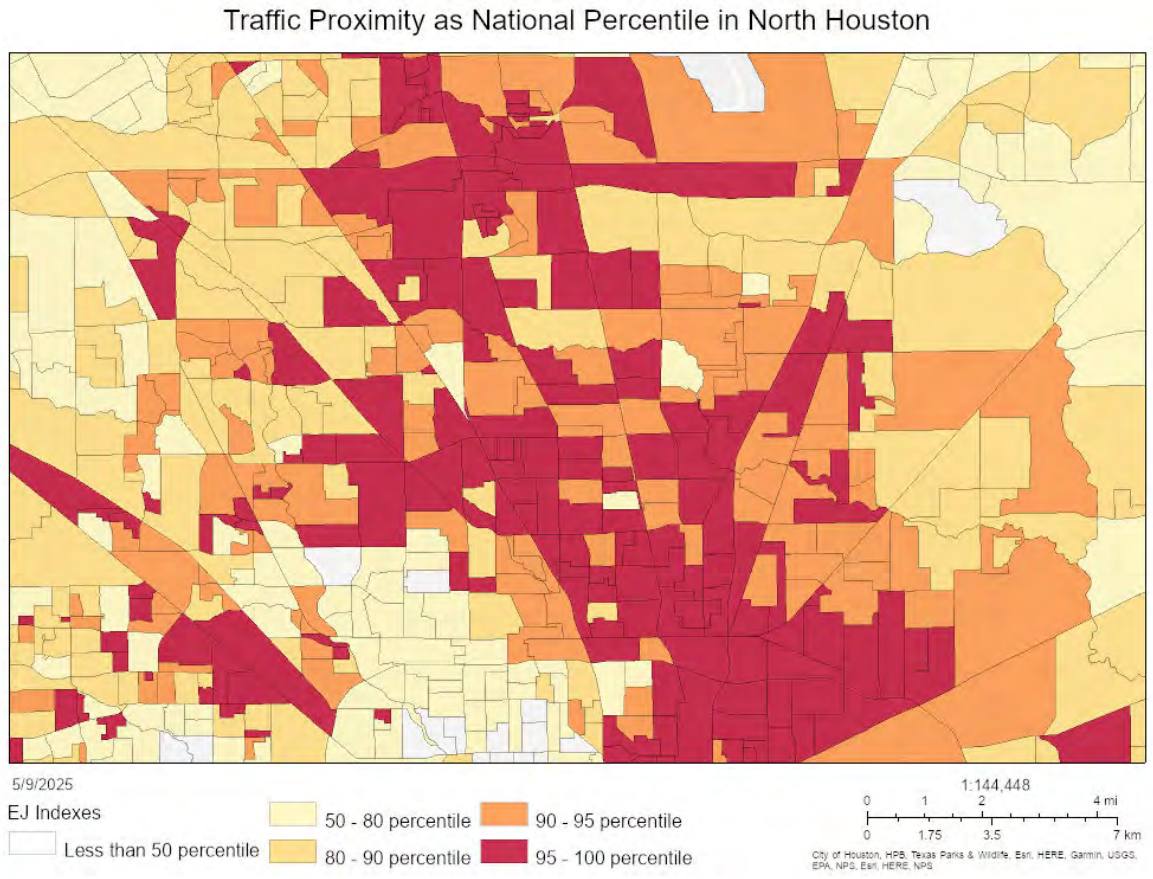
Figure 36. Location of Houston North Loop Monitor in Houston Heights Neighborhoods[102]



The corridor in which the Houston Department of Transformation largely operates is almost wholly in the 95th or higher national percentile for traffic proximity, as shown below[103], as are other large swatches of the City of Houston and Harris County. In other words, traffic and congestion is ubiquitous across the area and the impact of busy interstates such as north Loop I-610 cannot be simply set aside as so unique to meet the text of 40 C.F.R. § 58.30.

[101] See e.g. Dug Begley, *Analysis finds every trip in Houston taking longer, meaning more lost time for travelers*, HOUSTON CHRONICLE, Jan. 10, 2024, https://www.houstonchronicle.com/news/houston-texas/transportation/article/traffic-tomtom-congestion-increasing-2023-18596767.php.
[102] Texas Commission on Environmental Quality, Air Monitoring, Interactive Monitoring Map (GeoTAM), https://www.tceq.texas.gov/airquality/monops.
[103] The Public Environmental Data Partners, EJ Screen Mapping Tool reconstruction, https://screening-tools.com/epa-ejscreen.

Figure 37. Traffic Proximity as National Percentile in North Houston



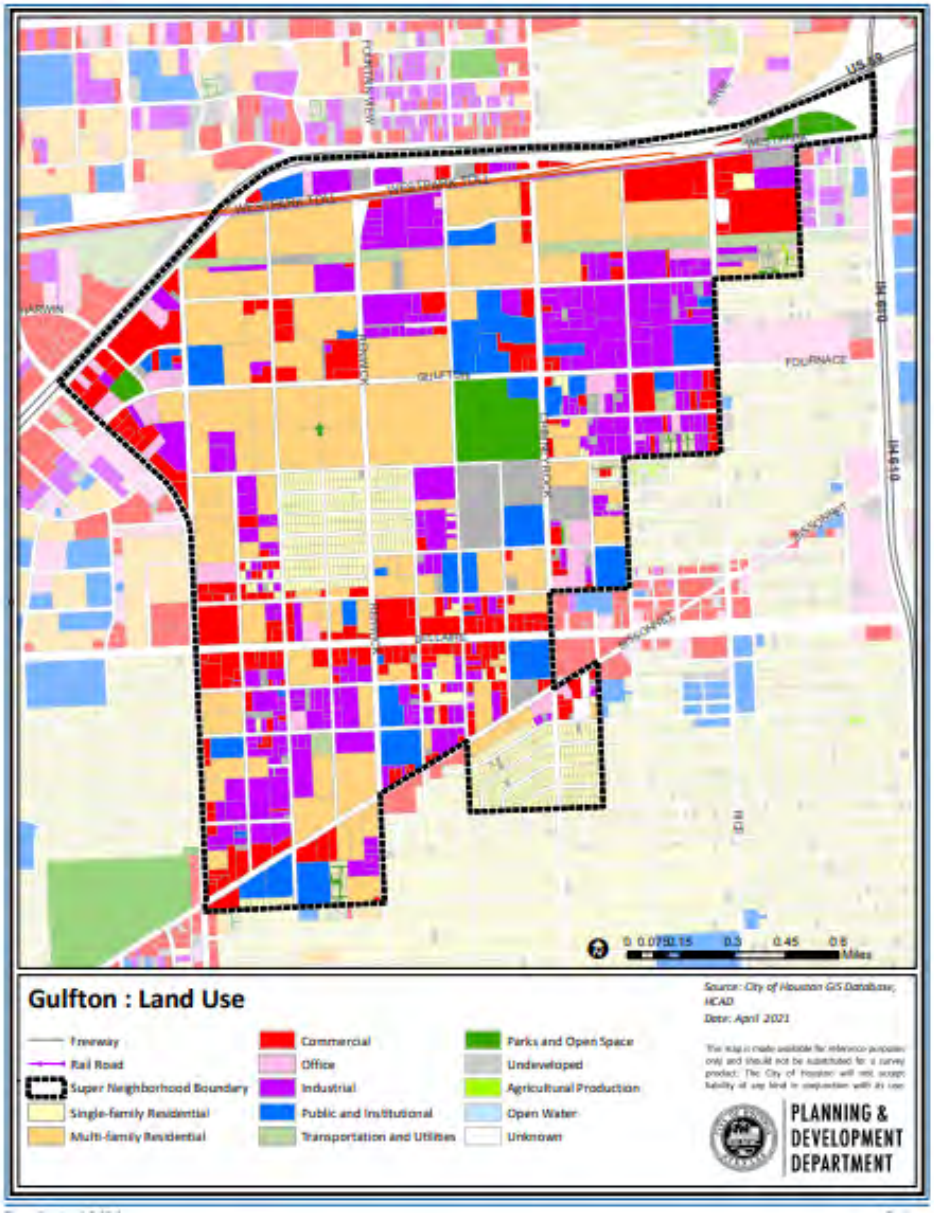
Again, the timing of this recommendation by TCEQ is conspicuous and a clear reaction to EPA's lowering of the annual $PM_{2.5}$ NAAQS. As TCEQ's draft AMNP admits, it now seeks to exclude the Houston North Loop monitor because the monitor has high values of $PM_{2.5}$ that are above the new $PM_{2.5}$ standards. This is not a valid reason for the change.

The Gulfton Super Neighborhood Council registers its agreement that the Houston North Loop monitor must remain comparable to the annual $PM_{2.5}$ NAAQS. The Gulfton neighborhood, in southeast Houston, is surrounded on 3 sides by I-69/US-59 and Loop I-610. (Gulfton is located just across I-69/US-59 from the aforementioned Houston Galleria area.) The following land use map shows the Gulfton area[104]. Large multi-residential apartment complexes line I-69/US-59 and the Westpark Tollway. Gulfton residents, like those in other locations across Harris County, are affected daily by congested and high AADT interstates. $PM_{2.5}$ monitors such as the Houston North Loop monitor and NO_x monitors such as the Houston Southwest Freeway monitor located in Gulfton are meaningful and representative air quality samples for hundreds of thousands of residents across Harris County.

[104] City of Houston Department of Neighborhoods, Super Neighborhoods, Profile for Super Neighborhood 27 – Gulfton, https://www.houstontx.gov/superneighborhoods/27.html.

Residents of Gulfton, a largely lower income and minority neighborhood, will be directly affected by TCEQ's choices to compare or not compare $PM_{2.5}$ monitors elsewhere in Harris County given they live, shop, eat, and work adjacent to interstates. If TCEQ no longer compares the Houston North Loop monitor to the annual $PM_{2.5}$ NAAQS in order to avoid potential challenges complying with the new $PM_{2.5}$ Residents of Gulfton fear TCEQ's failure to account for the impact of highway traffic on adjacent communities will harm them moving forward.

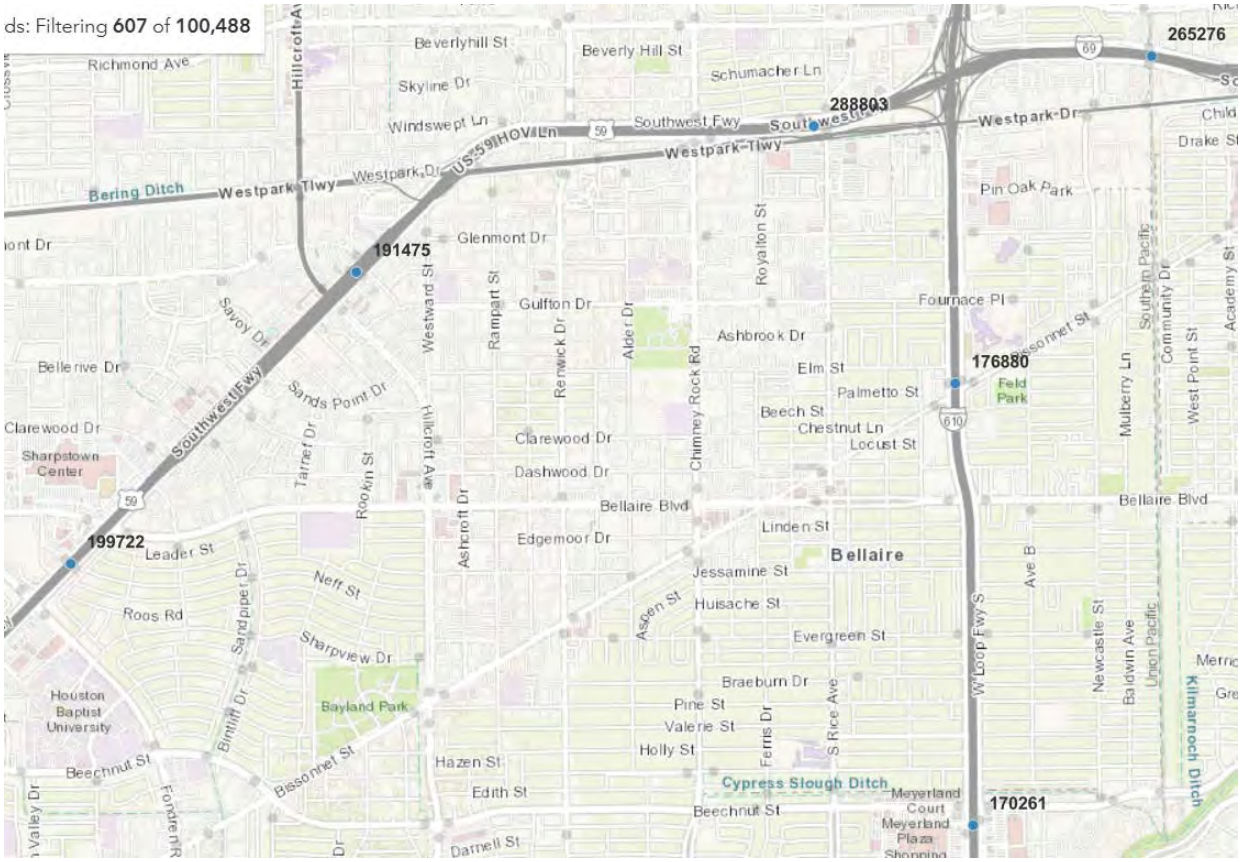
Figure 38. Land Use Map in Gulfton Super Neighborhood



I-69/US-59 adjacent to Gulfton's west and north sides has AADTs *higher* than those

found by the Houston North Loop monitor, as the following figure shows[105]. Traffic station 102SP140 had 288,803 daily trips on average in 2023, approximately 100,000 more than the traffic station nearest the Houston North Loop monitor.

Figure 39. Traffic Stations on Interstates Near Gulfton Neighborhood



For its part, the Houston Bayland Park $PM_{2.5}$ monitor located on the southwestern edge of Gulfton at the City of Houston's Bayland Park shows high levels of $PM_{2.5}$, despite not being located adjacent to an interstate. Rather, the Houston Bayland Park monitor is approximately 1.02 miles from I69/US-59, and even further from Loop I-610. Per Appendix K of the 2025 draft AMNP, the Houston Bayland Park monitor had the following statistics:

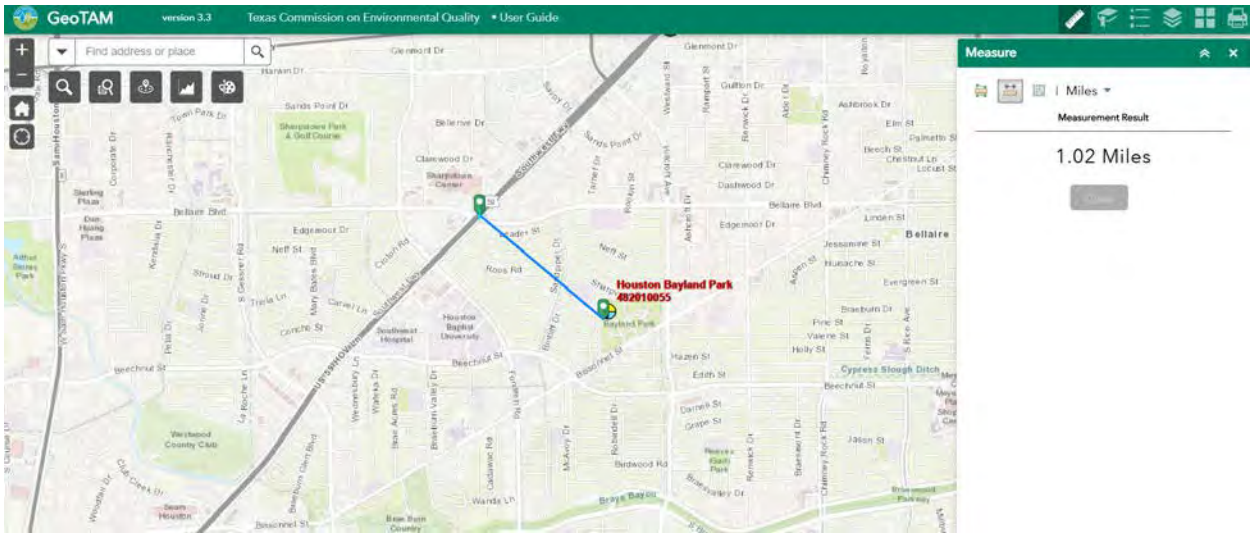
2021-2023 Annual Design Value = 10.2 $\mu g/m^3$

Percent of Annual NAAQS = 113%

These numbers help prove the above comments, that $PM_{2.5}$ is prevalent across Harris County and that the numbers found at the Houston North Loop monitor are *not* so localized nor is the Houston North Loop monitor as significantly higher than other $PM_{2.5}$ values as the draft 2025 AMNP's discussion of the Houston North Loop monitor suggests.

