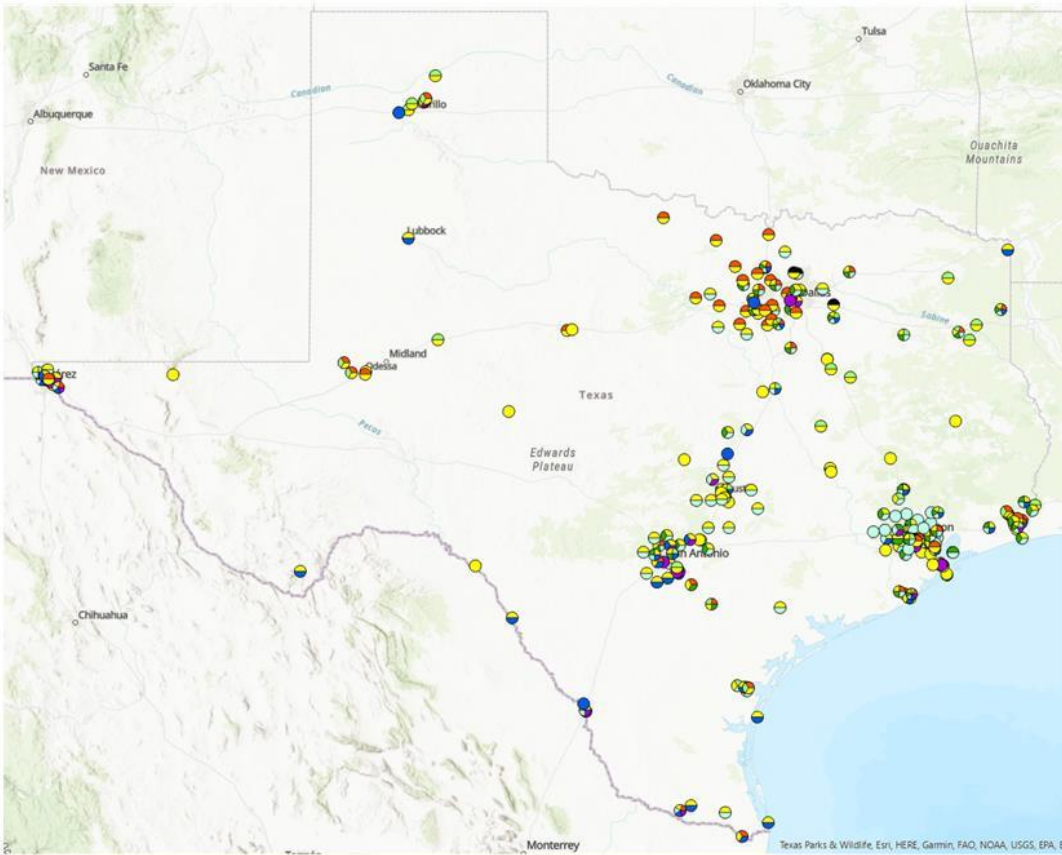


# Texas Commission on Environmental Quality Draft Annual Monitoring Network Plan



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# Texas Commission on Environmental Quality Draft 2021 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<sup>3</sup> - micrograms per cubic meter

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 Standards

NCore - National Core Multipollutant Monitoring Stations

NEI - National Emissions Inventory

NO<sub>2</sub> - nitrogen dioxide

NO - nitrogen oxide

NO<sub>x</sub> - oxides of nitrogen

NO<sub>y</sub> - total reactive nitrogen compounds

O<sub>3</sub> - ozone

PAMS - Photochemical Assessment Monitoring Stations

Pb - lead

PM<sub>10</sub> - particulate matter of 10 micrometers or less in diameter

PM<sub>2.5</sub> - particulate matter of 2.5 micrometers or less in diameter

PM<sub>10-2.5</sub> – coarse particulate matter

ppb – parts per billion

PWEI – population weighted emissions index

QC – quality control

RA-40 – Regional Administrator 40

SE – southeast

SLAMS – State or Local Air Monitoring Stations

SO<sub>2</sub> – sulfur dioxide

SPM – special purpose monitor

TAD – technical assistance document

TCEQ – Texas Commission on Environmental Quality

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.

The TCEQ reviews its ambient air quality monitoring network annually and creates the AMNP to demonstrate how Texas is meeting or will meet federal air monitoring requirements specified in 40 CFR Part 58 and its appendices. The AMNP presents the current federal network established for use in evaluations to determine compliance with the National Ambient Air Quality Standards (NAAQS). The monitoring plan includes proposed changes from the previous year and future proposed changes to the monitoring network. Specific air monitors used to meet federal air quality standards as well as other monitors that provide additional information on air quality and the weather are discussed in the AMNP. 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 the TCEQ air monitoring network designed to comply with federal monitoring requirements and supported by federal funding.

The Texas Commission on Environmental Quality (TCEQ) posts the annual plan to solicit public comment for at least 30 days prior to submission to the EPA. The 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 with any appropriate changes based on the received comments. This plan includes the recommended federal monitoring network changes from July 1, 2020, through December 31, 2022, summarized in AMNP Appendix A. Historical air monitoring network plans, associated public comments, and TCEQ responses are available on the TCEQ webpage [TCEQ Monitoring Network Plans and Lead Waiver Requests - Texas Commission on Environmental Quality - www.tceq.texas.gov](https://www.tceq.texas.gov/monitoring-network-plans).

The TCEQ continues to evaluate additional ambient air monitoring requested during previous AMNP public inspection and comment periods. Details regarding the potential monitors under consideration are included in this plan to solicit further public comment. Any future implementation of these monitoring considerations may be included as part of the TCEQ federal ambient air monitoring network or as state-initiative special studies. These monitoring proposals are under consideration, and the proposals and implementation of said proposals are subject to change.

The TCEQ monitoring network includes more than double the number of monitors required by federal rule. The 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. The latest information regarding the Texas air monitoring network, monitoring data, and air quality forecast conditions for Texas' metropolitan areas is featured on the TCEQ webpage [Air Quality and Monitoring - Texas Commission on Environmental Quality - www.tceq.texas.gov](https://www.tceq.texas.gov/air-quality).

Title 40 CFR Part 58, Appendix D provides the minimum design requirements for 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 existing monitors established to meet federal monitoring requirements and objectives.

Based on annual internal audits performed to date, all monitoring sites supporting federal requirements and monitoring objectives are meeting the requirements defined in 40 CFR Part 58 and Appendices A, B, C, D, and E, with the following exception:

- The TCEQ is developing site specifications to make changes at the Midlothian Old Fort Worth (OFW) site, which is not meeting siting criteria.

The following sites will be relocated at the request of the property owner.

- The TCEQ Nederland High School site will be relocated less than one mile from the current site and renamed Nederland 17<sup>th</sup> Street, approved by the EPA in a letter dated March 17, 2021, due to the property owner's revocation of the TCEQ's use of the property for ambient air monitoring purposes.
- The TCEQ Brownsville site will be relocated with a new site name due to the property owner's revocation of the TCEQ's use of the property for ambient air monitoring purposes.

AMNP Appendix C lists Texas core based statistical areas (CBSAs) or metropolitan statistical areas (MSAs), 2019 U.S. Census Bureau population estimates, and associated required monitor counts. The TCEQ uses these data to evaluate the networks as documented in the AMNP. The U.S. Office of Management and Budget defined CBSAs and MSAs overlap in Texas, and the terms are used interchangeably in this assessment according to usage in federal regulations.

## Regulatory Network Review

### Nitrogen Dioxide

The TCEQ nitrogen dioxide (NO<sub>2</sub>) network includes monitoring for nitrogen oxide (NO), NO<sub>2</sub>, true NO<sub>2</sub>, and total reactive nitrogen compound (NO<sub>x</sub>) pollutants sited in compliance with federal monitoring requirements, as discussed further in this section. The TCEQ NO<sub>2</sub> network is designed to meet area-wide, Regional Administrator 40 (RA-40), near-road, PAMS, and NCore monitoring requirements. The TCEQ is required to operate 20 monitors that measure NO, NO<sub>2</sub>, true NO<sub>2</sub>, and NO<sub>y</sub> and exceeds the requirements with 58 monitors that measure those pollutants. AMNP Appendix D lists the monitoring requirements for NO, NO<sub>2</sub>, true NO<sub>2</sub>, and NO<sub>y</sub> in each Texas CBSA. The TCEQ utilizes a variety of instruments to measure these pollutants including a oxides of nitrogen (NO<sub>x</sub>) monitor that reports NO<sub>2</sub>, NO, and NO<sub>x</sub>; an instrument that measures NO<sub>2</sub> directly, and a NO<sub>y</sub> instrument that reports NO<sub>y</sub> and NO. Appendix B lists the air monitoring sites where NO<sub>x</sub>, NO, NO<sub>2</sub>, true NO<sub>2</sub>, and NO<sub>y</sub> 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 the areas with the highest expected NO<sub>2</sub> 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 2019 U.S. Census Bureau population estimates for Texas as noted in Appendix D, area-wide neighborhood or urban scale NO<sub>2</sub> monitoring is required in four Texas CBSAs. The NO<sub>2</sub> monitors at the following sites meet these area-wide requirements.

- Dallas-Fort Worth-Arlington (DFW) CBSA: Dallas Hinton
- Houston-The Woodlands-Sugar Land (Houston) CBSA: Clinton
- San Antonio-New Braunfels (San Antonio) CBSA: San Antonio Northwest
- Austin-Round Rock (Austin) CBSA: Austin North Hills Drive

### **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<sub>2</sub> monitoring stations nationwide that are positioned to protect susceptible and vulnerable populations (referred to as RA-40 monitoring requirements). The TCEQ collaborated with the EPA to identify the four Texas monitoring sites listed below to meet the portion of this requirement attributed to Texas.

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

### **Near-Road Monitoring Requirements**

Title 40 CFR Part 58, Appendix D, Section 4.3.2 requires one microscale near-road NO<sub>2</sub> monitor located near a major road with high annual average daily traffic 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. The TCEQ near-road monitoring network meets these requirements with the six current sites and one pending site listed below.

- DFW CBSA: Dallas LBJ Freeway and Fort Worth California Parkway North
- Houston CBSA: Houston Southwest Freeway and Houston North Loop
- San Antonio CBSA: San Antonio Interstate 35 and the pending new site listed in the AMNP NO<sub>2</sub> Previously Recommended Changes section below
- Austin CBSA: Austin North Interstate 35

### **NCore and PAMS Monitoring Requirements**

The TCEQ meets NCore monitoring requirements listed in 40 CFR Part 58, Appendix D, Section 3(b) with NO and NO<sub>y</sub> measured at the NCore sites listed in Table 1.

The EPA revisions to the PAMS program under the final rule published October 26, 2015, and listed in 40 CFR Part 58, appendix D, Section 5, require state agencies to

collect and report NO, true NO<sub>2</sub>, and NO<sub>y</sub> measurements at NCore sites in CBSAs with 1,000,000 or more persons. The TCEQ meets the PAMS network monitoring requirements with hourly averaged NO, NO<sub>2</sub>, and NO<sub>y</sub> measured at the Dallas Hinton and Houston Deer Park number #2 sites.

**Table 1: NCore and PAMS Sites**

Core Based Statistical Area	Site Name	2019 Population Estimates*	NCore	PAMS
Dallas-Fort Worth-Arlington	Dallas Hinton	7,573,136	Yes	Yes
Houston-The Woodlands-Sugar Land	Houston Deer Park #2	7,066,141	Yes	Yes
El Paso	El Paso Chamizal	844,124	Yes	No

\*United States Census Bureau population estimates as of July 1, 2019.

# - number

NCore - National Core Multipollutant Monitoring Station

PAMS - Photochemical Assessment Monitoring Stations

## Previously Recommended Changes

The TCEQ 2019 AMNP recommended deploying a NO<sub>x</sub> monitor to a new Houston West End site, named Houston Harvard Street. The EPA approved the request in a letter dated November 4, 2019, and the monitor was deployed January 25, 2021. The TCEQ Austin Northwest NO<sub>x</sub> monitor was temporarily shut down on February 18, 2020, due to the property owner's revocation of the TCEQ's use of the property for ambient air monitoring purposes. The air monitoring station was relocated one-tenth of a mile to Austin North Hills Drive on October 15, 2020, and the NO<sub>x</sub> monitor was activated on October 21, 2020. This site relocation was approved by the EPA in a letter dated April 10, 2020.

The TCEQ 2020 AMNP recommended deploying a second near-road monitoring station in the San Antonio CBSA to meet the near-road monitoring requirement in CBSAs with 2,500,000 or more persons. The EPA approved the request in a letter dated October 22, 2020. The TCEQ continues to explore possible new sites adjacent to the highest possible ranked road segment and expects to deploy the site and NO<sub>x</sub> monitor before December 31, 2021.

## Regulatory NO<sub>2</sub> Monitoring Network Changes

The TCEQ evaluated the current NO<sub>2</sub> monitoring network with the changes described above and determined the existing NO<sub>2</sub> network, with the addition of a second pending San Antonio near-road NO<sub>2</sub> monitoring site, meets all federal monitoring requirements; therefore, no changes are recommended. The TCEQ will update this plan and provide additional information regarding potential San Antonio near-road NO<sub>2</sub> monitoring sites to EPA Region 6 for review and approval, as they become available.

## **Sulfur Dioxide**

The TCEQ sulfur dioxide (SO<sub>2</sub>) network includes monitors sited to meet federal ambient SO<sub>2</sub> and high-sensitivity SO<sub>2</sub> monitoring requirements. The TCEQ SO<sub>2</sub> network is designed to meet 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 further in this section. The TCEQ is required to operate a total of 19 SO<sub>2</sub> monitors and exceeds the requirements with 31 monitors. A summary of the PWEI calculations, monitoring requirements, and current number of SO<sub>2</sub> monitors in each CBSA is shown in AMNP Appendix E. AMNP Appendix B lists the air monitoring sites where SO<sub>2</sub> 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<sub>2</sub> 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. The 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.

The TCEQ used the most recent quality assured data available – the 2019 U.S. Census Bureau population estimates and 2017 National Emissions Inventory (NEI) data with 2019 TCEQ point-source EI data to calculate the PWEIs and to determine the minimum monitoring requirements for each CBSA. The TCEQ meets the PWEI requirements with six monitors, as shown in AMNP Appendix E.

#### **Data Requirements Rule (DRR) Requirements**

Title 40 CFR Part 51 Subpart BB (the DRR) required air agencies to characterize air quality around specified sources that emitted 2,000 tons per year (tpy) or more of SO<sub>2</sub> in the latest emissions inventory year (2014, at that time, for Texas). The TCEQ identified 24 sources for air quality characterization, including 13 sources identified for evaluation by monitoring. To meet the DRR requirement for characterization of air quality around those sources, 11 SO<sub>2</sub> source-oriented monitors, located near these 13 sources, were installed and operating by January 1, 2017. Details for the TCEQ's DRR SO<sub>2</sub> source evaluation, modeling, and monitoring recommendations are in the TCEQ 2017 AMNP.

One of the 11 sites, the TCEQ Rockdale John D. Harper SO<sub>2</sub> monitor (and entire site), was decommissioned on June 5, 2020, due to the sale/lease of the property. This monitor was eligible for decommission based on a preliminary design value less than 50% of the 2010 one-hour SO<sub>2</sub> NAAQS from data collected during the first three-year period of operation, as provided by 40 CFR Section 51.1203(c)(3). Additionally, the facility near this site that required DRR SO<sub>2</sub> air quality characterization was shut down

in 2017. The EPA approved of this site decommissioning in a letter dated May 29, 2020.

Title 40 CFR Section 51.1205(b) requires the TCEQ to submit an annual report for areas where modeling of actual SO<sub>2</sub> emissions served as the basis for designating such area as attainment. The report must document the annual SO<sub>2</sub> 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<sub>2</sub> emissions served as the basis for designating the area as attainment, air agencies are not subject to ongoing data requirements, *see* 40 CFR Section 51.1205(c).

### **NCore Requirements**

Title 40 CFR Part 58, Appendix D, Section 3 requires states to monitor SO<sub>2</sub> at NCore sites. The TCEQ meets this requirement with three high-sensitivity SO<sub>2</sub> monitors at the NCore sites listed in Table 1.

### **Previously Recommended Changes**

The TCEQ Austin Northwest SO<sub>2</sub> monitor was temporarily shut down on February 18, 2020, due to the property owner's revocation of the TCEQ's use of the property for ambient air monitoring purposes. The air monitoring station was relocated one-tenth of a mile to Austin North Hills Drive on October 15, 2020, and the SO<sub>2</sub> monitor was activated on October 21, 2020. The site relocation was approved by the EPA in a letter dated April 10, 2020.

The TCEQ 2020 AMNP recommended decommissioning the Baytown Garth SO<sub>2</sub> monitor and changing two SO<sub>2</sub> monitor network designations. The EPA approved the requested changes in a letter dated October 22, 2020. The Baytown Garth SO<sub>2</sub> monitor was decommissioned on October 21, 2020, based on the most recent passing quality assurance checks. The Houston Croquet SO<sub>2</sub> monitor network designation was changed from SPM to SLAMS to meet area PWEI requirements, and the Corsicana Airport SO<sub>2</sub> monitor was changed from state-initiative to federal SPM on January 1, 2021.

### **Regulatory SO<sub>2</sub> Monitoring Network Changes**

The TCEQ recommends decommissioning the San Antonio Gardner Road SO<sub>2</sub> monitor by December 31, 2021. This monitor is eligible for decommission based on the 2017-2019 design value of 22 ppb, which is 29% of the one-hour SO<sub>2</sub> NAAQS, as provided by 40 CFR Section 51.1203(c)(3). In addition, the SO<sub>2</sub> source requiring DRR SO<sub>2</sub> air quality characterization was shut down in late 2018. The San Antonio-New Braunfels CBSA PWEI required monitor, located at the Calaveras Lake air monitoring site, will remain operational.

### **Lead**

The TCEQ lead (Pb) network includes total suspended particulate (TSP) monitors sited in compliance with federal source-oriented SLAMS requirements, as discussed further in this section. The TCEQ Pb network 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 where Pb is measured.

## Monitoring Requirements

The TCEQ Pb network meets 40 CFR Part 58, Appendix D, Section 4.5 monitoring requirements. 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.

The TCEQ evaluated the 2017, 2018, and 2019 Pb point source EI data. All 2019 point source emissions are below the 0.50 tpy threshold. Table 2 includes information regarding Pb point source EI data and source-oriented monitoring.

**Table 2: 2017-2019 Lead Point Source Emissions Inventory Data**

Facility Name	County	2017 Pb Emissions (tpy)	2018 Pb Emissions (tpy)	2019 Pb Emissions (tpy)	TCEQ Comments
Lower Colorado River Authority	Fayette	0.6300	0.5793	0.1800	Pb waiver renewal approved on October 26, 2015, see Pb Waivers section below for detail
Conesus, LLC	Kaufman	0.2617	0.2812	0.1804	Pb is currently monitored at the Terrell Temtex site

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).

The request to renew the Lower Colorado River Authority Fayette Power Plant Pb waiver in the 2015 TCEQ *Texas Five-Year Ambient Monitoring Network Assessment* was approved by the EPA Region 6 in a letter dated October 26, 2015. The 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 continues to remain below 50% of the NAAQS. The TCEQ has not received a response from EPA Region 6 on the 2020 Pb waiver request.

## **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, with the first of these monitors measuring the highest Pb concentrations in the network. Based on the current network of primary Pb monitors, the TCEQ is required to maintain one collocated QC Pb monitor. The TCEQ operates collocated QC Pb monitors at Frisco Eubanks and Terrell Temtex. Terrell Temtex measured the highest 2019 network Pb concentrations.

## **Previously Recommended Changes**

The TCEQ 2020 AMNP recommended decommissioning the Pb monitors at El Paso UTEP and Ojo De Agua due to a lack of area point sources and near-nondetectable Pb monitoring data. The EPA approved the requests in a letter dated October 22, 2020. The El Paso UTEP and Ojo De Agua Pb monitors were decommissioned on October 31, 2020, and the air monitoring sites will continue monitoring for other pollutants, as listed in AMNP Appendix B.

## **Regulatory Pb Monitoring Network Changes**

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

## **Ozone**

The TCEQ ozone (O<sub>3</sub>) network is designed to meet SLAMS, PAMS, and NCore monitoring requirements, as discussed further in this section. The TCEQ O<sub>3</sub> monitoring network is required to operate a total of 27 O<sub>3</sub> monitors and exceeds this requirement with 72 O<sub>3</sub> monitors. AMNP Appendix H lists the O<sub>3</sub> requirements and monitors in each MSA in the state. AMNP Appendix B lists the air monitoring sites where O<sub>3</sub> is measured.

## **Monitoring Requirements**

### **SLAMS Requirements**

Title 40 CFR Part 58, Appendix D, Section 4.1 requires O<sub>3</sub> 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. Monitoring requirements are outlined in Table 3. According to 2019 U.S. Census Bureau population estimates and 2017-2019 eight-hour O<sub>3</sub> design values, the TCEQ must operate a minimum of 24 O<sub>3</sub> monitors to meet SLAMS network requirements. AMNP Appendix B lists the monitors in each MSA.



**Table 3: Ozone Monitoring Requirements**

<b>MSA Population</b>	<b>Monitors required for MSAs with most recent 3-year design value concentrations <math>\geq</math>85% of any O<sub>3</sub> NAAQS<sup>1</sup></b>	<b>Monitors required for MSAs with most recent 3-year design value concentrations &lt;85% of any O<sub>3</sub> NAAQS<sup>2,3</sup></b>
>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

<sup>1</sup>The ozone (O<sub>3</sub>) National Ambient Air Quality Standards (NAAQS) levels are defined in 40 CFR Part 50.

<sup>2</sup>These minimum monitoring requirements apply in the absence of a design value.

<sup>3</sup>MSA must contain an urbanized area of 50,000 or more population.

$\geq$  - greater than or equal to

< - less than

> - greater than

% - percent

## **NCore and PAMS Requirements**

In addition to SLAMS O<sub>3</sub> requirements, 40 CFR Part 58, Appendix D, Sections 3 and 5 require O<sub>3</sub> monitoring at NCore sites to meet NCore design criteria, and at NCore sites in CBSAs with a population of 1,000,000 or more persons to meet PAMS requirements. The TCEQ meets combined NCore and PAMS requirements with O<sub>3</sub> monitors at the three NCore sites listed in Table 1.

## **Previously Recommended Changes**

The TCEQ 2019 AMNP recommended deploying O<sub>3</sub> SPM monitors to a new Houston West End site, named Houston Harvard Street, and to the Ojo De Agua air monitoring site in El Paso, Texas. The EPA approved the requests in a letter dated November 4, 2019, and the monitors were activated on January 19, 2021 and March 24, 2021, respectively.

The TCEQ Austin Northwest O<sub>3</sub> monitor was temporarily shut down on February 18, 2020, due to the property owner's revocation of the TCEQ's use of the property for ambient air monitoring purposes. The air monitoring station was relocated one-tenth of a mile to Austin North Hills Drive on October 15, 2020, and the O<sub>3</sub> monitor was activated on October 22, 2020. The site relocation was approved by the EPA in a letter dated April 10, 2020.

## **Regulatory O<sub>3</sub> Monitoring Network Changes**

The TCEQ evaluated the current O<sub>3</sub> monitoring network and determined the existing O<sub>3</sub> network meets all federal monitoring requirements; therefore, no changes are recommended.

## **Carbon Monoxide**

The TCEQ carbon monoxide (CO) network includes ambient CO and high-sensitivity CO monitoring to meet federal monitoring requirements, as discussed in this section. The TCEQ 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 12 monitors: seven ambient CO monitors and five high-sensitivity

CO monitors. 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**

### **NCore Requirements**

Title 40 CFR Part 58, Appendix D, Section 3 requires CO monitoring at NCore sites. The EPA's *Technical Assistance Document (TAD) for Precursor Gas Measurements in the NCore Multi-Pollutant Monitoring Network – Version 4* (September 2005) recommends high-sensitivity CO monitors at the NCore sites. The TCEQ meets this technical recommendation with high-sensitivity CO monitors at the three NCore sites listed in Table 1.

### **Near-Road Requirements**

Title 40 CFR Part 58, Appendix D, Section 4.2 requires collocating one CO monitor with one required near-road NO<sub>2</sub> monitor in CBSAs with populations of 1,000,000 or more persons. The TCEQ meets this requirement with CO monitors at the following near-road 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

## **Previously Recommended Changes**

The TCEQ 2019 AMNP recommended replacing the San Antonio Interstate 35 CO monitor with a high-sensitivity CO monitor. The EPA approved this request in a letter dated November 4, 2019. The existing San Antonio Interstate 35 CO monitor will be replaced with a high-sensitivity CO monitor Spring 2021.

## **Regulatory CO Monitoring Network Changes**

The 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**

The TCEQ particulate matter of 10 micrometers or less in diameter (PM<sub>10</sub>) network is designed to meet SLAMS monitoring requirements based on MSA populations, as discussed further in this section. The TCEQ is required to operate between 11 and 32 PM<sub>10</sub> monitors and exceeds the minimum requirements with 20 monitors. AMNP Appendix J lists the required and current PM<sub>10</sub> monitors in each MSA. AMNP Appendix B lists the air monitoring sites where PM<sub>10</sub> is measured.

## **Monitoring Requirements**

The TCEQ PM<sub>10</sub> network is designed to meet the area requirements of 40 CFR Part 58, Appendix D, Section 4.6, which specifies the number of PM<sub>10</sub> monitors required in MSAs based on population and available measured concentrations. Monitoring requirements are listed in Table 4. Compliance with the PM<sub>10</sub> standard is based on the

number of measured exceedances of the 150  $\mu\text{g}/\text{m}^3$  standard averaged over three years. The evaluation of  $\text{PM}_{10}$  monitoring requirements was completed using the most recent quality assured data - 2019 U.S. Census Bureau population estimates and 2017-2019  $\text{PM}_{10}$  data. The evaluation and associated maximum 2017-2019 concentrations for each MSA are listed in AMNP Appendix J, Table 1.

**Table 4: Particulate Matter of 10 Micrometers or Less Minimum Monitoring Requirements**

MSA Population	$\text{PM}_{10}$ monitors required for MSAs with high concentration <sup>1</sup>	$\text{PM}_{10}$ monitors required for MSAs with medium concentration <sup>2</sup>	$\text{PM}_{10}$ monitors required for MSAs with low concentration <sup>3</sup>
>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

<sup>1</sup>High Concentration areas are those for which ambient  $\text{PM}_{10}$  data show ambient concentrations exceeding the  $\text{PM}_{10}$  National Ambient Air Quality Standards (NAAQS) by 20 percent or more.

<sup>2</sup>Medium Concentration areas are those for which ambient  $\text{PM}_{10}$  data show ambient concentrations exceeding 80 percent of the  $\text{PM}_{10}$  NAAQS.

<sup>3</sup>Low Concentration areas are those for which ambient  $\text{PM}_{10}$  data show ambient concentrations less than 80 percent of the  $\text{PM}_{10}$  NAAQS.

$\text{PM}_{10}$  - particulate matter of 10 micrometers or less in diameter

> - greater than

## Collocation Requirements

Title 40 CFR Part 58, Appendix A, Section 3.3.4 requires a primary quality assurance organization to select 15% of the  $\text{PM}_{10}$  monitoring sites within the network for collocated QC sampling. At least 50% of the selected sites should have an annual mean particulate matter concentration among the highest in the network. AMNP Appendix J, Table 2 lists the maximum concentration measurements during the three-year period from 2017-2019 and includes the 2017, 2018, and 2019 annual mean concentrations for each  $\text{PM}_{10}$  site. The TCEQ evaluates the  $\text{PM}_{10}$  concentration data annually to ensure the  $\text{PM}_{10}$  collocated QC monitors continue to meet 40 CFR Part 58, Appendix A, Section 3.3.4.2. Based on the current network of  $\text{PM}_{10}$  monitors, the TCEQ is required to operate three  $\text{PM}_{10}$  collocated QC monitors and exceeds this requirement with four monitors.

