

Texas Commission on Environmental Quality

# 2013 Annual Monitoring Network Plan

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# 2013 Annual Monitoring Network Plan

## ***Introduction***

Under 40 Code of Federal Regulations (CFR) §58.10, states are required to submit an annual monitoring network plan to the U.S. Environmental Protection Agency (EPA) by July 1 of each year. This monitoring plan is required to provide the framework for establishment and maintenance of an air quality surveillance system. This document provides information on the Texas network of ambient air monitors established to meet regulatory requirements of the National Ambient Air Quality Standards (NAAQS) and other monitors that support this effort. The annual monitoring network plan must be made available for public inspection for at least 30 days prior to submission to the EPA. The plan and any comments received during the 30 day inspection period are forwarded to the EPA for final review and approval. This document presents the current Texas network, as well as, proposed changes to the network from July 1, 2012, through December 31, 2014.

## **TCEQ Networks**

TCEQ operates an extensive network of monitors in support of assessing ambient air quality throughout the state of Texas. A list of monitors that fall under the State and Local Air Monitoring Stations (SLAMS), Photochemical Assessment Monitoring Stations (PAMS), Chemical Speciation Network (CSN), National Air Toxics Trends Stations (NATTS), National Core (NCore), and federally funded Special Purpose Monitors (SPM) Networks is located in Appendix A. A table of metropolitan statistical areas (MSAs), 2012 U.S. Census population estimates, and a summary count of required monitors is located in Appendix B.

## ***Regulatory Network Changes***

### **Nitrogen Dioxide (NO<sub>2</sub>)**

#### **Area-Wide Requirements**

Title 40 CFR Part 58, Appendix D, 4.3.3 requires one site in each core based statistical area (CBSA) with a population greater than or equal to 1,000,000 people. The requirements also stipulate that the site must be located in the area of highest expected NO<sub>2</sub> concentration representative of a neighborhood or larger (urban) spatial scale. Based on 2012 U.S. Census estimates for Texas, area-wide NO<sub>2</sub> monitoring is required in the Dallas-Fort Worth-Arlington, Houston-The Woodlands-Sugarland, San Antonio-New Braunfels, and Austin-Round Rock CBSAs. The NO<sub>2</sub> monitors at the sites listed below were proposed in the 2012 annual monitoring network plan as monitors meeting the area-wide requirements. This proposal is pending EPA approval.

- Houston-The Woodlands-Sugarland: Clinton (AQS 482011035)
- Dallas-Fort Worth-Arlington: Dallas Hinton (AQS 481130069)
- San Antonio-New Braunfels: San Antonio Northwest (AQS 480290032)

- Austin-Round Rock: Austin Northwest (AQS 484530014)

### **Regional Administrator Required Monitoring (RA-40)**

Title 40 CFR Part 58, Appendix D, 4.3.4 states that the EPA Regional Administrators will collaborate with the States to designate a minimum of 40 NO<sub>2</sub> monitoring stations nationwide that are sited in locations to protect susceptible and vulnerable populations. In the 2012 annual monitoring network plan, the TCEQ proposed the four NO<sub>2</sub> monitors listed below for RA-40 classification. This proposal is pending EPA approval.

- El Paso: Ascarate Park SE (AQS 481410055)
- Houston: Clinton (AQS 482011035)
- Arlington: Arlington Municipal Airport (AQS 484393011)
- Nederland: Nederland High School (AQS 482451035)