[105] Texas Department of Transportation, TxDOT TPP Annual AADT Data (SPM View), https://gis-txdot.opendata.arcgis.com/datasets/TXDOT::txdot-tpp-annual-aadt-data-spm-view/about.

Figure 40. Location of Houston Bayland Park Monitor in Relation to Nearest Interstate[106]



These numbers are not surprising, given $PM_{2.5}$ is known to be capable of remaining airborne and traveling over significant distances.[107]

For these reasons, TCEQ should not move forward with designating the Houston North Loop monitor as not suitable for comparison with the annual $PM_{2.5}$ NAAQS under 40 C.F.R. § 58.30. Near-road monitors, even if at a micro- or middle-scale, can be representative of numerous locations across a region such as Harris County. The Houston North Loop monitor is representative of numerous traffic corridors and many locations across Harris County. It therefore is not unique and is suitable for comparison to the annual $PM_{2.5}$ NAAQS.

4. Aggregate Facilities are Concentrated in and around SN 48 Cause Concerns about Significant Exposures to Large and Small Particulate Matter Pollution.

The proliferation of concrete batch plants and other concrete facilities remains a significant threat to SN 48—causing significant pollution concerns for PM_{10} and $PM_{2.5}$. Aggregate facilities are disproportionately located in Northeast Houston.[108] Due to the prolific number of concrete facilities in Harris County and public outcries to make a permit more protective of human health, TCEQ has spent several years amending the Concrete Batch Plant Standard Permit. Through this amendment process, TCEQ conducted modeling which showed that both PM_{10} and $PM_{2.5}$ are significant air quality concerns in areas where concrete batch plants cluster. Specifically, the "modeling predicted that both the PM10 and PM2.5 NAAQS in the vicinity of the concrete batch plant cluster would be exceeded by a very wide margin. The modeled PM10 concentration exceeded the NAAQS by about a factor of 10 and the modeled

[106] Texas Department of Transportation, TxDOT TPP Annual AADT Data (SPM View), https://gis-txdot.opendata.arcgis.com/datasets/TXDOT::txdot-tpp-annual-aadt-data-spm-view/about.
[107] See e.g. https://www.epa.gov/pmcourse/what-particle-pollution; https://www.pima.gov/504/Particulate-Matter-Information.
[108] Houston-Galveston-Brazoria (HGB) $PM_{2.5}$ Advance Path Forward Update (2019) at 36-37.

PM2.5 concentration exceeds the NAAQS by about a factor of 3 to 4."[109] Due to the concentration of concrete batch plants and the resulting PM_{10} air emissions—SN 48 requests that the PM10 monitoring at North Wayside meet federally equivalent standards so that it is NAAQS comparable.

Table 15: Permitted Concrete Batch Plants in Harris County[110]

Permit No.	**Permit Type**	**Legal Name**	**Physical Location (Harris County)**	**Impacted Community**
25243	2009 Permit by Rule	Southern Star Concrete Inc	1123 Goodnight Trail	Greater Greenspoint
78606	2012 Standard Permit	Integrity Ready Mix Concrete LLC n/k/a Yellow Jacket Readymix	2219 Hartwick Rd	East Aldine
116476	2012 Standard Permit	Texas Concrete Enterprise, L.L.C./ Tex Con Ready Mix #3	3315 Carr Street	Fifth Ward
121798	2012 Standard Permit	Texas Concrete Enterprise, L.L.C. ./ Tex Con Ready Mix #2	3506 Cherry Street	Fifth Ward
122677	2012 Standard Permit	CEMEX Construction Materials South, LLC	5307 Navigation Blvd	East Aldine
131665	2012 Standard Permit	Five Star Ready Mix, LLC	8001 Ley Rd	Super Neighborhood 49/50
135498	2012 Standard Permit	CEMEX Construction Materials South, LLC	1902 Rothwell Street	Fifth Ward

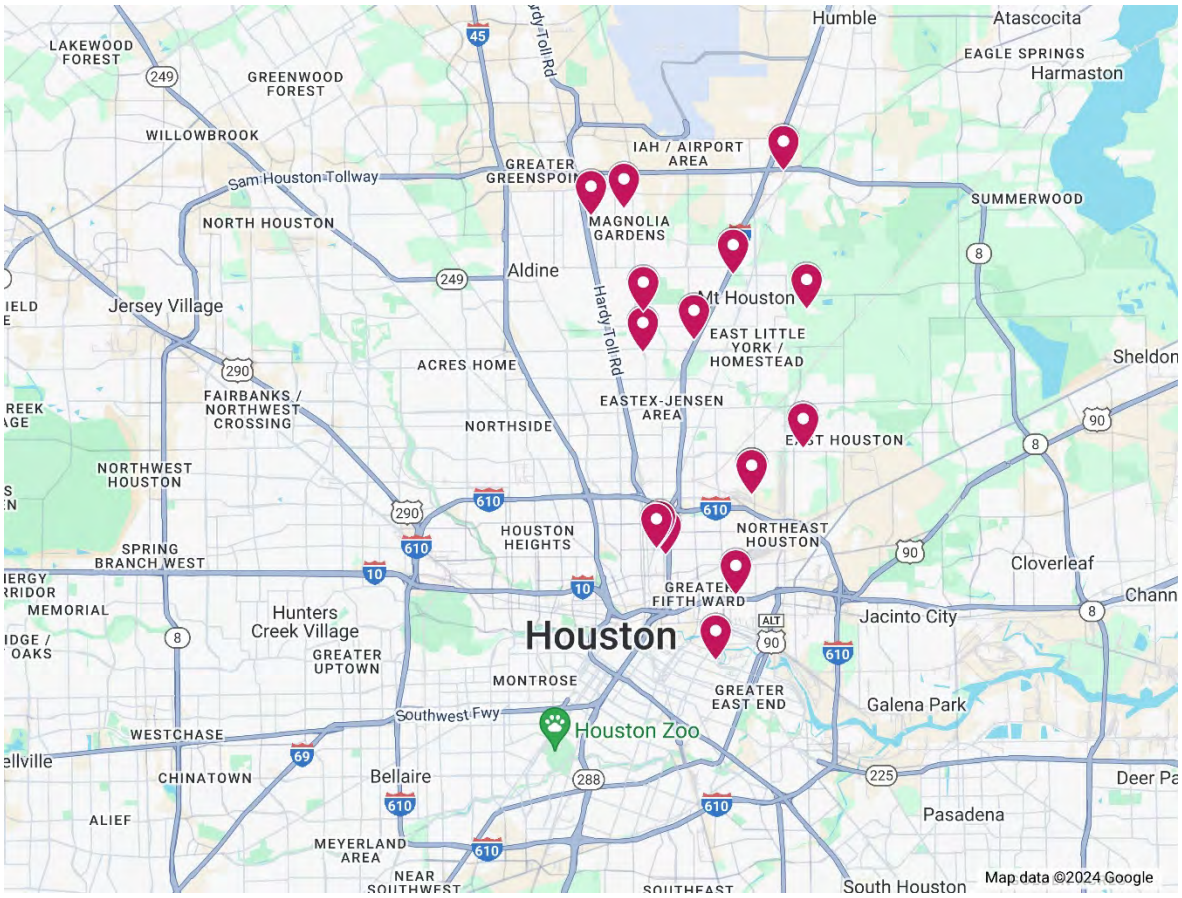
[109] Air Resource Specialists. Air Quality Dispersion Modeling Report, Concrete Batch Plant Cluster – Gunter Texas (Jan. 2022) at 16.

[110] Texas Commission on Environmental Quality, TCEQ New Source Review ("NSR") Permit Search for Concrete Batch Plant Standard Permits, TCEQ - NSR, TV and CapTrade Searchs (texas.gov); filter Region: Harris, filter Unit Rule: Concrete Batch Plants.

Permit No.	Permit Type	Legal Name	Physical Location (Harris County)	Impacted Community
136479	2012 Standard Permit	Texan Concrete Enterprise Ready Mix, Inc.	Approximately 0.5 Miles North From The Intersection Of 610 And Homestead Road	Super Neighborhood 49/50
136883	2012 Standard Permit	Houston Ready Mix, LLC / SMYRNA	5220 Winfield Road	Dyersforest / East Aldine
139955	Concrete Crushing Permit (NSR)	Cherry Crushed Concrete	9200 Winfield Road	Dyerforest
148312	2012 Standard Permit	Baker Ready Mixed Concrete, LLC	1731 Peach Leaf St	East Aldine
150603	2012 Standard Permit	Texan Concrete Enterprise Ready Mix, Inc.	6001 Homestead Rd	Super Neighborhood 48
89909	2012 Standard Permit	Wilbert Vaults Of Houston, L.L.P.	10645 Aldine Westfield Rd	East Aldine
138309	2021 Standard Permit	CemTech Concrete Ready Mix Inc	3116 Jensen Dr	Fifth Ward
157195	2022 Standard Permit	Rocket Materials LLC	914 Pinafore Ln	East Aldine
164280	2021 Standard Permit	Always Ready Concrete, LLC	6510 N Sam Houston Pkwy E	East Aldine
167400	2021 Standard Permit	Cs Concrete Ready Mix Inc.	7515 Furay Rd	Super Neighborhood 49/50

Permit No.	Permit Type	Legal Name	Physical Location (Harris County)	Impacted Community
167453	2021 Standard Permit	Avant Garde Construction Co.	10945 Eastex Fwy	East Aldine

Figure 41. Map of Some of the Concrete Batch Plants in Northeast Houston



The 24-Hour PM_{10} NAAQS is 150 µg/m^3. This standard may not be exceeded more than once per years on average over a three year period.[111] Compliance with the standard is based on the 98th percentile of 24-hour concentrations, averaged over 3 consecutive years. Taking the data from the North Wayside monitor and comparing it to the standard suggests that the monitor exceeds NAAQS more than once per year. While SN 48 understands that the federal statue may allow TCEQ to exclude certain higher than average monitor readings due to exceptional events, that does not eliminate high monitor readings entirely.[112] This data suggests that the North

[111] 40 CFR § 50.6.
[112] 40 CFR § 51.14.

Wayside monitor may also show the area is in nonattainment for PM_{10}. Accordingly, SN 48 requests that to ensure compliance with NAAQS, the Wayside monitor be upgraded to collect NAAQS comparable data.

Below is the PM_{10} monitoring data for the monitor closest to SN 48, the North Wayside monitor (CAMS C405/C1033) located at 7330 ½ North Wayside Drive, Houston, Texas taken from the TCEQ website.[113]

Table 16: PM_{10} Daily Mean Values at North Wayside Monitor (2021-2025)

[113] TCEQ Daily Mean Values for Calendar Year, PM_{10} Report available at: https://www.tceq.texas.gov/cgi-bin/compliance/monops/24hr_annual.pl

Daily Mean Values for Calendar Year 2021



Houston-Galveston-Brazoria
CAMS 1033 Houston North Wayside C405/C1033
7330 1/2 North Wayside
Houston, Texas

PM-10 (Standard Conditions) (µg/m³ (25° C)), Calendar Year 2021
Daily Mean Values

Day	January	February	March	April	May	June	July	August	September	October	November	December
1							No Data	42.9	22.6	15.7	71.4	91.8
2						ID N:0	No Data	8.7	72.0	20.8	84.2	69.1
3						33.6	No Data	13.6	71.5	32.8	65.3	39.1
4						32.0	No Data	45.6	79.3	57.4	16.5	16.6
5						50.6	No Data	60.3	73.5	110.9	54.8	7.9
6						64.6	No Data	79.3	36.5	148.0	57.8	16.5
7						66.8	No Data	39.9	61.2	139.0	30.7	64.5
8						ID N:0	No Data	32.1	103.7	131.3	101.8	67.1
9						No Data	No Data	37.5	99.8	84.9	100.4	39.8
10						No Data	No Data	37.2	98.5	15.5	96.2	37.7
11						No Data	No Data	37.3	62.0	52.6	37.8	21.4
12						No Data	No Data	70.7	35.6	41.8	53.2	32.8
13						No Data	No Data	96.0	15.7	18.8	67.1	69.1
14						No Data	No Data	46.1	ID N:8	38.2	35.0	16.3
15						No Data	ID N:12	13.5	ID N:11	36.5	54.5	38.5
16						No Data	47.0	35.4	35.0	44.6	34.8	26.8
17						ID N:23	45.7	28.4	74.2	38.8	27.2	30.4
18						92.8	32.4	51.4	55.1	99.7	38.6	11.8
19						54.6	33.0	35.0	25.7	87.1	79.4	13.8
20						29.5	43.4	46.8	25.0	86.7	47.0	17.1
21						ID N:12	68.0	66.5	72.4	69.8	16.2	62.9
22						No Data	52.1	44.9	25.6	69.7	65.9	66.9
23						No Data	-2.1	87.9	99.3	54.7	95.5	31.7
24						No Data	-2.0	77.6	94.6	13.3	36.2	30.7
25						No Data	-1.7	72.4	68.0	32.1	16.0	37.1
26						No Data	-1.3	60.1	37.7	59.1	17.6	20.9
27						No Data	-1.6	54.0	43.1	16.5	21.1	35.0
28						No Data	-1.2	41.0	29.7	51.8	13.6	39.2
29		--				No Data	12.0	24.9	17.6	47.1	28.1	45.8
30		--				No Data	16.1	47.9	34.1	56.1	57.3	67.5
31		--		--		--	9.3	42.9	--	57.4	--	33.3
Monthly Summaries Based on Daily Data												
Mean						53.1	21.2	46.9	59.3	58.3	51.2	37.4
Max						92.8	68.0	96.0	102.7	148.0	101.8	91.8
Min						29.5	-2.1	8.7	15.7	13.3	13.6	7.9

Summary Statistics For 2021 (December 2 - December 31)
Annual Mean 47.9
Highest Daily Mean 148.0 (October 06)
Lowest Daily Mean -2.1 (January)

This site began collecting PM-10 (Standard Conditions) on June 2, 2021

Daily values are based on 24 hourly averages per day
ID N:5 -- ID = insufficient data; 75% or less of data available for day of interest; N = number of hourly averages available for day
No Data refers to data that were invalidated or lost

Daily Mean Values for Calendar Year 2022



Houston-Galveston-Brazoria
CAMS 1033 Houston North Wayside C405/C1033
7330 1/2 North Wayside
Houston, Texas

PM-10 (Standard Conditions) (µg/m³ (25° C)), Calendar Year 2022
Daily Mean Values

Day	January	February	March	April	May	June	July	August	September	October	November	December
1	37.4	No Data	No Data	85.8	28.2	29.6	No Data	No Data	103.3	78.9	38.6	119.4
2	12.2	No Data	No Data	57.3	29.1	48.6	No Data	No Data	109.9	68.7	43.1	47.1
3	39.1	No Data	ID N:0	32.6	29.6	56.1	No Data	No Data	27.0	126.8	41.3	34.6
4	80.5	No Data	102.3	44.1	29.3	31.1	No Data	No Data	22.5	115.3	24.5	40.8
5	109.3	No Data	36.2	39.7	24.6	17.5	No Data	No Data	21.9	86.0	33.6	39.5
6	49.5	No Data	36.9	47.2	44.3	23.0	No Data	No Data	43.9	95.5	28.3	33.9
7	59.8	No Data	16.0	63.4	33.6	ID N:11	No Data	No Data	68.9	111.3	43.2	31.1
8	27.8	No Data	7.3	96.9	28.2	No Data	No Data	No Data	68.9	98.7	122.1	33.6
9	18.3	No Data	34.3	73.5	34.7	No Data	No Data	No Data	105.5	43.8	116.5	38.0
10	ID N:11	No Data	46.2	58.3	ID N:5	No Data	No Data	No Data	61.2	122.8	115.5	34.1
11	No Data	No Data	37.1	44.6	ID N:11	No Data	No Data	No Data	46.0	111.2	114.8	12.9
12	No Data	No Data	32.6	41.7	70.2	No Data	No Data	No Data	68.3	53.2	16.6	39.6
13	No Data	No Data	31.9	39.5	61.1	No Data	No Data	No Data	109.8	59.0	46.5	35.9
14	No Data	No Data	28.4	66.2	26.0	No Data	No Data	No Data	64.5	70.9	45.5	30.1
15	No Data	No Data	32.2	27.8	20.9	No Data	No Data	No Data	61.8	33.6	21.7	60.6
16	No Data	No Data	64.9	39.8	48.2	No Data	No Data	No Data	44.8	23.4	61.6	63.5
17	No Data	No Data	38.0	36.0	60.4	No Data	No Data	No Data	39.5	26.9	136.2	48.9
18	No Data	No Data	55.4	36.0	35.3	No Data	No Data	No Data	28.7	58.8	150.2	32.6
19	No Data	No Data	47.3	79.8	32.5	No Data	No Data	No Data	52.7	111.3	13.2	17.9
20	No Data	No Data	36.9	42.0	49.3	No Data	No Data	No Data	97.5	184.7	19.6	14.1
21	No Data	No Data	39.3	44.3	ID N:5	No Data	No Data	No Data	87.2	38.1	13.4	72.0
22	No Data	No Data	35.1	55.7	No Data	No Data	No Data	No Data	90.6	38.8	65.9	47.1
23	No Data	No Data	34.8	34.3	ID N:14	No Data	No Data	ID N:11	136.1	21.0	74.2	34.2
24	No Data	No Data	108.5	26.1	26.8	No Data	No Data	28.8	58.3	27.7	13.0	56.0
25	No Data	No Data	148.8	19.3	35.7	No Data	No Data	46.1	29.6	43.6	7.9	45.4
26	No Data	No Data	71.6	30.2	32.5	No Data	No Data	44.4	54.1	136.5	8.1	59.9
27	No Data	No Data	38.5	59.4	75.3	No Data	No Data	56.5	66.7	112.2	37.1	90.7
28	No Data	No Data	36.1	33.6	54.7	No Data	No Data	16.2	116.3	21.1	73.0	89.5
29	No Data	--	42.7	22.3	31.3	No Data	No Data	19.4	78.5	18.6	35.1	34.1
30	No Data	--	47.0	27.2	29.9	No Data	No Data	43.3	69.2	33.6	54.0	39.0
31	No Data	--	54.4	--	ID N:10	--	No Data	77.6	--	115.7	--	37.7
Monthly Summaries Based on Daily Data												
Mean	46.0		44.7	45.8	40.1	32.0		58.3	72.0	73.9	52.0	43.8
Max	109.3		148.8	96.9	75.3	56.1		77.6	136.1	184.7	136.2	119.4
Min	12.2		7.3	19.3	20.9	17.5		16.2	20.7	18.6	7.9	12.9