The  $\text{PM}_{10}$  annual measured mean concentration data were evaluated from 2017-2019 to determine network collocated QC sites, shown in AMNP Appendix J, Table 2. The  $\text{PM}_{10}$  measurement concentrations at Clinton and Socorro Hueco had 2019 annual mean concentrations among the highest in the network and continue to satisfy collocation QC requirements. AMNP Appendix J, Table 1 lists the current collocated QC monitors.

## Previously Recommended Changes

The TCEQ 2019 AMNP recommended adding a  $\text{PM}_{10}$  continuous federal equivalent method (FEM) monitor to Houston North Wayside, approved by the EPA in a letter dated November 4, 2019. This monitor is expected to be operational in April 2021. The TCEQ recommended deploying a  $\text{PM}_{10}$  federal reference method (FRM) monitor to a new air monitoring site, Dallas Bexar Street, in the Dallas County southern sector industrial corridor to provide improved spatial coverage and air quality information. The new Dallas Bexar Street air monitoring site and  $\text{PM}_{10}$  monitor, approved by the EPA in a letter dated September 2, 2020, are expected to be operational Spring 2021.

Due to industrial and population growth in the Gregory-Portland area north of Corpus Christi, the TCEQ continues to evaluate the potential placement of a particulate matter monitor in San Patricio County, as previously recommended.

The TCEQ 2020 AMNP recommended decommissioning the Houston Westhollow and the Edinburg East Freddy Gonzales Drive PM<sub>10</sub> FRM monitors. The EPA approved the requests in a letter dated October 22, 2020, and both monitors were decommissioned on October 31, 2020.

## **Regulatory PM<sub>10</sub> Monitoring Network Changes**

The TCEQ evaluated the current PM<sub>10</sub> monitoring network and determined the existing PM<sub>10</sub> network meets all federal monitoring requirements; therefore, no changes are recommended.

## **Particulate Matter of 2.5 Micrometers or Less**

The TCEQ particulate matter of 2.5 micrometers or less in diameter (PM<sub>2.5</sub>) monitoring network includes a combination of non-continuous FRM, continuous FEM, and non-NAAQS comparable monitors designed to meet area, regional background, regional transport, NCore, and near-road network requirements, as discussed further in this section. The TCEQ is required to operate 28 FRM, FEM, coarse particulate matter (PM<sub>10-2.5</sub>), or speciated PM<sub>2.5</sub> monitors and exceeds the requirements with 71 monitors. An analysis of PM<sub>2.5</sub> monitoring and siting requirements using the most recent 2019 U.S. Census Bureau population estimates and 2019 PM<sub>2.5</sub> design values is provided in AMNP Appendix K. AMNP Appendix B lists the air monitoring sites where PM<sub>2.5</sub> is measured.

## **Monitoring Requirements**

### **General and Continuous Requirements**

Title 40 CFR Part 58, Appendix D, Section 4.7 requires PM<sub>2.5</sub> monitoring in MSAs with populations of 500,000 or more persons and in MSAs with lower populations if measured PM<sub>2.5</sub> design values for an MSA equal or exceed 85% of the NAAQS.

Monitoring requirements are outlined in Table 5. Under 40 CFR Part 58, Appendix D, Section 4.7.2, the TCEQ must operate continuous PM<sub>2.5</sub> monitors equal to at least one-half the required number of SLAMS-required sites. At least one of these required continuous monitors in each MSA must be collocated with one of the required FRM/FEM monitors unless the FEM monitor is itself a continuous monitor.

Additionally, 40 CFR Part 58, Appendix D, Section 4.7.3 requires each state to install and operate at least one PM<sub>2.5</sub> site to monitor for regional background and at least one PM<sub>2.5</sub> site to monitor regional transport. AMNP Appendix B lists monitors meeting the regional background and transport requirements.

**Table 5: Particulate Matter of 2.5 Micrometers or Less Minimum Monitoring Requirements**

MSA population	PM <sub>2.5</sub> monitors required for MSAs with most recent 3-year design value $\geq 85\%$ of any PM <sub>2.5</sub> NAAQS	PM <sub>2.5</sub> monitors required for MSAs with most recent 3-year design value $< 85\%$ of any PM <sub>2.5</sub> NAAQS
>1,000,000	3	2
500,000 to 1,000,000	2	1
50,000 to <500,000	1	0

&lt; - less than

&gt; - greater than

 $\geq$  - greater than or equal to

% - percent

MSA - metropolitan statistical area

NAAQS - National Ambient Air Quality Standards

PM<sub>2.5</sub> - particulate matter of 2.5 micrometers or less in diameter**NCore Monitoring Requirements**

Title 40 CFR Part 58, Appendix D, Section 3 requires PM<sub>2.5</sub> FRM mass, PM<sub>2.5</sub> FEM mass continuous, speciated PM<sub>2.5</sub>, and PM<sub>10-2.5</sub> mass monitoring at all NCore sites. The TCEQ meets this requirement with PM<sub>2.5</sub> monitors at the three NCore sites listed in Table 1.

**Near-Road PM<sub>2.5</sub> Requirements**

Title 40 CFR Part 58, Appendix D, Section 4.7.1(b)(2) requires collocating one FRM or FEM PM<sub>2.5</sub> monitor with one required near-road NO<sub>2</sub> monitor in CBSAs with populations of 1,000,000 or more persons. The TCEQ meets this requirement with PM<sub>2.5</sub> monitors at the near-road sites listed 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

**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<sub>2.5</sub> primary monitors of each method designation (FRM or FEM) for collocated QC sampling. Based on the current network of 11 PM<sub>2.5</sub> FRM monitors, the TCEQ is required to operate two collocated PM<sub>2.5</sub> FRM (FRM/FRM collocation) monitors and meets this requirement with two monitors. 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<sub>2.5</sub> network of 34 FEM monitors, the TCEQ is required to operate five collocated QC monitors pursuant to 40 CFR Part 58, Appendix A, Section 3.2.3.2(b). The TCEQ meets this requirement with two same method collocated PM<sub>2.5</sub> (FEM/FEM collocation) monitors and three different method collocated PM<sub>2.5</sub> (FEM/FRM collocation) monitors with PM<sub>2.5</sub> monitors at the five air monitoring sites listed in

Table 6. Information regarding the PM<sub>2.5</sub> collocation designations is listed in AMNP Appendix B.

**Table 6: Particulate Matter of 2.5 Micrometers or Less FEM Quality Control Collocation Monitor Types and Site Names**

Primary Monitor Type and Method Code	QC Collocated Monitor Type and Method Code	Site Name
PM <sub>2.5</sub> FEM, method 209	PM <sub>2.5</sub> FRM, method 141	Austin Webberville Road
PM <sub>2.5</sub> FEM, method 209	PM <sub>2.5</sub> FEM, method 209	Corpus Christi Huisache
PM <sub>2.5</sub> FEM, method 209	PM <sub>2.5</sub> FRM, method 141	San Antonio Northwest
PM <sub>2.5</sub> FEM, method 209	PM <sub>2.5</sub> FEM, method 209	Fort Worth California Parkway North
PM <sub>2.5</sub> FEM, method 209	PM <sub>2.5</sub> FRM, method 141	Houston Aldine

FEM - federal equivalent method

FRM - federal reference method

PM<sub>2.5</sub> - particulate matter of 2.5 micrometers or less

QC - quality control

## Previously Recommended Changes

The TCEQ 2019 AMNP recommended several PM<sub>2.5</sub> changes that were approved by the EPA in a letter dated November 4, 2019. Reallocation of the discontinued Houston Aldine PM<sub>2.5</sub> speciation monitor to the Clinton Drive air monitoring site is expected to be operational soon.

The TCEQ Austin Northwest PM<sub>2.5</sub> monitor was temporarily shut down on February 18, 2020, due to the property owner's revocation of the TCEQ's use of the property for ambient air monitoring purposes. The air monitoring station was relocated one-tenth of a mile to Austin North Hills Drive on October 15, 2020, and the PM<sub>2.5</sub> non-NAAQS comparable monitor was upgraded to a FEM continuous monitor on that date. The TCEQ recommended deploying a PM<sub>2.5</sub> non-NAAQS comparable monitor to a new air monitoring site, Dallas Bexar Street, in the Dallas County southern sector industrial corridor to provide improved spatial coverage and air quality information. The new Dallas Bexar Street air monitoring site and PM<sub>2.5</sub> monitor, approved by the EPA in a letter dated September 2, 2020, are expected to be operational Spring 2021. The TCEQ recommended deploying a PM<sub>2.5</sub> continuous monitor to Houston North Wayside, which was approved by the EPA in a letter dated November 4, 2019. This monitor is expected to be operational in April 2021.

The TCEQ 2020 AMNP recommended several PM<sub>2.5</sub> changes approved by the EPA in a letter dated October 20, 2020. The Clinton and Houston Aldine collocated QC PM<sub>2.5</sub> FRM monitor's sampling frequency were reduced to 1-in-12 days, effective January 5, 2021, and January 1, 2021, respectively. The TCEQ aligned the Dona Park PM<sub>2.5</sub> speciation network affiliation from Chemical Speciation Network for Supplemental Speciation Stations to SPM, reflecting current data usage, effective January 1, 2021.



The TCEQ continues to replace aging PM<sub>2.5</sub> FRM non-continuous monitors and non-NAAQS comparable PM<sub>2.5</sub> continuous monitors (PM<sub>2.5</sub> TEOMs) with PM<sub>2.5</sub> FEM continuous monitors, as indicated and approved in previous AMNPs. The status of approved changes is listed in Table 7.

**Table 7: Particulate Matter of 2.5 Micrometers or Less Summary of Approved Changes**

Site Name	Monitor(s) Replaced	New Monitor	Action	Status
Austin North Hills Drive	PM <sub>2.5</sub> TEOM	PM <sub>2.5</sub> FEM continuous	Relocation and method code change	Completed October 15, 2020
Houston Westhollow	PM <sub>10</sub>	PM <sub>2.5</sub> FEM continuous	New PM <sub>2.5</sub> monitor	Completed January 19, 2021
Dallas Bexar Street	None - new monitor	PM <sub>2.5</sub> TEOM	Deploy	Expected Spring 2021
Houston North Wayside	None - new monitor	PM <sub>2.5</sub> FEM continuous	Deploy	April 2021
Ascarate Park Southeast	PM <sub>2.5</sub> TEOM	PM <sub>2.5</sub> FEM continuous	Method code change	Pending
Clinton	PM <sub>2.5</sub> speciation	Deploy	Deploy	Pending
Clinton	PM <sub>2.5</sub> TEOM	PM <sub>2.5</sub> FEM continuous	Method code change	Pending
Conroe Relocated	PM <sub>2.5</sub> TEOM	PM <sub>2.5</sub> FEM continuous	Method code change	Pending
Convention Center	PM <sub>2.5</sub> FRM	PM <sub>2.5</sub> FEM continuous	Method code change	Pending
Corsicana Airport	PM <sub>2.5</sub> TEOM	PM <sub>2.5</sub> FEM continuous	Method code change	Pending
Dona Park	PM <sub>2.5</sub> TEOM	PM <sub>2.5</sub> FEM continuous	Method code change	Pending
Edinburg East Freddy Gonzalez	PM <sub>2.5</sub> FRM	PM <sub>2.5</sub> FEM continuous	Method code change	Pending
El Paso UTEP	PM <sub>2.5</sub> TEOM	PM <sub>2.5</sub> FEM continuous	Method code change	Pending
Houston North Loop	PM <sub>2.5</sub> FRM	PM <sub>2.5</sub> FEM continuous	Method code change	Pending
Karnack	PM <sub>2.5</sub> FRM and PM <sub>2.5</sub> TEOM pair	PM <sub>2.5</sub> FEM continuous	Method code change	Pending
Kaufman	PM <sub>2.5</sub> TEOM	PM <sub>2.5</sub> FEM continuous	Method code change	Pending

Site Name	Monitor(s) Replaced	New Monitor	Action	Status
Midlothian OFW	PM <sub>2.5</sub> TEOM	PM <sub>2.5</sub> FEM continuous	Method code change	Pending
Seabrook Friendship Park	PM <sub>2.5</sub> TEOM	PM <sub>2.5</sub> FEM continuous	Method code change	Pending
Socorro Hueco	PM <sub>2.5</sub> TEOM	PM <sub>2.5</sub> FEM continuous	Method code change	Pending

FEM - federal equivalent method

FRM - federal reference method

OFW - Old Fort Worth

PM<sub>2.5</sub> - particulate matter of 2.5 micrometers or less in diameter

TEOM - tapered element oscillating microbalance

UTEP - University of Texas at El Paso

## Regulatory PM<sub>2.5</sub> Monitoring Network Changes

The TCEQ continues to replace aging PM<sub>2.5</sub> non-NAAQS comparable equipment with new FEM monitors to provide continuous NAAQS comparable data to the public that is suitable for Air Quality Index reporting and the EPA's AirNow webpage. The increase in NAAQS equivalent monitors optimizes the monitoring resources in affected MSAs. The TCEQ recommends deploying QC collocated FEM monitors at the three sites described in Table 8 to meet the 15% collocation requirements as primary FEM monitor counts reach thresholds. The TCEQ considered PM<sub>2.5</sub> network monitors' annual mean, 24-hour concentrations, and area spatial coverage with these recommendations.

**Table 8: Particulate Matter of 2.5 Micrometers or Less Recommendations**

Site Name	Current Primary Monitor	Recommendation	Recommended Primary Monitor Method Code	Recommended QC Collocated Method Code	Estimated Completion Date
Port Arthur Memorial School	PM <sub>2.5</sub> FEM	Add same method PM <sub>2.5</sub> FEM continuous QC collocated monitor	209	209	August 31, 2021
El Paso UTEP	PM <sub>2.5</sub> FRM	Deploy PM <sub>2.5</sub> FEM and change existing PM <sub>2.5</sub> FRM to QC collocated	209	141	December 31, 2021
Mission	PM <sub>2.5</sub> FEM	Add same method PM <sub>2.5</sub> FEM continuous QC collocated monitor	209	209	December 31, 2022

FEM - federal equivalent method

FRM - federal reference method

PM<sub>2.5</sub> - particulate matter of 2.5 micrometers or less in diameter

QC - quality control

UTEP - University of Texas at El Paso

## **Volatile Organic Compounds**

The TCEQ volatile organic compound (VOC) network is designed to meet PAMS requirements, as discussed further in this section. The TCEQ is required to operate two VOC monitors and exceeds this requirement with 12 monitors. For purposes of meeting federal PAMS requirements, the TCEQ VOC network includes eight automated gas chromatograph (autoGC) continuous monitors and four non-continuous canister monitors. AMNP Appendix L, Table 1 lists the 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. The TCEQ exceeds PAMS required VOC monitoring requirements with autoGCs at the three NCore sites listed in Table 1 and at five other sites as listed in AMNP Appendix B.

### **Previously Recommended Changes**

The TCEQ 2020 AMNP recommended no changes to the VOC monitoring network.

### **Regulatory VOC Monitoring Network Changes**

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

## **Carbonyls**

The TCEQ carbonyl monitoring network is designed to meet PAMS requirements, as discussed further in this section. The TCEQ is required to operate two carbonyl monitors and exceeds this requirement with four monitors. AMNP Appendix L, Table 2 lists the 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 a CBSA with a population of 1,000,000 or more persons. The TCEQ exceeds carbonyl monitoring requirements with carbonyl monitors at the two required PAMS sites listed in Table 1 and at two other sites listed in AMNP Appendix B.

## **Previously Recommended Changes**

The TCEQ 2020 AMNP recommended no changes to the carbonyl monitoring network.

## **Regulatory Carbonyl Monitoring Network Changes**

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

## **Meteorology**

The TCEQ 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 the TCEQ 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. The 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**

The TCEQ 2019 AMNP recommended several meteorology monitoring changes that were approved by the EPA in a letter dated November 4, 2019. The TCEQ Austin Northwest wind speed, wind direction, and outdoor temperature monitors were temporarily shut down on February 18, 2020, due to the property owner's revocation of the TCEQ's use of the property for ambient air monitoring purposes. The air monitoring station and the meteorological monitors were relocated one-tenth of a mile to Austin North Hills Drive on October 15, 2020. The site relocation was approved by the EPA in a letter dated April 10, 2020. The TCEQ recommended deploying wind speed, wind direction, and outdoor temperature monitors to a new air monitoring site, Dallas Bexar Street, in the Dallas County southern sector industrial corridor. The new Dallas Bexar Street air monitoring site and wind speed, wind direction, and outdoor temperature monitors were approved by the EPA in a letter dated September 2, 2020, and are expected Spring 2021. The TCEQ San Antonio Northwest ceilometer is expected to be operational Fall 2021.

The TCEQ 2020 AMNP recommended deploying wind speed, wind direction, and outdoor temperature monitors to a second near-road monitoring station in the San Antonio MSA to meet the near-road requirements. The recommendation was approved by the EPA in a letter dated April 10, 2020. The TCEQ continues to explore possible

new sites adjacent to the highest possible ranked road segment and expects to deploy the site and meteorological monitors before December 31, 2021.

## Additional Monitoring Considerations

The TCEQ reviews its ambient air quality monitoring network annually and created this AMNP to demonstrate how Texas is meeting or will meet federal air monitoring requirements specified in 40 CFR Part 58 and its appendices. Additional ambient air monitoring requested during previous AMNP public inspection and comment periods continue to be evaluated for potential inclusion in the TCEQ ambient air monitoring network. Any future implementation of these monitoring considerations may be included as part of the TCEQ federal air monitoring network or as state-initiative special studies.

The TCEQ is considering the following proposed air monitors based on previously received AMNP comments. These monitoring proposals are under consideration and are subject to change. Details regarding the potential monitors under consideration are included in this plan and summarized in Appendix M to solicit further public comment.

- Deployment of a PM<sub>2.5</sub> FEM continuous monitor to the existing Houston Bayland Park site.
- Establishment of a new air monitoring site in the Houston Fifth Ward to measure VOCs, PM<sub>2.5</sub> continuous, and meteorological parameters.
- Establishment of a new air monitoring site in the Houston Pleasantville neighborhood area to measure PM<sub>2.5</sub> continuous and meteorological parameters.
- Establishment of a new air monitoring site in the Gregory-Portland area to measure VOCs, PM<sub>2.5</sub> continuous, and meteorological parameters; the recommendation to measure PM<sub>10</sub> is no longer under consideration.

## Conclusion

As discussed in this report, the TCEQ has evaluated all federal requirements for ambient air quality monitoring and reviewed the TCEQ ambient air quality monitoring network. After consideration of the federal regulations, 2019 U.S. Census Bureau population data, and 2019 design values, the TCEQ has determined that it will meet or exceed all monitoring requirements with the above-mentioned recommendations for the next calendar year.

# Appendix A

## 2021 Summary of Proposed Network Changes

**Texas Commission on Environmental Quality  
2021 Annual Monitoring Network Plan**





## Appendix A: 2021 Summary of Proposed Network Changes

Air Monitoring Site Name	Proposed Action	Parameter(s)	Estimated Completion Date
Port Arthur Memorial School	Deploy QC collocated monitor	PM <sub>2.5</sub> FEM continuous	August 31, 2021
El Paso UTEP	Deploy PM <sub>2.5</sub> FEM primary monitor and change existing PM <sub>2.5</sub> FRM network designation to QC collocated, sample every 12 <sup>th</sup> day	PM <sub>2.5</sub> FRM and FEM continuous	December 31, 2021
Mission	Deploy QC collocated monitor	PM <sub>2.5</sub> FEM continuous	December 31, 2022
San Antonio Gardner Road	Decommission monitor	SO <sub>2</sub>	December 31, 2021

FEM – federal equivalent method

FRM – federal reference method

PM<sub>2.5</sub> – particulate matter of 2.5 micrometers or less in diameter

QC – quality control

SO<sub>2</sub> – sulfur dioxide

UTEP – University of Texas at El Paso

# Appendix B

## Ambient Air Monitoring Network Site List

**Texas Commission on Environmental Quality  
2021 Annual Monitoring Network Plan**



## Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Amarillo	483751025	Amarillo 24th Avenue	4205 NE 24th Avenue, Amarillo	SO2	SLAMS	Pulsed Fluorescence	Continuous	Suburban	Population Exposure	Neighborhood	35.23674	-101.78741
Amarillo	483751025	Amarillo 24th Avenue	4205 NE 24th Avenue, Amarillo	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	General, Background	Neighborhood	35.23674	-101.78741
Amarillo	483751025	Amarillo 24th Avenue	4205 NE 24th Avenue, Amarillo	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	General, Background	Neighborhood	35.23674	-101.78741
Amarillo	483750320	Amarillo A&M	6500 Amarillo Blvd West, Amarillo	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Urban and Center City	Population Exposure	Urban Scale	35.20159	-101.90927
Amarillo	483751077	Amarillo Xcel El Rancho	Folsom Rd. & El Rancho Rd., Amarillo	SO2	SLAMS	Pulsed Fluorescence	Continuous	Rural	Source Oriented	Neighborhood	35.31650	-101.74180
Amarillo	483751077	Amarillo Xcel El Rancho	Folsom Rd. & El Rancho Rd., Amarillo	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	35.31650	-101.74180
Amarillo	483751077	Amarillo Xcel El Rancho	Folsom Rd. & El Rancho Rd., Amarillo	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	35.31650	-101.74180
Austin-Round Rock-Georgetown	484530020	Austin Audubon Society	12200 Lime Creek Rd, Leander	O3	SLAMS	UV Photometric	Continuous	Rural	Population Exposure	Neighborhood	30.48316	-97.87508
Austin-Round Rock-Georgetown	484530020	Austin Audubon Society	12200 Lime Creek Rd, Leander	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Rural	Population Exposure	Neighborhood	30.48316	-97.87508
Austin-Round Rock-Georgetown	484530020	Austin Audubon Society	12200 Lime Creek Rd, Leander	Solar Radiation	SPM	Photovoltaic	Continuous	Rural	Population Exposure	Urban Scale	30.48316	-97.87508
Austin-Round Rock-Georgetown	484530020	Austin Audubon Society	12200 Lime Creek Rd, Leander	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	Population Exposure	Urban Scale	30.48316	-97.87508
Austin-Round Rock-Georgetown	484530020	Austin Audubon Society	12200 Lime Creek Rd, Leander	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	Population Exposure	Urban Scale	30.48316	-97.87508
Austin-Round Rock-Georgetown	484530014	Austin North Hills Drive	3824 North Hills Dr, Austin	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Suburban	Population Exposure	Urban Scale	30.35494	-97.76180
Austin-Round Rock-Georgetown	484530014	Austin North Hills Drive	3824 North Hills Dr, Austin	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	30.35494	-97.76180
Austin-Round Rock-Georgetown	484530014	Austin North Hills Drive	3824 North Hills Dr, Austin	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Suburban	Population Exposure	Neighborhood	30.35494	-97.76180
Austin-Round Rock-Georgetown	484530014	Austin North Hills Drive	3824 North Hills Dr, Austin	SO2	SLAMS	Pulsed Fluorescence	Continuous	Suburban	Population Exposure	Urban Scale	30.35494	-97.76180

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Austin-Round Rock-Georgetown	484530014	Austin North Hills Drive	3824 North Hills Dr, Austin	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	General, Background	Neighborhood	30.35494	-97.76180
Austin-Round Rock-Georgetown	484530014	Austin North Hills Drive	3824 North Hills Dr, Austin	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	General, Background	Neighborhood	30.35494	-97.76180
Austin-Round Rock-Georgetown	484531068	Austin North Interstate 35	8912 N IH 35 service road southbound, Austin	CO	Near Road, SLAMS	Gas Filter Correlation	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	30.35386	-97.69166
Austin-Round Rock-Georgetown	484531068	Austin North Interstate 35	8912 N IH 35 service road southbound, Austin	NO/NO2/NOx	Near Road, SLAMS	Chemilumine-scence	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	30.35386	-97.69166
Austin-Round Rock-Georgetown	484531068	Austin North Interstate 35	8912 N IH 35 service road southbound, Austin	PM2.5 (Beta)	Near Road, SLAMS	Beta Attenuation	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	30.35386	-97.69166
Austin-Round Rock-Georgetown	484531068	Austin North Interstate 35	8912 N IH 35 service road southbound, Austin	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	30.35386	-97.69166
Austin-Round Rock-Georgetown	484531068	Austin North Interstate 35	8912 N IH 35 service road southbound, Austin	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	30.35386	-97.69166
Austin-Round Rock-Georgetown	484530021	Austin Webberville Rd	2600B Webberville Rd, Austin	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Urban and Center City	Population Exposure	Neighborhood	30.26320	-97.71289
Austin-Round Rock-Georgetown	484530021	Austin Webberville Rd	2600B Webberville Rd, Austin	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Urban and Center City	Population Exposure	Neighborhood	30.26320	-97.71289
Austin-Round Rock-Georgetown	484530021	Austin Webberville Rd	2600B Webberville Rd, Austin	PM2.5 (FRM)	QA Collocated, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/12 Days	Urban and Center City	Population Exposure	Neighborhood	30.26320	-97.71289
Austin-Round Rock-Georgetown	484530021	Austin Webberville Rd	2600B Webberville Rd, Austin	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Population Exposure	Neighborhood	30.26320	-97.71289
Austin-Round Rock-Georgetown	484530021	Austin Webberville Rd	2600B Webberville Rd, Austin	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Population Exposure	Neighborhood	30.26320	-97.71289
Beaumont-Port Arthur	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	NO/NO2/NOx	PAMS, SLAMS	Chemilumine-scence	Continuous	Suburban	Population Exposure	Neighborhood	30.03642	-94.07106
Beaumont-Port Arthur	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	O3	PAMS, SLAMS	UV Photometric	Continuous	Suburban	Max Precursor Emissions Impact; Population Exposure	Neighborhood	30.03642	-94.07106

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Beaumont-Port Arthur	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	SO2	SLAMS	Pulsed Fluorescence	Continuous	Suburban	Population Exposure	Neighborhood	30.03642	-94.07106
Beaumont-Port Arthur	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Suburban	Max Precursor Emissions Impact	Neighborhood	30.03642	-94.07106
Beaumont-Port Arthur	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Suburban	Max Precursor Emissions Impact; Population Exposure	Neighborhood	30.03642	-94.07106
Beaumont-Port Arthur	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Suburban	Max Precursor Emissions Impact	Neighborhood	30.03642	-94.07106
Beaumont-Port Arthur	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Suburban	Max Precursor Emissions Impact; Population Exposure	Neighborhood	30.03642	-94.07106
Beaumont-Port Arthur	482450009	Beaumont Downtown	1086 Vermont Avenue, Beaumont	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Suburban	Max Precursor Emissions Impact	Neighborhood	30.03642	-94.07106
Beaumont-Port Arthur	482450022	Hamshire	12552 Second St, Not In A City	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Suburban	General, Background; Regional Transport	Neighborhood, Urban Scale	29.86396	-94.31780
Beaumont-Port Arthur	482450022	Hamshire	12552 Second St, Not In A City	O3	SLAMS	UV Photometric	Continuous	Suburban	General, Background; Regional Transport	Urban Scale	29.86396	-94.31780
Beaumont-Port Arthur	482450022	Hamshire	12552 Second St, Not In A City	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Suburban	Population Exposure	Neighborhood	29.86396	-94.31780
Beaumont-Port Arthur	482450022	Hamshire	12552 Second St, Not In A City	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	General, Background	Neighborhood	29.86396	-94.31780
Beaumont-Port Arthur	482450022	Hamshire	12552 Second St, Not In A City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	General, Background	Neighborhood	29.86396	-94.31780
Beaumont-Port Arthur	482450022	Hamshire	12552 Second St, Not In A City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	General, Background	Neighborhood	29.86396	-94.31780
Beaumont-Port Arthur	482450018	Jefferson County Airport	End of 90th Street at Jefferson County Airport, Port Arthur	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	Suburban	General, Background	Neighborhood	29.94280	-94.00077