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

#### *Federal Site Selection Requirements*

Title 40 CFR Part 58, Appendix D, 4.3.2 requires near-road monitors for CBSAs with over 500,000 people. The EPA promulgated a final rule for the phased implementation of this near-road NO<sub>2</sub> monitoring on March 7, 2013. The first phase of the rule requires that one microscale site be deployed in CBSAs with populations greater than or equal to 1,000,000 people by January 1, 2014. An additional near-road site is required by January 1, 2015, in CBSAs with greater than or equal to 2,500,000 people or in any CBSA with a population greater than or equal to 500,000 people and one or more road segments with annual average daily traffic (AADT) counts of 250,000 or greater. One site is also required in CBSAs with a population greater than 500,000 people, but less than 1,000,000 people, by January 1, 2017. The requirements also stipulate that sites must be deployed in areas of maximum expected hourly NO<sub>2</sub> concentrations near a major road with high AADT counts with consideration to fleet mix, roadway design, congestion patterns, terrain, and meteorology. These monitors must be deployed away from obstructions or obstacles, within 50 meters of the major roadway, and with an inlet probe height between two and seven meters.

In Texas, this results in a need for eight new near-road monitors. In the first phase, one near-road monitor will be deployed in each of the Houston, Dallas, Austin, and San Antonio CBSAs by January 1, 2014. In the second phase, an additional near-road monitor will be deployed in each of the Houston and Dallas CBSAs by January 1, 2015. In the final phase, one near-road monitor will be deployed in each of the El Paso and McAllen-Edinburg-Mission CBSAs by January 1, 2017.

#### *TCEQ Site Selection Process*

The TCEQ received AADT and Fleet Equivalent (FE) AADT rankings from the Texas Department of Transportation (TxDOT). The latitude and longitude of the AADT rankings provided by TxDOT and detailed in Appendix C represent the location of TxDOT traffic counting cameras along the targeted roadway. Although TCEQ evaluated

between 50 and 100 of the top-ranked segments in each CBSA, only those road segments that include a viable monitoring location consistent with the requirements set forth in 40 CFR Part 58 are included in Table 1 below. Appendix C contains detailed information regarding the viability determination for each road segment starting with the highest AADT ranked segment. The TCEQ concluded its viability determination for a CBSA once three road segments with viable near-road sites were identified.

The TCEQ relied on the requirements in 40 CFR Part 58, Appendix D, 4.3.2(1) for the evaluation of potential near-road sites. The regulation states that, “The near-road NO<sub>2</sub> monitoring stations shall be selected by ranking all road segments within a CBSA by AADT and then identifying a location or locations adjacent to those highest ranked road segments, considering fleet mix, roadway design, congestion patterns, terrain, and meteorology, where maximum hourly NO<sub>2</sub> concentrations are expected to occur and siting criteria can be met in accordance with appendix E of this part.” Therefore, the TCEQ first sorted the list of road segments provided by TxDOT in descending order by AADT ranking. Through coordination with EPA Region 6, boundaries for ranked road segments were defined as encompassing the area along the roadway of the traffic counting camera up to the point of a major roadway intersection or significant traffic divergence. The TCEQ then conducted a physical site reconnaissance to locate potential sites within that segment. All areas within each defined road segment were considered for the potential to locate a near-road site.

During this reconnaissance, TCEQ evaluated the logistical considerations provided under 40 CFR Part 58 and the *Near-road NO<sub>2</sub> Monitoring Technical Assistance Document* (TAD) guidelines, including roadway design (at-grade or close to at-grade spaces were preferred), level terrain, and meteorology. Additional logistical considerations required by 40 CFR Part 58, Appendix E were also considered, including distance from obstructions, power availability and sufficient space to accommodate the monitoring station and equipment. The TCEQ’s standard site size is 40-foot by 40-foot based on the inclusion of meteorological equipment and providing long-term site flexibility. Meteorological data are valuable in determining potential nearby receptors, nearby sources, and assessing data trends. The rigid, 10-meter meteorological tower requires four guy-wires anchored to the fence for safety. The angle and tension of the guy-wires allow the structure to withstand lateral loads such as wind and the cantilevered sensor boom. In addition, the larger 40-foot by 40-foot site provides long-term flexibility for addressing any future near-road monitoring requirements that may target additional parameters. Prior planning for multi-parameter monitoring ensures that the addition of monitoring equipment will not require site improvements, such as site pad or electrical expansion that may affect existing monitoring equipment. Expansion of an existing site can be costly, therefore planning for future expansion from the beginning of site preparation saves money and time in the long-term use of the site.