Summary Statistics For 2021 (June 2 - December 31) For 2022 Calendar Year
Annual Mean 47.9 52.3
Highest Daily Mean 148.0 (October 06) 184.7 (October 20)
Lowest Daily Mean -2.1 (July 27) 7.3 (April 08)

This site began collecting PM-10 (Standard Conditions) on June 2, 2021

Daily values are based on 24 hourly averages per day
ID N:5 -- ID = insufficient data; 75% or less of data available for day of interest; N = number of hourly averages available for day
No Data refers to data that were invalidated or lost

Daily Mean Values for Calendar Year 2023

Select Year: 2023 | Select Report Format: Tabular / Comma-Delimited | Decimals to Display: 1

Select a Monitoring Site | Select a Parameter

Houston-Galveston-Brazoria
CAMS 1033 Houston North Wayside C405/C1033
7330 1/2 North Wayside
Houston, Texas

PM-10 (Standard Conditions) (µg/m³ (25° C)), Calendar Year 2023
Daily Mean Values

Day	January	February	March	April	May	June	July	August	September	October	November	December
1	47.6	5.6	45.6	76.8	71.2	ID N=15	24.8	42.8	64.6	32.4	36.4	27.8
2	23.3	6.6	57.7	51.2	68.7	ID N=9	24.8	53.7	81.8	59.9	61.0	42.8
3	61.0	66.3	64.8	42.2	79.8	34.2	43.3	42.5	18.3	32.5	71.8	48.4
4	161.6	55.1	70.7	45.5	94.6	23.4	24.8	39.3	21.1	34.5	45.8	64.7
5	199.3	48.9	40.8	40.6	40.8	38.2	39.0	40.6	33.2	36.8	31.7	82.4
6	143.7	48.3	81.5	14.3	33.4	ID N=15	45.6	25.8	40.3	40.2	58.1	101.3
7	33.0	38.1	77.8	9.0	24.6	No Data	38.6	37.4	29.3	32.5	30.8	71.7
8	23.3	24.9	80.7	19.9	26.9	No Data	46.7	38.7	42.8	38.0	27.3	22.4
9	39.4	84.6	53.3	30.2	29.2	No Data	38.6	39.6	24.8	67.3	60.6	33.9
10	31.8	93.7	84.5	64.9	16.4	No Data	36.7	36.5	33.3	79.7	6.3	27.3
11	39.0	27.3	47.1	81.5	32.1	No Data	45.6	41.3	46.4	30.8	13.6	63.7
12	52.9	38.7	32.9	105.6	40.3	No Data	44.9	37.5	53.8	53.6	21.1	57.8
13	84.7	113.5	80.6	74.6	21.3	No Data	36.2	33.9	55.1	60.8	12.8	51.4
14	90.7	39.5	76.8	111.8	13.4	No Data	68.0	37.4	25.4	44.1	27.9	68.1
15	23.2	33.6	108.2	31.8	24.8	ID N=10	67.8	38.1	ID N=13	31.8	58.6	62.9
16	58.5	31.5	36.3	29.8	28.7	54.3	65.4	45.7	No Data	27.7	33.2	15.9
17	45.2	41.3	9.6	64.9	32.4	51.9	74.5	65.0	No Data	78.2	49.0	51.8
18	57.8	57.6	20.9	44.9	71.6	37.1	37.8	40.4	No Data	87.6	59.8	88.2
19	87.0	39.1	33.4	36.0	46.6	54.9	71.9	33.6	No Data	111.9	48.1	60.3
20	51.8	29.2	54.1	37.2	28.7	60.9	70.3	34.5	No Data	98.5	25.1	47.9
21	11.8	35.6	34.7	22.2	28.2	63.5	58.0	70.4	No Data	51.8	23.4	49.4
22	30.4	46.1	28.0	43.0	62.7	46.9	47.4	98.6	No Data	34.6	68.0	54.6
23	60.5	50.7	28.5	26.0	90.0	48.3	36.5	72.1	No Data	41.5	45.0	27.5
24	23.0	44.5	28.9	48.3	71.8	34.6	71.0	75.4	No Data	51.7	48.4	31.1
25	39.7	48.4	46.9	69.5	53.2	32.7	59.7	92.9	No Data	47.6	29.3	ID N=14
26	108.0	24.9	42.4	53.3	86.8	34.2	85.9	36.9	No Data	27.3	14.0	ID N=11
27	121.7	135.8	34.0	32.8	98.6	37.7	126.0	39.6	No Data	34.1	30.2	42.6
28	34.3	60.9	35.0	56.5	29.5	58.0	100.4	31.1	No Data	21.6	68.4	36.1
29	17.9	--	45.9	36.0	17.1	36.6	92.9	38.2	ID N=11	16.2	85.1	33.6
30	14.5	--	47.7	25.0	54.9	37.1	42.1	56.9	37.5	11.4	14.8	71.1
31	11.4	--	39.7	--	37.8	--	43.1	101.3	--	22.0	--	42.6
Monthly Summaries Based on Daily Data												
Mean	60.2	48.6	48.8	47.2	45.8	44.3	56.7	49.0	41.7	44.1	39.1	50.3
Max	199.3	135.8	108.2	111.8	94.6	63.5	126.0	101.3	94.6	111.9	85.1	101.3
Min	11.4	5.6	9.6	9.0	12.4	23.4	24.8	25.8	18.3	11.4	6.3	15.9

Summary Statistics	For 2023 (June 2 - December 31)	For 2022 Calendar Year	For 2023 Calendar Year
Annual Mean	47.9	32.3	46.4
Highest Daily Mean	148.0 (October 06)	184.7 (October 20)	199.3 (January 05)
Lowest Daily Mean	-9.1 (July 23)	7.3 (March 08)	5.6 (March 01)

This site began collecting PM-10 (Standard Conditions) on June 2, 2021

Daily values are based on 24 hourly averages per day
ID N: 5 -- ID : Insufficient data; 75% or less of data available for day of interest; N : number of hourly averages available for day
No Data refers to data that were invalidated or lost

Daily Mean Values for Calendar Year 2024

Select Year: 2024 | Select Report Format: Tabular / Comma-Delimited | Decimals to Display: 1

Select a Monitoring Site | Select a Parameter

Houston-Galveston-Brazoria
CAMS 405 Houston North Wayside C405/C1033
7330 1/2 North Wayside
Houston, Texas

PM-10 (Standard Conditions) (µg/m³ (25° C)), Calendar Year 2024
Daily Mean Values

Day	January	February	March	April	May	June	July	August	September	October	November	December
1	129.0	125.8	38.7	49.4	46.3	45.3	69.0	No Data	16.6	No Data	No Data	No Data
2	28.4	67.0	45.1	28.3	22.7	41.0	76.7	No Data	30.5	No Data	No Data	No Data
3	18.9	15.4	23.7	38.8	25.3	34.3	60.9	No Data	76.0	No Data	No Data	No Data
4	41.2	58.2	27.6	66.1	28.4	43.1	27.9	No Data	53.8	No Data	No Data	No Data
5	29.1	25.8	36.9	37.9	21.7	47.3	57.8	No Data	26.4	No Data	No Data	No Data
6	31.6	96.6	36.9	34.7	29.2	59.7	41.8	No Data	ID N=11	No Data	No Data	No Data
7	22.9	79.3	37.5	39.0	40.9	90.2	21.4	No Data	No Data	No Data	No Data	No Data
8	21.6	46.7	35.5	43.2	48.9	33.0	ID N=9	No Data	No Data	No Data	No Data	No Data
9	49.9	37.1	22.5	39.9	87.8	26.2	29.1	ID N=12	No Data	No Data	No Data	No Data
10	68.3	37.7	25.4	16.4	64.6	46.9	43.8	58.7	No Data	No Data	No Data	No Data
11	54.5	18.5	49.2	59.1	42.0	43.8	54.6	40.2	No Data	No Data	No Data	No Data
12	44.5	25.0	74.2	84.9	25.9	58.5	48.0	68.2	No Data	No Data	No Data	No Data
13	68.1	58.7	31.1	50.4	37.6	71.6	25.1	57.6	No Data	No Data	No Data	No Data
14	27.5	62.7	41.6	28.3	42.2	80.3	36.4	53.1	No Data	No Data	No Data	No Data
15	13.6	74.7	49.3	41.0	85.2	69.0	54.4	54.1	No Data	No Data	No Data	No Data
16	9.8	19.9	24.3	51.8	ID N=17	29.8	49.9	47.4	No Data	No Data	No Data	No Data
17	ID N=1	15.0	19.7	53.1	No Data	79.1	50.4	ID N=12	No Data	No Data	No Data	No Data
18	No Data	27.4	26.9	41.9	No Data	78.2	26.5	No Data	No Data	No Data	No Data	No Data
19	No Data	59.8	41.4	84.2	No Data	25.2	44.5	ID N=10	No Data	No Data	No Data	No Data
20	No Data	91.0	58.9	28.7	ID N=10	39.4	26.1	48.6	No Data	No Data	No Data	No Data
21	No Data	37.5	35.2	15.0	51.1	61.5	25.4	79.9	No Data	No Data	No Data	No Data
22	No Data	52.2	18.9	36.8	48.3	45.6	53.9	72.8	No Data	No Data	No Data	No Data
23	No Data	39.0	36.9	71.7	49.5	ID N=6	28.4	38.3	No Data	No Data	No Data	No Data
24	No Data	74.9	34.8	43.1	90.5	ID N=13	26.7	57.6	No Data	No Data	No Data	No Data
25	ID N=10	48.5	54.9	35.5	90.1	19.7	28.4	37.3	No Data	No Data	No Data	No Data
26	36.8	43.6	42.1	41.7	51.7	37.8	33.7	52.9	No Data	No Data	No Data	No Data
27	13.8	72.2	64.5	40.9	67.5	36.1	27.8	48.8	No Data	No Data	No Data	No Data
28	25.1	58.3	85.7	43.4	52.8	39.1	21.8	49.7	No Data	No Data	No Data	No Data
29	61.7	48.9	33.3	27.3	43.4	42.4	ID N=9	38.3	No Data	No Data	No Data	No Data
30	77.7	---	35.1	22.2	41.2	43.6	No Data	27.2	No Data	No Data	No Data	No Data
31	104.4	---	35.3	--	26.6	--	No Data	18.7	---	No Data	---	No Data
Monthly Summaries Based on Daily Data												
Mean	43.4	50.8	38.8	44.8	45.8	48.0	41.1	49.9	38.7			
Max	129.0	125.8	85.7	84.2	85.2	90.2	76.7	79.9	76.0			
Min	9.8	15.0	18.9	15.0	21.7	19.7	21.4	18.7	16.6			

Summary Statistics	For 2022 Calendar Year	For 2023 Calendar Year	For 2024 Calendar Year
Annual Mean	32.3	46.4	45.1
Highest Daily Mean	184.7 (October 20)	199.3 (January 05)	129.0 (January 01)
Lowest Daily Mean	7.3 (March 08)	5.6 (February 01)	9.8 (February 16)

This site began collecting PM-10 (Standard Conditions) on June 2, 2021

Daily values are based on 24 hourly averages per day
ID N: 5 -- ID : Insufficient data; 75% or less of data available for day of interest; N : number of hourly averages available for day
No Data refers to data that were invalidated or lost

Daily Mean Values for Calendar Year 2025

Select Year: 2025 | Select Report Format: Tabular / Comma-Delimited | Decimals to Display: 1

Select a Monitoring Site — Find Site: Wayside | CAMS | AQS | Description | CAMS 405 Houston North Wayside C405/C1033 | Generate Report | Reset to Defaults

Select a Parameter: PM-10 (Standard Conditions)

Houston-Galveston-Brazoria
CAMS 405 Houston North Wayside C405/C1033
7330 1/2 North Wayside
Houston, Texas

PM-10 (Standard Conditions) (µg/m³ (25° C)), Calendar Year 2025
Daily Mean Values

Day	January	February	March	April	May
1	No Data	127.4	No Data	58.6	37.6
2	No Data	55.8	No Data	42.9	32.1
3	No Data	30.9	ID N=11	43.8	20.3
4	No Data	36.9	88.1	41.8	26.3
5	No Data	30.8	90.9	28.3	ID N=13
6	No Data	ID N=16	97.3	10.4	16.9
7	No Data	No Data	64.2	31.9	24.9
8	No Data	No Data	52.8	69.2	59.7
9	No Data	No Data	14.1	100.3	27.4
10	No Data	No Data	44.6	41.8	37.2
11	No Data	No Data	87.7	66.0	21.3
12	No Data	No Data	53.8	68.9	51.5
13	No Data	No Data	ID N=9	27.4	ID N=8
14	No Data	No Data	ID N=13	36.5	
15	No Data	No Data	168.7	69.3	
16	No Data	No Data	32.8	90.9	
17	No Data	No Data	80.8	33.8	
18	No Data	No Data	49.6	44.0	
19	No Data	No Data	67.7	45.8	
20	No Data	No Data	39.7	44.8	
21	No Data	No Data	91.1	25.5	
22	No Data	No Data	54.1	54.3	
23	No Data	No Data	41.4	33.2	
24	No Data	No Data	35.2	36.4	
25	No Data	No Data	91.9	48.8	
26	No Data	No Data	68.4	50.3	
27	No Data	No Data	ID N=13	24.2	
28	No Data	No Data	No Data	26.2	
29	No Data	--	No Data	33.3	
30	No Data	--	No Data	38.9	
31	ID N=10	--	No Data	--	
Monthly Summaries Based on Daily Data					
Mean		56.4	67.4	45.6	32.3
Max		127.4	168.7	100.3	59.7
Min		30.8	14.1	10.4	16.9

Summary Statistics	For 2023 Calendar Year	For 2024 Calendar Year	For 2025 (January 1 - May 13)
Annual Mean	48.4	45.1	51.0
Highest Daily Mean	199.2 (January 05)	129.0 (January 01)	168.7 (March 15)
Lowest Daily Mean	5.6 (February 01)	9.8 (January 16)	10.4 (May 06)

This site began collecting PM-10 (Standard Conditions) on June 2, 2021

Daily values are based on 24 hourly averages per day
ID N=5 -- ID = insufficient data; 75% or less of data available for day of interest; N = number of hourly averages available for day
No Data refers to data that were invalidated or lost

Accordingly, it is paramount that TCEQ ensure that there is adequate monitoring in Northeast Houston where these concrete operations cluster.

Concentrated Exposure to Other Industrial Polluters

Shortly after the North Wayside monitor's deployment, TCEQ began identifying individual members of industry in hopes of resolving the violations at the North Wayside monitor under the 2012 National Ambient Air Quality Standards (NAAQS). The list below represents the industrial users TCEQ identified as potentially responsible for the community's exposure to pollutants and the 2012 and 2024 NAAQS exceedances.[114] These facilities are located within 2 miles of the North Wayside monitor:

1. Gold Star Metals (0.12 miles E)
2. Invictus Transport (0.13 miles NE)
3. XLR8 Truck Lines (0.20 miles NE)
4. Five Star Ready Mix (0.37 miles NE)
5. Texas Concrete Ready Mix (1.4 miles SW)
6. Texas Concrete Ready Mix (1.4 miles SW)

[114] TCEQ, North Wayside Monitor Update May 2021-January 2022, (Feb. 8, 2022) at 3.