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Beaumont-Port Arthur	482450018	Jefferson County Airport	End of 90th Street at Jefferson County Airport, Port Arthur	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Suburban	General, Background	Neighborhood	29.94280	-94.00077
Beaumont-Port Arthur	482450018	Jefferson County Airport	End of 90th Street at Jefferson County Airport, Port Arthur	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Suburban	General, Background	Neighborhood	29.94280	-94.00077
Beaumont-Port Arthur	482451035	Nederland High School	1800 N. 18th Street, Nederland	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous	Suburban	Max Precursor Emissions Impact	Neighborhood	29.97893	-94.01087
Beaumont-Port Arthur	482451035	Nederland High School	1800 North 18th Street, Nederland	Dew Point	SPM	Derived at site	Continuous	Suburban	Population Exposure	Neighborhood	29.97893	-94.01087
Beaumont-Port Arthur	482451035	Nederland High School	1800 North 18th Street, Nederland	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Suburban	Max Precursor Emissions Impact; Population Exposure	Neighborhood	29.97893	-94.01087
Beaumont-Port Arthur	482451035	Nederland High School	1800 North 18th Street, Nederland	O3	PAMS, SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	29.97893	-94.01087
Beaumont-Port Arthur	482451035	Nederland High School	1800 North 18th Street, Nederland	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Suburban	Max Precursor Emissions Impact	Neighborhood	29.97893	-94.01087
Beaumont-Port Arthur	482451035	Nederland High School	1800 North 18th Street, Nederland	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Suburban	Max Precursor Emissions Impact	Neighborhood	29.97893	-94.01087
Beaumont-Port Arthur	482451035	Nederland High School	1800 North 18th Street, Nederland	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Suburban	Max Precursor Emissions Impact; Population Exposure	Neighborhood	29.97893	-94.01087
Beaumont-Port Arthur	482451035	Nederland High School	1800 North 18th Street, Nederland	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Suburban	Max Precursor Emissions Impact	Neighborhood	29.97893	-94.01087
Beaumont-Port Arthur	482451035	Nederland High School	1800 North 18th Street, Nederland	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Suburban	Max Precursor Emissions Impact; Population Exposure	Neighborhood	29.97893	-94.01087
Beaumont-Port Arthur	482451035	Nederland High School	1800 North 18th Street, Nederland	UV Radiation	PAMS, SLAMS	Photovoltaic Potentiometer	Continuous	Suburban	Max Precursor Emissions Impact	Neighborhood	29.97893	-94.01087
Beaumont-Port Arthur	482451035	Nederland High School	1800 North 18th Street, Nederland	Wind	PAMS, SLAMS	Cup Anemometer	Continuous	Suburban	Max Precursor Emissions Impact	Neighborhood	29.97893	-94.01087



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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Beaumont-Port Arthur	483611083	Orange 1st Street	2239 1st Street, Orange	SO2	SLAMS	Pulsed Fluorescence	Continuous	Urban and Center City	Source Oriented	Neighborhood	30.15368	-93.72590
Beaumont-Port Arthur	483611083	Orange 1st Street	2239 1st Street, Orange	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	General, Background	Neighborhood	30.15368	-93.72590
Beaumont-Port Arthur	483611083	Orange 1st Street	2239 1st Street, Orange	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	General, Background	Neighborhood	30.15368	-93.72590
Beaumont-Port Arthur	482450021	Port Arthur Memorial School	2200 Jefferson Drive, Port Arthur	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Suburban	Population Exposure	Neighborhood	29.92289	-93.90902
Beaumont-Port Arthur	482450011	Port Arthur West	623 Ellias Street, Port Arthur	O3	SLAMS	UV Photometric	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.89752	-93.99108
Beaumont-Port Arthur	482450011	Port Arthur West	623 Ellias Street, Port Arthur	SO2	SLAMS	Pulsed Fluorescence	Continuous	Urban and Center City	Source Oriented	Neighborhood	29.89752	-93.99108
Beaumont-Port Arthur	482450011	Port Arthur West	623 Ellias Street, Port Arthur	Solar Radiation	SPM	Photovoltaic	Continuous	Urban and Center City	Population Exposure; Source Oriented	Neighborhood	29.89752	-93.99108
Beaumont-Port Arthur	482450011	Port Arthur West	623 Ellias Street, Port Arthur	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Source Oriented	Neighborhood	29.89752	-93.99108
Beaumont-Port Arthur	482450011	Port Arthur West	623 Ellias Street, Port Arthur	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Population Exposure; Source Oriented	Neighborhood	29.89752	-93.99108
Beaumont-Port Arthur	482451071	Port Arthur West 7th Street Gate 2	West 7th Street, Chevron Port Arthur Gate 2, Port Arthur	SO2	SLAMS	Pulsed Fluorescence	Continuous	Rural	Source Oriented	Neighborhood	29.84420	-93.96520
Beaumont-Port Arthur	482451071	Port Arthur West 7th Street Gate 2	West 7th Street, Chevron Port Arthur Gate 2, Port Arthur	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	29.84420	-93.96520
Beaumont-Port Arthur	482451071	Port Arthur West 7th Street Gate 2	West 7th Street, Chevron Port Arthur Gate 2, Port Arthur	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	29.84420	-93.96520
Beaumont-Port Arthur	482450101	SETRPC 40 Sabine Pass	5200 Mechanic, Not In A City	O3	PAMS, SLAMS	UV Photometric	Continuous	Rural	Max Ozone Concentration	Neighborhood	29.72793	-93.89408
Beaumont-Port Arthur	483611100	SETRPC 42 Mauriceville	Intersection of TX Hwys 62 & 12, Port Arthur	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Suburban	Regional Transport; Upwind Background	Regional Scale	30.19456	-93.86724

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Beaumont-Port Arthur	482450102	SETRPC 43 Jefferson Co Airport	Jefferson County Airport, Port Arthur	O3	SPM	UV Photometric	Continuous	Suburban	Max Precursor Emissions Impact	Middle Scale	29.94275	-94.00068
Beaumont-Port Arthur	483611001	West Orange	2700 Austin Ave, West Orange	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Urban and Center City	Population Exposure	Neighborhood	30.08526	-93.76134
Beaumont-Port Arthur	483611001	West Orange	2700 Austin Ave, West Orange	O3	SLAMS	UV Photometric	Continuous	Urban and Center City	Population Exposure	Neighborhood	30.08526	-93.76134
Beaumont-Port Arthur	483611001	West Orange	2700 Austin Ave, West Orange	Solar Radiation	SPM	Photovoltaic	Continuous	Urban and Center City	Source Oriented	Neighborhood	30.08526	-93.76134
Beaumont-Port Arthur	483611001	West Orange	2700 Austin Ave, West Orange	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Source Oriented	Neighborhood	30.08526	-93.76134
Beaumont-Port Arthur	483611001	West Orange	2700 Austin Ave, West Orange	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Source Oriented	Neighborhood	30.08526	-93.76134
Big Spring*	482271072	Big Spring Midway	1218 North Midway Rd, Big Spring	SO2	SLAMS	Pulsed Fluorescence	Continuous	Rural	Source Oriented	Neighborhood	32.28042	-101.40714
Big Spring*	482271072	Big Spring Midway	1218 North Midway Rd, Big Spring	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	32.28042	-101.40714
Big Spring*	482271072	Big Spring Midway	1218 North Midway Rd, Big Spring	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	32.28042	-101.40714
Borger*	482331073	Borger FM 1559	19440 FM 1559, Borger	SO2	SLAMS	Pulsed Fluorescence	Continuous	Rural	Source Oriented	Neighborhood	35.67620	-101.44010
Borger*	482331073	Borger FM 1559	19440 FM 1559, Borger	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	35.67620	-101.44010
Borger*	482331073	Borger FM 1559	19440 FM 1559, Borger	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	35.67620	-101.44010
Brownsville-Harlingen	480610006	Brownsville	344 Porter Drive, Brownsville	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Urban and Center City	Population Exposure	Regional Scale	25.89252	-97.49383
Brownsville-Harlingen	480610006	Brownsville	344 Porter Drive, Brownsville	Solar Radiation	SPM	Photovoltaic	Continuous	Urban and Center City	Highest Concentration	Neighborhood	25.89252	-97.49383
Brownsville-Harlingen	480610006	Brownsville	344 Porter Drive, Brownsville	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Population Exposure	Urban Scale	25.89252	-97.49383
Brownsville-Harlingen	480610006	Brownsville	344 Porter Drive, Brownsville	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Highest Concentration	Neighborhood	25.89252	-97.49383

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Brownsville-Harlingen	480611023	Harlingen Teege	1602 W Teege Avenue, Harlingen	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	26.20033	-97.71268
Brownsville-Harlingen	480611023	Harlingen Teege	1602 W Teege Avenue, Harlingen	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure	Neighborhood	26.20033	-97.71268
Brownsville-Harlingen	480611023	Harlingen Teege	1602 W Teege Avenue, Harlingen	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	26.20033	-97.71268
Brownsville-Harlingen	480612004	Isla Blanca State Park Road	333174 State Park Road 100, South Padre Island	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Rural	Regional Transport	Urban Scale	26.07110	-97.15770
Brownsville-Harlingen	480612004	Isla Blanca State Park Road	333174 State Park Road 100, South Padre Island	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	Regional Transport	Regional Scale	26.07110	-97.15770
Brownsville-Harlingen	480612004	Isla Blanca State Park Road	333174 State Park Road 100, South Padre Island	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	Rural	Regional Transport	Regional Scale	26.07110	-97.15770
College Station-Bryan	480411086	Bryan Finfeather Road	3670 Finfeather Road, Bryan	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Rural	Population Exposure; Regional Transport	Neighborhood	30.62833	-96.36278
College Station-Bryan	480411086	Bryan Finfeather Road	3670 Finfeather Road, Bryan	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	30.62833	-96.36278
College Station-Bryan	480411086	Bryan Finfeather Road	3670 Finfeather Road, Bryan	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	30.62833	-96.36278
College Station-Bryan	483951076	Franklin Oak Grove	8127 Oak Grove Road, Franklin	SO2	SLAMS	Pulsed Fluorescence	Continuous	Rural	Source Oriented	Neighborhood	31.16889	-96.48194
College Station-Bryan	483951076	Franklin Oak Grove	8127 Oak Grove Road, Franklin	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	31.16889	-96.48194
College Station-Bryan	483951076	Franklin Oak Grove	8127 Oak Grove Road, Franklin	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	31.16889	-96.48194
Corpus Christi	483550032	Corpus Christi Huisache	3810 Huisache Street, Corpus Christi	PM2.5 (Beta)	SLAMS QA	Beta Attenuation	Continuous	Urban and Center City	Population Exposure	Neighborhood	27.80449	-97.43155
Corpus Christi	483550032	Corpus Christi Huisache	3810 Huisache Street, Corpus Christi	PM2.5 (Beta)	Collocated, SLAMS	Beta Attenuation	Continuous	Urban and Center City	Quality Assurance	Neighborhood	27.80449	-97.43155
Corpus Christi	483550032	Corpus Christi Huisache	3810 Huisache Street, Corpus Christi	SO2	SLAMS	Pulsed Fluorescence	Continuous	Urban and Center City	Highest Concentration; Population Exposure	Neighborhood	27.80449	-97.43155

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Corpus Christi	483550032	Corpus Christi Huisache	3810 Huisache Street, Corpus Christi	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Population Exposure	Middle Scale	27.80449	-97.43155
Corpus Christi	483550032	Corpus Christi Huisache	3810 Huisache Street, Corpus Christi	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Population Exposure	Middle Scale	27.80449	-97.43155
Corpus Christi	483550026	Corpus Christi Tuloso	9860 La Branch, Corpus Christi	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	27.83241	-97.55539
Corpus Christi	483550026	Corpus Christi Tuloso	9860 La Branch, Corpus Christi	SO2	SLAMS	Pulsed Fluorescence	Continuous	Suburban	Population Exposure	Neighborhood	27.83241	-97.55539
Corpus Christi	483550026	Corpus Christi Tuloso	9860 La Branch, Corpus Christi	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Highest Concentration	Neighborhood	27.83241	-97.55539
Corpus Christi	483550026	Corpus Christi Tuloso	9860 La Branch, Corpus Christi	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Highest Concentration	Neighborhood	27.83241	-97.55539
Corpus Christi	483550025	Corpus Christi West	Corpus Christi State School, 902 Airport Road, Corpus Christi	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	27.76534	-97.43426
Corpus Christi	483550025	Corpus Christi West	Corpus Christi State School, 902 Airport Road, Corpus Christi	SO2	SLAMS	Pulsed Fluorescence	Continuous	Suburban	Population Exposure	Neighborhood	27.76534	-97.43426
Corpus Christi	483550025	Corpus Christi West	Corpus Christi State School, 902 Airport Road, Corpus Christi	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	Population Exposure	Neighborhood	27.76534	-97.43426
Corpus Christi	483550025	Corpus Christi West	Corpus Christi State School, 902 Airport Road, Corpus Christi	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure	Neighborhood	27.76534	-97.43426
Corpus Christi	483550025	Corpus Christi West	Corpus Christi State School, 902 Airport Road, Corpus Christi	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	27.76534	-97.43426
Corpus Christi	483550034	Dona Park	5707 Up River Rd, Corpus Christi	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Urban and Center City	Population Exposure	Neighborhood	27.81182	-97.46570
Corpus Christi	483550034	Dona Park	5707 Up River Rd, Corpus Christi	PM2.5 (FRM)	SPM	Sequential FRM Gravimetric	24 Hours; 1/6 Days	Urban and Center City	Population Exposure	Neighborhood	27.81182	-97.46570

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Corpus Christi	483550034	Dona Park	5707 Up River Rd, Corpus Christi	PM2.5 (Speciation)	SPM	Carbons, Elements, Ions, 2025/URG	24 Hours; 1/6 Days	Urban and Center City	Population Exposure	Neighborhood	27.81182	-97.46570
Corpus Christi	483550034	Dona Park	5707 Up River Rd, Corpus Christi	PM2.5 (TEOM) <sup>N</sup>	SPM	TEOM Gravimetric	Continuous	Urban and Center City	Regional Transport	Neighborhood	27.81182	-97.46570
Corpus Christi	483550034	Dona Park	5707 Up River Rd, Corpus Christi	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Highest Concentration	Regional Scale	27.81182	-97.46570
Corpus Christi	483550034	Dona Park	5707 Up River Rd, Corpus Christi	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Highest Concentration General, Background; Max Precursor Emissions Impact	Regional Scale	27.81182	-97.46570
Corsicana*	483491051	Corsicana Airport	Corsicana Airport, Corsicana	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Rural	General, Background; Max Ozone Concentration	Urban Scale	32.03193	-96.39914
Corsicana*	483491051	Corsicana Airport	Corsicana Airport, Corsicana	O3	SPM	UV Photometric	Continuous	Rural	General, Background; Max Ozone Concentration	Urban Scale	32.03193	-96.39914
Corsicana*	483491051	Corsicana Airport	Corsicana Airport, Corsicana	PM2.5 (TEOM) <sup>N</sup>	SPM	TEOM Gravimetric	Continuous	Rural	Source Oriented	Neighborhood	32.03193	-96.39914
Corsicana*	483491051	Corsicana Airport	Corsicana Airport, Corsicana	Relative Humidity	SPM	Humidity Sensor	Continuous	Rural	General, Background	Urban Scale	32.03193	-96.39914
Corsicana*	483491051	Corsicana Airport	Corsicana Airport, Corsicana	SO2	SPM	Pulsed Fluorescence	Continuous	Rural	Source Oriented	Urban Scale	32.03193	-96.39914
Corsicana*	483491051	Corsicana Airport	Corsicana Airport, Corsicana	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Urban Scale	32.03193	-96.39914
Corsicana*	483491051	Corsicana Airport	Corsicana Airport, Corsicana	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Urban Scale	32.03193	-96.39914
Corsicana*	483491081	Richland Southeast 1220 Road	Southeast 1220 Road, Richland	SO2	SLAMS	Pulsed Fluorescence	Continuous	Rural	Source Oriented	Neighborhood	31.90410	-96.35200
Corsicana*	483491081	Richland Southeast 1220 Road	Southeast 1220 Road, Richland	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	31.90410	-96.35200
Corsicana*	483491081	Richland Southeast 1220 Road	Southeast 1220 Road, Richland	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	31.90410	-96.35200
Dallas-Fort Worth-Arlington	484393011	Arlington Municipal Airport	5504 South Collins Street, Arlington	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Suburban	Population Exposure	Neighborhood	32.65637	-97.08859

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Dallas-Fort Worth-Arlington	484393011	Arlington Municipal Airport	5504 South Collins Street, Arlington	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	32.65637	-97.08859
Dallas-Fort Worth-Arlington	484393011	Arlington Municipal Airport	5504 South Collins Street, Arlington	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	Highest Concentration	Neighborhood	32.65637	-97.08859
Dallas-Fort Worth-Arlington	484393011	Arlington Municipal Airport	5504 South Collins Street, Arlington	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Highest Concentration	Neighborhood	32.65637	-97.08859
Dallas-Fort Worth-Arlington	484393011	Arlington Municipal Airport	5504 South Collins Street, Arlington	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Highest Concentration	Neighborhood	32.65637	-97.08859
Dallas-Fort Worth-Arlington	482510003	Cleburne Airport	1650 Airport Drive, Cleburne	O3	PAMS, SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Urban Scale	32.35359	-97.43674
Dallas-Fort Worth-Arlington	482510003	Cleburne Airport	1650 Airport Drive, Cleburne	Radar Profiler	SPM	Radar Profiler	Continuous	Suburban	Regional Transport	Regional Scale	32.35359	-97.43674
Dallas-Fort Worth-Arlington	482510003	Cleburne Airport	1650 Airport Drive, Cleburne	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Suburban	General, Background	Neighborhood	32.35359	-97.43674
Dallas-Fort Worth-Arlington	482510003	Cleburne Airport	1650 Airport Drive, Cleburne	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Suburban	General, Background	Neighborhood	32.35359	-97.43674
Dallas-Fort Worth-Arlington	482510003	Cleburne Airport	1650 Airport Drive, Cleburne	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Suburban	General, Background	Neighborhood	32.35359	-97.43674
Dallas-Fort Worth-Arlington	481130050	Convention Center	717 South Akard, Dallas	PM10 (FRM)	SLAMS QA	HiVol Gravimetric	24 Hours; 1/6 Days	Urban and Center City	Population Exposure	Neighborhood	32.77426	-96.79769
Dallas-Fort Worth-Arlington	481130050	Convention Center	717 South Akard, Dallas	PM10 (FRM)	Collocated, SLAMS	HiVol Gravimetric	24 Hours; 1/12 Days	Urban and Center City	Population Exposure	Neighborhood	32.77426	-96.79769
Dallas-Fort Worth-Arlington	481130050	Convention Center	717 South Akard, Dallas	PM2.5 (FRM)	SLAMS	Sequential FRM Gravimetric	24 Hours; 1/3 Days	Urban and Center City	Highest Concentration; Population Exposure	Neighborhood	32.77426	-96.79769
Dallas-Fort Worth-Arlington	481130050	Convention Center	717 South Akard, Dallas	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Population Exposure	Neighborhood	32.77426	-96.79769
Dallas-Fort Worth-Arlington	481130050	Convention Center	717 South Akard, Dallas	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Population Exposure	Neighborhood	32.77426	-96.79769
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous 24 Hours; Seasonal, 8 Hour; Seasonal	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	Carbonyl	PAMS, SLAMS	DNPH Silica HPLC	Continuous 24 Hours; Seasonal, 8 Hour; Seasonal	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.82007	-96.86012



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Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	CO (High Sensitivity)	NCORE, SLAMS	Gas Filter Correlation	Continuous	Urban and Center City	Max Precursor Emissions Impact; Population Exposure	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	Dew Point	SPM	Derived at site	Continuous	Urban and Center City	Population Exposure	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	NO2 (Direct)	PAMS, SLAMS	Direct-Read NO2	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	NOy (High Sensitivity)	NCORE, PAMS, SLAMS	Chemiluminescence API200 EU/501	Continuous	Urban and Center City	Highest Concentration	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	O3	NCORE, PAMS, SLAMS	UV Photometric Beta	Continuous	Urban and Center City	Max Precursor Emissions Impact; Population Exposure	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	PM10-2.5	NCORE, SLAMS	Attenuation, 185 calculated	Continuous	Urban and Center City	Population Exposure	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	PM2.5	NCORE, SLAMS	Attenuation, 170	Continuous	Urban and Center City	Population Exposure	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	PM2.5 (FRM)	NCORE, SLAMS QA	Sequential FRM Gravimetric	24 Hours; 1/3 Days	Urban and Center City	Population Exposure	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	PM2.5 (FRM)	Collocated, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/12 Days	Urban and Center City	Population Exposure	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	PM2.5 (Speciation)	Csn Stn, NCORE, SLAMS	Carbons, Elements, Ions, SASS/URG	24 Hours; 1/3 Days	Urban and Center City	Population Exposure	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	Relative Humidity	NCORE, PAMS, SLAMS	Humidity Sensor	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	SO2 (High Sensitivity)	NCORE, SLAMS	Pulsed Fluorescence	Continuous	Urban and Center City	Population Exposure	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.82007	-96.86012



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Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Urban and Center City	Highest Concentration; Max Precursor Emissions Impact	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Urban and Center City	Highest Concentration; Max Precursor Emissions Impact	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	UV Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	Visibility	SPM	Visibility Sensor	Continuous	Urban and Center City	Population Exposure	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481130069	Dallas Hinton	1415 Hinton Street, Dallas	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.82007	-96.86012
Dallas-Fort Worth-Arlington	481131067	Dallas LBJ Freeway	8652 LBJ Freeway, Dallas	NO/NO2/NOx	Near Road, SLAMS	Chemiluminescence	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	32.92118	-96.75355
Dallas-Fort Worth-Arlington	481131067	Dallas LBJ Freeway	8652 LBJ Freeway, Dallas	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	32.92118	-96.75355
Dallas-Fort Worth-Arlington	481131067	Dallas LBJ Freeway	8652 LBJ Freeway, Dallas	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	32.92118	-96.75355
Dallas-Fort Worth-Arlington	481130075	Dallas North #2	12532 1/2 Nuestra Drive, Dallas	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Suburban	Population Exposure	Neighborhood	32.91921	-96.80850
Dallas-Fort Worth-Arlington	481130075	Dallas North #2	12532 1/2 Nuestra Drive, Dallas	O3	PAMS, SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Urban Scale	32.91921	-96.80850
Dallas-Fort Worth-Arlington	481130075	Dallas North #2	12532 1/2 Nuestra Drive, Dallas	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Suburban	General, Background	Neighborhood	32.91921	-96.80850
Dallas-Fort Worth-Arlington	481130075	Dallas North #2	12532 1/2 Nuestra Drive, Dallas	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Suburban	General, Background	Neighborhood	32.91921	-96.80850
Dallas-Fort Worth-Arlington	481130075	Dallas North #2	12532 1/2 Nuestra Drive, Dallas	Wind	PAMS, SPM	Potentiometer Cup Anemometer	Continuous	Suburban	General, Background	Neighborhood	32.91921	-96.80850
Dallas-Fort Worth-Arlington	481130087	Dallas Redbird Airport Executive	3277 W Redbird Lane, Dallas	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Suburban	Population Exposure	Neighborhood	32.67645	-96.87206

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Dallas-Fort Worth-Arlington	481130087	Dallas Redbird Airport Executive	3277 W Redbird Lane, Dallas	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Urban Scale	32.67645	-96.87206
Dallas-Fort Worth-Arlington	481130087	Dallas Redbird Airport Executive	3277 W Redbird Lane, Dallas	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer Cup	Continuous	Suburban	General, Background	Neighborhood	32.67645	-96.87206
Dallas-Fort Worth-Arlington	481130087	Dallas Redbird Airport Executive	3277 W Redbird Lane, Dallas	Wind	SPM	Anemometer	Continuous	Suburban	General, Background	Neighborhood	32.67645	-96.87206
Dallas-Fort Worth-Arlington	481210034	Denton Airport South	Denton Airport South, Denton	Dew Point	SPM	Derived at site	Continuous	Rural	Population Exposure	Urban Scale	33.21907	-97.19628
Dallas-Fort Worth-Arlington	481210034	Denton Airport South	Denton Airport South, Denton	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Rural	Max Ozone Concentration; Population Exposure	Urban Scale	33.21907	-97.19628
Dallas-Fort Worth-Arlington	481210034	Denton Airport South	Denton Airport South, Denton	NOy (High Sensitivity)	PAMS, SLAMS	Chemiluminescence Teledyne API200 EU/501	Continuous	Rural	Max Ozone Concentration; Population Exposure	Urban Scale	33.21907	-97.19628
Dallas-Fort Worth-Arlington	481210034	Denton Airport South	Denton Airport South, Denton	O3	PAMS, SLAMS	UV Photometric	Continuous	Rural	Max Ozone Concentration; Population Exposure	Urban Scale	33.21907	-97.19628
Dallas-Fort Worth-Arlington	481210034	Denton Airport South	Denton Airport South, Denton	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Rural	Population Exposure	Urban Scale	33.21907	-97.19628
Dallas-Fort Worth-Arlington	481210034	Denton Airport South	Denton Airport South, Denton	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	Rural	Max Ozone Concentration	Urban Scale	33.21907	-97.19628
Dallas-Fort Worth-Arlington	481210034	Denton Airport South	Denton Airport South, Denton	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Rural	Max Ozone Concentration	Urban Scale	33.21907	-97.19628
Dallas-Fort Worth-Arlington	481210034	Denton Airport South	Denton Airport South, Denton	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Rural	Max Ozone Concentration	Urban Scale	33.21907	-97.19628
Dallas-Fort Worth-Arlington	481210034	Denton Airport South	Denton Airport South, Denton	Speciated VOC (Canister)	PAMS, SLAMS	Canister GC-MS	24 Hours; 1/6 Days	Rural	Max Ozone Concentration; Population Exposure	Urban Scale	33.21907	-97.19628
Dallas-Fort Worth-Arlington	481210034	Denton Airport South	Denton Airport South, Denton	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister Potentiometer Cup	Continuous	Rural	Max Ozone Concentration	Urban Scale	33.21907	-97.19628
Dallas-Fort Worth-Arlington	481210034	Denton Airport South	Denton Airport South, Denton	Wind	PAMS, SLAMS	Anemometer	Continuous	Rural	Max Ozone Concentration	Urban Scale	33.21907	-97.19628
Dallas-Fort Worth-Arlington	484390075	Eagle Mountain Lake	14290 Morris Dido Newark Rd, Eagle Mountain	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Rural	Max Precursor Emissions Impact	Urban Scale	32.98789	-97.47718

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Dallas-Fort Worth-Arlington	484390075	Eagle Mountain Lake	14290 Morris Dido Newark Rd, Eagle Mountain	O3	SLAMS	UV Photometric	Continuous	Rural	Max Ozone Concentration	Neighborhood	32.98789	-97.47718
Dallas-Fort Worth-Arlington	484390075	Eagle Mountain Lake	14290 Morris Dido Newark Rd, Eagle Mountain	Solar Radiation	SPM	Photovoltaic	Continuous	Rural	Highest Concentration	Middle Scale	32.98789	-97.47718
Dallas-Fort Worth-Arlington	484390075	Eagle Mountain Lake	14290 Morris Dido Newark Rd, Eagle Mountain	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	Highest Concentration	Middle Scale	32.98789	-97.47718
Dallas-Fort Worth-Arlington	484390075	Eagle Mountain Lake	14290 Morris Dido Newark Rd, Eagle Mountain	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	Highest Concentration	Middle Scale	32.98789	-97.47718
Dallas-Fort Worth-Arlington	481130061	Earhart	3434 Bickers, Dallas	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Urban and Center City	Population Exposure	Neighborhood	32.78536	-96.87657
Dallas-Fort Worth-Arlington	484391053	Fort Worth California Parkway North	1198 California Parkway North, Fort Worth	CO	Near Road, SLAMS	Gas Filter Correlation	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	32.66475	-97.33792
Dallas-Fort Worth-Arlington	484391053	Fort Worth California Parkway North	1198 California Parkway North, Fort Worth	NO/NO2/NOx	Near Road, SLAMS	Chemiluminescence	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	32.66475	-97.33792
Dallas-Fort Worth-Arlington	484391053	Fort Worth California Parkway North	1198 California Parkway North, Fort Worth	PM2.5 (Beta)	Near Road, SLAMS	Beta Attenuation	Continuous	Urban and Center City	Population Exposure	Microscale	32.66475	-97.33792
Dallas-Fort Worth-Arlington	484391053	Fort Worth California Parkway North	1198 California Parkway North, Fort Worth	PM2.5 (Beta)	Collocated, SLAMS	Beta Attenuation	Continuous	Urban and Center City	Quality Assurance	Microscale	32.66475	-97.33792
Dallas-Fort Worth-Arlington	484391053	Fort Worth California Parkway North	1198 California Parkway North, Fort Worth	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	32.66475	-97.33792
Dallas-Fort Worth-Arlington	484391053	Fort Worth California Parkway North	1198 California Parkway North, Fort Worth	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	32.66475	-97.33792
Dallas-Fort Worth-Arlington	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	Carbonyl	PAMS, SLAMS	DNPH Silica HPLC	24 Hours; 1/6 days; Seasonal	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.80581	-97.35653
Dallas-Fort Worth-Arlington	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	Dew Point	SPM	Derived at site	Continuous	Urban and Center City	Population Exposure	Middle Scale	32.80581	-97.35653
Dallas-Fort Worth-Arlington	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Urban and Center City	Max Precursor Emissions Impact; Population Exposure	Neighborhood	32.80581	-97.35653
Dallas-Fort Worth-Arlington	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	O3	PAMS, SLAMS	UV Photometric	Continuous	Urban and Center City	Max Precursor Emissions Impact; Population Exposure	Neighborhood	32.80581	-97.35653