After collecting and evaluating information from the physical site reconnaissance, the TCEQ provided a list of potential near-road locations to TxDOT and local metropolitan planning organizations to request input on congestion patterns, traffic diversion plans, future roadway expansions, and long-term construction projects that may later jeopardize continuous site operation or invalidate site representativeness.

After receiving feedback from TxDOT and the local metropolitan planning organizations, the TCEQ made a final evaluation using all available data for each road segment to determine the road segment's overall viability and ranking. The TCEQ focused on complying with the directly-applicable federal requirements listed in 40 CFR Part 58 by primarily prioritizing potential sites based on AADT ranking. The TCEQ considered road segment FE-AADT rankings, but did not rely solely on FE-AADT in the prioritization of potential sites since FE-AADT is not a specific siting requirement under 40 CFR Part 58. The TCEQ then collectively considered logistical constraints, such as space, power availability, terrain, highway grade, and long-term risk to site use due to planned roadway construction projects. Failure to meet the criteria for any single parameter did not necessarily preclude the segment from consideration. Appendix C details the specific reasons for each roadway segment's viability determination. Based on this evaluation, a final TCEQ ranking was provided for each roadway segment with a viable site (noted as TCEQ rank in Table 1). The TCEQ worked closely with EPA Region 6 staff throughout this ranking process to ensure sites were selected in accordance with the 40 CFR Part 58. The TCEQ has received preliminary concurrence from the EPA Region 6 for the selected sites and has begun working on obtaining site agreements with the property owners. The TCEQ is committed to deploying the first phase sites by January 1, 2014.

**Table 1: Potential NO<sub>2</sub> Near-Road Sites**

<b>TCEQ Rank</b>	<b>AADT Rank</b>	<b>FE AADT Rank</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Location</b>
<b>Houston</b>					
1	1	1	29.72271	-95.49241	Southwest Freeway and Westpark Drive at a park and ride
<b>Dallas</b>					
1	46	49	32.79401	-96.69920	On Interstate 30 west of North Jim Miller Road
2	47	50	32.79840	-96.68144	Northeast corner of Interstate 30 and St. Francis Avenue
3	66	57	32.65822	-97.32127	On Interstate 35W north of Altamesa Boulevard
<b>Austin</b>					
1	7	10	30.34241	-97.69807	On Interstate 35 between Rundberg Lane and Barwood Park
2	42	52	30.38100	-97.67423	On Interstate 35 between Covington Drive East and Thrush Avenue
3	46	56	30.38726	-97.67274	On Interstate 35 between Wren Avenue and Sandpiper Avenue
<b>San Antonio</b>					
1	4	97	29.52000	-98.51832	On Interstate 410 between Honeysuckle Lane and Roletto Drive
2	5	98	29.51919	-98.52095	On Interstate 410 west of Honeysuckle Lane
3	6	99	29.51904	-98.52136	Northeast corner of West Avenue and Interstate 410

### **Sulfur Dioxide (SO<sub>2</sub>)**

Under Title 40 CFR Part 58, Appendix D, 4.4.2, states are required to establish an SO<sub>2</sub> monitoring network based on a calculated population weighted emissions index (PWEI). This index is calculated by multiplying the population of a CBSA with the emissions inventory data for counties within that CBSA. The calculated value is then divided by one million in order to obtain the PWEI value. Using the 2012 U.S. Census population estimates and 2008 national emissions inventory data with 2011 point source emissions

inventory data, the TCEQ determined that no additional SO<sub>2</sub> monitors are required beyond the Amarillo SO<sub>2</sub> monitor that was proposed in the 2012 annual monitoring network plan.