7. Queen Ready Mix (1.75 miles SE)
8. Union Pacific Rail Yard (0.40 miles SW-W)

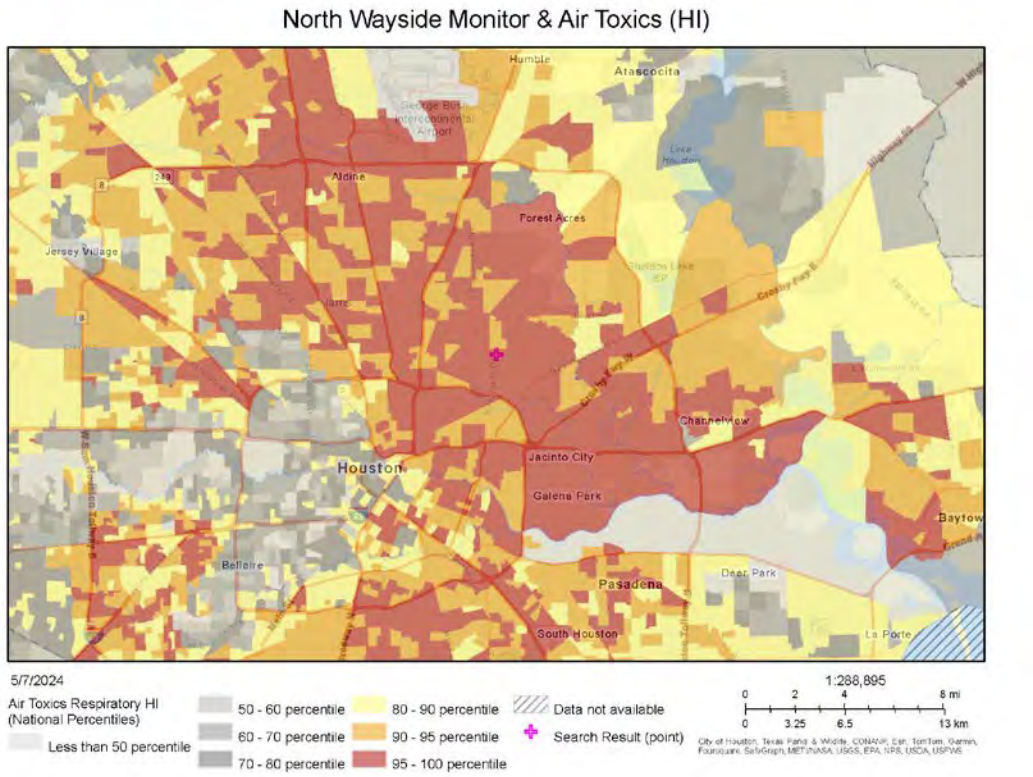
But, there are many more concerning industrial operations in Northeast Houston within five miles from the North Wayside monitor, including the following:

1. McCarty Road Landfill
2. Longhorn Glass Plant
3. Anheuser Busch Houston Brewery
4. 69th Street Wastewater Treatment Plant
5. Owens Corning
6. Greens Bayou Electric Generating Station
7. Whispering Pines Landfill
8. McCarty Road Landfill Gas Recovery Facility
9. Johns Manville
10. Magellan Pipeline Terminals East Houston Tank Farm

While SN 48 and the surrounding communities remain encouraged that monitoring was deployed at N. Wayside, the results of the monitoring are deeply concerning. Further, four Super Neighborhoods with increasing industrial encroachment in predominately residential subdivisions covering 25.74 sq. miles all rely on the N. Wayside monitoring to understand the quality of the air they are breathing. Further, the monitoring at North Wayside is deficient and only evaluates PM_{10} (non-NAAQS comparable), $PM_{2.5}$, Ozone, Wind & Temperature. Monitoring only for these pollutants is insufficient to assess emissions from multiple different industrial facilities.

Specifically, local community members on and near Dockal Road are often complaining about strong odors and smells emanating from Gold Star Metals. Gold Star Metals is estimated to be only .12 miles from the North Wayside Monitor. And, according to a research project conducted by the University of Texas Health and other partners, metal air pollution was evaluated near CMC Metal Recycling located at 2015 Quitman Street, Houston, TX 77026. This study rated the Hazard Index (HI) created from the metal emissions at this site and found that the HI for developing nasal irritation and upper respiratory distress ranged from 0.4 to 1.6. The HI for developing bronchitis, lung inflammation and difficulty breathing ranged from 0.4 to 1.6. And, generally, the study found: “the risks for diseases other than cancer would decrease if metal air pollution decreases; the risks would increase if metal air pollution increases.” Taking this study as true and applying to similarly situated communities in Northeast Houston where there are many more metal facilities, including: Gold Star Metals, Steel Castings, Hydril Premium Connections, Modern Welding Co Houston Plant, and Mauser Corp—is concerning. Below is a map illustrating the Hazard Index in Northeast Houston as demarked by the North Wayside monitor.

Figure 42. Hazard Index in Northeast Houston[115]



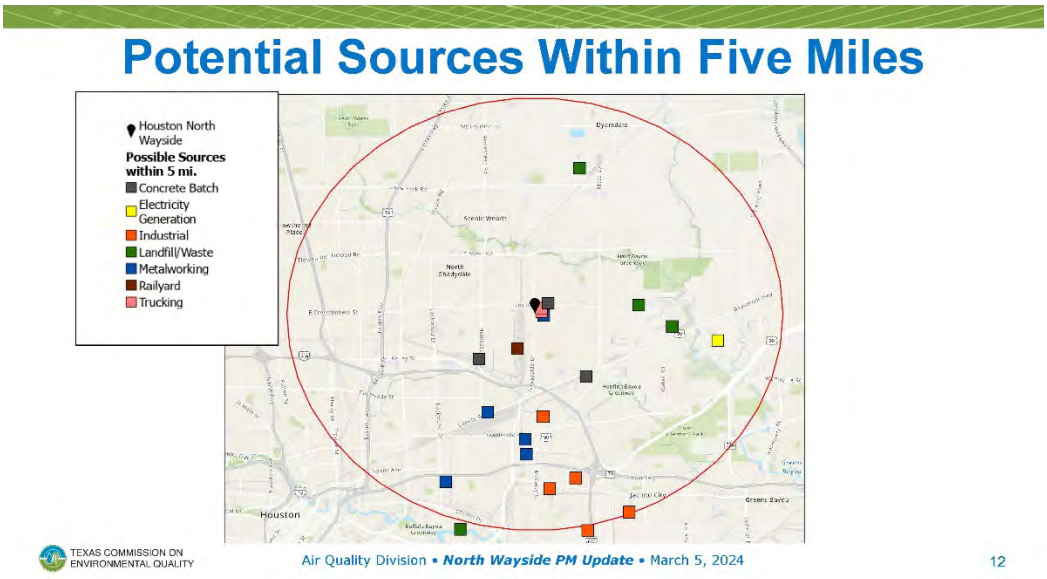
Further, metal facilities are located near to the North Wayside Monitor, which has documented 2012 and 2024 NAAQS exceedances for $PM_{2.5}$. Because the North Wayside Monitor does not currently evaluate other concerning pollutants, SN 48 encourages TCEQ to also collect VOC and heavy metals data at the North Wayside monitoring site so that the adjacent communities can understand the health impacts of living near facilities with metal emissions.

Last year TCEQ responded to comments submitted on behalf of communities by LSLA that VOC monitoring was enhanced in 2024 by adding a state-initiative VOC monitor at the Houston East air monitoring site that is five miles upwind of Houston North Wayside. SN 48 appreciates both that an enhanced VOC monitor was deployed and that TCEQ responded to comments by informing the community. SN 48 additionally applauds TCEQ for agreeing to deploy VOC monitoring at Houston Finnigan Park and Houston Pleasantville Elementary School. While all three of these monitors are within five miles of Houston North Wayside—SN 48 still believes VOC monitoring at the North Wayside location is necessary for the following reasons.

[115] U.S. Environmental Protection Agency, EJScreen: Environmental Justice Screening and Mapping Tool, https://www.epa.gov/ejscreen.

First, the area around the North Wayside monitor is industrialized with operators that are known to emit VOCs. These sources are noted on the TCEQ's presentation slide below.

Figure 43. Potential Sources within 5 Miles of the North Wayside Monitor



Second, at five miles away, VOC concentrations from the point sources near the Wayside monitor noted in the TCEQ's presentation may be diluted significantly.[116] So, at five miles away, a monitor may only be capturing background levels or diluted plumes rather than peak community exposure. Third, community exposure in and around SN 48 related to these known polluters will be underestimated at monitors five miles away. For example, if the monitors 5 miles away are upwind or crosswind or misaligned in another way, it will underestimate exposure. Moreover, the community members are experiencing health impacts are experiencing those from peak exposure—and monitors 5 miles away will not show that peak, it will only capture an average. Finally, while TCEQ may assert that the additional VOC monitoring five miles away adequately protect public health, this may not hold true for a community five miles away because the more-distant monitors will only evaluate averages and so will mask localized risks especially in areas where VOC emissions are underestimated already.[117] Accordingly, the monitors placed 5 miles away are important to the local communities that they are sited near but this monitoring is insufficient for the communities near the Wayside monitor. Therefore, SN 48 requests that VOC and heavy metals monitoring be added to the North Wayside Monitor.

[116] Xiao-Bing Li. Sources of volatile organic compounds and policy implications for regional ozone pollution control in an urban location of Nanjing, East China. *Atmospheric Chemistry and Physics*, 22(16), 10567–10587 at 10574.

[117] Zhang, Y., et al. (2018). "Indoor and Outdoor VOC Concentrations in Ship Cabins: Implications for Human Health." *Environmental Science & Technology*, 52(15), 8765–8772 at 8769.

III. SUMMARY OF REQUESTED RELIEF

A. NOx (Nitrogen Dioxide):

- Brazoria County: Add NO_2 monitoring at the Freeport Avenue I monitor location.
- Harris County: Add near-road NO_2 monitoring along Interstate 45 north of Beltway 8.

B. SO2 (Sulfur Dioxide):

- Brazoria County: Add SO_2 monitoring at the Freeport Avenue I monitor location.
- Jefferson County: Review and properly adjust placement of DRR-required SO_2 monitor near Oxbow Calcining facility in Port Arthur.

C. O3 (Ozone):

- Brazoria County: Add O_3 capabilities back to the Clute monitoring site.
- Harris County: Add an ozone monitor in Pasadena area.

D. Particulate Matter:

- Harris County: Commit to installing the new $PM_{2.5}$ and PM_{10} monitors in Fifth Ward and Pleasantville Area before December 31, 2025
- Harris County: Continue to designate the Houston North Loop monitor as comparable to the annual PM2.5 NAAQS.
- Harris County: Make PM_{10} monitoring federally equivalent/NAAQS comparable at the N. Wayside monitor location.

E. VOC (Volatile Organic Compounds):

- Better Brazoria: Add VOC Monitoring to the Freeport Avenue I monitor location.
- Harris County: Commit to installing the new VOC monitors in Fifth Ward and at Pleasantville Elementary before December 31, 2025.
- Harris County: Commit to adding VOC monitoring to the North Wayside Monitor.
- Harris County: Commit to installing more VOC monitors in Pasadena, Channelview, and other Houston Ship Channel communities.

F. Heavy Metals

- Brazoria County: Add heavy metals monitoring to the Freeport Avenue I monitor location.
- Harris County: Add heavy metals monitoring to the N. Wayside monitor location.

IV. CONCLUSION

For these reasons, LSLA, on behalf of its 8 group clients and one individual client in Channelview, Texas who have participated in these comments, hopes TCEQ will incorporate these concerns into its final 2025 Air Monitoring Network Plan and would appreciate a complete response from TCEQ in response to the comments and concerns raised in this letter. Please contact the undersigned counsel if you have any questions or need clarification regarding the comments contained herein.

Respectfully submitted,

LONE STAR LEGAL AID

Amy Catherine Dinn, Litigation Director
Chase Porter, Staff Attorney
Caroline Crow, Staff Attorney
1415 Fannin
Houston, TX 77002
Telephone: (713) 652-0077 ext. 8108
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adinn@lonestarlegal.org
cporter@lonestarlegal.org
ccrow@lonestarlegal.org

ATTORNEYS FOR PORT ARTHUR COMMUNITY ACTION NETWORK, CARING FOR PASADENA COMMUNITIES, SUPER NEIGHBORHOOD 48 TRINITY GARDENS / HOUSTON GARDENS, PLEASANTVILLE AREA SUPER NEIGHBORHOOD 57, PROGRESSIVE FIFTH WARD COMMUNITY ASSOCIATION, BETTER BRAZORIA—CLEAN AIR & WATER, HOUSTON DEPARTMENT OF TRANSFORMATION, GULFTON SUPER NEIGHBORHOOD COUNCIL, AND CAROLYN STONE, CHANNELVIEW RESIDENT

From:	Luke Metzger
To:	tceqamnp
Subject:	Draft 2025 AMNP
Date:	Wednesday, May 14, 2025 6:50:29 PM
Attachments:	Draft 2025 AMNP comments.pdf

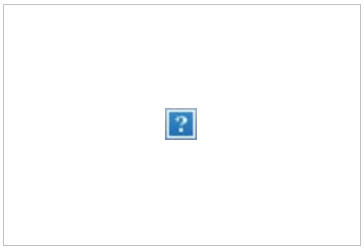
Please see the attached comment regarding the Draft 2023 Annual Monitoring Network Plan.

Sincerely,

Luke

--

Luke Metzger
Executive Director, Environment Texas
luke@environmenttexas.org
200 E. 30th Street
Austin, Texas 78705
(512) 479-9861 office
(512) 743-8257 cell
www.EnvironmentTexas.org
Twitter
LinkedIn



Environment Texas works for clean air, clean water, clean energy, wildlife and open spaces, and a livable climate. Our members across the state put grassroots support behind our research and advocacy. Environment Texas is part of Environment America, a national network of 30 state environmental groups. Learn more at www.EnvironmentTexas.org

Feel free to schedule a time to meet with me at:
https://calendar.app.google/T78yw3ehepw7S3K56

Sign up to get my semiregular updates on Environment Texas' work.

Come work with me - we're hiring
City Hall Advocate

May 14, 2025

We write to call on the TCEQ to place more air monitors in South Texas' Eagle Ford Shale and West Texas' Permian Basin. Prolific oil and gas activity in these basins, including emissions from leaks, venting and flaring, means that we need more data on ozone levels, and their building blocks, nitrogen oxides and volatile organic compounds, and other harmful pollution like particulate matter. Please protect our air and health by ensuring the industry's emissions and impacts are adequately measured.

Sincerely,

Laura Irwin	Pflugerville	TX	78660
Seamus O'Neill	San Antonio	TX	78220
Baylee Burman	La Porte	TX	77571
Virginia Palacios	Encinal	TX	78019
Joanie Steinhaus	Galveston	TX	77550
Elisa Saldivar	Laredo	TX	78045
Brandon Chavez	Laredo	TX	78043
Rodrigo Hernandez	Laredo	TX	78041
MarisolVazquez	Laredo	TX	78041
Justin Martinez	Laredo	TX	78046
Evelyn Padilla	Laredo	TX	78045
valeria martinez gutierrez	Laredo	TX	78045
Beatriz Vidales	Laredo	TX	78045
Vielka Martinez	Laredo	TX	78040
Carmen Ramirez	Laredo	TX	78041
Melinda Hernandez	Laredo	TX	78045
Luis Castillo	Laredo	TX	78040
Juan Perez	Laredo	TX	78045
Montserrat Salinas	Laredo	TX	78045
Mariana Correa Farias	Laredo	TX	78041
David Casarez	Laredo	TX	78043
Brianna Andrews	Laredo	TX	78046
Karla ambrose	Laredo	TX	78045
Francisco Martinez	San Antonio	TX	78229
Rodolfo Rendon	Laredo	TX	78045
Mia Jasso	Laredo	TX	78040
Ian Seamans	Plano	TX	75074
Mario Gutierrez Becerra	Laredo	TX	78045
Clarissa Almanza	Laredo	TX	78041
LUIS MAYERS	Laredo	TX	78041

From:	RESET Lab
To:	tceqamnp
Cc:	Jordan French
Subject:	2025 Annual Monitoring Network Plan: Comment submission
Date:	Wednesday, May 14, 2025 11:08:16 PM
Attachments:	TCEQ-AMNP-comment_RESETLabUT.pdf

Dear Ms. Landuyt,
We appreciate the opportunity to comment on TCEQ's 2025 Draft Air Monitoring Network Plan.