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Dallas-Fort Worth-Arlington	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Urban and Center City	Population Exposure	Neighborhood	32.80581	-97.35653
Dallas-Fort Worth-Arlington	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.80581	-97.35653
Dallas-Fort Worth-Arlington	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.80581	-97.35653
Dallas-Fort Worth-Arlington	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Urban and Center City	Max Precursor Emissions Impact; Population Exposure	Neighborhood	32.80581	-97.35653
Dallas-Fort Worth-Arlington	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.80581	-97.35653
Dallas-Fort Worth-Arlington	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Urban and Center City	Max Precursor Emissions Impact; Population Exposure	Neighborhood	32.80581	-97.35653
Dallas-Fort Worth-Arlington	484391002	Fort Worth Northwest	3317 Ross Ave, Fort Worth	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	32.80581	-97.35653
Dallas-Fort Worth-Arlington	480850005	Frisco	6590 Hillcrest Road, Frisco	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Urban Scale	33.13240	-96.78642
Dallas-Fort Worth-Arlington	480850005	Frisco	6590 Hillcrest Road, Frisco	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	General, Background	Urban Scale	33.13240	-96.78642
Dallas-Fort Worth-Arlington	480850005	Frisco	6590 Hillcrest Road, Frisco	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	General, Background	Urban Scale	33.13240	-96.78642
Dallas-Fort Worth-Arlington	480850005	Frisco	6590 Hillcrest Road, Frisco	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	General, Background	Urban Scale	33.13240	-96.78642
Dallas-Fort Worth-Arlington	480850009	Frisco Eubanks	6601 Eubanks, Frisco	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure; Source Oriented	Neighborhood	33.14466	-96.82881
Dallas-Fort Worth-Arlington	480850009	Frisco Eubanks	6601 Eubanks, Frisco	TSP (Pb)	SLAMS	HiVol ICP-MS	24 Hours; 1/6 Days	Suburban	Population Exposure; Source Oriented	Neighborhood	33.14466	-96.82881
Dallas-Fort Worth-Arlington	480850009	Frisco Eubanks	6601 Eubanks, Frisco	TSP (Pb)	QA Collocated, SLAMS	HiVol ICP-MS	24 Hours; 1/12 Days	Suburban	Population Exposure; Source Oriented	Neighborhood	33.14466	-96.82881

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Dallas-Fort Worth-Arlington	480850009	Frisco Eubanks	6601 Eubanks, Frisco	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	33.14466	-96.82881
Dallas-Fort Worth-Arlington	480850029	Frisco Stonebrook	7202 Stonebrook Parkway, Frisco	TSP (Pb)	SPM	HiVol ICP-MS	24 Hours; 1/6 Days	Suburban	Population Exposure; Source Oriented	Neighborhood	33.13602	-96.82447
Dallas-Fort Worth-Arlington	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous	Suburban	Max Ozone Concentration	Neighborhood	32.98426	-97.06372
Dallas-Fort Worth-Arlington	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	Dew Point	SPM	Derived at site	Continuous	Suburban	Highest Concentration; Max Ozone Concentration	Neighborhood	32.98426	-97.06372
Dallas-Fort Worth-Arlington	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Suburban	Max Ozone Concentration; Population Exposure	Neighborhood	32.98426	-97.06372
Dallas-Fort Worth-Arlington	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	O3	PAMS, SLAMS	UV Photometric	Continuous	Suburban	Max Ozone Concentration; Population Exposure	Neighborhood	32.98426	-97.06372
Dallas-Fort Worth-Arlington	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Suburban	Max Ozone Concentration	Neighborhood	32.98426	-97.06372
Dallas-Fort Worth-Arlington	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Suburban	Max Ozone Concentration	Neighborhood	32.98426	-97.06372
Dallas-Fort Worth-Arlington	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	Speciated VOC (Canister)	PAMS, SLAMS	Canister GC-MS	24 Hours; 1/6 Days	Suburban	Max Ozone Concentration; Population Exposure	Neighborhood	32.98426	-97.06372
Dallas-Fort Worth-Arlington	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Suburban	Max Ozone Concentration	Neighborhood	32.98426	-97.06372
Dallas-Fort Worth-Arlington	484393009	Grapevine Fairway	4100 Fairway Dr, Grapevine	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Suburban	Max Ozone Concentration	Neighborhood	32.98426	-97.06372
Dallas-Fort Worth-Arlington	482311006	Greenville	824 Sayle Street, Greenville	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Suburban	Population Exposure; Upwind Background	Neighborhood	33.15309	-96.11557
Dallas-Fort Worth-Arlington	482311006	Greenville	824 Sayle Street, Greenville	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure; Upwind Background	Neighborhood	33.15309	-96.11557
Dallas-Fort Worth-Arlington	482311006	Greenville	824 Sayle Street, Greenville	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	General, Background	Neighborhood	33.15309	-96.11557

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Dallas-Fort Worth-Arlington	482311006	Greenville	824 Sayle Street, Greenville	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	General, Background	Neighborhood	33.15309	-96.11557
Dallas-Fort Worth-Arlington	482311006	Greenville	824 Sayle Street, Greenville	Wind	SPM	Potentiometer Cup	Continuous	Suburban	General, Background	Neighborhood	33.15309	-96.11557
Dallas-Fort Worth-Arlington	484391006	Haws Athletic Center	600 1/2 Congress St, Fort Worth	PM2.5 (Beta)	SPM	Anemometer	Continuous	Urban and Center City	Population Exposure	Neighborhood	32.75915	-97.34233
Dallas-Fort Worth-Arlington	481391044	Italy	900 FM 667 Ellis County, Italy	Dew Point	SPM	Beta Attenuation	Continuous	Rural	Upwind Background	Urban Scale	32.17542	-96.87019
Dallas-Fort Worth-Arlington	481391044	Italy	900 FM 667 Ellis County, Italy	NO/NO2/NOx	PAMS, SLAMS	Derived at site	Continuous	Rural	Upwind Background	Urban Scale	32.17542	-96.87019
Dallas-Fort Worth-Arlington	481391044	Italy	900 FM 667 Ellis County, Italy	O3	PAMS, SLAMS	Chemiluminescence	Continuous	Rural	Upwind Background	Urban Scale	32.17542	-96.87019
Dallas-Fort Worth-Arlington	481391044	Italy	900 FM 667 Ellis County, Italy	Relative Humidity	PAMS, SLAMS	UV Photometric	Continuous	Rural	Upwind Background	Urban Scale	32.17542	-96.87019
Dallas-Fort Worth-Arlington	481391044	Italy	900 FM 667 Ellis County, Italy	Solar Radiation	PAMS, SLAMS	Humidity Sensor	Continuous	Rural	Upwind Background	Urban Scale	32.17542	-96.87019
Dallas-Fort Worth-Arlington	481391044	Italy	900 FM 667 Ellis County, Italy	Speciated VOC (Canister)	PAMS, SLAMS	Photovoltaic	Continuous	Rural	Upwind Background	Urban Scale	32.17542	-96.87019
Dallas-Fort Worth-Arlington	481391044	Italy	900 FM 667 Ellis County, Italy	VOC (Canister)	PAMS, SLAMS	Canister GC-MS	24 Hours; 1/6 Days	Rural	Upwind Background	Urban Scale	32.17542	-96.87019
Dallas-Fort Worth-Arlington	481391044	Italy	900 FM 667 Ellis County, Italy	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Rural	Upwind Background	Urban Scale	32.17542	-96.87019
Dallas-Fort Worth-Arlington	481391044	Italy	900 FM 667 Ellis County, Italy	UV Radiation	PAMS, SLAMS	Potentiometer Cup	Continuous	Rural	Upwind Background	Urban Scale	32.17542	-96.87019
Dallas-Fort Worth-Arlington	481391044	Italy	900 FM 667 Ellis County, Italy	Wind	PAMS, SLAMS	Anemometer	Continuous	Rural	Upwind Background	Urban Scale	32.17542	-96.87019
Dallas-Fort Worth-Arlington	482511008	Johnson County Luisa	2420 Luisa Ln, Alvarado	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure	Neighborhood	32.46970	-97.16927
Dallas-Fort Worth-Arlington	482511008	Johnson County Luisa	2420 Luisa Ln, Alvarado	Wind	SPM	Potentiometer Cup	Continuous	Suburban	Population Exposure	Neighborhood	32.46970	-97.16927
Dallas-Fort Worth-Arlington	482570005	Kaufman	3790 S Houston St, Kaufman	Dew Point	SPM	Anemometer	Continuous	Suburban	Highest Concentration	Neighborhood	32.56497	-96.31769
Dallas-Fort Worth-Arlington	482570005	Kaufman	3790 S Houston St, Kaufman	NO/NO2/NOx	PAMS, SLAMS	Derived at site	Continuous	Suburban	Population Exposure; Upwind Background	Neighborhood, Urban Scale	32.56497	-96.31769



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Dallas-Fort Worth-Arlington	482570005	Kaufman	3790 S Houston St, Kaufman	O3	PAMS, SLAMS	UV Photometric	Continuous	Suburban	Population Exposure; Upwind Background	Urban Scale	32.56497	-96.31769
Dallas-Fort Worth-Arlington	482570005	Kaufman	3790 S Houston St, Kaufman	PM2.5 (TEOM) <sup>N</sup>	SPM	TEOM Gravimetric	Continuous	Suburban	Upwind Background	Regional Scale	32.56497	-96.31769
Dallas-Fort Worth-Arlington	482570005	Kaufman	3790 S Houston St, Kaufman	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Suburban	Upwind Background	Urban Scale	32.56497	-96.31769
Dallas-Fort Worth-Arlington	482570005	Kaufman	3790 S Houston St, Kaufman	SO2	SLAMS	Pulsed Fluorescence	Continuous	Suburban	Population Exposure; Upwind Background	Neighborhood	32.56497	-96.31769
Dallas-Fort Worth-Arlington	482570005	Kaufman	3790 S Houston St, Kaufman	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Suburban	Upwind Background	Urban Scale	32.56497	-96.31769
Dallas-Fort Worth-Arlington	482570005	Kaufman	3790 S Houston St, Kaufman	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Suburban	Upwind Background	Urban Scale	32.56497	-96.31769
Dallas-Fort Worth-Arlington	482570005	Kaufman	3790 S Houston St, Kaufman	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Suburban	Upwind Background	Urban Scale	32.56497	-96.31769
Dallas-Fort Worth-Arlington	484392003	Keller	FAA Site off Alta Vista Road, Fort Worth	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Suburban	Max Precursor Emissions Impact	Urban Scale	32.92249	-97.28210
Dallas-Fort Worth-Arlington	484392003	Keller	FAA Site off Alta Vista Road, Fort Worth	O3	PAMS, SLAMS	UV Photometric	Continuous	Suburban	Max Ozone Concentration; Population Exposure	Neighborhood	32.92249	-97.28210
Dallas-Fort Worth-Arlington	484392003	Keller	FAA Site off Alta Vista Road, Fort Worth	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Suburban	General, Background	Urban Scale	32.92249	-97.28210
Dallas-Fort Worth-Arlington	484392003	Keller	FAA Site off Alta Vista Road, Fort Worth	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Suburban	General, Background	Urban Scale	32.92249	-97.28210
Dallas-Fort Worth-Arlington	484392003	Keller	FAA Site off Alta Vista Road, Fort Worth	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Suburban	General, Background	Urban Scale	32.92249	-97.28210
Dallas-Fort Worth-Arlington	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Suburban	Source Oriented	Neighborhood	32.48208	-97.02690
Dallas-Fort Worth-Arlington	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Urban Scale	32.48208	-97.02690
Dallas-Fort Worth-Arlington	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	PM2.5 (FRM)	SPM	Sequential FRM Gravimetric	24 Hours; 1/6 Days	Suburban	Population Exposure; Source Oriented	Regional Scale	32.48208	-97.02690



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Dallas-Fort Worth-Arlington	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	PM2.5 (Speciation)	SPM	Carbons, Elements, Ions, 2025/URG	24 Hours; 1/6 Days	Suburban	Population Exposure; Source Oriented	Neighborhood, Regional Scale	32.48208	-97.02690
Dallas-Fort Worth-Arlington	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	PM2.5 (TEOM) <sup>N</sup>	SPM	TEOM Gravimetric	Continuous	Suburban	Regional Transport	Regional Scale	32.48208	-97.02690
Dallas-Fort Worth-Arlington	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	SO2	SLAMS	Pulsed Fluorescence	Continuous	Suburban	Source Oriented	Neighborhood	32.48208	-97.02690
Dallas-Fort Worth-Arlington	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	General, Background	Neighborhood	32.48208	-97.02690
Dallas-Fort Worth-Arlington	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer Cup	Continuous	Suburban	General, Background	Neighborhood	32.48208	-97.02690
Dallas-Fort Worth-Arlington	481390016	Midlothian OFW	2725 Old Fort Worth Road, Midlothian	Wind	SPM	Anemometer	Continuous	Suburban	General, Background	Neighborhood	32.48208	-97.02690
Dallas-Fort Worth-Arlington	483670081	Parker County	3033 New Authon Rd, Weatherford	O3	SLAMS	UV Photometric	Continuous	Rural	Population Exposure	Urban Scale	32.86877	-97.90593
Dallas-Fort Worth-Arlington	483670081	Parker County	3033 New Authon Rd, Weatherford	Solar Radiation	SPM	Photovoltaic	Continuous	Rural	Source Oriented	Neighborhood	32.86877	-97.90593
Dallas-Fort Worth-Arlington	483670081	Parker County	3033 New Authon Rd, Weatherford	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer Cup	Continuous	Rural	Source Oriented	Neighborhood	32.86877	-97.90593
Dallas-Fort Worth-Arlington	483670081	Parker County	3033 New Authon Rd, Weatherford	Wind	SPM	Anemometer	Continuous	Rural	Source Oriented	Neighborhood	32.86877	-97.90593
Dallas-Fort Worth-Arlington	481211032	Pilot Point	792 E Northside Dr, Pilot Point	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Regional Scale	33.41065	-96.94459
Dallas-Fort Worth-Arlington	481211032	Pilot Point	792 E Northside Dr, Pilot Point	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	Upwind Background	Regional Scale	33.41065	-96.94459
Dallas-Fort Worth-Arlington	481211032	Pilot Point	792 E Northside Dr, Pilot Point	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer Cup	Continuous	Suburban	Upwind Background	Regional Scale	33.41065	-96.94459
Dallas-Fort Worth-Arlington	481211032	Pilot Point	792 E Northside Dr, Pilot Point	Wind	SPM	Anemometer	Continuous	Suburban	Upwind Background	Regional Scale	33.41065	-96.94459
Dallas-Fort Worth-Arlington	483970001	Rockwall Heath	100 E Heath St, Rockwall	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	32.93652	-96.45921
Dallas-Fort Worth-Arlington	483970001	Rockwall Heath	100 E Heath St, Rockwall	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	Population Exposure	Neighborhood	32.93652	-96.45921

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Dallas-Fort Worth-Arlington	483970001	Rockwall Heath	100 E Heath St, Rockwall	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure	Neighborhood	32.93652	-96.45921
Dallas-Fort Worth-Arlington	483970001	Rockwall Heath	100 E Heath St, Rockwall	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	32.93652	-96.45921
Dallas-Fort Worth-Arlington	482570020	Terrell Temtex	2988 Temtex Blvd, Terrell	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	32.73192	-96.31791
Dallas-Fort Worth-Arlington	482570020	Terrell Temtex	2988 Temtex Blvd, Terrell	TSP (Pb)	SLAMS	HiVol ICP-MS	24 Hours; 1/6 Days	Rural	Population Exposure; Source Oriented	Neighborhood	32.73192	-96.31791
Dallas-Fort Worth-Arlington	482570020	Terrell Temtex	2988 Temtex Blvd, Terrell	TSP (Pb)	QA Collocated, SLAMS	HiVol ICP-MS	24 Hours; 1/12 Days	Rural	Population Exposure; Source Oriented	Neighborhood	32.73192	-96.31791
Dallas-Fort Worth-Arlington	482570020	Terrell Temtex	2988 Temtex Blvd, Terrell	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	32.73192	-96.31791
Eagle Pass*	483230004	Eagle Pass	265 Foster Maldonado, Eagle Pass	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Urban and Center City	Regional Transport	Regional Scale	28.70461	-100.45116
Eagle Pass*	483230004	Eagle Pass	265 Foster Maldonado, Eagle Pass	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Regional Transport	Regional Scale	28.70461	-100.45116
Eagle Pass*	483230004	Eagle Pass	265 Foster Maldonado, Eagle Pass	Visibility	SPM	Visibility Sensor	Continuous	Urban and Center City	Regional Transport	Regional Scale	28.70461	-100.45116
Eagle Pass*	483230004	Eagle Pass	265 Foster Maldonado, Eagle Pass	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Regional Transport	Regional Scale	28.70461	-100.45116
El Paso	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous	Suburban	Max Ozone Concentration; Upwind Background	Neighborhood	31.74678	-106.40281
El Paso	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	Dew Point	SPM	Derived at site	Continuous	Suburban	Highest Concentration; Upwind Background	Urban Scale	31.74678	-106.40281
El Paso	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	NO/NO2/NOx	PAMS, SLAMS	Chemilumine-scence	Continuous	Suburban	Highest Concentration; Upwind Background	Neighborhood, Urban Scale	31.74678	-106.40281
El Paso	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	O3	PAMS, SLAMS	UV Photometric	Continuous	Suburban	Max Ozone Concentration; Upwind Background	Neighborhood	31.74678	-106.40281

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El Paso	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	PM2.5 (TEOM) <sup>N</sup>	SPM	TEOM Gravimetric	Continuous	Suburban	Population Exposure	Neighborhood	31.74678	-106.40281
El Paso	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Suburban	Max Ozone Concentration; Upwind Background	Neighborhood	31.74678	-106.40281
El Paso	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Suburban	Max Ozone Concentration; Upwind Background	Neighborhood	31.74678	-106.40281
El Paso	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Suburban	Max Ozone Concentration; Upwind Background	Neighborhood	31.74678	-106.40281
El Paso	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	Visibility	SPM	Visibility Sensor	Continuous	Suburban	Highest Concentration; Population Exposure	Urban Scale	31.74678	-106.40281
El Paso	481410055	Ascarate Park SE	650 R E Thomason Loop, El Paso	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Suburban	Max Ozone Concentration; Upwind Background	Neighborhood	31.74678	-106.40281
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	CO (High Sensitivity)	NCORE, SLAMS	Gas Filter Correlation	Continuous	Urban and Center City	Highest Concentration	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	Dew Point	SPM	Derived at site	Continuous	Urban and Center City	Highest Concentration; Max Precursor Emissions Impact	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Urban and Center City	Highest Concentration; Max Precursor Emissions Impact	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	NOy (High Sensitivity)	NCORE, SLAMS	Chemiluminescence API200 EU/501	Continuous	Urban and Center City	Highest Concentration	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	O3	NCORE, PAMS, SLAMS	UV Photometric	Continuous	Urban and Center City	Max Precursor Emissions Impact; Population Exposure	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	PM10-2.5	NCORE, SLAMS	Beta Attenuation, 185 calculated	Continuous	Urban and Center City	Highest Concentration; Population Exposure	Neighborhood	31.76569	-106.45523

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El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	PM2.5	NCORE, SLAMS	Beta Attenuation, 170	Continuous	Urban and Center City	Highest Concentration; Population Exposure	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	PM2.5 (FRM)	NCORE, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/3 Days	Urban and Center City	Highest Concentration; Population Exposure	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	PM2.5 (Speciation)	Csn Stn, NCORE, SLAMS	Carbons, Elements, Ions, SASS/URG	24 Hours; 1/3 Days	Urban and Center City	Highest Concentration	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	SO2 (High Sensitivity)	NCORE, SLAMS	Pulsed Fluorescence	Continuous	Urban and Center City	Highest Concentration	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Urban and Center City	Highest Concentration; Max Precursor Emissions Impact	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Urban and Center City	Highest Concentration; Max Precursor Emissions Impact	Neighborhood	31.76569	-106.45523
El Paso	481410044	El Paso Chamizal	800 S San Marcial Street, El Paso	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	31.76569	-106.45523
El Paso	481410038	El Paso Mimosa	7501 Mimosa Avenue, El Paso	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Suburban	Population Exposure	Neighborhood	31.73586	-106.37791
El Paso	481410037	El Paso UTEP	250 Rim Rd, El Paso	CO	SPM	Gas Filter Correlation	Continuous	Urban and Center City	Highest Concentration	Neighborhood	31.76829	-106.50124
El Paso	481410037	El Paso UTEP	250 Rim Rd, El Paso	Dew Point	SPM	Derived at site	Continuous	Urban and Center City	Max Ozone Concentration; Population Exposure	Neighborhood	31.76829	-106.50124

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
El Paso	481410037	El Paso UTEP	250 Rim Rd, El Paso	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Urban and Center City	Max Ozone Concentration; Population Exposure	Neighborhood	31.76829	-106.50124
El Paso	481410037	El Paso UTEP	250 Rim Rd, El Paso	O3	PAMS, SLAMS	UV Photometric	Continuous	Urban and Center City	Max Ozone Concentration; Population Exposure	Neighborhood	31.76829	-106.50124
El Paso	481410037	El Paso UTEP	250 Rim Rd, El Paso	PM2.5 (FRM)	SLAMS	Sequential FRM Gravimetric	24 Hours; 1/6 Days	Urban and Center City	General, Background; Population Exposure	Neighborhood	31.76829	-106.50124
El Paso	481410037	El Paso UTEP	250 Rim Rd, El Paso	PM2.5 (TEOM) <sup>N</sup>	SPM	TEOM Gravimetric	Continuous	Urban and Center City	Highest Concentration	Neighborhood	31.76829	-106.50124
El Paso	481410037	El Paso UTEP	250 Rim Rd, El Paso	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	Urban and Center City	Max Ozone Concentration	Neighborhood	31.76829	-106.50124
El Paso	481410037	El Paso UTEP	250 Rim Rd, El Paso	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Urban and Center City	Max Ozone Concentration	Neighborhood	31.76829	-106.50124
El Paso	481410037	El Paso UTEP	250 Rim Rd, El Paso	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Urban and Center City	Max Ozone Concentration	Neighborhood	31.76829	-106.50124
El Paso	481410037	El Paso UTEP	250 Rim Rd, El Paso	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Urban and Center City	Max Ozone Concentration	Neighborhood	31.76829	-106.50124
El Paso	481410037	El Paso UTEP	250 Rim Rd, El Paso	UV Radiation	PAMS, SLAMS	Photovoltaic Potentiometer Cup	Continuous	Urban and Center City	Max Ozone Concentration	Neighborhood	31.76829	-106.50124
El Paso	481410037	El Paso UTEP	250 Rim Rd, El Paso	Wind	PAMS, SLAMS	Anemometer	Continuous	Urban and Center City	Max Ozone Concentration	Neighborhood	31.76829	-106.50124
El Paso	481410029	Ivanhoe	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	O3	SPM	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	31.78577	-106.32358
El Paso	481410029	Ivanhoe	10834 Ivanhoe, El Paso	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Suburban	Population Exposure	Neighborhood	31.78577	-106.32358
El Paso	481410029	Ivanhoe	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	Relative Humidity	Border Grant, SLAMS	Humidity Sensor	Continuous	Suburban	General, Background	Neighborhood	31.78577	-106.32358
El Paso	481410029	Ivanhoe	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	General, Background	Neighborhood	31.78577	-106.32358
El Paso	481410029	Ivanhoe	10834 Ivanhoe (Ivanhoe Fire Station), El Paso	Wind	Border Grant, SLAMS	Potentiometer Cup Anemometer	Continuous	Suburban	General, Background	Neighborhood	31.78577	-106.32358

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
El Paso	481411021	Ojo De Agua	6767 Ojo De Agua, El Paso	CO	SLAMS	Gas Filter Correlation	Continuous	Suburban	Population Exposure	Neighborhood	31.86247	-106.54730
El Paso	481411021	Ojo De Agua	6767 Ojo De Agua, El Paso	O3	SLAMS	UV Photometric	Continuous seasonal April-October	Suburban	Population Exposure	Neighborhood	31.86247	-106.54730
El Paso	481411021	Ojo De Agua	6767 Ojo De Agua, El Paso	PM10 (FRM)	SLAMS QA	HiVol Gravimetric	24 Hours; 1/6 Days	Suburban	Population Exposure	Neighborhood	31.86247	-106.54730
El Paso	481411021	Ojo De Agua	6767 Ojo De Agua, El Paso	PM10 (FRM)	Collocated, SLAMS	HiVol Gravimetric	24 Hours; 1/12 Days	Suburban	Population Exposure	Neighborhood	31.86247	-106.54730
El Paso	481411021	Ojo De Agua	6767 Ojo De Agua, El Paso	Wind	SPM	Potentiometer Cup	Continuous	Suburban	Population Exposure	Neighborhood	31.86247	-106.54730
El Paso	481410058	Skyline Park	5050A Yvette Drive, El Paso	O3	Border Grant, SLAMS	Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	31.89391	-106.42583
El Paso	481410058	Skyline Park	5050A Yvette Drive, El Paso	Temperature (Outdoor)	Border Grant, SLAMS	Aspirated Thermister	Continuous	Suburban	Population Exposure	Neighborhood	31.89391	-106.42583
El Paso	481410058	Skyline Park	5050A Yvette Drive, El Paso	Wind	Border Grant, SLAMS	Potentiometer Cup	Continuous	Suburban	Population Exposure	Neighborhood	31.89391	-106.42583
El Paso	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	O3	SLAMS	Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	31.66750	-106.28800
El Paso	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	PM10 (FRM)	Border Grant, SLAMS	UV Photometric	Continuous	Suburban	General, Background; Population Exposure	Neighborhood	31.66750	-106.28800
El Paso	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	PM10 (FRM)	Border Grant, QA Collocated, SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Suburban	Population Exposure	Neighborhood	31.66750	-106.28800
El Paso	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	PM2.5 (TEOM) <sup>N</sup>	SPM	TEOM Gravimetric	24 Hours; 1/12 Days	Suburban	Population Exposure	Neighborhood	31.66750	-106.28800
El Paso	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	Radar Profiler	SPM	TEOM Gravimetric	Continuous	Suburban	Population Exposure	Neighborhood	31.66750	-106.28800
El Paso	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	Radar Profiler	SPM	Radar Profiler	Continuous	Suburban	Regional Transport	Regional Scale	31.66750	-106.28800
El Paso	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure	Neighborhood	31.66750	-106.28800
El Paso	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	Wind	SPM	Potentiometer Cup	Continuous	Suburban	Population Exposure	Neighborhood	31.66750	-106.28800
El Paso	481410057	Socorro Hueco	320 Old Hueco Tanks Road, El Paso	Wind	SPM	Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	31.66750	-106.28800



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El Paso	481410693	Van Buren	2700 Harrison Avenue, El Paso	PM10 (FRM)	SPM	HiVol Gravimetric	24 Hours; 1/6 Days	Urban and Center City	Population Exposure	Neighborhood	31.81337	-106.46452
El Paso	481410693	Van Buren	2700 Harrison Avenue, El Paso	Relative Humidity	SPM	Humidity Sensor	Continuous	Urban and Center City	Population Exposure	Neighborhood	31.81337	-106.46452
El Paso	481410693	Van Buren	2700 Harrison Avenue, El Paso	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer	Continuous	Urban and Center City	Population Exposure	Neighborhood	31.81337	-106.46452
El Paso	481410693	Van Buren	2700 Harrison Avenue, El Paso	Wind	SPM	Cup Anemometer	Continuous	Urban and Center City	Population Exposure	Neighborhood	31.81337	-106.46452
Granbury*	482210001	Granbury	200 N Gordon Street, Granbury	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	32.44230	-97.80353
Granbury*	482210001	Granbury	200 N Gordon Street, Granbury	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	General, Background	Middle Scale	32.44230	-97.80353
Granbury*	482210001	Granbury	200 N Gordon Street, Granbury	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer	Continuous	Suburban	General, Background	Middle Scale	32.44230	-97.80353
Granbury*	482210001	Granbury	200 N Gordon Street, Granbury	Wind	SPM	Cup Anemometer	Continuous	Suburban	General, Background	Middle Scale	32.44230	-97.80353
Houston-The Woodlands-Sugar Land	482010058	Baytown	7210 1/2 Bayway Drive, Baytown	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Suburban	Population Exposure	Neighborhood	29.77070	-95.03123
Houston-The Woodlands-Sugar Land	482010058	Baytown	7210 1/2 Bayway Drive, Baytown	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer	Continuous	Suburban	Highest Concentration	Neighborhood	29.77070	-95.03123
Houston-The Woodlands-Sugar Land	482010058	Baytown	7210 1/2 Bayway Drive, Baytown	Wind	SPM	Cup Anemometer	Continuous	Suburban	Highest Concentration	Neighborhood	29.77070	-95.03123
Houston-The Woodlands-Sugar Land	482011017	Baytown Garth	8622 Garth Road Unit A, Baytown	O3	SLAMS	UV Photometric	Continuous	Suburban	Max Ozone Concentration	Neighborhood	29.82335	-94.98387
Houston-The Woodlands-Sugar Land	482011017	Baytown Garth	8622 Garth Road Unit A, Baytown	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	Population Exposure	Neighborhood	29.82335	-94.98387
Houston-The Woodlands-Sugar Land	482011017	Baytown Garth	8622 Garth Road Unit A, Baytown	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer	Continuous	Suburban	Population Exposure	Neighborhood	29.82335	-94.98387
Houston-The Woodlands-Sugar Land	482011017	Baytown Garth	8622 Garth Road Unit A, Baytown	Wind	SPM	Cup Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	29.82335	-94.98387
Houston-The Woodlands-Sugar Land	482010026	Channelview	1405 Sheldon Road, Channelview	Dew Point	SPM	Derived at site	Continuous	Suburban	Highest Concentration	Neighborhood	29.80271	-95.12549



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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Houston-The Woodlands-Sugar Land	482010026	Channelview	1405 Sheldon Road, Channelview	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Suburban	Population Exposure Max Precursor Emissions Impact;	Middle Scale, Neighborhood	29.80271	-95.12549
Houston-The Woodlands-Sugar Land	482010026	Channelview	1405 Sheldon Road, Channelview	O3	PAMS, SLAMS	UV Photometric	Continuous	Suburban	Population Exposure Max Precursor Emissions Impact;	Neighborhood	29.80271	-95.12549
Houston-The Woodlands-Sugar Land	482010026	Channelview	1405 Sheldon Road, Channelview	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Suburban	Population Exposure Max Precursor Emissions Impact;	Neighborhood	29.80271	-95.12549
Houston-The Woodlands-Sugar Land	482010026	Channelview	1405 Sheldon Road, Channelview	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Suburban	Population Exposure Max Precursor Emissions Impact;	Neighborhood	29.80271	-95.12549
Houston-The Woodlands-Sugar Land	482010026	Channelview	1405 Sheldon Road, Channelview	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Suburban	Population Exposure Max Precursor Emissions Impact;	Neighborhood	29.80271	-95.12549
Houston-The Woodlands-Sugar Land	482010026	Channelview	1405 Sheldon Road, Channelview	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Suburban	Population Exposure Max Precursor Emissions Impact;	Neighborhood	29.80271	-95.12549
Houston-The Woodlands-Sugar Land	482010026	Channelview	1405 Sheldon Road, Channelview	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Suburban	Population Exposure Max Precursor Emissions Impact;	Neighborhood	29.80271	-95.12549
Houston-The Woodlands-Sugar Land	482010026	Channelview	1405 Sheldon Road, Channelview	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Suburban	Population Exposure Max Precursor Emissions Impact;	Neighborhood	29.80271	-95.12549
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous 24 Hours	Urban and Center City	Population Exposure Max Precursor Emissions Impact;	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	Carbonyl	PAMS, SLAMS	DNPH Silica HPLC	1/6 days; Seasonal	Urban and Center City	Population Exposure Max Precursor Emissions Impact;	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	CO (High Sensitivity)	SPM	Gas Filter Correlation	Continuous	Urban and Center City	Population Exposure Max Precursor Emissions Impact;	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	Dew Point	SPM	Derived at site	Continuous	Urban and Center City	Population Exposure Max Precursor Emissions Impact;	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Urban and Center City	Population Exposure Max Precursor Emissions Impact;	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	O3	PAMS, SLAMS	UV Photometric	Continuous	Urban and Center City	Population Exposure Max Precursor Emissions Impact;	Neighborhood	29.73373	-95.25759

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Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	PM10 (FRM)	QA Collocated, SLAMS	HiVol Gravimetric	24 Hours; 1/12 Days	Urban and Center City	Highest Concentration; Population Exposure	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Urban and Center City	Highest Concentration; Source Oriented	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	PM2.5 (FRM)	SLAMS	Sequential FRM Gravimetric	24 Hours; 1/1 Days	Urban and Center City	Highest Concentration; Population Exposure; Source Oriented	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	PM2.5 (FRM)	QA Collocated, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/12 Days	Urban and Center City	Highest Concentration; Population Exposure	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	PM2.5 (Speciation) pending	SPM		24 Hours 1/6 days; Seasonal	Urban and Center City	Highest Concentration	Middle Scale	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	PM2.5 (TEOM) <sup>N</sup>	SPM	TEOM Gravimetric	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	Precipitation	SPM	Rain Gauge	Continuous	Urban and Center City	Max Precursor Emissions Impact; Population Exposure	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	SO2	SLAMS	Pulsed Fluorescence	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Urban and Center City	Highest Concentration; Population Exposure; Source Oriented	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	29.73373	-95.25759

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Urban and Center City	Highest Concentration; Population Exposure; Source Oriented	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	UV Radiation	PAMS, SLAMS	Photovoltaic Potentiometer	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	482011035	Clinton	9525 1/2 Clinton Dr, Houston	Wind	PAMS, SLAMS	Cup Anemometer	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	29.73373	-95.25759
Houston-The Woodlands-Sugar Land	483390078	Conroe Relocated	9472A Hwy 1484, Conroe	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Suburban	General, Background; Population Exposure	Urban Scale	30.35030	-95.42513
Houston-The Woodlands-Sugar Land	483390078	Conroe Relocated	9472A Hwy 1484, Conroe	O3	PAMS, SLAMS	UV Photometric	Continuous	Suburban	General, Background; Population Exposure	Urban Scale	30.35030	-95.42513
Houston-The Woodlands-Sugar Land	483390078	Conroe Relocated	9472A Hwy 1484, Conroe	PM2.5 (TEOM) <sup>N</sup>	SPM	TEOM Gravimetric	Continuous	Suburban	General, Background	Neighborhood	30.35030	-95.42513
Houston-The Woodlands-Sugar Land	483390078	Conroe Relocated	9472A Hwy 1484, Conroe	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Suburban	Highest Concentration	Neighborhood	30.35030	-95.42513
Houston-The Woodlands-Sugar Land	483390078	Conroe Relocated	9472A Hwy 1484, Conroe	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister Potentiometer	Continuous	Suburban	Highest Concentration	Neighborhood	30.35030	-95.42513
Houston-The Woodlands-Sugar Land	483390078	Conroe Relocated	9472A Hwy 1484, Conroe	Wind	PAMS, SLAMS	Cup Anemometer	Continuous	Suburban	Highest Concentration	Neighborhood	30.35030	-95.42513
Houston-The Woodlands-Sugar Land	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	Dew Point	SPM	Derived at site	Continuous	Suburban	General, Background; Upwind Background	Middle Scale	29.25447	-94.86129
Houston-The Woodlands-Sugar Land	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Suburban	General, Background; Upwind Background	Middle Scale, Urban Scale	29.25447	-94.86129
Houston-The Woodlands-Sugar Land	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	O3	PAMS, SLAMS	UV Photometric	Continuous	Suburban	Max Ozone Concentration; Upwind Background	Urban Scale	29.25447	-94.86129
Houston-The Woodlands-Sugar Land	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Suburban	Regional Transport	Regional Scale	29.25447	-94.86129

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Houston-The Woodlands-Sugar Land	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Suburban	Max Ozone Concentration; Upwind Background	Urban Scale	29.25447	-94.86129
Houston-The Woodlands-Sugar Land	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Suburban	Max Ozone Concentration; Upwind Background	Urban Scale	29.25447	-94.86129
Houston-The Woodlands-Sugar Land	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Suburban	Max Ozone Concentration; Upwind Background	Urban Scale	29.25447	-94.86129
Houston-The Woodlands-Sugar Land	481671034	Galveston 99th Street	9511 Avenue V 1/2, Galveston	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Suburban	Max Ozone Concentration; Upwind Background	Urban Scale	29.25447	-94.86129
Houston-The Woodlands-Sugar Land	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous	Suburban	Max Ozone Concentration	Neighborhood	29.90104	-95.32614
Houston-The Woodlands-Sugar Land	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	Dew Point	SPM	Derived at site	Continuous	Suburban	Population Exposure	Urban Scale	29.90104	-95.32614
Houston-The Woodlands-Sugar Land	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	NO/NO2/NOx	PAMS, SLAMS	Chemiluminescence	Continuous	Suburban	Max Ozone Concentration; Population Exposure	Neighborhood	29.90104	-95.32614
Houston-The Woodlands-Sugar Land	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	NOy (High Sensitivity)	PAMS, SLAMS	Chemiluminescence Teledyne API200 EU/501	Continuous	Suburban	Max Ozone Concentration; Population Exposure	Neighborhood	29.90104	-95.32614
Houston-The Woodlands-Sugar Land	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	O3	PAMS, SLAMS	UV Photometric	Continuous	Suburban	Max Ozone Concentration; Population Exposure	Neighborhood	29.90104	-95.32614
Houston-The Woodlands-Sugar Land	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	PM2.5 (Beta)	SLAMS QA	Beta Attenuation	Continuous	Suburban	Population Exposure	Neighborhood	29.90104	-95.32614
Houston-The Woodlands-Sugar Land	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	PM2.5 (FRM)	Collocated, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/12 Days	Suburban	Population Exposure	Neighborhood	29.90104	-95.32614
Houston-The Woodlands-Sugar Land	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Suburban	Max Ozone Concentration	Neighborhood	29.90104	-95.32614
Houston-The Woodlands-Sugar Land	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Suburban	Max Ozone Concentration	Neighborhood	29.90104	-95.32614
Houston-The Woodlands-Sugar Land	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Suburban	Max Ozone Concentration	Neighborhood	29.90104	-95.32614

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Houston-The Woodlands-Sugar Land	482010024	Houston Aldine	4510 1/2 Aldine Mail Rd, Houston	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Suburban	Max Ozone Concentration	Neighborhood	29.90104	-95.32614
Houston-The Woodlands-Sugar Land	482010055	Houston Bayland Park	6400 Bissonnet Street, Houston	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Suburban	Population Exposure	Middle Scale, Neighborhood	29.69573	-95.49922
Houston-The Woodlands-Sugar Land	482010055	Houston Bayland Park	6400 Bissonnet Street, Houston	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Middle Scale	29.69573	-95.49922
Houston-The Woodlands-Sugar Land	482010055	Houston Bayland Park	6400 Bissonnet Street, Houston	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	General, Background; Max Precursor Emissions Impact	Middle Scale	29.69573	-95.49922
Houston-The Woodlands-Sugar Land	482010055	Houston Bayland Park	6400 Bissonnet Street, Houston	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	General, Background; Max Precursor Emissions Impact	Middle Scale	29.69573	-95.49922
Houston-The Woodlands-Sugar Land	482010055	Houston Bayland Park	6400 Bissonnet Street, Houston	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	General, Background; Max Precursor Emissions Impact	Middle Scale	29.69573	-95.49922
Houston-The Woodlands-Sugar Land	482010051	Houston Croquet	13826 1/2 Croquet, Houston	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	29.62389	-95.47417
Houston-The Woodlands-Sugar Land	482010051	Houston Croquet	13826 1/2 Croquet, Houston	SO2	SLAMS	Pulsed Fluorescence	Continuous	Suburban	Population Exposure	Neighborhood	29.62389	-95.47417
Houston-The Woodlands-Sugar Land	482010051	Houston Croquet	13826 1/2 Croquet, Houston	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure	Neighborhood	29.62389	-95.47417
Houston-The Woodlands-Sugar Land	482010051	Houston Croquet	13826 1/2 Croquet, Houston	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	29.62389	-95.47417
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	Barometric Pressure	PAMS, SLAMS	Barometric pressure transducer	Continuous	Urban and Center City	General, Background	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	Carbonyl	PAMS, SLAMS	DNPH Silica HPLC	24 Hours; Seasonal, 8 Hour; Seasonal	Urban and Center City	Max Precursor Emissions Impact; Population Exposure	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	CO (High Sensitivity)	NCORE, SLAMS	Gas Filter Correlation	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	Dew Point	SPM	Derived at site	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.67003	-95.12851

## Appendix B: Ambient Air Monitoring Network Site List

Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	NO2 (Direct)	PAMS, SLAMS	Direct-Read NO2	Continuous	Urban and Center City	Population Exposure; Source Oriented	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	NOy (High Sensitivity)	NCORE, PAMS, SLAMS	Chemiluminescence Teledyne API200 EU/501	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	O3	NCORE, PAMS, SLAMS	UV Photometric Beta	Continuous	Urban and Center City	Max Precursor Emissions Impact; Population Exposure	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	PM10-2.5	NCORE, SLAMS	Attenuation, 185 calculated Beta	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	PM2.5	NCORE, SLAMS	Attenuation, 170	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	PM2.5 (FRM)	NCORE, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/3 Days	Urban and Center City	Population Exposure	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	PM2.5 (Speciation)	Csn Stn, NCORE, SLAMS	Carbons, Elements, Ions, SASS/URG	24 Hours; 1/3 Days	Urban and Center City	Population Exposure	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	PM2.5 (Speciation)	Csn Stn, QA Collocated, SLAMS	Carbons, Elements, Ions, SASS/URG	24 Hours; 1/6 Days	Urban and Center City	Population Exposure	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	Urban and Center City	General, Background	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	Relative Humidity	NCORE, PAMS, SLAMS	Humidity Sensor	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	SO2 (High Sensitivity)	NCORE, SLAMS	Pulsed Fluorescence	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	Speciated VOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Urban and Center City	Max Precursor Emissions Impact; Population Exposure	Neighborhood	29.67003	-95.12851



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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	Temperature (Outdoor)	NCORE, PAMS, SLAMS	Aspirated Thermister	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	TNMOC (AutoGC)	PAMS, SLAMS	GC	Continuous	Urban and Center City	Max Precursor Emissions Impact; Population Exposure	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	UV Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Urban and Center City	General, Background	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011039	Houston Deer Park #2	4514 1/2 Durant St, Deer Park	Wind	NCORE, PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Max Precursor Emissions Impact	Neighborhood	29.67003	-95.12851
Houston-The Woodlands-Sugar Land	482011034	Houston East	1262 1/2 Mae Drive, Houston	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Suburban	Highest Concentration; Population Exposure	Middle Scale, Neighborhood	29.76800	-95.22058
Houston-The Woodlands-Sugar Land	482011034	Houston East	1262 1/2 Mae Drive, Houston	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	29.76800	-95.22058
Houston-The Woodlands-Sugar Land	482011034	Houston East	1262 1/2 Mae Drive, Houston	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Suburban	Population Exposure	Neighborhood	29.76800	-95.22058
Houston-The Woodlands-Sugar Land	482011034	Houston East	1262 1/2 Mae Drive, Houston	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure	Urban Scale	29.76800	-95.22058
Houston-The Woodlands-Sugar Land	482011034	Houston East	1262 1/2 Mae Drive, Houston	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	29.76800	-95.22058
Houston-The Woodlands-Sugar Land	482010417	Houston Harvard Street	160 Harvard Street, Houston	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.77292	-95.39578
Houston-The Woodlands-Sugar Land	482010417	Houston Harvard Street	160 Harvard Street, Houston	O3	SPM	UV Photometric	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.77292	-95.39578
Houston-The Woodlands-Sugar Land	482010060	Houston Kirkpatrick	5565 Kirkpatrick, Houston	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure	Neighborhood	29.80741	-95.29362
Houston-The Woodlands-Sugar Land	482010060	Houston Kirkpatrick	5565 Kirkpatrick, Houston	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	29.80741	-95.29362
Houston-The Woodlands-Sugar Land	482010062	Houston Monroe	9726 1/2 Monroe, Houston	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	29.62556	-95.26722
Houston-The Woodlands-Sugar Land	482010062	Houston Monroe	9726 1/2 Monroe, Houston	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Suburban	Population Exposure	Neighborhood	29.62556	-95.26722



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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Houston-The Woodlands-Sugar Land	482010062	Houston Monroe	9726 1/2 Monroe, Houston	Precipitation	SPM	Rain Gauge	Continuous	Suburban	General, Background	Neighborhood	29.62556	-95.26722
Houston-The Woodlands-Sugar Land	482011052	Houston North Loop	822 North Loop, Houston	CO	Near Road, SLAMS	Gas Filter Correlation	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	29.81453	-95.38769
Houston-The Woodlands-Sugar Land	482011052	Houston North Loop	822 North Loop, Houston	NO/NO2/NOx	Near Road, SLAMS	Chemiluminescence	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	29.81453	-95.38769
Houston-The Woodlands-Sugar Land	482011052	Houston North Loop	822 North Loop, Houston	PM2.5 (FRM)	Near Road, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/3 Days	Urban and Center City	Max Precursor Emissions Impact	Microscale	29.81453	-95.38769
Houston-The Woodlands-Sugar Land	482011052	Houston North Loop	822 North Loop, Houston	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	29.81453	-95.38769
Houston-The Woodlands-Sugar Land	482011052	Houston North Loop	822 North Loop, Houston	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	29.81453	-95.38769
Houston-The Woodlands-Sugar Land	482010046	Houston North Wayside	7330 1/2 North Wayside, Houston	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	29.82809	-95.28410
Houston-The Woodlands-Sugar Land	482010046	Houston North Wayside	7330 1/2 North Wayside, Houston	PM10 (TEOM 1405)	SPM	TEOM Gravimetric	Continuous	Suburban	General, Background	Neighborhood	29.82809	-95.28410
Houston-The Woodlands-Sugar Land	482010046	Houston North Wayside	7330 1/2 North Wayside, Houston	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Suburban	Population Exposure	Neighborhood	29.82809	-95.28410
Houston-The Woodlands-Sugar Land	482010046	Houston North Wayside	7330 1/2 North Wayside, Houston	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	General, Background	Neighborhood	29.82809	-95.28410
Houston-The Woodlands-Sugar Land	482010046	Houston North Wayside	7330 1/2 North Wayside, Houston	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	General, Background	Neighborhood	29.82809	-95.28410
Houston-The Woodlands-Sugar Land	482011066	Houston Southwest Freeway	5617 Westward Avenue, Houston	NO/NO2/NOx	Near Road, SLAMS	Chemiluminescence	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	29.72160	-95.49265
Houston-The Woodlands-Sugar Land	482011066	Houston Southwest Freeway	5617 Westward Avenue, Houston	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	29.72160	-95.49265
Houston-The Woodlands-Sugar Land	482011066	Houston Southwest Freeway	5617 Westward Avenue, Houston	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	29.72160	-95.49265
Houston-The Woodlands-Sugar Land	482010066	Houston Westhollow	3333 1/2 Hwy 6 South, Houston	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	29.72333	-95.63583
Houston-The Woodlands-Sugar Land	482010066	Houston Westhollow	3333 1/2 Hwy 6 South, Houston	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Suburban	Population Exposure	Neighborhood	29.72333	-95.63583

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Houston-The Woodlands-Sugar Land	482010066	Houston Westhollow	3333 1/2 Hwy 6 South, Houston	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure	Neighborhood	29.72333	-95.63583
Houston-The Woodlands-Sugar Land	482010066	Houston Westhollow	3333 1/2 Hwy 6 South, Houston	Wind	SPM	Potentiometer Cup	Continuous	Suburban	Population Exposure	Neighborhood	29.72333	-95.63583
Houston-The Woodlands-Sugar Land	482011043	La Porte Airport C243	2434 Buchanan Street, La Porte	Precipitation	PAMS, SLAMS	Rain Gauge	Continuous	Suburban	General, Background	Neighborhood	29.67200	-95.06470
Houston-The Woodlands-Sugar Land	482011043	La Porte Airport C243	2434 Buchanan Street, La Porte	Radar Profiler	SPM	Radar Profiler	Continuous	Suburban	Regional Transport	Regional Scale	29.67200	-95.06470
Houston-The Woodlands-Sugar Land	482011043	La Porte Airport C243	2434 Buchanan Street, La Porte	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Suburban	General, Background	Neighborhood	29.67200	-95.06470
Houston-The Woodlands-Sugar Land	482011043	La Porte Airport C243	2434 Buchanan Street, La Porte	Wind	PAMS, SLAMS	Potentiometer Cup	Continuous	Suburban	General, Background	Neighborhood	29.67200	-95.06470
Houston-The Woodlands-Sugar Land	480391016	Lake Jackson	109B Brazoria Hwy 332 West, Lake Jackson	NO/NO2/NOx	SLAMS	Chemilumine-scence	Continuous	Suburban	Population Exposure; Source Oriented	Middle Scale, Neighborhood	29.04376	-95.47295
Houston-The Woodlands-Sugar Land	480391016	Lake Jackson	109B Brazoria Hwy 332 West, Lake Jackson	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure; Source Oriented	Neighborhood	29.04376	-95.47295
Houston-The Woodlands-Sugar Land	480391016	Lake Jackson	109B Brazoria Hwy 332 West, Lake Jackson	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	Highest Concentration	Middle Scale	29.04376	-95.47295
Houston-The Woodlands-Sugar Land	480391016	Lake Jackson	109B Brazoria Hwy 332 West, Lake Jackson	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Highest Concentration	Middle Scale	29.04376	-95.47295
Houston-The Woodlands-Sugar Land	480391016	Lake Jackson	109B Brazoria Hwy 332 West, Lake Jackson	Wind	SPM	Potentiometer Cup	Continuous	Suburban	Highest Concentration	Middle Scale	29.04376	-95.47295
Houston-The Woodlands-Sugar Land	482010047	Lang	4401 1/2 Lang Rd, Houston	NO/NO2/NOx	SLAMS	Chemilumine-scence	Continuous	Suburban	Population Exposure	Middle Scale, Urban Scale	29.83417	-95.48917
Houston-The Woodlands-Sugar Land	482010047	Lang	4401 1/2 Lang Rd, Houston	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Urban Scale	29.83417	-95.48917
Houston-The Woodlands-Sugar Land	482010047	Lang	4401 1/2 Lang Rd, Houston	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Suburban	Population Exposure	Neighborhood	29.83417	-95.48917
Houston-The Woodlands-Sugar Land	482011015	Lynchburg Ferry	Independence Parkway South, Baytown	NO/NO2/NOx	SLAMS	Chemilumine-scence	Continuous	Suburban	Source Oriented	Middle Scale, Neighborhood	29.75889	-95.07944

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Houston-The Woodlands-Sugar Land	482011015	Lynchburg Ferry	4364 Independence Parkway South, Baytown	O3	SLAMS	UV Photometric	Continuous	Suburban	Source Oriented	Middle Scale	29.75889	-95.07944
Houston-The Woodlands-Sugar Land	482011015	Lynchburg Ferry	4364 Independence Parkway South, Baytown	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	Highest Concentration	Neighborhood	29.75889	-95.07944
Houston-The Woodlands-Sugar Land	482011015	Lynchburg Ferry	4364 Independence Parkway South, Baytown	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Highest Concentration	Neighborhood	29.75889	-95.07944
Houston-The Woodlands-Sugar Land	482011015	Lynchburg Ferry	4364 Independence Parkway South, Baytown	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Highest Concentration	Neighborhood	29.75889	-95.07944
Houston-The Woodlands-Sugar Land	480391004	Manvel Croix Park	4503 Croix Pkwy, Manvel	NO/NO2/NOx	SLAMS	Chemilumine-scence	Continuous	Suburban	Population Exposure	Urban Scale	29.52044	-95.39251
Houston-The Woodlands-Sugar Land	480391004	Manvel Croix Park	4503 Croix Pkwy, Manvel	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Urban Scale	29.52044	-95.39251
Houston-The Woodlands-Sugar Land	480391004	Manvel Croix Park	4503 Croix Pkwy, Manvel	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure	Neighborhood	29.52044	-95.39251
Houston-The Woodlands-Sugar Land	480391004	Manvel Croix Park	4503 Croix Pkwy, Manvel	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	29.52044	-95.39251
Houston-The Woodlands-Sugar Land	482010029	Northwest Harris County	16822 Kitzman, Tomball	Dew Point	SPM	Derived at site	Continuous	Rural	Source Oriented	Microscale	30.03952	-95.67395
Houston-The Woodlands-Sugar Land	482010029	Northwest Harris County	16822 Kitzman, Tomball	NO/NO2/NOx	PAMS, SLAMS	Chemilumine-scence	Continuous	Rural	Extreme Downwind; Population Exposure; Upwind Background	Urban Scale	30.03952	-95.67395
Houston-The Woodlands-Sugar Land	482010029	Northwest Harris County	16822 Kitzman, Tomball	O3	PAMS, SLAMS	UV Photometric	Continuous	Rural	Extreme Downwind; Population Exposure; Upwind Background	Urban Scale	30.03952	-95.67395
Houston-The Woodlands-Sugar Land	482010029	Northwest Harris County	16822 Kitzman, Tomball	Relative Humidity	PAMS, SLAMS	Humidity Sensor	Continuous	Rural	Extreme Downwind; Upwind Background	Urban Scale	30.03952	-95.67395