Please find attached a .pdf file with our written comments.

With thanks,
Dr. Sergio Castellanos
Mr. Jordan French

May 14th, 2025
Texas Commission on Environmental Quality (TCEQ)
P.O Box 13087
Attention: Holly Landuyt, MC-165
Austin, Texas 78711-3087
Sent via: tceqamnp@tceq.texas.gov

RE: 2025 Draft Air Monitoring Network Plan (AMNP)

Dear Ms. Landuyt:

As private citizens, who are also researchers at The University of Texas at Austin, evaluating equitable energy transitions, we appreciate the opportunity to comment on the Texas Commission on Environmental Quality's (TCEQ) 2025 Draft Air Monitoring Network Plan (AMNP).

There is a continued proliferation of air pollution sources in the Austin-Round Rock-San Marcos MSA, specifically in Bastrop, TX. Bastrop County grew 21.12% in population from 2019–2023[1], making it the 13th fastest-growing county in Texas. Along with that growth, the emissions sources, both stationary and mobile, are also expected to increase.

Below, we share our comments on and recommendations for the AMNP regarding opportunities that we believe will strengthen regulatory air monitoring in the growing Bastrop area.

1. Need for Expansion of Air Monitoring in Bastrop

There are references in the AMNP to continued evaluation of the PM_{10} FEM monitoring network. Considering the growth of emissions sources in Bastrop County, the lack of regulatory-grade monitoring in this area, and the high levels of PM_{10} detected through our independent monitoring campaign, we encourage TCEQ to initiate the process of establishing PM_{10} FEM monitors in Bastrop County.

Of particular concern are industry properties related to mining (Fig. 1). These sources are presumed to be responsible for the elevated levels of PM_{10} (near the properties shown in Fig. 1), in apparent violation of NAAQS, as illustrated in Fig. 2.

[1] United States Census Bureau, https://data.census.gov

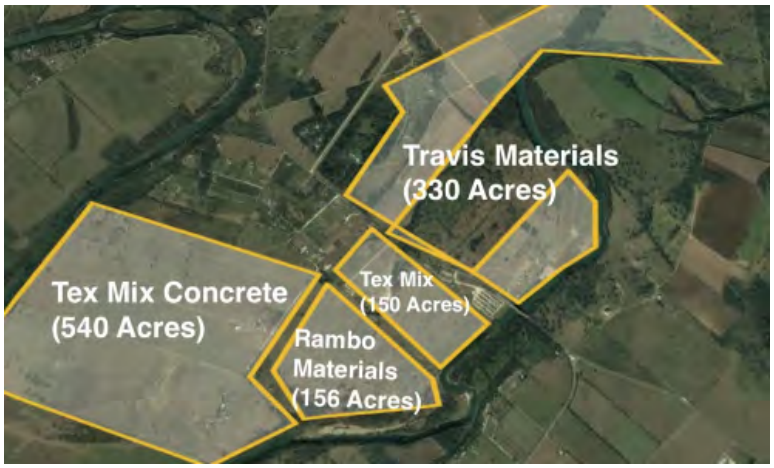


Fig. 1. Extractive industries in the Bastrop area, contributing to exceedingly high PM_{10} values. While some of these properties are undeveloped, they are owned by companies associated with the mining industry, representing potential sites for current and future emissions.

Data in Fig. 2 is from our lab's stationary monitoring campaign, conducted near Utley, Bastrop County, near the sites shown in Fig. 1. This monitoring campaign relied on a professional-grade air quality "Quant-AQ" sensor[2], which allowed us to identify that, between February and April of this year (when we installed the sensor), the PM_{10} NAAQS limit of 150 µg/m^3 (24 hour average) was exceeded twice, violating the regulatory limit of once per year on average over 3 years.

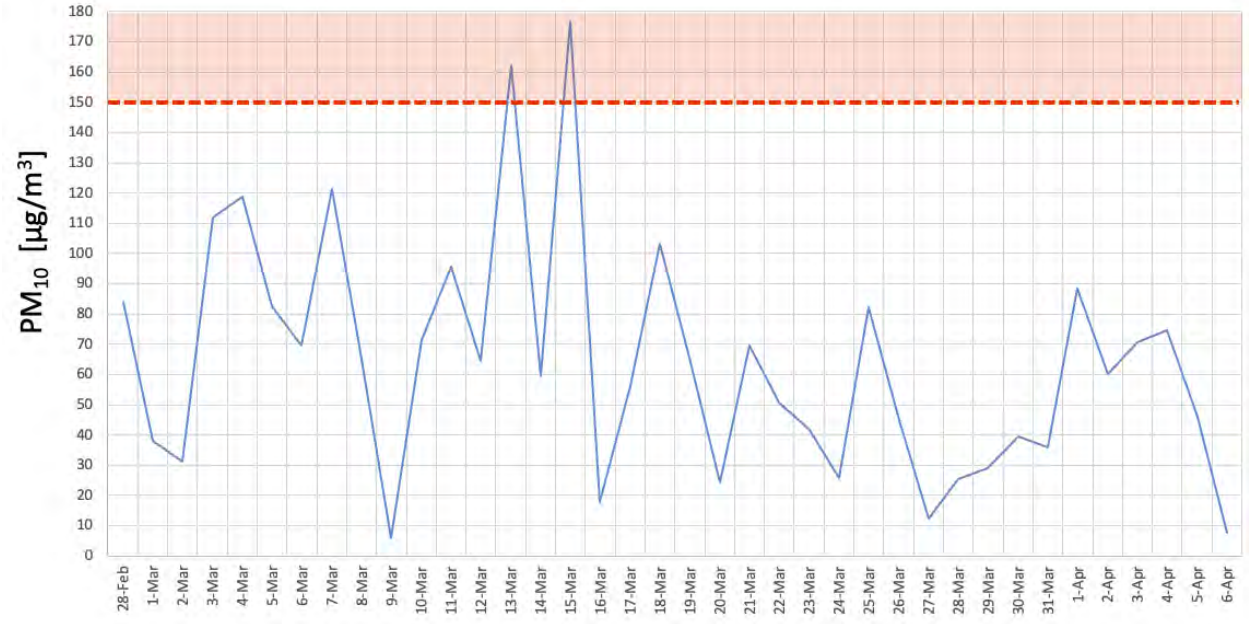
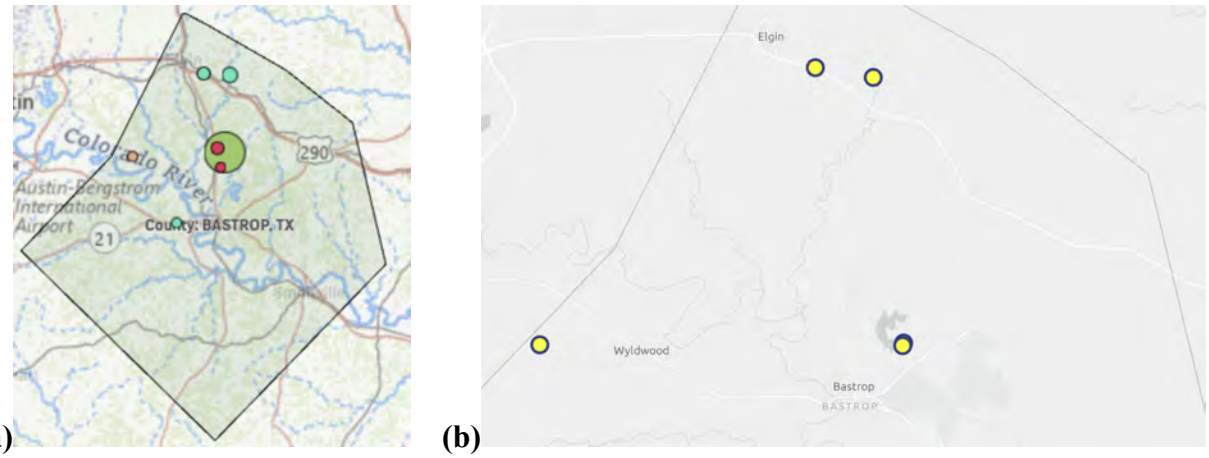


Fig. 2. Average daily ambient PM_{10} concentration (µg/m^3) values measured during a stationary monitoring campaign between February and April. Red dashed line represents the PM_{10} NAAQS of 150 µg/m^3 (24 hour average) not to be exceeded more than once per year on average over 3 years. This limit was exceeded twice in March 2025.

[2] Quant-AQ, https://quant-aq.com

Beyond the PM_{10} sources shown above, there are other existing emissions sources across Bastrop County, as shown in Fig. 3. Because of this, we believe that continued focus and attention on collecting the most comprehensive air monitoring data for this area should be a high priority.



(a) **(b)**

Fig. 3. Significant emissions sources in Bastrop County, including seven facilities listed in the EPA's Toxic Release Inventory (a, left) and five facilities listed in the EPA's AirToxScreen tool (b, right). For Fig. 3(a), the size of each point represents the magnitude of emissions, and the color represents the industry (green, food; cyan, nonmetallic minerals; orange, wood; red, other). Facilities in 3(b) include brick manufacturing facilities and electric power plants.

Residents near the properties shown in Fig. 1 have expressed concerns regarding the impacts of gravel and mining operations on their air quality. As such, we recommend that TCEQ reach out to these communities (near Utley, TX) to begin the process of siting regulatory air monitors. Additional communities near the emissions sources shown in Fig. 3 may have similar concerns; we recommend that TCEQ contact these communities as well.

Considering the monitoring requirements and locations shown in Table 1, Appendix J of the AMNP (shown below), we recommend that TCEQ consider expanding its monitoring network in the Austin-Round Rock-San Marcos MSA. While we recognize that TCEQ's existing PM_{10} monitoring network falls within the required range of 2-4 sensors, both monitors are in the Austin area, and the MSA's rapid growth merits proactive monitoring across all communities with expanding emissions sources, population growth, and limited monitoring resources.

Table 1: Particulate Matter of 10 Micrometers or Less Monitoring Requirements Assessment and Monitor Locations[1]

Metropolitan Statistical Area	2023 Population Estimates[2]	Site Name	2021-2023 Maximum Concentration ($\mu g/m^3$)	Maximum Concentration in Comparison to Percent of NAAQS[3] (%)	Required Monitors[4,5]	Existing Monitors[4,5]
Austin-Round Rock-San Marcos	**2,473,275**		**97**	**65**	**2-4**	**2**
		Austin Webberville Road (PM_{10} FEM continuous monitor activated November 2023)	97	65		
		Austin Audubon Society	90	60		

2. Consideration of Community Air Monitoring Networks Alongside Regulatory Monitoring

Our lab's stationary monitoring efforts in Bastrop, as well as our ongoing monitoring projects in Travis County, demonstrate how community-engaged air monitoring via reliable and precise air monitoring sensors can foster collaborations with community members, highlighting local environmental concerns and empowering citizen scientists. Our experience interacting with community members is that there is a growing desire to increase monitoring networks. Therefore, we echo the comments of previous air quality and environmental groups and urge TCEQ and the AMNP to establish a framework for community monitoring that can enhance regulatory monitoring and actions. This framework would engage and educate community members while supplying TCEQ with additional environmental data, thus fostering meaningful collaborations and promoting sustainable development in Bastrop and beyond.

Again, we appreciate the opportunity to comment on the 2025 Draft AMNP. If you have any questions about this letter, please do not hesitate to contact us at your convenience by email at RESETLabUT@gmail.com and jordanfrenchcfc@gmail.com.

Respectfully,

Dr. Sergio Castellanos
RESETLabUT@gmail.com

Mr. Jordan French
jordanfrenchcfc@gmail.com

From:	Julie Sears (jcsears@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Saturday, May 10, 2025 2:16:19 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Julie Sears
320 Canyon Ridge Dr
Richardson, TX 75080
jcsears@gmail.com
(972) 680-2393

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Lisa Yelenick (lkayey@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Saturday, May 10, 2025 4:32:27 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Lisa Yelenick
10135 w temple dr
Houston, TX 77095
lkayey@gmail.com
(281) 234-5678

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Sarah Sudheer (sudheer.sarah@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Saturday, May 10, 2025 8:04:00 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Sarah Sudheer
10500 Salt Block Cir
Austin, TX 78750
sudheer.sarah@gmail.com
(832) 741-5713

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Neil Mcqueen (svtranquilo@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Sunday, May 11, 2025 9:15:07 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Neil Mcqueen
4213 Estate Drive
Corpus Christi, TX 78412
svtranquilo@hotmail.com
(361) 765-4445

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Karen Freeman (kfreemanrn@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Sunday, May 11, 2025 1:28:12 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Karen Freeman
8711 Rustling Meadows
san antonio, TX 78254
kfreemanrn@gmail.com
(210) 216-4480

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Marie West (blackforestgreen3@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Saturday, May 10, 2025 10:32:35 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Marie West
6140 Annanhill Circle
Cleburne, TX 76033
blackforestgreen3@gmail.com
(817) 781-1955

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Melissa Davis (melimcd2018@protonmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Saturday, May 10, 2025 9:34:09 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Melissa Davis
5711 Blue Ridge
College Station, TX 77845
melimcd2018@protonmail.com
(979) 229-4849

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Margaret Duran (pegduran1@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Saturday, May 10, 2025 7:02:03 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Margaret Duran
4022 Congressional Drive
Corpus Christi, TX 78413
pegduran1@gmail.com
(361) 696-9366

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jessica McCown (d96jess@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 10:35:44 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jessica McCown
609 24th St, Lot 89
San Leon, TX 77539
d96jess@gmail.com
(979) 533-1211

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jennifer Yacio (jennifer@sensoryworld.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 10:25:32 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jennifer Yacio
3132 WATERSIDE DR
Arlington, TX 76012
jennifer@sensoryworld.com
(817) 503-5929

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Analyn Urpi (agurpi.ediaz@verizon.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 7:33:55 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Analyn Urpi
4540 Winding Wood Trl
Plano, TX 75024
agurpi.ediaz@verizon.net
(972) 618-6488

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Sheila Wa (sheila_walton1@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 5:47:08 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Sheila Wa
108 bayshore de
Ingleside, TX 78362
sheila_walton1@yahoo.com
(817) 633-5214

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Diane Duesterhoeft (dduesterhoeft@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 5:36:08 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Diane Duesterhoeft
5227 Wildflower Drive
San Antonio, TX 78228
dduesterhoeft@gmail.com
(210) 254-0245

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Diana Teter (dteterus@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 4:26:24 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Diana Teter
915 S 7th Ave
Edinburg, TX 78539
dteterus@yahoo.com
(956) 249-0872

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Eli McKay (elimckay361@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 4:10:51 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Eli McKay
1008 Marguerite St., corpus christi
Corpus Christi, TX 78401
elimckay361@gmail.com
(970) 433-9329

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Katy Holland (hollakerr@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 3:41:00 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Katy Holland
1717 S Avenue A
Aransas Pass, TX 78336
hollakerr@yahoo.com
(361) 230-2469

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	SOCORRO RAMOS-AVILES (sramosavilespr@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 3:29:20 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

SOCORRO RAMOS-AVILES
4901 Saratoga Blvd Apt 723
CORPUS CHRISTI, TX 78413
sramosavilespr@gmail.com
(787) 562-4582

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Merida Forrest (aleli420@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 3:21:57 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Merida Forrest
7114 Grape Arbor Dr.
Corpus Christi, TX 78414
aleli420@yahoo.com
(361) 249-8579

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Paul Hottensen Jr (phottensen@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 3:17:06 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Paul Hottensen Jr
24106 Kingdom Isle Ln
Katy, TX 77493
phottensen@yahoo.com
(281) 687-6285

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Roberta Beckman (rbeckmaninc@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 2:45:22 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Roberta Beckman
14618 Bergenia Dr
Cypress, TX 77429
rbeckmaninc@aol.com
(832) 607-9673

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Rachel Fickey (rachelfickey@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 10:49:01 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Rachel Fickey
322 Lelia St
Palestine, TX 75803
rachelfickey@gmail.com
(903) 724-5778

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jo Smmons (joellenscats@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 10:14:42 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jo Smmons
307 Windjammer
Rockport, TX 78382
joellenscats@gmail.com
(512) 413-5514

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jean Thomad (irisjean@comcast.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 9:27:15 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jean Thomad
3714 sunstone dr
Houston, TX 77068
irisjean@comcast.net
(713) 222-3333

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Anna K (ahaley1@protonmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 8:41:26 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Anna K
1001 Lake Carolyn Pkwy
Irving, TX 75039
ahaley1@protonmail.com
(361) 779-7628

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Yareli Ortega (yareli.ortega@icloud.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 8:01:16 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Yareli Ortega
2953 Marine Cir
Fort Worth, TX 76106
yareli.ortega@icloud.com
(817) 266-9016