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Houston-The Woodlands-Sugar Land	482010029	Northwest Harris County	16822 Kitzman, Tomball	Solar Radiation	PAMS, SLAMS	Photovoltaic	Continuous	Rural	Extreme Downwind; Upwind Background	Urban Scale	30.03952	-95.67395
Houston-The Woodlands-Sugar Land	482010029	Northwest Harris County	16822 Kitzman, Tomball	Temperature (Outdoor)	PAMS, SLAMS	Aspirated Thermister	Continuous	Rural	Extreme Downwind; Upwind Background	Urban Scale	30.03952	-95.67395
Houston-The Woodlands-Sugar Land	482010029	Northwest Harris County	16822 Kitzman, Tomball	Wind	PAMS, SLAMS	Potentiometer Cup Anemometer	Continuous	Rural	Extreme Downwind; Upwind Background	Urban Scale	30.03952	-95.67395
Houston-The Woodlands-Sugar Land	482010416	Park Place	7421 Park Place Blvd, Houston	Barometric Pressure	SPM	Barometric pressure transducer	Continuous	Urban and Center City	General, Background	Neighborhood	29.68639	-95.29472
Houston-The Woodlands-Sugar Land	482010416	Park Place	7421 Park Place Blvd, Houston	Dew Point	SPM	Derived at site	Continuous	Urban and Center City	General, Background	Neighborhood	29.68639	-95.29472
Houston-The Woodlands-Sugar Land	482010416	Park Place	7421 Park Place Blvd, Houston	NO/NO2/NOx	SPM	Chemilumine-scence	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.68639	-95.29472
Houston-The Woodlands-Sugar Land	482010416	Park Place	7421 Park Place Blvd, Houston	O3	SPM	UV Photometric	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.68639	-95.29472
Houston-The Woodlands-Sugar Land	482010416	Park Place	7421 Park Place Blvd, Houston	Precipitation	SPM	Rain Gauge	Continuous	Urban and Center City	General, Background	Neighborhood	29.68639	-95.29472
Houston-The Woodlands-Sugar Land	482010416	Park Place	7421 Park Place Blvd, Houston	Relative Humidity	SPM	Humidity Sensor	Continuous	Urban and Center City	General, Background	Neighborhood	29.68639	-95.29472
Houston-The Woodlands-Sugar Land	482010416	Park Place	7421 Park Place Blvd, Houston	SO2	SPM	Pulsed Fluorescence	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.68639	-95.29472
Houston-The Woodlands-Sugar Land	482010416	Park Place	7421 Park Place Blvd, Houston	Solar Radiation	SPM	Photovoltaic	Continuous	Urban and Center City	General, Background	Neighborhood	29.68639	-95.29472
Houston-The Woodlands-Sugar Land	482010416	Park Place	7421 Park Place Blvd, Houston	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	General, Background	Neighborhood	29.68639	-95.29472
Houston-The Woodlands-Sugar Land	482010416	Park Place	7421 Park Place Blvd, Houston	UV Radiation	SPM	Photovoltaic Potentiometer Cup	Continuous	Urban and Center City	General, Background	Neighborhood	29.68639	-95.29472
Houston-The Woodlands-Sugar Land	482010416	Park Place	7421 Park Place Blvd, Houston	Wind	SPM	Anemometer	Continuous	Urban and Center City	General, Background	Neighborhood	29.68639	-95.29472
Houston-The Woodlands-Sugar Land	482011050	Seabrook Friendship Park	4522 Park Rd, Seabrook	NO/NO2/NOx	SLAMS	Chemilumine-scence	Continuous	Suburban	Population Exposure	Middle Scale, Neighborhood	29.58305	-95.01554

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Houston-The Woodlands-Sugar Land	482011050	Seabrook Friendship Park	4522 Park Rd, Seabrook	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	29.58305	-95.01554
Houston-The Woodlands-Sugar Land	482011050	Seabrook Friendship Park	4522 Park Rd, Seabrook	PM2.5 (TEOM) <sup>N</sup>	SPM	TEOM Gravimetric	Continuous	Suburban	Highest Concentration	Middle Scale	29.58305	-95.01554
Houston-The Woodlands-Sugar Land	482011050	Seabrook Friendship Park	4522 Park Rd, Seabrook	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	Highest Concentration	Middle Scale	29.58305	-95.01554
Houston-The Woodlands-Sugar Land	482011050	Seabrook Friendship Park	4522 Park Rd, Seabrook	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer Cup	Continuous	Suburban	Highest Concentration	Middle Scale	29.58305	-95.01554
Houston-The Woodlands-Sugar Land	482011050	Seabrook Friendship Park	4522 Park Rd, Seabrook	Wind	SPM	Anemometer	Continuous	Suburban	Highest Concentration	Middle Scale	29.58305	-95.01554
Houston-The Woodlands-Sugar Land	480710013	Smith Point Hawkins Camp	1850 Hawkins Camp Rd, Anahuac	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer Cup	Continuous	Suburban	Source Oriented	Neighborhood	29.54624	-94.78697
Houston-The Woodlands-Sugar Land	480710013	Smith Point Hawkins Camp	1850 Hawkins Camp Rd, Anahuac	Wind	SPM	Anemometer	Continuous	Suburban	Source Oriented	Neighborhood	29.54624	-94.78697
Houston-The Woodlands-Sugar Land	481670004	Texas City Fire Station	2516 Texas Avenue, Texas City	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Urban and Center City	Highest Concentration	Neighborhood	29.38444	-94.93083
Killeen-Temple-Fort Hood	480271047	Killeen Skylark Field	1605 Stone Tree Drive, Killeen	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Urban and Center City	General, Background	Urban Scale	31.08800	-97.67973
Killeen-Temple-Fort Hood	480271047	Killeen Skylark Field	1605 Stone Tree Drive, Killeen	O3	SLAMS	UV Photometric	Continuous	Urban and Center City	Population Exposure	Urban Scale	31.08800	-97.67973
Killeen-Temple-Fort Hood	480271047	Killeen Skylark Field	1605 Stone Tree Drive, Killeen	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer Cup	Continuous	Urban and Center City	Population Exposure	Urban Scale	31.08800	-97.67973
Killeen-Temple-Fort Hood	480271047	Killeen Skylark Field	1605 Stone Tree Drive, Killeen	Wind	SPM	Anemometer	Continuous	Urban and Center City	Population Exposure	Urban Scale	31.08800	-97.67973
Killeen-Temple-Fort Hood	480271045	Temple Georgia	8406 Georgia Avenue, Temple	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Urban Scale	31.12242	-97.43105
Killeen-Temple-Fort Hood	480271045	Temple Georgia	8406 Georgia Avenue, Temple	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Suburban	Population Exposure	Urban Scale	31.12242	-97.43105
Killeen-Temple-Fort Hood	480271045	Temple Georgia	8406 Georgia Avenue, Temple	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer Cup	Continuous	Suburban	General, Background	Neighborhood	31.12242	-97.43105
Killeen-Temple-Fort Hood	480271045	Temple Georgia	8406 Georgia Avenue, Temple	Wind	SPM	Anemometer	Continuous	Suburban	General, Background	Neighborhood	31.12242	-97.43105
Kingsville*	482730314	National Seashore	20420 Park Road, Corpus Christi	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Rural	Regional Transport	Regional Scale	27.42698	-97.29869

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Kingsville*	482730314	National Seashore	20420 Park Road, Corpus Christi	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	Regional Transport	Regional Scale	27.42698	-97.29869
Kingsville*	482730314	National Seashore	20420 Park Road, Corpus Christi	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	Regional Transport	Regional Scale	27.42698	-97.29869
Laredo	484790017	Laredo Bridge	700 Zaragosa St, Laredo	PM10 (FRM) Speciated	Border Grant, SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Urban and Center City	Highest Concentration	Microscale	27.50183	-99.50298
Laredo	484790017	Laredo Bridge	700 Zaragosa St, Laredo	VOC (Canister)	Border Grant, SPM	Canister GC-MS	24 Hours; 1/6 Days	Urban and Center City	Highest Concentration	Neighborhood	27.50183	-99.50298
Laredo	484790017	Laredo Bridge	700 Zaragosa St, Laredo	Temperature (Outdoor)	Border Grant, SLAMS	Aspirated Thermister	Continuous	Urban and Center City	Population Exposure	Neighborhood	27.50183	-99.50298
Laredo	484790017	Laredo Bridge	700 Zaragosa St, Laredo	Wind	Border Grant, SLAMS	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Population Exposure	Neighborhood	27.50183	-99.50298
Laredo	484790016	Laredo Vidaurri	2020 Vidaurri Ave, Laredo	CO	Border Grant, SLAMS	Gas Filter Correlation	Continuous	Suburban	Population Exposure	Neighborhood	27.51746	-99.51522
Laredo	484790016	Laredo Vidaurri	2020 Vidaurri Ave, Laredo	O3	Border Grant, SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	27.51746	-99.51522
Laredo	484790016	Laredo Vidaurri	2020 Vidaurri Ave, Laredo	PM10 (FRM)	Border Grant, SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Suburban	Population Exposure	Neighborhood	27.51746	-99.51522
Laredo	484790016	Laredo Vidaurri	2020 Vidaurri Ave, Laredo	Temperature (Outdoor)	Border Grant, SLAMS	Aspirated Thermister	Continuous	Suburban	Population Exposure	Neighborhood	27.51746	-99.51522
Laredo	484790016	Laredo Vidaurri	2020 Vidaurri Ave, Laredo	Wind	Border Grant, SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	27.51746	-99.51522
Laredo	484790313	World Trade Bridge	Mines Road 11601 FM 1472, Laredo	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Suburban	Source Oriented	Microscale	27.59944	-99.53333
Longview	481830001	Longview	Gregg Co Airport near Longview, Longview	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Rural	Population Exposure	Neighborhood	32.37870	-94.71181
Longview	481830001	Longview	Gregg Co Airport near Longview, Longview	O3	SLAMS	UV Photometric	Continuous	Rural	Population Exposure	Neighborhood	32.37870	-94.71181
Longview	481830001	Longview	Gregg Co Airport near Longview, Longview	Precipitation	SPM	Rain Gauge	Continuous	Rural	General, Background	Neighborhood	32.37870	-94.71181



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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
Longview	481830001	Longview	Gregg Co Airport near Longview, Longview	SO2	SLAMS	Pulsed Fluorescence	Continuous	Rural	General, Background; Population Exposure	Neighborhood	32.37870	-94.71181
Longview	481830001	Longview	Gregg Co Airport near Longview, Longview	Solar Radiation	SPM	Photovoltaic	Continuous	Rural	General, Background	Neighborhood	32.37870	-94.71181
Longview***	482031079	Hallsville Red Oak Road	9206 Red Oak Road, Hallsville	SO2	SLAMS	Pulsed Fluorescence	Continuous	Rural	Source Oriented	Neighborhood	32.47023	-94.48160
Longview***	482031079	Hallsville Red Oak Road	9206 Red Oak Road, Hallsville	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	32.47023	-94.48160
Longview***	482031079	Hallsville Red Oak Road	9206 Red Oak Road, Hallsville	Wind	SPM	Potentiometer Cup	Continuous	Rural	General, Background	Neighborhood	32.47023	-94.48160
Longview***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Rural	General, Background	Regional Scale, Urban Scale	32.66900	-94.16747
Longview***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	O3	SLAMS	UV Photometric	Continuous	Rural	General, Background	Regional Scale	32.66900	-94.16747
Longview***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	PM2.5 (FRM)	SPM	Sequential FRM Gravimetric	24 Hours; 1/6 Days	Rural	General, Background	Regional Scale	32.66900	-94.16747
Longview***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	PM2.5 (Speciation)	Csn Supplemental, SLAMS	Carbons, Elements, Ions, SASS/URG	1/6 Days, 24 Hours; 1/3 Days	Rural	General, Background; Regional Transport	Regional Scale	32.66900	-94.16747
Longview***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	PM2.5 (TEOM) <sup>N</sup>	SPM	TEOM Gravimetric	Continuous	Rural	General, Background	Regional Scale	32.66900	-94.16747
Longview***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	Solar Radiation	SPM	Photovoltaic	Continuous	Rural	General, Background	Urban Scale	32.66900	-94.16747
Longview***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Urban Scale	32.66900	-94.16747
Longview***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	Visibility	SPM	Visibility Sensor	Continuous	Rural	General, Background	Urban Scale	32.66900	-94.16747
Longview***	482030002	Karnack	Hwy 134 & Spur 449, Not In A City	Wind	SPM	Potentiometer Cup	Continuous	Rural	General, Background	Urban Scale	32.66900	-94.16747
Longview***	481830001	Longview	Gregg Co Airport near Longview, Longview	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	32.37870	-94.71181

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Longview***	481830001	Longview	Gregg Co Airport near Longview, Longview	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	32.37870	-94.71181
Longview***	484011082	Tatum CR 2181d Martin Creek Lake	9515 County Road 2181d, Tatum	SO2	SPM	Pulsed Fluorescence	Continuous	Rural	Source Oriented	Neighborhood	32.27793	-94.57085
Longview***	484011082	Tatum CR 2181d Martin Creek Lake	9515 County Road 2181d, Tatum	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	32.27793	-94.57085
Longview***	484011082	Tatum CR 2181d Martin Creek Lake	9515 County Road 2181d, Tatum	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	32.27793	-94.57085
Lubbock	483031028	Lubbock 12th Street	3901 East 12th Street, Lubbock	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Urban and Center City	Population Exposure	Urban Scale	33.58553	-101.78698
Lubbock	483031028	Lubbock 12th Street	3901 East 12th Street, Lubbock	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	General, Background	Regional Scale	33.58553	-101.78698
Lubbock	483031028	Lubbock 12th Street	3901 East 12th Street, Lubbock	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	General, Background	Regional Scale	33.58553	-101.78698
McAllen-Edinburg-Mission	482151046	Edinburg East Freddy Gonzalez Drive	1491 East Freddy Gonzalez Drive, Edinburg	PM2.5 (FRM)	SLAMS	Sequential FRM Gravimetric	24 Hours; 1/3 Days	Urban and Center City	Population Exposure	Regional Scale	26.28862	-98.15207
McAllen-Edinburg-Mission	482151046	Edinburg East Freddy Gonzalez Drive	1491 East Freddy Gonzalez Drive, Edinburg	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Population Exposure	Regional Scale	26.28862	-98.15207
McAllen-Edinburg-Mission	482151046	Edinburg East Freddy Gonzalez Drive	1491 East Freddy Gonzalez Drive, Edinburg	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Population Exposure	Regional Scale	26.28862	-98.15207
McAllen-Edinburg-Mission	482150043	Mission	2300 North Glasscock, Mission	O3	SLAMS	UV Photometric	Continuous	Suburban	Population Exposure	Neighborhood	26.22621	-98.29107
McAllen-Edinburg-Mission	482150043	Mission	2300 North Glasscock, Mission	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Suburban	Population Exposure	Urban Scale	26.22621	-98.29107
McAllen-Edinburg-Mission	482150043	Mission	2300 North Glasscock, Mission	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Suburban	Population Exposure	Urban Scale	26.22621	-98.29107
McAllen-Edinburg-Mission	482150043	Mission	2300 North Glasscock, Mission	Solar Radiation	SPM	Photovoltaic	Continuous	Suburban	Population Exposure	Microscale	26.22621	-98.29107
McAllen-Edinburg-Mission	482150043	Mission	2300 North Glasscock, Mission	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure	Microscale	26.22621	-98.29107
McAllen-Edinburg-Mission	482150043	Mission	2300 North Glasscock, Mission	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Population Exposure	Microscale	26.22621	-98.29107

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Mount Pleasant*	484491078	Cookville FM 4855	385 CR 4855, Not In A City	SO2	SLAMS	Pulsed Fluorescence	Continuous	Rural	Source Oriented	Neighborhood	33.07520	-94.84740
Mount Pleasant*	484491078	Cookville FM 4855	385 CR 4855, Not In A City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	33.07520	-94.84740
Mount Pleasant*	484491078	Cookville FM 4855	385 CR 4855, Not In A City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	33.07520	-94.84740
none	480430101	Bravo Big Bend	Big Bend National Park, Big Bend Nat Park	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Rural	General, Background	Regional Scale	29.30255	-103.17791
none	480430101	Bravo Big Bend	Big Bend National Park, Big Bend Nat Park	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Microscale	29.30255	-103.17791
none	480430101	Bravo Big Bend	Big Bend National Park, Big Bend Nat Park	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Regional Scale	29.30255	-103.17791
none	481611084	Fairfield FM 2570 Ward Ranch	488 FM 2570, Fairfield	SO2	SPM	Pulsed Fluorescence	Continuous	Rural	Source Oriented	Neighborhood	31.79780	-96.10310
none	481611084	Fairfield FM 2570 Ward Ranch	488 FM 2570, Fairfield	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	Source Oriented	Neighborhood	31.79780	-96.10310
none	481611084	Fairfield FM 2570 Ward Ranch	488 FM 2570, Fairfield	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	Source Oriented	Neighborhood	31.79780	-96.10310
none	482551070	Karnes County	1100B East Main Avenue, Karnes City	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Rural	Max Precursor Emissions Impact; Upwind Background	Urban Scale	28.88044	-97.88807
none	482551070	Karnes County	1100B East Main Avenue, Karnes City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	28.88044	-97.88807
none	482551070	Karnes County	1100B East Main Avenue, Karnes City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	28.88044	-97.88807
Odessa	481351014	Odessa Gonzales	2700 Disney, Odessa	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Suburban	Highest Concentration	Regional Scale	31.87026	-102.33475
Odessa	481351014	Odessa Gonzales	2700 Disney, Odessa	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure	Neighborhood	31.87026	-102.33475
Odessa	481351014	Odessa Gonzales	2700 Disney, Odessa	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	31.87026	-102.33475

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San Antonio-New Braunfels	480290059	Calaveras Lake	14620 Laguna Rd, San Antonio	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Rural	Source Oriented; Upwind Background	Urban Scale	29.27538	-98.31169
San Antonio-New Braunfels	480290059	Calaveras Lake	14620 Laguna Rd, San Antonio	O3	SLAMS	UV Photometric	Continuous	Rural	Source Oriented; Upwind Background	Urban Scale	29.27538	-98.31169
San Antonio-New Braunfels	480290059	Calaveras Lake	14620 Laguna Rd, San Antonio	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Rural	Population Exposure; Source Oriented	Urban Scale	29.27538	-98.31169
San Antonio-New Braunfels	480290059	Calaveras Lake	14620 Laguna Rd, San Antonio	SO2	SLAMS	Pulsed Fluorescence	Continuous	Rural	Population Exposure; Source Oriented	Neighborhood	29.27538	-98.31169
San Antonio-New Braunfels	480290059	Calaveras Lake	14620 Laguna Rd, San Antonio	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	Source Oriented	Urban Scale	29.27538	-98.31169
San Antonio-New Braunfels	480290059	Calaveras Lake	14620 Laguna Rd, San Antonio	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	Source Oriented	Urban Scale	29.27538	-98.31169
San Antonio-New Braunfels	480290052	Camp Bullis	F Range (1000 Yd marker off Wilderness Trail), Near Wilderness Rd, San Antonio	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Rural	Max Precursor Emissions Impact	Urban Scale	29.63206	-98.56494
San Antonio-New Braunfels	480290052	Camp Bullis	F Range (1000 Yd marker off Wilderness Trail), Near Wilderness Rd, San Antonio	O3	SLAMS	UV Photometric	Continuous	Rural	Max Ozone Concentration; Population Exposure	Urban Scale	29.63206	-98.56494
San Antonio-New Braunfels	480290052	Camp Bullis	F Range (1000 Yd marker off Wilderness Trail), Near Wilderness Rd, San Antonio	Solar Radiation	SPM	Photovoltaic	Continuous	Rural	Highest Concentration	Urban Scale	29.63206	-98.56494
San Antonio-New Braunfels	480290052	Camp Bullis	F Range (1000 Yd marker off Wilderness Trail), Near Wilderness Rd, San Antonio	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	Highest Concentration	Urban Scale	29.63206	-98.56494

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Texas MSA - CBSA	AQS Site Number	Site Name	Address - Location	Sampler Type	Network	Methods	Operating Schedule	Location Setting	Monitoring Objective	Spatial Scale	Latitude	Longitude
San Antonio-New Braunfels	480290052	Camp Bullis	F Range (1000 Yd marker off Wilderness Trail), Near Wilderness Rd, San Antonio	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	Highest Concentration Max Precursor Emissions Impact; Upwind Background	Urban Scale	29.63206	-98.56494
San Antonio-New Braunfels	484931038	Floresville Hospital Boulevard	1404 Hospital Blvd, Floresville	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Rural	General, Background	Urban Scale	29.13070	-98.14810
San Antonio-New Braunfels	484931038	Floresville Hospital Boulevard	1404 Hospital Blvd, Floresville	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	29.13070	-98.14810
San Antonio-New Braunfels	484931038	Floresville Hospital Boulevard	1404 Hospital Blvd, Floresville	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	29.13070	-98.14810
San Antonio-New Braunfels	480290060	Frank Wing Municipal Court	401 South Frio St, San Antonio	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Urban and Center City	Population Exposure	Middle Scale	29.42219	-98.50542
San Antonio-New Braunfels	480290677	Old Hwy 90	911 Old Hwy 90 West, San Antonio	PM2.5 (TEOM) <sup>N</sup>	SPM	1405 TEOM Gravimetric	Continuous	Urban and Center City	Population Exposure	Neighborhood	29.42394	-98.58051
San Antonio-New Braunfels	480291087	San Antonio Bulverde Parkway	3843 Bulverde Parkway, San Antonio	PM10 (FRM)	SLAMS	HiVol Gravimetric	24 Hours; 1/6 Days	Suburban	Population Exposure	Neighborhood	29.63500	-98.41770
San Antonio-New Braunfels	480291087	San Antonio Bulverde Parkway	3843 Bulverde Parkway, San Antonio	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Population Exposure	Neighborhood	29.63500	-98.41770
San Antonio-New Braunfels	480291087	San Antonio Bulverde Parkway	3843 Bulverde Parkway, San Antonio	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Population Exposure	Neighborhood	29.63500	-98.41770
San Antonio-New Braunfels	480291080	San Antonio Gardner Road	7145 Gardner Road, San Antonio	SO2	SLAMS	Pulsed Fluorescence	Continuous	Suburban	Source Oriented	Neighborhood	29.35291	-98.33281
San Antonio-New Braunfels	480291080	San Antonio Gardner Road	7145 Gardner Road, San Antonio	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	General, Background	Neighborhood	29.35291	-98.33281
San Antonio-New Braunfels	480291080	San Antonio Gardner Road	7145 Gardner Road, San Antonio	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	General, Background	Neighborhood	29.35291	-98.33281
San Antonio-New Braunfels	480291069	San Antonio Interstate 35	9904 IH 35 N, San Antonio	CO	Near Road, SLAMS	Gas Filter Correlation	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	29.52943	-98.39140
San Antonio-New Braunfels	480291069	San Antonio Interstate 35	9904 IH 35 N, San Antonio	NO/NO2/NOx	Near Road, SLAMS	Chemiluminescence	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	29.52943	-98.39140
San Antonio-New Braunfels	480291069	San Antonio Interstate 35	9904 IH 35 N, San Antonio	PM2.5 (Beta)	Near Road, SLAMS	Beta Attenuation	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	29.52943	-98.39140

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San Antonio-New Braunfels	480291069	San Antonio Interstate 35	9904 IH 35 N, San Antonio	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	29.52943	-98.39140
San Antonio-New Braunfels	480291069	San Antonio Interstate 35	9904 IH 35 N, San Antonio	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Max Precursor Emissions Impact	Microscale	29.52943	-98.39140
San Antonio-New Braunfels	480290032	San Antonio Northwest	6655 Bluebird Lane, San Antonio	NO/NO2/NOx	SLAMS	Chemiluminescence	Continuous	Suburban	Population Exposure	Neighborhood	29.51509	-98.62017
San Antonio-New Braunfels	480290032	San Antonio Northwest	6655 Bluebird Lane, San Antonio	O3	SLAMS	UV Photometric	Continuous	Suburban	Max Ozone Concentration; Population Exposure	Urban Scale	29.51509	-98.62017
San Antonio-New Braunfels	480290032	San Antonio Northwest	6655 Bluebird Lane, San Antonio	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Suburban	Population Exposure	Urban Scale	29.51509	-98.62017
San Antonio-New Braunfels	480290032	San Antonio Northwest	6655 Bluebird Lane, San Antonio	PM2.5 (FRM)	QA Collocated, SLAMS	Sequential FRM Gravimetric	24 Hours; 1/12 Days	Suburban	Population Exposure; Quality Assurance	Urban Scale	29.51509	-98.62017
San Antonio-New Braunfels	480290032	San Antonio Northwest	6655 Bluebird Lane, San Antonio	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Suburban	Highest Concentration	Urban Scale	29.51509	-98.62017
San Antonio-New Braunfels	480290032	San Antonio Northwest	6655 Bluebird Lane, San Antonio	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Suburban	Highest Concentration	Urban Scale	29.51509	-98.62017
San Antonio-New Braunfels	480131090	Von Ormy Highway 16	17534 North State Highway 16, Not In A City	PM2.5 (Beta)	SPM	Beta Attenuation	Continuous	Rural	Population Exposure; Source Oriented	Microscale	29.16300	-98.58916
San Antonio-New Braunfels	480131090	Von Ormy Highway 16	17534 North State Highway 16, Not In A City	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Rural	General, Background	Neighborhood	29.16300	-98.58916
San Antonio-New Braunfels	480131090	Von Ormy Highway 16	17534 North State Highway 16, Not In A City	Wind	SPM	Potentiometer Cup Anemometer	Continuous	Rural	General, Background	Neighborhood	29.16300	-98.58916
Texarkana	480371031	Texarkana New Boston	2700 New Boston Rd, Texarkana	PM2.5 (Beta)	SLAMS	Beta Attenuation	Continuous	Urban and Center City	Population Exposure	Urban Scale	33.43611	-94.07778
Texarkana	480371031	Texarkana New Boston	2700 New Boston Rd, Texarkana	Temperature (Outdoor)	SPM	Aspirated Thermister	Continuous	Urban and Center City	Population Exposure	Urban Scale	33.43611	-94.07778
Texarkana	480371031	Texarkana New Boston	2700 New Boston Rd, Texarkana	Wind (3m)	SPM	Potentiometer Cup Anemometer	Continuous	Urban and Center City	Population Exposure	Urban Scale	33.43611	-94.07778
Tyler	484230007	Tyler Airport Relocated	14790 County Road 1145, Tyler	NO/NO2/NOx	SPM	Chemiluminescence	Continuous	Rural	General, Background	Urban Scale	32.34403	-95.41575



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Tyler	484230007	Tyler Airport Relocated	14790 County Road 1145, Tyler	O3	SLAMS	UV Photometric	Continuous	Rural	General, Background	Urban Scale	32.34403	-95.41575
Tyler	484230007	Tyler Airport Relocated	14790 County Road 1145, Tyler	Precipitation	SPM	Rain Gauge	Continuous	Rural	General, Background	Neighborhood	32.34403	-95.41575
Tyler	484230007	Tyler Airport Relocated	14790 County Road 1145, Tyler	Solar Radiation	SPM	Photovoltaic	Continuous	Rural	General, Background	Neighborhood	32.34403	-95.41575
Tyler	484230007	Tyler Airport Relocated	14790 County Road 1145, Tyler	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer Cup	Continuous	Rural	General, Background	Neighborhood	32.34403	-95.41575
Tyler	484230007	Tyler Airport Relocated	14790 County Road 1145, Tyler	Wind	SPM	Anemometer	Continuous	Rural	General, Background	Neighborhood	32.34403	-95.41575
Victoria	484690003	Victoria	106 Mockingbird Lane, Victoria	O3	SLAMS	UV Photometric	Continuous	Urban and Center City	Population Exposure	Neighborhood	28.83621	-97.00553
Victoria	484690003	Victoria	106 Mockingbird Lane, Victoria	Solar Radiation	SPM	Photovoltaic	Continuous	Urban and Center City	Highest Concentration	Neighborhood	28.83621	-97.00553
Victoria	484690003	Victoria	106 Mockingbird Lane, Victoria	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer Cup	Continuous	Urban and Center City	Highest Concentration	Neighborhood	28.83621	-97.00553
Victoria	484690003	Victoria	106 Mockingbird Lane, Victoria	Wind	SPM	Anemometer	Continuous	Urban and Center City	Highest Concentration	Neighborhood	28.83621	-97.00553
Waco	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	CO	SLAMS	Gas Filter Correlation	Continuous	Rural	Upwind Background	Urban Scale	31.65309	-97.07070
Waco	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	O3	SLAMS	UV Photometric	Continuous	Rural	Upwind Background	Regional Scale	31.65309	-97.07070
Waco	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	PM2.5 (TEOM) <sup>N</sup>	SPM	1405 TEOM Gravimetric	Continuous	Rural	Regional Transport	Regional Scale	31.65309	-97.07070
Waco	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	SO2	SLAMS	Pulsed Fluorescence	Continuous	Rural	Upwind Background	Urban Scale	31.65309	-97.07070
Waco	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	Solar Radiation	SPM	Photovoltaic	Continuous	Rural	Regional Transport	Urban Scale	31.65309	-97.07070
Waco	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	Temperature (Outdoor)	SPM	Aspirated Thermister Potentiometer Cup	Continuous	Rural	Regional Transport	Urban Scale	31.65309	-97.07070
Waco	483091037	Waco Mazanec	4472 Mazanec Rd, Waco	Wind	SPM	Anemometer	Continuous	Rural	Regional Transport	Urban Scale	31.65309	-97.07070