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Margaret Weiss (mtweiss1@sbcglobal.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 7:47:34 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Margaret Weiss
1036 Highland Terrace Dr.
Canyon Lake, TX 78133
mtweiss1@sbcglobal.net
(214) 616-7828

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Margaret Goodman (maggiegoodman13@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 7:00:17 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Margaret Goodman
1406 Divide Pass,
Blanco, TX 78606
maggiegoodman13@gmail.com
(830) 554-0186

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Dale Price (deprice1@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 6:41:11 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Dale Price
819 Heather Woods Dr
Tool, TX 75143
deprice1@yahoo.com
(903) 432-2850

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jerry Morrisey (jlmorrisey@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 5:47:49 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jerry Morrisey
19631 Encino Way
San Antonio, TX 78259
jlmorrisey@aol.com
(210) 382-2614

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kathryn Melton (zappa2004@earthlink.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Friday, May 9, 2025 1:08:15 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kathryn Melton
3209 Brookmeade Ct
Deer Park, TX 77536
zappa2004@earthlink.net
(281) 476-4867

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Greg Sells (gsells@austin.rr.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:26:34 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Greg Sells
3300 Parker Ln. Apt. 258
Austin, TX 78741
gsells@austin.rr.com
(512) 443-6461

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Elaine Byrne (elaine_byrne@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:07:39 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Elaine Byrne
17021 Ennis Trail
Austin, TX 78717
elaine_byrne@yahoo.com
(512) 422-8088

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Benjamin Alpers (preciseshotinthedark@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:06:07 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Benjamin Alpers
1602 Fairplay Ct.
Austin, TX 78721
preciseshotinthedark@yahoo.com
(555) 555-5555

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Mark Goodman (mpg6354@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:01:22 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Mark Goodman
6506 REDPINE RD
Dallas, TX 75248
mpg6354@aol.com
(972) 931-9332

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Leslie Dare (danceconnection.mabank@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 9:35:14 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Leslie Dare
174 Shady Shores Dr
Mabank, TX 75156
danceconnection.mabank@yahoo.com
(903) 880-9999

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Giselle Whitwell (gisellewhitwell@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 9:33:41 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Giselle Whitwell
14200 Fort Smith Trail
Austin, TX 78734
gisellewhitwell@yahoo.com
(512) 382-0729

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Keith Daniels (kdan281.wrld@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 9:16:22 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Keith Daniels
8211 Renmark Ln
Houston, TX 77070
kdan281.wrld@gmail.com
(281) 894-4217

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kate Bremer (foresthorse@moment.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 9:09:15 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kate Bremer
189 High Country Rd
Blanco, TX 78606
foresthorse@moment.net
(512) 468-1914

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Duncan Brown (dbrown1414@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 9:08:32 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Duncan Brown
28 Summit Dr
Canyon, TX 79015
dbrown1414@gmail.com
(940) 782-0540

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Mary Lou Ramirez (ramirezspider@sbcglobal.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 8:54:58 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Mary Lou Ramirez
8431 Cargill St
Houston, TX 77029
ramirezspider@sbcglobal.net
(713) 562-6212

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Barbara Puett (barbarapuett@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 8:44:35 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Barbara Puett
1034 Liberty park drive 101
Austin, TX 78746
barbarapuett@gmail.com
(512) 576-9244

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From: Sam Waxler (sjwaxler@outlook.com) Sent You a Personal Message
To: tceqamnp
Subject: Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date: Thursday, May 8, 2025

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Sam Waxler
984 Frazer Rd
Sealy, TX 77474
sjwaxler@outlook.com
(979) 877-8573

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Joyce Faulk (jgf2230@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 8:02:49 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Joyce Faulk
6103 Abilene Trl
Austin, TX 78749
jgf2230@gmail.com
(512) 394-0537

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Melanie Gibson (mmcgarra@sbcglobal.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 8:28:57 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Melanie Gibson
1231 Kings Hwy Apt 4
Dallas, TX 75208
mmcgarra@sbcglobal.net
(214) 926-6074

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kim George (broke-05.phobia@icloud.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 8:22:27 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kim George
330 Spinner Road
Desoto, TX 75115
broke-05.phobia@icloud.com
(469) 544-0344

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Joyce Faulk (jgf2230@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 8:02:49 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Joyce Faulk
6103 Abilene Trl
Austin, TX 78749
jgf2230@gmail.com
(512) 394-0537

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Patricia Cowan (one800-0-2lose@mindspring.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 7:35:43 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Patricia Cowan
3636 S. Alameda, Ste. B 214
Corpus Christi, TX 78411
one800-0-2lose@mindspring.com
(770) 885-5683

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Diane Moore (dpiecara@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 7:31:32 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Diane Moore
707 Leann Ln
Cedar Park, TX 78613
dpiecara@gmail.com
(512) 264-0000

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Sherolyn Smith (sjvsmith_wtx@att.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 7:13:45 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Sherolyn Smith
2226 Woodland Hills Ln
Weatherford, TX 76087
sjvsmith_wtx@att.net
(817) 988-7341

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Robert Bollinger (rhbollnger@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 6:55:55 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Robert Bollinger
4105 Avenue A
Austin, TX 78751
rhbollnger@aol.com
(512) 452-2957

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Lisa Silguero (lsilguero2001@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 6:43:14 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Lisa Silguero
PO Box 591373
San Antonio, TX 78259
lsilguero2001@gmail.com
(214) 893-7990

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Georgena Askew (geodancer@sbcglobal.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 6:41:06 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Georgena Askew
11821 Pueblo Carmel Way
El Paso, TX 79936
geodancer@sbcglobal.net
(915) 328-0526

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Ellen Buchanan (ellenbuchanan@sbcglobal.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 6:40:36 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Ellen Buchanan
P O Box 1489
Kountze, TX 77625
ellenbuchanan@sbcglobal.net
(409) 382-5102

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Joaquin Villarreal (jvonwater@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 6:34:45 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Joaquin Villarreal
4 Texcoco
Brownsville, TX 78526
jvonwater@gmail.com
(901) 229-1898

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Marie Sophia Vassilakidis (manglebaby@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 6:18:55 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Marie Sophia Vassilakidis
2744 Briarhurst Dr
Houston, TX 77057
manglebaby@hotmail.com
(713) 524-5533

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Joan West (nojowest@verizon.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 5:33:50 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Joan West
1714 14thPL
Plano, TX 75074
nojowest@verizon.net
(214) 893-6471

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Harriet Horton (harriet.s.horton@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 5:16:30 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Harriet Horton
404 Marigold Ln
Cedar Park, TX 78613
harriet.s.horton@gmail.com
(512) 249-7626

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	John Lundborg (john.lundborg@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 5:04:26 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

John Lundborg
4140 Legendary Dr, Apt 310
Frisco, TX 75034
john.lundborg@gmail.com
(214) 435-7018

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Mary Laskowski (txbodie@comcast.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 4:57:17 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Mary Laskowski
25918 Eagle Pines Ln
Spring, TX 77389
txbodie@comcast.net
(281) 516-2150

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Alan Montemayor (alan.montemayor@sbcglobal.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 4:56:01 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Alan Montemayor
2186 Jackson Keller Rd. #432
San Antonio, TX 78213
alan.montemayor@sbcglobal.net
(210) 342-9721

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	David Mulcihy (dmulcihy@comcast.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 4:40:06 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

David Mulcihy
18506 Capetown
Houston, TX 77058
dmulcihy@comcast.net
(281) 333-2929

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Marc Gill (mcgill1980m@att.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 4:38:15 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Marc Gill
5 Niram Lane, San Antonio, TX
San Antonio, TX 78216
mcgill1980m@att.net
(210) 499-4527

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Lisa Stone (lestone@aya.yale.edu) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 4:22:47 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Lisa Stone
8902 Birdwood Ct
Houston, TX 77096
lestone@aya.yale.edu
(713) 456-7890

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Sandra Varvel (sandravarvel@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 4:09:54 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Sandra Varvel
9030 Betel Dr Building I apt 8
El Paso, TX 79907
sandravarvel@yahoo.com
(903) 407-9096

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	L M (marshallteam@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 4:09:10 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

L M
18823 Cove Mill
Cypress, TX 77433
marshallteam@yahoo.com
(832) 247-5889

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Catherine Croom (catbc123@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 4:01:49 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Catherine Croom
30412 Heimer Cv
Bulverde, TX 78163
catbc123@gmail.com
(830) 980-6161

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Virginia Himelright (dinners-epitome06@icloud.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 3:51:06 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Virginia Himelright
11911 N Kensington
Houston, TX 77031
dinners-epitome06@icloud.com
(281) 460-0465

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Grace Sharington (grace@dremana.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 3:40:21 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Grace Sharington
3608 Capistrano Trl.
Austin, TX 78739
grace@dremana.com
(773) 616-7726

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kylara Hunter (kylarahunter@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 3:38:04 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kylara Hunter
425 Pine St.
Donna, TX 78537
kylarahunter@yahoo.com
(956) 464-5254

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Elizabeth McDougle (lizardmcdougle@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 3:33:57 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Elizabeth McDougle
12322 Hart Ranch
San Antonio, TX 78249
lizardmcdougle@gmail.com
(210) 865-9391

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Claire Coleman (claireecoleman@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 3:30:24 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Claire Coleman
6434 McCommas
Dallas, TX 75214
claireecoleman@aol.com
(972) 273-9008

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Brian Zygo (brian.zygo@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 3:28:00 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Brian Zygo
1801 Hardy Street
Houston, TX 77026
brian.zygo@gmail.com
(713) 703-4868

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Patrick Nye (patrick@nyexp.us) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 3:23:18 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Patrick Nye
1018 Bayshore Dr.
Ingleside, TX 78362
patrick@nyexp.us
(361) 658-1089

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Brandt Mannchen (brandt_mannchen@comcast.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 3:05:00 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Brandt Mannchen
4300 Dunlavy St., Apt. 3138
Houston, TX 77006
brandt_mannchen@comcast.net
(281) 570-7212

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Douglas Rives (brives@windstream.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 3:03:06 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Douglas Rives
503 Hefley St
Wheeler, TX 79096
brives@windstream.net
(806) 662-7810

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Eloisa Villanueva (evilla127@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 2:48:13 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Eloisa Villanueva
1405 Claborne Street
Mission, TX 78572
evilla127@gmail.com
(956) 566-6014

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Melanie Nelson (meljnelson@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 2:37:59 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Melanie Nelson
2411 Blue Water Lane
Houston, TX 77018
meljnelson@yahoo.com
(713) 367-8025

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Madalynn Carey (lyncarey@swbell.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 2:30:39 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Madalynn Carey
11500 Huebner Rd. Apt 2207
San Antonio, TX 78230
lyncarey@swbell.net
(210) 641-1418

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Thomas Wolfsohn (tewolf000@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 2:26:34 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Thomas Wolfsohn
112 Frogfruit Way
San Marcos, TX 78666
tewolf000@hotmail.com
(571) 294-6125

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Amy Martin (amymoonmartin@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 2:24:29 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Amy Martin
980 S Rustic Cir,
Dallas, TX 75218
amymoonmartin@gmail.com
(214) 797-2457

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Miriam Otts (mimiotts@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 2:24:08 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Miriam Otts
1332 East Pecan
Gainesville, TX 76240
mimiotts@gmail.com
(940) 293-7633

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Catherine Faver (catherinefaver@sbcglobal.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 2:22:46 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Catherine Faver
1111 Houghton Rd. Apt. 1118
Katy, TX 77450
catherinefaver@sbcglobal.net
(956) 342-8688

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Laurie Hawley Stelljes (swp455gb@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 2:15:43 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Laurie Hawley Stelljes
2745 Manorwood Trail
Fort Worth, TX 76109
swp455gb@gmail.com
(817) 521-2124

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Diane Carmona (dianecarmona@sbcglobal.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 2:11:47 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Diane Carmona
12306, Northledge
Live Oak, TX 78233
dianecarmona@sbcglobal.net
(210) 260-8641

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Charles Hobbs (chuckredawg@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 2:11:23 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Charles Hobbs
142 Leda Dr, fit2train
Dallas, TX 75218
chuckredawg@yahoo.com
(214) 213-1004

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Sunny Rose Trevino (sylviatrevino32@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 2:11:20 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Sunny Rose Trevino
1718 keys st
Corpus Christi, TX 78404
sylviatrevino32@yahoo.com
(361) 756-1533

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Martha Gorak (martha2503@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 2:09:34 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Martha Gorak
837 Jaquet Dr
Bellaire, TX 77401
martha2503@gmail.com
(202) 768-1996

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Sarah Desousa (salerbo@gvtc.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 2:02:34 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Sarah Desousa
351 Whispering Oaks
Spring Branch, TX 78070
salerbo@gvtc.com
(210) 415-1301

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Gary Shephard (shephard@prodigy.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 1:42:02 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Gary Shephard
PO Box 48608
Watauga, TX 76148
shephard@prodigy.net
(817) 439-3567

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Erin Eitel (precbg52@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 1:26:11 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Erin Eitel
249 Adeline Drive
Uhland, TX 78640
precbg52@hotmail.com
(512) 410-0555

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	+Evelyn Adams (evie.adams@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 1:23:04 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

+Evelyn Adams
4920 Pecan Pl. Dr.
McKinney, TX 75071
evie.adams@gmail.com
(972) 838-2279

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Guy Leiman (gleiman@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 1:17:43 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Guy Leiman
4810 W 43rd St
Houston, TX 77092
gleiman@aol.com
(281) 224-5608

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kelly Crunk (crunkkelly@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 1:12:31 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kelly Crunk
326 lost Valley
Kerrville, TX 78028
crunkkelly@gmail.com
(830) 377-1346

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	James Burrough (jandpburrough@sbcglobal.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 1:12:18 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

James Burrough
4613 Holt St
Bellaire, TX 77401
jandpburrough@sbcglobal.net
(713) 661-1692

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	April Carne (aprilc8702@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 1:09:48 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

April Carne
1708 River Birch Dr
Flower Mound, TX 75028
aprilc8702@gmail.com
(972) 467-9080

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Sahand Naghavi (mrgrimgamer@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 1:03:38 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Sahand Naghavi
3530 W 12th St
Houston, TX 77008
mrgrimgamer@gmail.com
(713) 398-7750

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Janelle Murphy (aggiekitty04@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:59:58 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Janelle Murphy
122 20th Ave N
Texas City, TX 77590
aggiekitty04@hotmail.com
(214) 455-1594

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Eva Lorini (ecl1130@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:59:51 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Eva Lorini
7003 Treasure Cove
Austin, TX 78745
ecl1130@gmail.com
(512) 647-6507

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Lindsay Mader (linzmader@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:51:17 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Lindsay Mader
PO Box 126
Florence, TX 76527
linzmader@gmail.com
(254) 291-1749

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Cindy Morrison (honcub@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:50:59 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Cindy Morrison
4828 Delwood
Corpus Christi, TX 78413
honcub@aol.com
(361) 816-8382

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Robert Kelley (texas49rk@icloud.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:48:39 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Robert Kelley
2099 Parnevik Place
Conroe, TX 77304
texas49rk@icloud.com
(409) 920-1199

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Stewart Smiley (smiley.stewart@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:44:42 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Stewart Smiley
2610 Alcott Lane Apt B
Austin, TX 78748
smiley.stewart@yahoo.com
(512) 720-1525

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Shane O"Shea (shaneoshea3d@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:42:50 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Shane O'Shea
2706 pheasant run
Humble, TX 77396
shaneoshea3d@gmail.com
(774) 287-5651

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Nicole Punday (imnic0001@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:42:11 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Nicole Punday
9399 Wade Blvd
Frisco, TX 75035
imnic0001@yahoo.com
(702) 416-8223

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	James talbot (talbot@talbotworld.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:36:11 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

James talbot
305 W Milton St xx xx
Austin, TX 78704
talbot@talbotworld.com
(512) 555-5555

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	jacklyn Alford (jacklynalford08@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:27:03 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

jacklyn Alford
11703 north oaks drive
Austin, TX 78753
jacklynalford08@gmail.com
(512) 656-9735

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Leah Haroldson (lrharoldson@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:24:22 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Leah Haroldson
2107, Kristin Ln
ARLINGTON, TX 76012
lrharoldson@gmail.com
(817) 201-2393

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Whitney Cloud (cloud6419@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:23:53 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Whitney Cloud
5906 FM 1082
Hawley, TX 79525
cloud6419@gmail.com
(325) 428-6771

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Lisa Wegman (curecat894@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:23:21 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Lisa Wegman
4602 Dennis Blvd
Wichita Falls, TX 76310
curecat894@yahoo.com
(940) 224-5313

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	D Schoech (dschoech@sbcglobal.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:15:38 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

D Schoech
2614 Chinquapin Oak Ln
Arlington, TX 76012
dschoech@sbcglobal.net
(817) 823-7108

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Thomas Kemp (tomkemp@telus.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:08:04 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Thomas Kemp
450 Clearfield Drive
Garland, TX 75043
tomkemp@telus.net
(778) 583-9543

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kurt Schultz (kurtsails@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 12:06:06 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kurt Schultz
3506 Ridgeway Cv
Lago Vista, TX 78645
kurtsails@yahoo.com
(512) 267-1771

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Debra Butterworth (gummyroxll@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:57:08 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Debra Butterworth
1811 Fresno, Apt 1
San Antonio, TX 78201
gummyroxll@gmail.com
(210) 595-7154

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Steven G. Kellman (kellman1@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:53:50 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Steven G. Kellman
302 Fawn Drive
Shavano Park, TX 78231
kellman1@gmail.com
(210) 838-8489

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Debra Espinoza (dle266@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:48:38 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Debra Espinoza
3216 Tomahawk St
El Paso, TX 79936
dle266@yahoo.com
(555) 555-5555

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Tracey Bonner (tlb8@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:41:07 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Tracey Bonner
1707 Castle Rd
Arlington, TX 76014
tlb8@yahoo.com
(817) 965-4424

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Mark Bedgood (mark@pdq.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:40:40 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Mark Bedgood
564 NW County Road 2100
Corsicana, TX 75110
mark@pdq.net
(903) 641-8427

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Debra Atlas (debraatlas@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:38:01 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Debra Atlas
1413 W 6th St.
Weslaco, TX 78596
debraatlas@gmail.com
(530) 949-1084

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Paul Hansen (ttmshh@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:37:12 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Paul Hansen
4501 Whispering Valley Drive
Austin, TX 78727
ttmshh@gmail.com
(512) 203-3132

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Deann Darling (annde905@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:32:33 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Deann Darling
305 Dee Ln
Arlington, TX 76011
annde905@gmail.com
(817) 713-7497

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Pamela Miller (pamz@pamelazmiller.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:32:06 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Pamela Miller
6230 Thomas Court
Tolar, TX 76476
pamz@pamelazmiller.com
(817) 219-4808

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Megan Metcalf (mnmetcalf@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:31:33 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Megan Metcalf
5455 Rowley Rd
San Antonio, TX 78240
mnmetcalf@yahoo.com
(817) 889-2933

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kelly Epstein (kepstein1@earthlink.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:31:30 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kelly Epstein
18319 Champion Forest Dr.
Spring, TX 77379
kepstein1@earthlink.net
(713) 205-6906

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Lisa Brenskelle (brenskelle@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:20:53 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Lisa Brenskelle
2823 La Branch St.
Houston, TX 77004
brenskelle@aol.com
(281) 300-8212

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Peter Monie (peter.monie@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:18:32 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Peter Monie
17655 Henderson Pass
San Antonio, TX 78232
peter.monie@yahoo.com
(210) 860-7414

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Maureen Saval (maureensaval@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:16:27 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Maureen Saval
3603 Lajitas
Leander, TX 78641
maureensaval@gmail.com
(512) 528-8448

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	James Baker (jk.baker@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:14:05 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

James Baker
727 Belvin St
San Marcos, TX 78666
jk.baker@hotmail.com
(512) 353-8658

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Anil Prabhakar (apakus@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:13:51 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Anil Prabhakar
2501 Grist Ln
Cedar Park, TX 78613
apakus@yahoo.com
(512) 334-1960

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Claire Bush (vychumspg@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:12:28 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Claire Bush
1214 Norwood Rd
Austin, TX 78722
vychumspg@hotmail.com
(817) 475-4320

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Frank Blake (frankblake@juno.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:11:00 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Frank Blake
1010 Peden St, Apt 3, Apt 3
Houston, TX 77006
frankblake@juno.com
(713) 528-2896

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Lois Looney Kochie (seesoutside@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:08:58 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Lois Looney Kochie
1111 Laurel Valley Dr,
Houston, TX 77062
seesoutside@gmail.com
(214) 564-2895

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Margaret Hera (hera.eva@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:08:16 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Margaret Hera
7711 CREEKFIELD DR
Spring, TX 77379
hera.eva@gmail.com
(832) 693-4901

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Andrew Lyall (alyall1102@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:04:31 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Andrew Lyall
3873 Bentwood Ln
Corpus Christi, TX 78415
alyall1102@gmail.com
(361) 445-5600

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	William Pumfrey (rosspumfrey@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:01:34 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

William Pumfrey
8716 Towana Trail
Austin, TX 78736
rosspumfrey@gmail.com
(512) 636-0757

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Dawn Reed (dawnreed25@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:00:57 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Dawn Reed
8105 Ganttcrest Drive
Austin, TX 78749
dawnreed25@gmail.com
(512) 560-5544

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Karen Berning (knb37@flash.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 11:00:12 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Karen Berning
3437 W 7th St, #102
Fort Worth, TX 76107
knb37@flash.net
(817) 715-3345

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Sandi Hebley (shebley@airmail.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:57:57 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Sandi Hebley
12304 Shiremont Dr
Dallas, TX 75230
shebley@airmail.net
(972) 866-8879

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jan Adrian (jan.adrian.09@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:57:26 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jan Adrian
2801 Denton Tap Rd
Lewisville, TX 75067
jan.adrian.09@gmail.com
(972) 316-0847

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Av Harville (avrilharville@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:55:43 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Av Harville
6131 AVERY DR APT 8209
Fort Worth, TX 76132
avrilharville@gmail.com
(817) 791-7683

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kelly Epstein (kepstein1@earthlink.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:55:33 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kelly Epstein
18319 Champion Forest Dr.
Spring, TX 77379
kepstein1@earthlink.net
(281) 376-5231

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Rebecca Redford (redford@candw.ky) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:54:58 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Rebecca Redford
101 Rainbow Drive, Box 14855
Livingston, TX 77399
redford@candw.ky
(941) 343-3671

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Tara Lulla (liberal_hoosier@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:52:41 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Tara Lulla
15511 Conifer Bay Court, Houston, TX, USA
Houston, TX 77059
liberal_hoosier@yahoo.com
(281) 486-5247

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Margaret Hill (mhill6298@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:52:38 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Margaret Hill
600 Kingfisher Creek Dr
Austin, TX 78748
mhill6298@gmail.com
(512) 280-1024

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Eileen Mcginnis (eileen_mcginnis@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:49:41 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Eileen Mcginnis
5100 Avenue F
Austin, TX 78751
eileen_mcginnis@hotmail.com
(512) 749-2820

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kathryn Stephenson (kstephenson@swbell.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:49:39 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kathryn Stephenson
523 Mockingbird Dr
Murphy, TX 75094
kstephenson@swbell.net
(972) 999-9999

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kathleen Wilson (kwilson533@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:43:08 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kathleen Wilson
12327 Brandywyne Drive
Houston, TX 77077
kwilson533@yahoo.com
(713) 882-0598

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kaneisha Lewis (kayyc90@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:42:26 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kaneisha Lewis
8604 Cottage Creek Drive
Fort Worth, TX 76123
kayyc90@gmail.com
(682) 367-4317

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Doreen Smithwick (froggie177@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:40:54 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Doreen Smithwick
2318 Placid Dr.
Carrollton, TX 75007
froggie177@aol.com
(972) 242-9084

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Randy Thomas (randyt68@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:40:52 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Randy Thomas
304 Dover Dr
Richardson, TX 75080
randyt68@aol.com
(972) 644-0642

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Eric Casey (recasey101@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:40:49 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Eric Casey
3316 Dartmouth Dr.
Plano, TX 75075
recasey101@yahoo.com
(972) 839-9067

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Patty Jones (pattyjones52@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:39:00 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Patty Jones
4334 Saint George Dr
Corpus Christi, TX 78413
pattyjones52@hotmail.com
(361) 549-9193

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	LINDA REID (lindacool3@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:38:56 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

LINDA REID
3401 Magnolia St, Apt 403, Texas City, 403
Texas City, TX 77590
lindacool3@aol.com
(409) 948-2580

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Marilyn Spivey (maspiveyy@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:36:31 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Marilyn Spivey
2301 N. Zaragoza Rd.
El Paso, TX 79938
maspiveyy@yahoo.com
(915) 217-0215

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Ellen Kaner (ekaner@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:34:58 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Ellen Kaner
6105 Kelly Elliott Rd
Arlington, TX 76001
ekaner@aol.com
(817) 691-7198

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	David Bell (easttxdave@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:33:22 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

David Bell
21416 Lakefront Dr.
Lago Vista, TX 78645
easttxdave@gmail.com
(713) 208-4738

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kaneisha Lewis (kayyc90@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:33:21 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kaneisha Lewis
8604 Cottage Creek Drive
Fort Worth, TX 76123
kayyc90@gmail.com
(682) 367-4317

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Joseph Vander Pluym (joevpluym@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:33:13 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Joseph Vander Pluym
2306 Benbrook Drive
Carrollton, TX 75007
joevpluym@gmail.com
(618) 975-6371

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Stacey Francis (purple_zep@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:33:10 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Stacey Francis
4606 Everest Ln
Austin, TX 78727
purple_zep@yahoo.com
(512) 529-3901

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jim Anderson (jimline@mindspring.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:32:57 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jim Anderson
7502 Spring Meadow Ln
Garland, TX 75044
jimline@mindspring.com
(512) 422-3160

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Mel Jordan (melvan.jordan@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:32:26 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Mel Jordan
5037 Mcintyre Cir
Austin, TX 78734
melvan.jordan@gmail.com
(512) 266-3753

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Cindy Vincelette (catskillcindy@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:31:12 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Cindy Vincelette
264 RAINBOW DRIVE, # 16499
Livingston, TX 77399
catskillcindy@yahoo.com
(941) 962-3332

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Penelope Nederlander (pennyzee@me.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:31:10 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Penelope Nederlander
3104 Harpers Ferry Lane
Austin, TX 78745
pennyzee@me.com
(512) 299-1698

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Leslie McCollom (lmccollom@808west.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:30:37 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Leslie McCollom
507 Kingfisher Creek Drive, Austin, Texas 78748
Austin, TX 78748
lmccollom@808west.com
(512) 893-4441

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Amber Abascal (abascala@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:29:30 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Amber Abascal
14024 Mint Trail Dr
San Antonio, TX 78232
abascala@yahoo.com
(210) 241-0626

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Gloria Morrison (gloria43jean@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:29:29 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Gloria Morrison
1709 W Jackson St. Pecos TX 79772
Pecos, TX 79772
gloria43jean@gmail.com
(432) 445-3326

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kevin Hartley (kevinh743@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Thursday, May 8, 2025 10:28:42 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kevin Hartley
322 Hoofbeat Trl
Kerrville, TX 78028
kevinh743@gmail.com
(830) 896-5191

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	First_texas Last_texas (kathleen.melendez@sierraclub.org) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Wednesday, May 7, 2025 7:43:42 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

First_texas Last_texas
100 Military Plaza
San Antonio, TX 78254
kathleen.melendez@sierraclub.org
(407) 283-0590

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Richard and Newhouse (richardnew@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Sunday, May 11, 2025 9:54:33 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Richard and Newhouse
16021 LA ROSA DR Enter Address Line 2
AUSTIN, TX 78738
richardnew@aol.com
(512) 953-5788

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Carolyn LaBarbera (ca.labarbera@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 7:41:08 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Carolyn LaBarbera
365 Johnson Road
Huntsville, TX 77320
ca.labarbera@yahoo.com
(936) 577-8906

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Ann Perez (annmperez22@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 6:42:57 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Ann Perez
2303 Cardigan Hill
San Antonio, TX 78232
annmperez22@gmail.com
(210) 725-3161

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jaime Lawson (jaimelawson28@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 6:41:39 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jaime Lawson
4424 Bell Street
Houston, TX 77023
jaimelawson28@yahoo.com
(713) 815-0504

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Lou McMullen (lemcmullen@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 5:49:12 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Lou McMullen
706 W. Kilpatrick Street
Mineola, TX 75773
lemcmullen@yahoo.com
(903) 497-1019

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Michelle E Smith (michellees61@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 3:52:38 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Michelle E Smith
3702 47th Street
Lubbock, TX 79413
michellees61@gmail.com
(806) 789-1084

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Annette Lambert (anlamb9015@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 3:38:13 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Annette Lambert
9015 NE CR2140
Kerens, TX 75144
anlamb9015@gmail.com
(214) 718-6843

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Miguel Castaneda (environmacm@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 3:20:55 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Miguel Castaneda
9511 Wilder Rd
Manvel, TX 77578
environmacm@yahoo.com
(832) 817-2838

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Elizabeth Griswold (elgriswold@alumni.ou.edu) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 2:10:48 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Elizabeth Griswold
2201 Brooks Trl
Heath, TX 75126
elgriswold@alumni.ou.edu
(972) 693-2286

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Gaurav Singh (gvsingh107@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 2:08:59 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Gaurav Singh
4429 Emory Rd
El Paso, TX 79922
gvsingh107@gmail.com
(915) 346-7862

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Gaurav Singh (gvsingh107@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 2:08:13 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Gaurav Singh
4429 Emory Rd
El Paso, TX 79922
gvsingh107@gmail.com
(915) 346-7862

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Gary Shephard (shephard@prodigy.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 2:04:34 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Gary Shephard
PO Box 48608
Watauga, TX 76148
shephard@prodigy.net
(817) 439-3567

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Georgena Askew (geodancer@sbcglobal.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 1:21:32 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Georgena Askew
11821 Pueblo Carmel Way
El Paso, TX 79936
geodancer@sbcglobal.net
(915) 328-0526

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Abel Silva (fitchboi86@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 12:14:27 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Abel Silva
5531 Soothing Water
San Antonio, TX 78244
fitchboi86@yahoo.com
(210) 421-9593

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Sue Wolfe (suewolfe1@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 12:09:20 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Sue Wolfe
29906 Cibolo Court
Fair Oaks Ranch, TX 78015
suewolfe1@hotmail.com
(979) 533-2265

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Sophia Robinson (prettypinksparkles452@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:58:59 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Sophia Robinson
5111 Donnelly Avenue
Fort Worth, TX 76107
prettypinksparkles452@gmail.com
(469) 961-3673

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Gina Knievel (g174410@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:55:18 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Gina Knievel
1308 County Road 3900
Lampasas, TX 76550
g174410@yahoo.com
(254) 345-2203

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jose Guerrero (littleears64@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:46:57 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jose Guerrero
221 Thelka
San Antonio, TX 78214
littleears64@gmail.com
(210) 800-4578

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jose Guerrero (littleears64@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:42:53 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jose Guerrero
221 Thelka
San Antonio, TX 78214
littleears64@gmail.com
(210) 800-4578

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Elizabeth Molidor (elizabeth.molidor@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:39:32 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Elizabeth Molidor
2907 Sunrise valley lane
Georgetown, TX 78626
elizabeth.molidor@gmail.com
(512) 639-1960

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Katie Lang (katielangtx@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:38:25 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Katie Lang
35 Brookhollow Dr.
Woodcreek, TX 78676
katielangtx@gmail.com
(908) 274-7696

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jose Guerrero (littleears64@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:38:20 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jose Guerrero
221 Thelka
San Antonio, TX 78214
littleears64@gmail.com
(210) 800-4578

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Katrina Leathers (kleathers4.6@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:36:26 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Katrina Leathers
2113 S Van Buren St
Amarillo, TX 79109
kleathers4.6@gmail.com
(806) 336-5290

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Bradley Smith (b-radsmith@outlook.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:30:05 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Bradley Smith
3607 Pebble Beach Drive
Farmers Branch, TX 75234
b-radsmith@outlook.com
(970) 817-3812

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Catherine Kelley (catherinelkelley@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:30:00 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Catherine Kelley
6420 Beck Rd
San Antonio, TX 78263
catherinelkelley@hotmail.com
(210) 648-0436

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Barbara OToole (barb@otoolemarketing.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:29:51 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Barbara OToole
6624 Monterrey Dr
Fort worth, TX 76112
barb@otoolemarketing.com
(817) 454-7709

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Cheryl Carney (carneyc86@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:29:23 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Cheryl Carney
1124 W Gramercy pl
San Antonio, TX 78201
carneyc86@hotmail.com
(210) 320-5071

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Ken Wheatcroft-Pardue (kwheatcroftpardue@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:20:44 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Ken Wheatcroft-Pardue
1805 Robinwood Dr
Fort Worth, TX 76111
kwheatcroftpardue@yahoo.com
(817) 705-0199

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Vesper Huerta-Sanchez (vesperh18@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:11:31 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Vesper Huerta-Sanchez
100 W Lee St
Navasota, TX 77868
vesperh18@gmail.com
(720) 896-1238

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kat Scherer (kschererphd@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:04:04 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kat Scherer
6009 Cary Drive
Austin, TX 78757
kschererphd@gmail.com
(512) 345-9198