## Appendix B: Ambient Air Monitoring Network Site List

Symbol/Acronym	Description
*	Micropolitan Statistical Area
**	County is not a Metropolitan or 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 not suitable for comparison against the annual PM <sub>2.5</sub> NAAQS as described in 40 Code of Federal Regulations Part 58.30
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, 1/1 Days	1 24-hour sample, daily
24 Hours; Seasonal, 8 Hour; Seasonal	1 24-hour sample every sixth day seasonal, three eight-hour samples seasonal
24-Hour 1/6 Days Seasonal	1 24-hour sample, once every sixth day seasonal
AMNP	Annual Monitoring Network Plan
AQS	Air Quality System
AR	Arkansas
AutoGC	automated gas chromatograph
Ave	avenue
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
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
CO	carbon monoxide
FM	farm-to-market
FRM	federal reference method
GC	gas chromatograph
GC-MS	gas chromatograph mass spectrometry
Hi-Vol	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

## Appendix B: Ambient Air Monitoring Network Site List

Symbol/Acronym	Description
LBJ	Lyndon B Johnson
Ln	lane
Max	maximum
MSA	metropolitan statistical area/micropolitan statistical area
NCore	National Core Multipollutant Monitoring Stations
N	north
NE	northeast
NO <sub>2</sub>	nitrogen dioxide
NO/NO <sub>2</sub> /NO <sub>x</sub>	nitrogen oxides
NO <sub>y</sub>	total reactive nitrogen
O <sub>3</sub>	ozone
OFW	Old Fort Worth
PAMS	Photochemical Assessment Monitoring Stations
Pkwy	parkway
PM <sub>10</sub>	particulate matter of 10 micrometers or less in diameter
PM <sub>10-2.5</sub>	coarse particulate matter
PM <sub>2.5</sub>	particulate matter of 2.5 micrometers or less in diameter
QA Collocated	quality assurance collocated monitor
Rd	road
S	south
SE	southeast
SETRPC	Southeast Texas Regional Planning Commission
SLAMS	State or Local Air Monitoring Stations
SO <sub>2</sub>	sulfur dioxide (one-hour and five-minute maximum monitors)
SPM	special purpose monitor
St	street
TCEQ	Texas Commission on Environmental Quality
TEOM	tapered element oscillating microbalance (not NAAQS comparable)
TSP (Pb)	total suspended particulate (lead)
TX	Texas
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 County Summary by Metropolitan Statistical Area

Texas Commission on Environmental Quality  
2021 Annual Monitoring Network Plan



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

Texas Metropolitan Statistical Area	2019 Population Estimate <sup>1</sup>	NO <sub>2</sub> and NO/NO <sub>y</sub> Monitors Required <sup>2,3</sup>	NO <sub>2</sub> and NO/NO <sub>y</sub> Monitors Existing <sup>2,3</sup>	SO <sub>2</sub> Monitors Required <sup>2</sup>	SO <sub>2</sub> Monitors Existing <sup>2,4</sup>	Pb Monitors Required	Pb Monitors Existing	O <sub>3</sub> Monitors Required	O <sub>3</sub> Monitors Existing	CO Monitors Required <sup>2</sup>	CO Monitors Existing <sup>2,4</sup>	PM <sub>10</sub> Monitors Required <sup>4</sup>	PM <sub>10</sub> Monitors Existing <sup>4</sup>	PM <sub>2.5</sub> Monitors Required <sup>4</sup>	PM <sub>2.5</sub> Monitors Existing <sup>4</sup>
Dallas-Fort Worth-Arlington	7,573,136	6	17	2	3	3	3	4	18	2	2	2-4	2	7	13
Houston-The Woodlands-Sugar Land	7,066,141	6	20	3	4	0	0	4	21	2	3	2-4	5	8	16
San Antonio-New Braunfels	2,550,960	3	5	2	2	0	0	2	3	1	1	2-4	2	3	5
Austin-Round Rock-Georgetown	2,227,083	2	2	0	1	0	0	2	2	1	1	2-4	2	3	3
McAllen-Edinburg-Mission	868,707	0	0	0	0	0	0	1	1	0	0	1-2	1	2	2
El Paso	844,124	2	4	1	1	0	0	3	7	1	3	2-4	5	5	8
Killeen-Temple	460,303	0	1	0	0	0	0	2	2	0	0	0-1	0	0	1
Corpus Christi	429,024	0	0	0	3	0	0	2	2	0	0	0-1	1	0	4
Brownsville-Harlingen	423,163	0	0	0	0	0	0	1	1	0	0	0-1	0	0	2
Beaumont-Port Arthur	392,563	1	4	3	4	0	0	2	7	0	0	0-1	0	0	3
Lubbock	322,257	0	0	0	0	0	0	0	0	0	0	0-1	0	0	1
Longview (includes Marshall)	286,657	0	2	2	3	0	0	1	2	0	0	0-1	0	0	3
Laredo	276,652	0	0	0	0	0	0	0	1	0	1	0-1	2	0	1
Waco	273,920	0	0	0	1	0	0	1	1	0	1	0-1	0	0	1
Amarillo	265,053	0	0	1	2	0	0	0	0	0	0	0-1	0	0	1
College Station-Bryan	264,728	0	0	1	1	0	0	0	0	0	0	0-1	0	0	1
Tyler	232,751	0	1	0	0	0	0	1	1	0	0	0	0	0	0
Midland	182,603	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Abilene	172,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odessa	166,223	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wichita Falls	151,254	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texarkana	148,761	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Sherman-Denison	136,212	0	0	0	0	0	0	0	0	0	0	0	0	0	0
San Angelo	122,027	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Victoria	99,742	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Granbury <sup>5</sup>	61,643	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Eagle Pass <sup>5</sup>	58,722	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Corsicana <sup>5</sup>	50,113	0	1	1	2	0	0	0	1	0	0	0	0	0	1
Mount Pleasant <sup>5</sup>	45,844	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Big Spring <sup>5</sup>	36,664	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Kingsville <sup>5</sup>	31,084	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Borger <sup>5</sup>	20,938	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Karnes County <sup>6</sup>	NA	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Freestone County <sup>6</sup>	NA	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Big Bend National Park <sup>6</sup>	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>Totals<sup>3</sup></b>		<b>20</b>	<b>58</b>	<b>19</b>	<b>31</b>	<b>3</b>	<b>3</b>	<b>27</b>	<b>72</b>	<b>7</b>	<b>12</b>	<b>11-32</b>	<b>20</b>	<b>28</b>	<b>71</b>

<sup>1</sup>United States Census Bureau population estimates as of July 1, 2019, link below.

<sup>2</sup>Required and existing counts include NO<sub>y</sub>, high-sensitivity SO<sub>2</sub>, and high-sensitivity CO monitors.

<sup>3</sup>Required monitor pending deployment is discussed in the applicable AMNP section.

<sup>4</sup>Individual monitors may fulfill multiple requirements and are only counted once. Collocated quality control monitors are not included in totals.

<sup>5</sup>Area is classified as a micropolitan statistical area and not subject to SLAMS requirements.

<sup>6</sup>Area not classified as a metropolitan or micropolitan statistical area, county population data is not applicable.

CO - carbon monoxide

NA - not applicable

NO<sub>2</sub> and NO/NO<sub>y</sub> - nitrogen dioxide, nitrogen oxide, and total reactive nitrogen compounds

Pb - lead

PM<sub>10</sub> - particulate matter of 10 micrometers or less

PM<sub>2.5</sub> - particulate matter of 2.5 micrometers or less

O<sub>3</sub> - ozone

SO<sub>2</sub> - sulfur dioxide

[Metropolitan and Micropolitan Statistical Areas Totals: 2010-2019 \(census.gov\)](https://www.census.gov/popest/data/totals/2010-2019/metro-and-micropolitan-areas/totals.html)

# Appendix D

## Nitrogen Dioxide, Nitrogen Oxide, and Total Reactive Nitrogen Monitor Requirements and Count Summary

Texas Commission on Environmental Quality  
2021 Annual Monitoring Network Plan





## Appendix D: Nitrogen Dioxide, Nitrogen Oxide, and Total Reactive Nitrogen Monitor Requirements and Count Summary

Core Based Statistical Areas	2019 Population Estimate <sup>1</sup>	Required NO <sub>2</sub> Area-Wide Monitors	Required NO <sub>2</sub> RA-40 Monitors	Required NO <sub>2</sub> Near-Road Monitors	Required True NO <sub>2</sub> PAMS Monitors	Required NO/NO <sub>y</sub> PAMS/NCore Monitors	Total Required NO <sub>2</sub> and NO/NO <sub>y</sub> Monitors	Total Existing NO <sub>2</sub> and NO/NO <sub>y</sub> Monitors <sup>2</sup>
Dallas-Fort Worth-Arlington	7,573,136	1	1	2	1	1	6	17
Houston-The Woodlands-Sugar Land	7,066,141	1	1	2	1	1	6	20
San Antonio-New Braunfels	2,550,960	1	0	2	0	0	3	5
Austin-Round Rock-Georgetown	2,227,083	1	0	1	0	0	2	2
McAllen-Edinburg-Mission	868,707	0	0	0	0	0	0	0
El Paso	844,124	0	1	0	0	1	2	4
Killeen-Temple	460,303	0	0	0	0	0	0	1
Corpus Christi	429,024	0	0	0	0	0	0	0
Brownsville-Harlingen	423,163	0	0	0	0	0	0	0
Beaumont-Port Arthur	392,563	0	1	0	0	0	1	4
Lubbock	322,257	0	0	0	0	0	0	0
Longview	286,657	0	0	0	0	0	0	2
Laredo	276,652	0	0	0	0	0	0	0
Waco	273,920	0	0	0	0	0	0	0
Amarillo	265,053	0	0	0	0	0	0	0
College Station-Bryan	264,728	0	0	0	0	0	0	0
Tyler	232,751	0	0	0	0	0	0	1
Midland	182,603	0	0	0	0	0	0	0
Abilene	172,060	0	0	0	0	0	0	0
Odessa	166,223	0	0	0	0	0	0	0
Wichita Falls	151,254	0	0	0	0	0	0	0
Texarkana	148,761	0	0	0	0	0	0	0
Sherman-Denison	136,212	0	0	0	0	0	0	0
San Angelo	122,027	0	0	0	0	0	0	0
Victoria	99,742	0	0	0	0	0	0	0
Corsicana <sup>3</sup>	50,113	0	0	0	0	0	0	1
Karnes County <sup>4</sup>	NA	0	0	0	0	0	0	1
<b>Totals</b>		<b>4</b>	<b>4</b>	<b>7</b>	<b>2</b>	<b>3</b>	<b>20</b>	<b>58</b>

<sup>1</sup>United States Census Bureau population estimates as of July 1, 2019.

[Metropolitan and Micropolitan Statistical Areas Totals: 2010-2019 \(census.gov\)](https://www.census.gov/data/tables/2010/decennial/2010-2019-statistical-areas.html)

<sup>2</sup>Monitors may fulfill multiple monitoring requirements and are only counted once.

<sup>3</sup>Area is classified as a micropolitan statistical area and not subject to SLAMS requirements.

<sup>4</sup>Area not classified as a metropolitan or micropolitan statistical area, county population data is not applicable.

NCore - National Core Multipollutant Monitoring Stations

NO - nitrogen oxide

NO<sub>2</sub> - nitrogen dioxide

NO<sub>y</sub> - total reactive nitrogen compounds

PAMS - Photochemical Assessment Monitoring Stations

RA-40 - Regional Administrator 40

# Appendix E

## Sulfur Dioxide Monitor Requirements and Count Summary

**Texas Commission on Environmental Quality  
2021 Annual Monitoring Network Plan**



## Appendix E: Sulfur Dioxide Monitor Requirements and Count Summary

Core Based Statistical Area	County	2019 Population Estimates <sup>1</sup>	2019 Point Source (tpy)	2017 NEI Data (tpy)	2017 Point Source Data (tpy)	2017 NEI Non-Point Source Data with 2019 Point Source Data (tpy)	PWEI	Required SO <sub>2</sub> PWEI Monitors	Required SO <sub>2</sub> DRR Monitors	Required SO <sub>2</sub> NCore Monitors (high-sensitivity)	Total Required SO <sub>2</sub> Monitors	Existing Monitors <sup>2</sup>
Dallas-Fort Worth-Arlington		7,573,136				4,878	36,941	1	0	1	2	3
	Collin		5	104	6	103						
	Dallas		343	921	347	917						
	Denton		367	69	340	96						
	Ellis		2,343	1,659	1,561	2,441						
	Hunt		1	35	1	35						
	Johnson		78	105	78	105						
	Kaufman		61	122	91	93						
	Parker		120	256	234	142						
	Rockwall		0	9	0	9						
	Tarrant		24	909	23	911						
	Wise		13	24	9	28						
Houston-The Woodlands-Sugar Land		7,066,141				39,815	281,338	2	0	1	3	4
	Austin		4	42	32	13						
	Brazoria		600	681	585	696						
	Chambers		206	203	191	219						
	Fort Bend		28,888	37,802	37,736	28,954						
	Galveston		1,493	2,382	1,819	2,055						
	Harris		6,517	8,667	7,546	7,638						
	Liberty		10	39	15	35						
	Montgomery		30	181	23	187						
	Waller		2	17	1	18						
San Antonio-New Braunfels		2,550,960				11,921	30,411	1	1	0	2	2
	Atascosa		9,179	9,316	8,779	9,715						
	Bandera		0	2	0	2						
	Bexar		1,184	13,007	12,724	1,467						
	Comal		382	428	407	403						
	Guadalupe		119	144	109	155						
	Kendall		2	7	2	8						
	Medina		0	10	0	10						
	Wilson		0	270	109	162						

## Appendix E: Sulfur Dioxide Monitor Requirements and Count Summary

Core Based Statistical Area	County	2019 Population Estimates <sup>1</sup>	2019 Point Source (tpy)	2017 NEI Data (tpy)	2017 Point Source Data (tpy)	2017 NEI Non-Point Source Data with 2019 Point Source Data (tpy)	PWEI	Required SO <sub>2</sub> PWEI Monitors	Required SO <sub>2</sub> DRR Monitors	Required SO <sub>2</sub> NCore Monitors (high-sensitivity)	Total Required SO <sub>2</sub> Monitors	Existing Monitors <sup>2</sup>
Austin-Round Rock-Georgetown		2,227,083				2,089	4,652	0	0	0	0	1
	Bastrop		140	305	292	153						
	Caldwell		0	354	338	16						
	Hays		1,471	1,189	1,164	1,495						
	Travis		128	359	119	369						
	Williamson		4	57	5	56						
McAllen-Edinburg-Mission		868,707				123	107	0	0	0	0	0
	Hidalgo		40	125	42	123						
El Paso		844,124				304	256	0	0	1	1	1
	El Paso		185	390	282	293						
	Hudspeth		7	10	7	10						
Killeen-Temple		460,303				104	48	0	0	0	0	0
	Bell		40	96	43	93						
	Coryell		0	7	0	7						
	Lampasas		0	4	0	4						
Corpus Christi		429,024				922	396	0	0	0	0	3
	Nueces		683	828	689	823						
	San Patricio		45	82	28	99						
Brownsville-Harlingen		423,163				83	35	0	0	0	0	0
	Cameron		1	83	1	83						
Beaumont-Port Arthur		392,563				17,660	6,933	1	2	0	3	4
	Hardin		1	12	1	13						
	Jefferson		12,862	14,002	13,849	13,016						
	Orange		4,592	6,340	6,300	4,632						
Lubbock		322,257				89	29	0	0	0	0	0
	Crosby		0	4	0	3						
	Lubbock		9	57	4	63						
	Lynn		0	23	0	23						

## Appendix E: Sulfur Dioxide Monitor Requirements and Count Summary

Core Based Statistical Area	County	2019 Population Estimates <sup>1</sup>	2019 Point Source (tpy)	2017 NEI Data (tpy)	2017 Point Source Data (tpy)	2017 NEI Non-Point Source Data with 2019 Point Source Data (tpy)	PWEI	Required SO <sub>2</sub> PWEI Monitors	Required SO <sub>2</sub> DRR Monitors	Required SO <sub>2</sub> NCore Monitors (high-sensitivity)	Total Required SO <sub>2</sub> Monitors	Existing Monitors <sup>2</sup>
Longview		286,657				50,089	14,358	1	1	0	2	3
	Gregg		20	68	23	65						
	Harrison		3,307	4,389	4,363	3,333						
	Rusk		46,661	36,599	36,578	46,682						
	Upshur		2	8	1	9						
Laredo		276,652				3,247	898	0	0	0	0	0
	Webb		471	584	390	664						
Waco		273,920				2,583	707	0	0	0	0	1
	Falls		0	7	0	7						
	McLennan		2,502	3,181	3,100	2,583						
Amarillo		265,053				10,897	2,888	0	1	0	1	2
	Armstrong		1	1	0	2						
	Carson		1	4	0	5						
	Potter		10,587	13,106	12,937	10,757						
	Randall		96	117	93	120						
	Oldham		0	14	0	14						
College Station-Bryan		264,728				9,455	2,503	0	1	0	1	1
	Brazos		14	57	12	58						
	Burleson		0	8	0	8						
	Robertson		9,382	11,254	11,248	9,389						
Tyler		232,751				463	108	0	0	0	0	0
	Smith		417	534	488	463						
Midland		182,603				1,381	252	0	0	0	0	0
	Martin		39	494	27	506						
	Midland		171	882	177	876						
Abilene		172,060				54	9	0	0	0	0	0
	Callahan		0	3	0	3						
	Jones		10	13	9	14						
	Taylor		0	37	0	37						

## Appendix E: Sulfur Dioxide Monitor Requirements and Count Summary

Core Based Statistical Area	County	2019 Population Estimates <sup>1</sup>	2019 Point Source (tpy)	2017 NEI Data (tpy)	2017 Point Source Data (tpy)	2017 NEI Non-Point Source Data with 2019 Point Source Data (tpy)	PWEI	Required SO <sub>2</sub> PWEI Monitors	Required SO <sub>2</sub> DRR Monitors	Required SO <sub>2</sub> NCore Monitors (high-sensitivity)	Total Required SO <sub>2</sub> Monitors	Existing Monitors <sup>2</sup>
Odessa		166,223				1,382	230	0	0	0	0	0
	Ector		926	1,484	1,028	1,382						
Wichita Falls		151,254				712	108	0	0	0	0	0
	Archer		0	2	0	2						
	Clay		66	50	47	69						
	Wichita		510	606	526	591						
Texarkana		148,761				50	7	0	0	0	0	0
	Bowie		32	34	15	50						
Sherman-Denison		136,212				45	6	0	0	0	0	0
	Grayson		7	45	7	45						
San Angelo		122,027				269	33	0	0	0	0	0
	Irion		0	237	0	237						
	Sterling		1	10	1	10						
	Tom Green		2	21	2	22						
Victoria		99,742				11,520	1,149	0	0	0	0	0
	Goliad		11,270	12,365	12,202	11,433						
	Victoria		33	85	31	87						
Corsicana <sup>3</sup>		50,113				3,634	182	NA	1	0	1	2
	Navarro		3,614	3,812	3,792	3,634						
Mount Pleasant <sup>3</sup>		45,844				11,199	513	NA	1	0	1	1
	Titus		11,177	43,509	43,487	11,199						
Big Spring <sup>3</sup>		36,664				5,377	197	NA	1	0	1	1
	Howard		4,888	6,835	6,346	5,377						
Borger <sup>3</sup>		20,938				9,473	198	NA	1	0	1	1
	Hutchinson		9,463	11,657	11,648	9,473						



## Appendix E: Sulfur Dioxide Monitor Requirements and Count Summary

Core Based Statistical Area	County	2019 Population Estimates <sup>1</sup>	2019 Point Source (tpy)	2017 NEI Data (tpy)	2017 Point Source Data (tpy)	2017 NEI Non-Point Source Data with 2019 Point Source Data (tpy)	PWEI	Required SO <sub>2</sub> PWEI Monitors	Required SO <sub>2</sub> DRR Monitors	Required SO <sub>2</sub> NCore Monitors (high-sensitivity)	Total Required SO <sub>2</sub> Monitors	Existing Monitors <sup>2</sup>
None		not available					NA	NA	NA	0	0	1
	Freestone <sup>4</sup>		17	47,653	47,645	24			0	0	0	1
<b>Total Monitors</b>								<b>6</b>	<b>10</b>	<b>3</b>	<b>19</b>	<b>31</b>

<sup>1</sup>United States Census Bureau population estimates as of July 1, 2019.

[Metropolitan and Micropolitan Statistical Areas Totals: 2010-2019 \(census.gov\)](https://www.census.gov/popest/data/totals/totals.html)

<sup>2</sup>Monitors may fulfill multiple monitoring requirements and are only counted once.

<sup>3</sup>Micropolitan statistical area

<sup>4</sup>Area not classified as a metropolitan or micropolitan statistical area.

DRR - Data Requirements Rule

NA - not applicable

NCore - National Core Multipollutant Monitoring Stations

NEI - National Emissions Inventory

PWEI - population weighted emission index (Core Based Statistical Area Population\*[2017 NEI non-point source data and 2018 point source data]/1,000,000)

SO<sub>2</sub> - sulfur dioxide

tpy - tons per year

# Appendix F

## Sulfur Dioxide Ongoing Data Requirements Annual Report

**Texas Commission on Environmental Quality  
2021 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<sub>2</sub>) emissions changes for areas designated attainment/unclassifiable for the 2010 SO<sub>2</sub> National Ambient Air Quality Standard (NAAQS), where the designations were based on characterization of air quality by modeling actual SO<sub>2</sub> emissions.

Out of all Texas counties (or portions of counties) currently designated attainment/unclassifiable for the 2010 SO<sub>2</sub> NAAQS, only the seven counties shown in Table 1 were designated based on modeled actual SO<sub>2</sub> emissions. The most recent (2019) total estimated SO<sub>2</sub> emissions, based on quality assured data from the relevant sources in each county, are listed in Table 1. The table includes emissions from the previous year (2018) and the change in SO<sub>2</sub> emissions from 2018 to 2019. There was no emissions increase from any relevant source in Atascosa, Fort Bend, Goliad, Lamb, Limestone, Robertson, or Wilbarger County. Since each of these seven counties had emissions decreases from the previous year, the original designations modeling for each county provides reasonable assurance that these areas all continue to meet the 2010 one-hour SO<sub>2</sub> primary NAAQS.

For any area where SO<sub>2</sub> 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<sub>2</sub> air quality modeling is needed to determine compliance with the 2010 SO<sub>2</sub> NAAQS for any of the seven Texas counties listed in Table 1.

**Table 1: 2018 to 2019 Emissions Comparisons**

County	Relevant Source	2018 SO <sub>2</sub> (tpy)	2019 SO <sub>2</sub> (tpy)	Difference 2018 to 2019
Atascosa	San Miguel Electric Plant	11,880	8,940	-2,940
Fort Bend	W.A. Parish Electric Generating Station	38,165	28,828	-9,337
Goliad	Coleto Creek Power Station	13,213	11,264	-1,949
Lamb	Tolk Station Power Plant	9,958	7,225	-2,733
Limestone	Limestone Electric Generating Station	8,320	5,686	-2,634
Robertson	Twin Oaks Power Station	2,523	2,408	-116
Wilbarger	Oklunion Power Station	2,191	1,779	-412

SO<sub>2</sub> – sulfur dioxide  
tpy – tons per year

# Appendix G

## Total Suspended Particulate Lead Monitor Requirements and Count Summary

Texas Commission on Environmental Quality  
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## Appendix G: Total Suspended Particulate Lead Monitor Requirements and County Summary

Metropolitan Statistical Area	County	Pb Source (Facility Name) or Monitoring Requirement	2019 Pb Source Emissions (tpy)	2018 Pb Source Emissions (tpy)	2017 Pb Source Emissions (tpy)	Site Name	Required Monitors <sup>1</sup>	Existing Monitors <sup>1</sup>
Dallas-Fort Worth-Arlington							3	3
	Collin	Maintenance Area	NA	NA	NA	Frisco Eubanks <sup>1,2</sup>	1	1
	Collin	Maintenance Area	NA	NA	NA	Frisco Stonebrook <sup>2</sup>	1	1
	Kaufman	Conesus, LLC	0.1804	0.2812	0.2617	Terrell Temtex <sup>1</sup>	1	1
<b>Totals</b>							<b>3</b>	<b>3</b>

<sup>1</sup>Collocated quality control monitors are not included in totals.

<sup>2</sup>Monitor required to fulfill State Implementation Plan commitments.

LCC - Limited Liability Company

NA - not applicable

Pb - lead

tpy - tons per year

# Appendix H

## Ozone Monitor Requirements and Count Summary

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## Appendix H: Ozone Monitor Requirements and Count Summary

Metropolitan Statistical Area	2019 Population Estimates <sup>1</sup>	2017-2019 8-Hour Design Value (ppm)	Design Value as Percent of NAAQS <sup>2</sup>	Total Required SLAMS Monitors	Total Required NCore/PAMS Monitors	Total Required Monitors <sup>3</sup>	Total Existing Monitors <sup>4</sup>
Dallas-Fort Worth-Arlington	7,573,136	0.077	110%	3	1	4	18
Houston-The Woodlands-Sugar Land	7,066,141	0.081	116%	3	1	4	21
San Antonio-New Braunfels	2,550,960	0.073	104%	2	0	2	3
Austin-Round Rock-Georgetown	2,227,083	0.069	99%	2	0	2	2
McAllen-Edinburg-Mission	868,707	0.055	79%	1	0	1	1
El Paso	844,124	0.075	107%	2	1	3	7
Killeen-Temple	460,303	0.069	99%	2	0	2	2
Corpus Christi	429,024	0.061	87%	2	0	2	2
Brownsville-Harlingen	423,163	0.059	84%	1	0	1	1
Beaumont-Port Arthur	392,563	0.070	100%	2	0	2	7
Lubbock	322,257	NA	NA	0	0	0	0
Longview	286,657	0.065	93%	1	0	1	2
Laredo	276,652	0.056	80%	0	0	0	1
Waco	273,920	0.065	93%	1	0	1	1
Amarillo	265,053	NA	NA	0	0	0	0
College Station-Bryan	264,728	NA	NA	0	0	0	0
Tyler	232,751	0.066	94%	1	0	1	1
Midland	182,603	NA	NA	0	0	0	0
Abilene	172,060	NA	NA	0	0	0	0
Odessa	166,223	NA	NA	0	0	0	0
Wichita Falls	151,254	NA	NA	0	0	0	0
Texarkana	148,761	NA	NA	0	0	0	0
Sherman-Denison	136,212	NA	NA	0	0	0	0
San Angelo	122,027	NA	NA	0	0	0	0
Victoria	99,742	0.063	90%	1	0	1	1
Granbury <sup>5</sup>	61,643	0.067	96%	0	0	0	1
Corsicana <sup>5</sup>	50,113	0.064	91%	0	0	0	1
<b>Totals</b>				<b>24</b>	<b>3</b>	<b>27</b>	<b>72</b>

<sup>1</sup>United States Census Bureau population estimates as of July 1, 2019.

[Metropolitan and Micropolitan Statistical Areas Totals: 2010-2019 \(census.gov\)](#)

<sup>2</sup>2015 eight-hour ozone National Ambient Air Quality Standard (NAAQS) is 0.070 parts per million (ppm).

<sup>3</sup>Total Required Monitors is a sum of requirements for SLAMS, PAMS, and NCore.

<sup>4</sup>Monitors may fulfill multiple monitoring requirements and are only counted once.

<sup>5</sup>Area is classified as a micropolitan statistical area and is not subject to SLAMS requirements.

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 Summary

**Texas Commission on Environmental Quality  
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## Appendix I: Carbon Monoxide Monitor Requirements and Count Summary

Core Based Statistical Area <sup>1</sup>	2019 Population Estimates <sup>2</sup>	Site Name	Required CO NCore Monitors	Required CO Near Road Monitors	Total Required Monitors <sup>3</sup>	Total Existing Monitors <sup>4</sup>
Dallas-Fort Worth-Arlington	52,600		1	1	2	2
		Dallas Hinton <sup>5</sup>	1	0	1	1
		Fort Worth California Parkway	0	1	1	1
Houston-The Woodlands-Sugar Land	51,639		1	1	2	3
		Clinton <sup>5</sup>	0	0	0	1
		Houston Deer Park #2 <sup>5</sup>	1	0	1	1
		Houston North Loop	0	1	1	1
San Antonio-New Braunfels	50,113		0	1	1	1
		San Antonio Interstate 35 <sup>5</sup>	0	1	1	1
Austin-Round Rock-Georgetown	49,859		0	1	1	1
		Austin North Interstate 35	0	1	1	1
El Paso	45,844		1	0	1	3
		El Paso Chamizal <sup>5</sup>	1	0	1	1
		El Paso UTEP	0	0	0	1
		Ojo De Agua	0	0	0	1
Laredo	36,643		0	0	0	1
		Laredo Vidaurri	0	0	0	1
Waco	35,882		0	0	0	1
		Waco Mazanec	0	0	0	0
<b>Totals</b>			<b>3</b>	<b>4</b>	<b>7</b>	<b>12</b>

<sup>1</sup>This list does not include core based statistical areas with zero requirements and zero monitors.

<sup>2</sup>United States Census Bureau population estimates as of July 1, 2019.

[Metropolitan and Micropolitan Statistical Areas Totals: 2010-2019 \(census.gov\)](https://www.census.gov/popest/totals/2010-2019)

<sup>3</sup>Total Required Monitors is a sum of requirements for NCore and Near-Road.

<sup>4</sup>Monitors may fulfill multiple monitoring requirements and are only counted once.

<sup>5</sup>High-Sensitivity CO monitor (high-sensitivity CO monitors are recommended at NCore sites)

# - number

CO - carbon monoxide

NCore - National Core Multipollutant Monitoring Stations

UTEP - University of Texas at El Paso

# Appendix J

## Particulate Matter of 10 Micrometers or Less Monitor Requirements and Count Summary

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

**Table 1: Particulate Matter of 10 Micrometers or Less Monitoring Requirements and Monitor Locations<sup>1</sup>**

Metropolitan Statistical Area	2019 Population Estimates <sup>2</sup>	Site Name	2017 2019 Maximum Concentration (µg/m <sup>3</sup> )	Percent of NAAQS <sup>3</sup> (%)	Required Monitors <sup>4</sup>	Existing Monitors <sup>4</sup>
Dallas-Fort Worth-Arlington	7,573,136		102	68	2-4	2
		Earhart	61	41		
		Convention Center (collocated QC pair)	102	68		
Houston-The Woodlands-Sugar Land	7,066,141		111	74	2-4	5
		Clinton (collocated QC pair)	111	74		
		Houston Monroe	97	65		
		Houston North Wayside <sup>5</sup>	NA	NA		
		Lang	101	67		
		Texas City Fire Station	105	70		
San Antonio-New Braunfels	2,550,960		117	78	2-4	2
		San Antonio Bulverde Parkway <sup>5</sup>	NA	NA		
		Frank Wing Municipal Court	117	78		
Austin-Round Rock-Georgetown	2,227,083		97	65	2-4	2
		Austin Webberville Road	97	65		
		Austin Audubon Society	90	60		
McAllen-Edinburg-Mission	868,707		93	62	1-2	1
		Mission	93	62		
El Paso	844,124		137	91	2-4	5
		El Paso Mimosa (previously Riverside)	126	84		
		Ivanhoe	85	57		
		Ojo De Agua (collocated QC pair)	137	91		
		Socorro Hueco (collocated QC pair)	114	76		
		Van Buren	134	89		
Killeen-Temple	460,303		NA	0	0-1	0
Corpus Christi	429,024		84	56	0-1	1
		Dona Park	84	56		
Brownsville-Harlingen	423,163		NA	0	0-1	0
Beaumont-Port Arthur	392,563		NA	0	0-1	0
Lubbock	322,257		NA	0	0-1	0

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

Metropolitan Statistical Area	2019 Population Estimates <sup>2</sup>	Site Name	2017-2019 Maximum Concentration (µg/m <sup>3</sup> )	Percent of NAAQS <sup>3</sup> (%)	Required Monitors <sup>4</sup>	Existing Monitors <sup>4</sup>
Longview	286,657		NA	0	0-1	0
Laredo	276,652		81	54	0-1	2
		Laredo Vidaurri	81	54		
		Laredo Bridge	75	50		
Waco	273,920		NA	0	0-1	0
Amarillo	265,053		NA	0	0-1	0
College Station-Bryan	264,728		NA	0	0-1	0
<b>Totals</b>					<b>11-32</b>	<b>20</b>

<sup>1</sup>This list doesn't include metropolitan statistical areas with zero requirements and zero monitors.

<sup>2</sup>United States Census Bureau population estimates as of July 1, 2019.

<sup>3</sup>Current PM<sub>10</sub> NAAQS is 150 micrograms per cubic meter (µg/m<sup>3</sup>).

<sup>4</sup>collocated QC quality control monitors are not counted.

<sup>5</sup>Monitor deployed 2020-2021, incomplete design values are not used for regulatory compliance.

% - percent

NAAQS - National Ambient Air Quality Standards

PM<sub>10</sub> - particulate matter of 10 micrometers or less

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

Table 2: Particulate Matter of 10 Micrometers or Less Monitor Concentrations

Site Name	2017-2019 Maximum Concentration ( $\mu\text{g}/\text{m}^3$ )	2019 Annual Mean Concentration ( $\mu\text{g}/\text{m}^3$ )	2018 Annual Mean Concentration ( $\mu\text{g}/\text{m}^3$ )	2017 Annual Mean Concentration ( $\mu\text{g}/\text{m}^3$ )
Socorro Hueco (collocated QC pair)*	114	33	34	32
Clinton (collocated QC pair)*	111	28	29	27
Ivanhoe	85	27	21	19
El Paso Mimosa (previously Riverside)	126	26	29	28
Van Buren	134	26	30	20
Laredo Vidaurri	81	25	25	22
Mission	93	24	24	25
Laredo Bridge	75	21	22	19
Houston Monroe	97	21	23	21
Convention Center (collocated QC pair)	102	20	25	21
Austin Webberville Road	97	20	23	22
Ojo De Agua (collocated QC pair)	137	20	24	21
Frank Wing Municipal Court	117	19	21	22
Lang	101	19	22	21
Earhart	61	19	24	24
Texas City Fire Station	105	17	21	14
Dona Park	84	17	20	20
Austin Audubon Society	90	12	18	15
San Antonio Bulverde Parkway** (previously Selma)	NA	NA	NA	NA
Houston North Wayside**	NA	NA	NA	NA

\*Highest annual mean concentrations, confirms at least half of collocated quality control (QC) monitoring occurs at network sites among the highest.

\*\*New monitor deployed in 2020-2021, resulting in incomplete design value. Incomplete design values are not used for regulatory compliance.

$\mu\text{g}/\text{m}^3$  - micrograms per cubic meter

# Appendix K

## Particulate Matter of 2.5 Micrometers or Less Monitor Requirements and Count Summary

**Texas Commission on Environmental Quality  
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# Appendix K: Particulate Matter of 2.5 Micrometers or Less Monitor Requirements and Count Summary

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

Metropolitan Statistical Area	2019 Population Estimates <sup>1</sup>	2017 2019 DV (µg/m <sup>3</sup> ) Annual (for Area)	2017 2019 DV (µg/m <sup>3</sup> ) 24-Hour (for Area)	Percent of NAAQS Annual <sup>2</sup> (for Area)	Percent of NAAQS 24-Hour <sup>3</sup> (for Area)	Required FRM/ FEM Monitors	Required NCore Monitors	Required Near Road Monitors	Total Required Monitors <sup>4</sup>	Total Existing Monitors <sup>4</sup>
Dallas-Fort Worth-Arlington	7,573,136	9.2	20	77	57	2	4	1	7	13
Houston-The Woodlands-Sugar Land	7,066,141	10.3	27	86	77	3	4	1	8	16
San Antonio-New Braunfels	2,550,960	8.4	21	70	60	2	0	1	3	5
Austin-Round Rock-Georgetown	2,227,083	9.8	23	82	66	2	0	1	3	3
McAllen-Edinburg-Mission	868,707	10.8	29	90	83	2	0	0	2	2
El Paso	844,124	8.7	24	73	69	1	4	0	5	8
Killeen-Temple <sup>5</sup>	460,303	8.3	19	69	54	0	0	0	0	1
Corpus Christi	429,024	9.0	24	75	69	0	0	0	0	4
Brownsville-Harlingen	423,163	9.9	25	83	71	0	0	0	0	2
Beaumont-Port Arthur <sup>5</sup>	392,563	9.6	22	80	63	0	0	0	0	3
Lubbock <sup>5</sup>	322,257	6.0	17	50	49	0	0	0	0	1
Longview	286,657	8.5	18	71	51	0	0	0	0	3
Laredo <sup>5</sup>	276,652	10.0	27	83	77	0	0	0	0	1
Waco	273,920	NA	NA	NA	NA	0	0	0	0	1
Amarillo <sup>5</sup>	265,053	5.5	12	46	34	0	0	0	0	1
College Station-Bryan <sup>5</sup>	264,728	NA	NA	NA	NA	0	0	0	0	1
Odessa <sup>5</sup>	166,223	8.0	20	67	57	0	0	0	0	1
Texarkana	148,761	8.9	19	74	54	0	0	0	0	1
Eagle Pass <sup>5,6</sup>	58,722	7.5	23	63	66	0	0	0	0	1
Corsicana <sup>6</sup>	50,113	NA	NA	NA	NA	0	0	0	0	1
Kingsville <sup>5,6</sup>	31,084	9.9	27	83	77	0	0	0	0	1
Big Bend National Park <sup>5,7</sup>	NA	6.1	14	51	40	0	0	0	0	1
<b>Totals*</b>						<b>12</b>	<b>12</b>	<b>4</b>	<b>28</b>	<b>71</b>

<sup>1</sup>United States Census Bureau population estimates as of July 1, 2019.

Metropolitan and Micropolitan Statistical Areas Totals: 2010-2019 (census.gov)

<sup>2</sup>Current PM<sub>2.5</sub> Annual NAAQS is 12.0 micrograms per cubic meter (µg/m<sup>3</sup>).

<sup>3</sup>Current PM<sub>2.5</sub> 24-hour NAAQS is 35 µg/m<sup>3</sup>.

<sup>4</sup>Individual monitors may fulfill multiple requirements and are only counted once. Collocated quality control monitors are not included in totals.

<sup>5</sup>Annual values do not meet completeness criteria; monitors deployed in 2017, 2018, or 2019. Incomplete design value information is not used for the purposes of regulatory compliance.

<sup>6</sup>Area is classified as a micropolitan statistical area and is not subject to SLAMS requirements.

<sup>7</sup>Area not classified as a metropolitan or micropolitan statistical area.

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

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

Table 2: Particulate Matter of 2.5 Micrometers or Less Monitor Design Value, Location and Monitor Type<sup>1</sup>

Metropolitan Statistical Area	2019 Population Estimates <sup>2</sup>	Site Name	Monitor Type(s)	2017 2019 Annual DV ( $\mu\text{g}/\text{m}^3$ )	2017 2019 24-Hour DV ( $\mu\text{g}/\text{m}^3$ )	Percent of NAAQS (Annual <sup>3</sup> )	Percent of NAAQS (24-Hour <sup>4</sup> )	Required SLAMS FRM/FEM Monitor <sup>5</sup>	Continuous Monitor <sup>6</sup>	Continuous Requirement Met <sup>6</sup>	Required NCore Monitor	Required Near Road Monitor	Total Required Monitors <sup>5</sup>	Total Existing Monitors <sup>5</sup>
Dallas-Fort Worth-Arlington	7,573,136			9.2	20	77	57	2	7	Y	4	1	7	13
		Convention Center	Partisol 2025	9.1	19	76	54	1	0		0	0	1	1
		Dallas Hinton (collocated QC pair)	Partisol 2025, BAM1020 PM2.5, BAM1020 PM10-2.5, SASS/URG Speciation <sup>7</sup> (Partisol 2025 QC)	9.2	20	77	57	0	1		4	0	4	4
		Denton Airport South <sup>9</sup>	BAM1022	7.6	14	63	40	0	1		0	0	0	1
		Fort Worth California Parkway North (collocated QC pair)	BAM1022 (BAM1022 QC)	8.5	18	71	51	0	1		0	1	1	1
		Fort Worth Northwest	BAM1022	8.5	18	71	51	1	1		0	0	1	1
		Haws Athletic Center	BAM1022	8.5	18	71	51	0	1		0	0	0	1
		Kaufman	TEOM <sup>8</sup>	NA	NA	NA	NA	0	1		0	0	0	1
		Midlothian OFW	Partisol 2025, TEOM <sup>8</sup> , URG/2025 Speciation	8.0	19	67	54	0	1		0	0	0	3
Houston-The Woodlands-Sugar Land	7,066,141			10.3	27	86	77	3	10	Y	4	1	8	16
		Baytown	BAM1022	9.2	22	77	63	1	1		0	0	1	1
		Clinton (collocated QC pair)	Partisol 2025, TEOM <sup>8</sup> , 2025 Speciation (pending) (Partisol 2025 QC)	10.3	22	86	63	1	1		0	0	1	3
		Conroe Relocated	TEOM <sup>8</sup>	NA	NA	NA	NA	0	1		0	0	0	1
		Galveston 99 <sup>th</sup> Street	BAM1022	7.0	22	58	63	0	1		0	0	0	1

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

Metropolitan Statistical Area	2019 Population Estimates <sup>2</sup>	Site Name	Monitor Type(s)	2017 2019 Annual DV (µg/m <sup>3</sup> )	2017 2019 24-Hour DV (µg/m <sup>3</sup> )	Percent of NAAQS (Annual <sup>3</sup> )	Percent of NAAQS (24-Hour <sup>4</sup> )	Required SLAMS FRM/FEM Monitor <sup>5</sup>	Continuous Monitor <sup>6</sup>	Continuous Requirement Met <sup>6</sup>	Required NCore Monitor	Required Near Road Monitor	Total Required Monitors <sup>5</sup>	Total Existing Monitors <sup>5</sup>
		Houston Aldine (collocated QC pair)	BAM 1022 (Partisol 2025 QC)	9.4	27	78	77	1	1		0	0	1	1
		Houston Deer Park #2 (speciation collocated QC pair <sup>7</sup> )	Partisol 2025, BAM1020 PM2.5, BAM1020 PM10-2.5, SASS/URG Speciation <sup>7</sup> (SASS/URG Speciation QC <sup>7</sup> )	8.0	21	67	60	0	1		4	0	4	4
		Houston East <sup>9</sup>	BAM1022	10.5	23	88	66	0	1		0	0	0	1
		Houston North Loop	T2025	9.9	23	83	66	0	0		0	1	1	1
		Houston North Wayside	BAM1022	NA	NA	NA	NA	0	1		0	0	0	1
		Houston Westhollow	BAM1022	NA	NA	NA	NA	0	1		0	0	0	1
		Seabrook Friendship Park	TEOM <sup>8</sup>	NA	NA	NA	NA	0	1		0	0	0	1
San Antonio-New Braunfels	2,550,960			8.4	21	70	60	2	5	Y	0	1	3	5
		Calaveras Lake <sup>9</sup>	BAM1022	7.5	28	63	80	1	1		0	0	1	1
		Old Highway 90	TEOM 1405 <sup>8</sup>	NA	NA	NA	NA	0	1		0	0	0	1
		San Antonio Interstate 35 <sup>9</sup>	BAM1022	8.4	27	70	77	0	1		0	1	1	1
		San Antonio Northwest (collocated QC pair)	BAM 1022 (Partisol 2025 QC)	8.4	21	70	60	1	1		0	0	1	1
		Von Ormy Highway 16 (previously Palo Alto) <sup>9</sup>	BAM1022	NA	NA	NA	NA	0	1		0	0	0	1
Austin-Round Rock-Georgetown	2,227,083			9.8	23	82	66	2	3	Y	0	1	3	3
		Austin North Interstate 35	BAM1022	9.3	22	78	63	1	1		0	1	2	1

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

Metropolitan Statistical Area	2019 Population Estimates <sup>2</sup>	Site Name	Monitor Type(s)	2017 2019 Annual DV (µg/m <sup>3</sup> )	2017 2019 24-Hour DV (µg/m <sup>3</sup> )	Percent of NAAQS (Annual <sup>3</sup> )	Percent of NAAQS (24-Hour <sup>4</sup> )	Required SLAMS FRM/FEM Monitor <sup>5</sup>	Continuous Monitor <sup>6</sup>	Continuous Requirement Met <sup>6</sup>	Required NCore Monitor	Required Near Road Monitor	Total Required Monitors <sup>5</sup>	Total Existing Monitors <sup>5</sup>
		Austin North Hills Drive (previously Austin Northwest) <sup>9</sup>	BAM1022	NA	NA	NA	NA	0	1		0	0	0	1
		Austin Webberville Road (collocated QC pair)	BAM 1022 (Partisol 2025 QC)	9.8	23	82	66	1	1		0	0	1	1
McAllen-Edinburg-Mission	868,707			10.8	29	90	83	2	1	Y	0	0	2	2
		Edinburg East Freddy Gonzalez Drive	Partisol 2025	9.6	29	80	83	1	0		0	0	1	1
		Mission	BAM1022	10.8	28	90	80	1	1		0	0	1	1
El Paso	844,124			8.7	24	73	69	1	4	Y	4	0	5	8
		Ascarate Park SE	TEOM <sup>8</sup>	NA	NA	NA	NA	0	1		0	0	0	1
		El Paso Chamizal	Partisol 2025, BAM1020 PM2.5, BAM1020 PM10-2.5, URG/SASS Speciation <sup>7</sup>	8.8	24	73	69	0	1		4	0	4	4
		El Paso UTEP	Partisol 2025, TEOM <sup>8</sup>	7.4	21	62	60	1	1		0	0	1	2
		Socorro Hueco	TEOM <sup>8</sup>	NA	NA	NA	NA	0	1		0	0	0	1
Killeen-Temple <sup>9</sup>	460,303			8.3	19	69	54	0	1	NA	0	0	0	1
		Temple Georgia <sup>9</sup>	BAM1022	8.3	19	69	54	0	1		0	0	0	1
Corpus Christi	429,024			9.0	24	75	69	0	2	NA	0	0	0	4
		Corpus Christi Huisache (collocated QC pair)	BAM1022 (BAM1022 QC)	9.0	24	75	69	0	1		0	0	0	1
		Dona Park <sup>9</sup>	Partisol 2025, TEOM <sup>8</sup> , URG/2025 Speciation	7.8	23	65	66	0	1		0	0	0	3

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

Metropolitan Statistical Area	2019 Population Estimates <sup>2</sup>	Site Name	Monitor Type(s)	2017 2019 Annual DV (µg/m <sup>3</sup> )	2017 2019 24-Hour DV (µg/m <sup>3</sup> )	Percent of NAAQS (Annual <sup>3</sup> )	Percent of NAAQS (24-Hour <sup>4</sup> )	Required SLAMS FRM/FEM Monitor <sup>5</sup>	Continuous Monitor <sup>6</sup>	Continuous Requirement Met <sup>6</sup>	Required NCore Monitor	Required Near Road Monitor	Total Required Monitors <sup>5</sup>	Total Existing Monitors <sup>5</sup>
Brownsville-Harlingen	423,163			9.9	25	83	71	0	2	NA	0	0	0	2
		Brownsville	BAM1022	9.9	25	83	71	0	1		0	0	0	1
		Isla Blanca State Park Road <sup>9</sup>	BAM1022	8.8	20	73	57	0	1		0	0	0	1
Beaumont-Port Arthur <sup>9</sup>	392,563			9.6	22	80	63	0	3	NA	0	0	0	3
		Hamshire <sup>9</sup>	BAM1022	8.4	21	70	60	0	1		0	0	0	1
		Port Arthur Memorial School <sup>9</sup>	BAM1022	9.5	21	79	60	0	1		0	0	0	1
		SETRPC 42 Mauriceville <sup>9</sup>	BAM1022	9.6	22	80	63	0	1		0	0	0	1
Lubbock <sup>9</sup>	322,257			6.0	17	50	49	0	1	NA	0	0	0	1
		Lubbock 12 <sup>th</sup> Street <sup>9</sup>	BAM1022	6.0	17	50	49	0	1		0	0	0	1
Longview	286,657			8.5	18	71	51	0	1	NA	0	0	0	3
		Karnack	Partisol 2025, TEOM <sup>8</sup> , URG/SASS Speciation <sup>7</sup>	8.4	18	70	51	0	1		0	0	0	3
Laredo <sup>9</sup>	276,652			10.0	27	83	77	0	1	NA	0	0	0	1
		World Trade Bridge <sup>9</sup>	BAM1022	10.0	27	83	77	0	1		0	0	0	1
Waco	273,920			NA	NA	NA	NA	0	1	NA	0	0	0	1
		Waco Mazanec	TEOM 1405 <sup>8</sup>	NA	NA	NA	NA	0	1		0	0	0	1
Amarillo <sup>9</sup>	265,053			5.5	12	46	34	0	1	NA	0	0	0	1
		Amarillo A&M <sup>9</sup>	BAM1022	5.5	12	46	34	0	1		0	0	0	1

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

Metropolitan Statistical Area	2019 Population Estimates <sup>2</sup>	Site Name	Monitor Type(s)	2017 2019 Annual DV (µg/m <sup>3</sup> )	2017 2019 24-Hour DV (µg/m <sup>3</sup> )	Percent of NAAQS (Annual <sup>3</sup> )	Percent of NAAQS (24-Hour <sup>4</sup> )	Required SLAMS FRM/FEM Monitor <sup>5</sup>	Continuous Monitor <sup>6</sup>	Continuous Requirement Met <sup>6</sup>	Required NCore Monitor	Required Near Road Monitor	Total Required Monitors <sup>5</sup>	Total Existing Monitors <sup>5</sup>
College Station-Bryan <sup>9</sup>	264,728			NA	NA	NA	NA	0	1	NA	0	0	0	1
		Bryan Finfeather Road <sup>9</sup>	BAM1022	NA	NA	NA	NA	0	1		0	0	0	1
Odessa <sup>9</sup>	166,223			8.0	20	67	57	0	1	NA	0	0	0	1
		Odessa Gonzales <sup>9</sup>	BAM1022	8.0	20	67	57	0	1		0	0	0	1
Texarkana	148,761			8.9	19	74	54	0	1	NA	0	0	0	1
		Texarkana New Boston	BAM1022	9.2	19	77	54	0	1		0	0	0	1
Eagle Pass <sup>9,10</sup>	58,722			7.5	23	63	66	0	1	NA	0	0	0	1
		Eagle Pass <sup>9</sup>	BAM1022	7.5	23	63	66	0	1		0	0	0	1
Corsicana <sup>10</sup>	50,113			NA	NA	NA	NA	0	1	NA	0	0	0	1
		Corsicana Airport	TEOM <sup>8</sup>	NA	NA	NA	NA	0	1		0	0	0	1
Kingsville <sup>9,10</sup>	31,084			9.9	27	83	77	0	1	NA	0	0	0	1
		National Seashore <sup>9</sup>	BAM1022	9.9	27	83	77	0	1		0	0	0	1

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

Metropolitan Statistical Area	2019 Population Estimates <sup>2</sup>	Site Name	Monitor Type(s)	2017 2019 Annual DV (µg/m <sup>3</sup> )	2017 2019 24-Hour DV (µg/m <sup>3</sup> )	Percent of NAAQS (Annual <sup>3</sup> )	Percent of NAAQS (24-Hour <sup>4</sup> )	Required SLAMS FRM/FEM Monitor <sup>5</sup>	Continuous Monitor <sup>6</sup>	Continuous Requirement Met <sup>6</sup>	Required NCore Monitor	Required Near Road Monitor	Total Required Monitors <sup>5</sup>	Total Existing Monitors <sup>5</sup>
Big Bend National Park <sup>9,11</sup>	NA			6.1	14	51	40	0	1	NA	0	0	0	1
		Bravo Big Bend <sup>9</sup>	BAM1022	6.1	14	51	40	0	1		0	0	0	1
<b>Totals</b>								<b>12</b>	<b>50</b>	<b>Y</b>	<b>12</b>	<b>4</b>	<b>28</b>	<b>71</b>

<sup>1</sup>This list does not include metropolitan statistical areas with no requirements and no monitors.

<sup>2</sup>United States Census Bureau population estimates as of July 1, 2019.

[Metropolitan and Micropolitan Statistical Areas Totals: 2010-2019 \(census.gov\)](https://www.census.gov/popest/data/totals/2010-2019/states/00.html)

<sup>3</sup>Current PM<sub>2.5</sub> Annual NAAQS is 12.0 micrograms per cubic meter (µg/m<sup>3</sup>).

<sup>4</sup>Current PM<sub>2.5</sub> 24-hour NAAQS is 35 µg/m<sup>3</sup>.

<sup>5</sup>Individual monitors may fulfill multiple requirements and are only counted once. Collocated quality control monitors are not included in totals.

<sup>6</sup>Continuous PM<sub>2.5</sub> monitor total must equal at least one-half the required number of SLAMS-required sites and each MSA with SLAMS-required sites must have a minimum of one.

<sup>7</sup>Speciation monitor for NCore or Chemical Speciation Network (CSN)

<sup>8</sup>PM<sub>2.5</sub> TEOM monitors are non-FEM/FRM (non-NAAQS comparable)

<sup>9</sup>Annual values do not meet completeness criteria; monitors deployed in 2017 - 2021. Incomplete design value (gray font) information is not used for regulatory compliance.

<sup>10</sup>Area is classified as a micropolitan statistical area and is not subject to SLAMS requirements.

<sup>11</sup>Area not classified as a metropolitan or micropolitan statistical area.

# - 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<sub>2.5</sub> FRM mass, PM<sub>2.5</sub> FEM continuous mass, PM<sub>10-2.5</sub> and PM<sub>2.5</sub> CSN speciation

N - no

OFW - Old Fort Worth

PM<sub>2.5</sub> FRM mass method code 145 by Partisol 2025 or 2025i

PM<sub>2.5</sub> FEM mass method codes 170 and 209 by beta attenuation method (BAM)1020 or 1022

PM<sub>2.5</sub> non-regulatory mass method code 702 by tapered element oscillating microbalance (TEOM)

PM<sub>2.5</sub> speciation method codes 810, 811, 812, 826, 831, 838, 839, 840, 841, 842, 846, and 849

PM<sub>10-2.5</sub> method code 185 by BAM1020

QC - quality control

SASS - second generation speciation sampling system (for CSN only)

SETRPC - Southeast Texas Regional Planning Commission

SE - southeast

SLAMS - State or Local Air Monitoring Stations

URG - University Research Glassware speciation sampler

UTEP - University of Texas at El Paso

Y - yes



# Appendix L

## Volatile Organic Compound and Carbonyl Monitor Requirements and Count Summary

Texas Commission on Environmental Quality  
2021 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 Summary**

Core Based Statistical Area <sup>1</sup>	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-The Woodlands-Sugar Land	1	0	3	3
El Paso	0	0	1	1
Beaumont-Port Arthur	0	0	2	2
Laredo	0	1	0	1
<b>Totals</b>	<b>2</b>	<b>4</b>	<b>8</b>	<b>12</b>

<sup>1</sup>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 <sup>1</sup>	Required PAMS Carbonyl Samplers	Total Existing Carbonyl Samplers
Dallas-Fort Worth-Arlington	1	2
Houston-The Woodlands-Sugar Land	1	2
<b>Totals</b>	<b>2</b>	<b>4</b>

<sup>1</sup>This list does not include core based statistical areas with zero requirements and zero monitors.

PAMS – Photochemical Assessment Monitoring Stations

# Appendix M

## 2021 Additional Monitoring Considerations

**Texas Commission on Environmental Quality  
2021 Annual Monitoring Network Plan**



## Appendix M: 2021 Additional Monitoring Considerations

Air Monitoring Site Name or Area of Interest	Monitoring Consideration	Parameter(s)
Houston Bayland Park	Deploy monitor	PM <sub>2.5</sub> FEM continuous
Houston Fifth Ward area	Deploy new site	PM <sub>2.5</sub> FEM continuous and volatile organic compounds by canister
Houston Pleasantville area	Deploy new site	PM <sub>2.5</sub> FEM continuous
Gregory-Portland area in San Patricio County	Deploy new site	PM <sub>2.5</sub> FEM continuous and volatile organic compounds by canister

FEM – federal equivalent method

PM<sub>2.5</sub> – particulate matter of 2.5 micrometers or less in diameter