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Maria Nieto (nmaria43@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 11:00:59 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Maria Nieto
201 EDGAR RD
EL PASO, TX 79932
nmaria43@gmail.com
(915) 221-5126

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Michelle Dyer-Long (dyerlongml789@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:57:14 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Michelle Dyer-Long
833 E Ailsie Ave, Apt 5F, false
Kingsville, TX 78363
dyerlongml789@gmail.com
(361) 522-2034

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Erika Kane (erikaraekane@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:53:27 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Erika Kane
1401 Fairway St
Kyle, TX 78640
erikaraekane@gmail.com
(512) 699-0824

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Margarita Flener (jflener424@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:46:44 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Margarita Flener
416 W Borden St,
Sinton, TX 78387
jflener424@gmail.com
(361) 437-9396

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jeanne Dupre" Weido (aweido@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:40:23 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jeanne Dupre' Weido
3729 Sunset Blvd
Houston, TX 77005
aweido@aol.com
(713) 882-2144

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Mary Maria Jarvis (mary.jarvis@zoho.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:37:45 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Mary Maria Jarvis
101 Palma del Lago Circle
San Benito, TX 78586
mary.jarvis@zoho.com
(509) 521-9619

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Carter Neal (cartercamden@live.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:36:31 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Carter Neal
1811 JJ Seabrook Drive
Austin, TX 78721
cartercamden@live.com
(512) 705-2692

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Michelle Singleton (mmsingleton1995@protonmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:35:44 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Michelle Singleton
1223 Circle Ln
Bedford, TX 76022
mmsingleton1995@protonmail.com
(817) 282-5233

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Lois Kochie (seesoutside@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:34:20 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Lois Kochie
1111 Laurel Valley Dr,
Houston, TX 77062
seesoutside@gmail.com
(214) 564-2895

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Brittany Hall (brittanyhallcpt@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:33:59 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Brittany Hall
108 Brooks St
Lufkin, TX 75904
brittanyhallcpt@gmail.com
(936) 208-0834

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Deborah Jensen (djensen1968@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:29:39 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Deborah Jensen
407 Dover Lane
Spring, TX 77373
djensen1968@gmail.com
(281) 701-9817

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Pamela Draper (pamjodraper@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:26:14 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Pamela Draper
1460 Live Oak Ridge
Bandera, TX 78003
pamjodraper@yahoo.com
(361) 649-1808

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Christopher McGregor (h2oshooter@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:23:41 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Christopher McGregor
505 Twin View St
Heath, TX 75032
h2oshooter@gmail.com
(214) 693-6923

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Lisa Ables (judefinnegan@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:23:02 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Lisa Ables
1026 sea breeze ln
Portland, TX 78374
judefinnegan@yahoo.com
(575) 808-3924

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Sheryl Quick (sheryl_quick@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:20:42 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Sheryl Quick
PO Box 1329, 1129 Highway 146
Kemah, TX 77565
sheryl_quick@yahoo.com
(713) 923-0172

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	LORRIE RODRIGUEZ (lorriedukes@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:19:03 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

LORRIE RODRIGUEZ
109 Escondido
Boerne, TX 78006
lorriedukes@hotmail.com
(210) 218-5702

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Betty Chern-Hughes (midwife@earthlink.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:18:37 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Betty Chern-Hughes
12325 Cedar Bend Dr
Dallas, TX 75244
midwife@earthlink.net
(972) 406-0132

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Martha Spinks (marthakspinks@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:18:20 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Martha Spinks
429 Stonewood Dr
San Antonio, TX 78216
marthakspinks@gmail.com
(210) 364-6474

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Winifred Hamilton (hamilton@bcm.edu) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:18:11 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Winifred Hamilton
201 Main Street, Unit 8H
Houston, TX 77002
hamilton@bcm.edu
(713) 205-2786

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Ed Breidenbach (ebreiden@live.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:16:18 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Ed Breidenbach
820 Killarney Rd
Floresville, TX 78114
ebreiden@live.com
(210) 232-8050

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Denise Christensen (pigsfly2b@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:12:51 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Denise Christensen
2422 Amber springs dr
Katy, TX 77450
pigsfly2b@hotmail.com
(281) 222-2041

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Lorraine Manon (lorraine.manon@sbcglobal.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:12:18 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Lorraine Manon
7318 Swanson Dr.
Richmond, TX 77406
lorraine.manon@sbcglobal.net
(281) 673-8470

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	David Kemp (dgkemp@sbcglobal.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:08:39 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

David Kemp
7828 Canode Dr
Amarillo, TX 79121
dgkemp@sbcglobal.net
(806) 570-6890

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Frank Netscher (fnetscher@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:08:05 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Frank Netscher
1711 e 16th
Austin, TX 78702
fnetscher@gmail.com
(713) 315-1657

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Mark Kestner (gorda301@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:08:04 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Mark Kestner
1968 Shanklin rd
Belton, TX 76513
gorda301@gmail.com
(941) 740-4418

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jamison Applebach (applebach1957@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:06:29 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jamison Applebach
3924 nature ct
Denison, TX 75020
applebach1957@gmail.com
(409) 670-5359

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Paulina Van Bavel Kearney (kearney.jp@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:05:55 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Paulina Van Bavel Kearney
2582 FM 2434
Weimar, TX 78962
kearney.jp@gmail.com
(979) 732-0376

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Shelia Howard (sheliahoward874@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:05:20 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Shelia Howard
8300 W. Airport Blvd
Houston, TX 77071
sheliahoward874@gmail.com
(281) 571-6619

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Lucy Berry (lucy.berry2024@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:04:53 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Lucy Berry
2600 Prospect Heights Dr, Apt 13207
Fort Worth, TX 76110
lucy.berry2024@gmail.com
(415) 306-2778

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Aaliyah Mendoza (aaliyah101bruh@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:04:38 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Aaliyah Mendoza
9647 Maria Isabel dr
San Antonio, TX 78211
aaliyah101bruh@gmail.com
(210) 929-2689

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Andrew Sutton (sn990bc@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:04:33 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Andrew Sutton
1611 Sunrise Trl
Kingwood, TX 77339
sn990bc@yahoo.com
(281) 777-2276

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	David Johnson (dbjprof@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:03:11 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

David Johnson
2806 Colleen Dr
Garland, TX 75043
dbjprof@yahoo.com
(214) 649-0278

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Aaliyah Mendoza (aaliyah101bruh@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:02:29 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Aaliyah Mendoza
9647 Maria Isabel Dr
San Antonio, TX 78211
aaliyah101bruh@gmail.com
(210) 929-2689

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Stephanie Mielke-Limon (jaspea@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:02:05 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Stephanie Mielke-Limon
9116 Mt San Berdu
El Paso, TX 79924
jaspea@aol.com
(915) 249-1030

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Paul Thomas (pjt4email@me.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:02:02 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Paul Thomas
PO Box 5244
Beaumont, TX 77706
pjt4email@me.com
(409) 504-8062

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Christine Amsbary (christineamsbary9@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:02:00 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Christine Amsbary
2940 Louis Street
Fort Worth, TX 76112
christineamsbary9@gmail.com
(817) 455-6695

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Daniel Eubank (daniel.eubank@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:01:38 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Daniel Eubank
620 N. Hewitt dr., Apt. 90
Hewitt, TX 76643
daniel.eubank@gmail.com
(817) 845-9535

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Mike Harris (harrism2334@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 10:00:32 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Mike Harris
PO Box 29241
Austin, TX 78755
harrism2334@gmail.com
(512) 920-7440

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Valarie Liveoak (valliveoak@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:57:42 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Valarie Liveoak
306 Avant Ave.
San Antonio, TX 78210
valliveoak@gmail.com
(210) 287-9723

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Wade Kannenberg (wakan98@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:57:11 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Wade Kannenberg
473 Tate Circle
Sherman, TX 75090
wakan98@yahoo.com
(903) 821-3372

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	kate bremer (foresthorse@moment.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:57:03 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

kate bremer
189 high country rd
Blanco, TX 78606
foresthorse@moment.net
(512) 468-1914

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Pamela Gideon (herecomesthesunwellness@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:55:55 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Pamela Gideon
1E Brookberry ct
The woodlands, TX 77381
herecomesthesunwellness@gmail.com
(817) 374-2954

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jose Sierra (fabensboy@netscape.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:55:04 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jose Sierra
3534Breckenridge
El Paso, TX 79936
fabensboy@netscape.net
(915) 274-0156

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Nancy Allen (kravetzallen@att.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:54:47 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Nancy Allen
10650 N. Northridge Dr.
Conroe, TX 77303
kravetzallen@att.net
(832) 403-6063

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Dorothy Wilson (dwilson1234@outlook.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:54:28 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Dorothy Wilson
210 Fenwick Dr
San Antonio, TX 78239
dwilson1234@outlook.com
(704) 953-5511

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Christine Dougherty (christinedougherty@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:54:03 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Christine Dougherty
600 Deer Crossing Ln
Wimberley, TX 78676
christinedougherty@yahoo.com
(346) 333-8564

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Nancy Warne (nancywarne@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:53:10 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Nancy Warne
4138 Trail De Paris
New Braunfels, TX 78132
nancywarne@yahoo.com
(214) 766-7922

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Phoebe Carter (phoebewill79@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:53:09 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Phoebe Carter
5855 Calder Ave
Beaumont, TX 77706
phoebewill79@gmail.com
(409) 333-5952

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Marga Silvestre (marga_silvestre@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:52:51 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Marga Silvestre
103 pheasant ridge
Round Rock, TX 78665
marga_silvestre@yahoo.com
(787) 404-1408

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Pamela Lienhard (plienhard@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:52:46 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Pamela Lienhard
111 Sandy Ln E, Kerrville TX 78028
Kerrville, TX 78028
plienhard@gmail.com
(830) 377-3991

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Katie Johnsonius (katie.johnsonius@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:52:35 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Katie Johnsonius
1032 S Lee St
Alvin, TX 77511
katie.johnsonius@gmail.com
(512) 554-1314

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	ahmad knight (duceboshine123@mail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:52:19 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

ahmad knight
5307 rivers edge dr
richmond, TX 77469
duceboshine123@mail.com
(850) 525-0426

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Juan B Mancias (onebigjuan@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:52:13 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Juan B Mancias
1250 , Roemer Lane
Floresville, TX 78114
onebigjuan@gmail.com
(830) 391-7992

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Phoebe Carter (phoebewill79@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:51:58 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Phoebe Carter
5855 Calder Ave
Beaumont, TX 77706
phoebewill79@gmail.com
(409) 333-5952

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Phoebe Carter (phoebewill79@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:51:30 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Phoebe Carter
5855 Calder Ave
Beaumont, TX 77706
phoebewill79@gmail.com
(409) 333-5952

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Sheila Rosenberg (srosenberg@austin.rr.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:51:27 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Sheila Rosenberg
3204 Menchaca Rd
Austin, TX 78704
srosenberg@austin.rr.com
(512) 563-3748

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Stephanie Schindler. (sschindler2@austin.rr.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:51:04 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Stephanie Schindler.
4429 Hunters lodge drive
Round Rock, TX 78681
sschindler2@austin.rr.com
(512) 799-8757

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Susan Hokanson (suzihokanson@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:51:00 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Susan Hokanson
2708 Perry Ln
Alvin, TX 77511
suzihokanson@gmail.com
(832) 512-6695

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Rose Brown (torillaface@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:50:29 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Rose Brown
1101 North Stanton
El Paso, TX 79903
torillaface@yahoo.com
(915) 206-0611

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Lola Bacon (lolabacon344@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:50:22 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Lola Bacon
16354 Ella Blvd. #3101
Houston, TX 77090
lolabacon344@yahoo.com
(832) 686-1424

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Aline Rosenzweig (alinerosenzweig@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:50:20 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Aline Rosenzweig
2126 Branard St, Apt 4
Houston, TX 77098
alinerosenzweig@yahoo.com
(954) 410-2544

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Carol Mcgarvey (carolmcgarvey@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:49:43 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Carol Mcgarvey
3100 Jeanette Ct
Austin, TX 78745
carolmcgarvey@yahoo.com
(512) 940-8472

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Kay Ruckel (kay.ruckel1961@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:49:24 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Kay Ruckel
775 Fletcher Street
Jasper, TX 75951
kay.ruckel1961@gmail.com
(409) 384-0450

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	D Mark Detrixhe (mark.detrixhe@mail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:49:22 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

D Mark Detrixhe
382 FM 1209
Bastrop, TX 78602
mark.detrixhe@mail.com
(512) 704-3169

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Maria Williamson (bluehorseskye@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:49:17 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Maria Williamson
17107 Cutter Way
Crosby, TX 77532
bluehorseskye@hotmail.com
(281) 628-3356

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	RICK WADSWORTH (rickwads@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:48:29 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

RICK WADSWORTH
14315 Rowe
San Antonio, TX 78247
rickwads@hotmail.com
(210) 383-3180

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Francisco Buendia (buendiafrancisco@hotmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:48:19 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Francisco Buendia
6184 Tranquil Desert Dr
El Paso, TX 79912
buendiafrancisco@hotmail.com
(915) 383-4418

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Zachary Dyck (zbdyck@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:47:58 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Zachary Dyck
3105 S interstate 35
Austin, TX 78741
zbdyck@gmail.com
(817) 917-9281

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Cindy Morrison (honcub@aol.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:47:57 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Cindy Morrison
4828 Delwood
Corpus Christi, TX 78413
honcub@aol.com
(391) 816-8382

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Barri Muphy (barrimurphy@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:47:53 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Barri Muphy
3205 Ridge Oak Dr
Garland, TX 75044
barrimurphy@gmail.com
(214) 515-8936

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Marty Massie (mmassie207@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:47:26 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Marty Massie
207 Carol Ln
Midland, TX 79705
mmassie207@gmail.com
(432) 528-8735

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Caia LaCpur (caiajlacour@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:47:06 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Caia LaCpur
1613 Ashberry Dr
Austin, TX 78723
caiajlacour@gmail.com
(203) 676-4487

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Patricia Munoz (patriciadesiree317@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:47:03 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Patricia Munoz
707 King Edward Place
Austin, TX 78745
patriciadesiree317@gmail.com
(512) 293-2979

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jerry Lee (jerryglee1102@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 9:20:34 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jerry Lee
717 Penvenen Place
Mckinney, TX 75069
jerryglee1102@gmail.com
(205) 534-0249

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Margarete Kelley (txkelley@earthling.net) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Tuesday, May 13, 2025 8:00:01 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Margarete Kelley
651 Hard Luck Rd.
Marion, TX 78124
txkelley@earthling.net
(210) 218-1445

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jackie Ruybal (jruybal2020@gmail.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Wednesday, May 14, 2025 4:06:24 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jackie Ruybal
5900 Charl s Merle Dr.,#1323
Austin, TX 78747
jruybal2020@gmail.com
(512) 792-7872

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Jennifer Steger (j_steger13@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Wednesday, May 14, 2025 7:39:08 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Jennifer Steger
11711 Braesview, 3403
San Antonio, TX 78213
j_steger13@yahoo.com
(210) 330-6588

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Carolyn LaBarbera (ca.labarbera@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Wednesday, May 14, 2025 6:36:55 AM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Carolyn LaBarbera
365 Johnson Road
Huntsville, TX 77320
ca.labarbera@yahoo.com
(936) 577-8906

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.

From:	Karen Watson (karen_watson006@yahoo.com) Sent You a Personal Message
To:	tceqamnp
Subject:	Public Comment: Draft 2025 Annual Monitoring Network Plan - Air Monitoring Expansion Urgently Needed in Five Regions!
Date:	Wednesday, May 14, 2025 4:11:15 PM

Dear TCEQ,

To whom it may concern:

I urge TCEQ to expand the ambient air monitoring network to include more ozone, particulate matter (PM), and nitrogen oxides (NOx) monitors in underserved and high-risk areas, as well as fenceline benzene and hydrogen sulfide monitoring in certain areas. Specifically, new monitors are needed in the Austin Metro and Williamson County region (Austin-Round Rock-San Marcos MSA), the Houston area ? especially in Fort Bend County near the W.A. Parish coal plant (Houston-Pasadena-The Woodlands MSA), Corpus Christi MSA, the Permian Basin (Midland and Odessa MSAs), and in East Texas ? especially near the Martin Lake coal plant (Longview MSA and Panola County). These communities deserve accurate, localized data about their air quality to protect public health and guide regulatory decisions. Please prioritize equity and transparency in the final 2025 Annual Monitoring Network Plan.

Thank you.

Sincerely,

Karen Watson
8515 Brodie Ln. Apt #837 Austin TX 78745
Austin, TX 78745
karen_watson006@yahoo.com
(925) 300-6201

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Member Care at Sierra Club at member.care@sierraclub.org or (415) 977-5673.