The deployment of this site has been delayed due to an unresponsive property owner. The TCEQ is now pursuing a proposed location on Northeast 24<sup>th</sup> Street, east of North Lake Street. Deployment of the site is pending site agreement negotiations and will be completed by early Fall 2013. A map depicting the location of the proposed site is located in Appendix D.

### Lead (Pb)

Title 40 CFR Part 58, Appendix D, 4.5, requires a minimum of one maximum concentration source-oriented ambient air Pb monitoring site near each facility that emits 0.50 tons per year (tpy) or more of Pb, unless the EPA approves a waiver of the requirement. The waiver request must include documentation demonstrating that Pb emissions from the source do not contribute to concentrations in excess of 50% of the NAAQS. In addition to source oriented lead monitoring, lead monitors are also required as part of the NCore network at Dallas Hinton (AQS 481130069), Houston Deer Park #2 (AQS 482011039), and Ascarate Park SE (AQS 481410055).

### Current Regulatory Pb Monitoring Sites

The TCEQ reviewed the most recently available Toxic Release Inventory (TRI) data and emissions inventory (EI) data to evaluate sources that reported Pb emissions of 0.50 tpy or more and did not identify any new sources above that threshold.

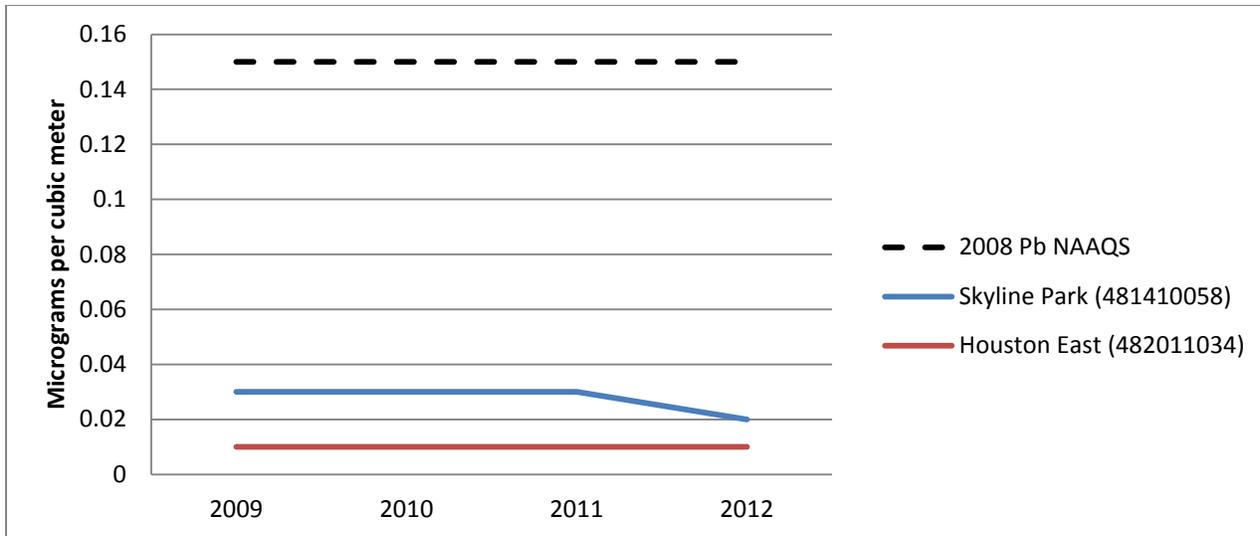
The TCEQ operates 15 Pb monitoring sites throughout the state, and an additional special airport study site at San Antonio 99<sup>th</sup> Street (AQS 480291052). After assessing current Pb monitoring sites, the TCEQ identified two Pb monitors for proposed decommission:

- Skyline Park (AQS 481410058); and
- Houston East (AQS 482011034).

These monitors are not oriented near Pb sources emitting greater than 0.50 tpy and design values have remained well below 50% of the Pb NAAQS. Table 2 below lists the design values for these sites from 2009 through 2012. Figure 1 shows the data trend for these sites. Maps of these sites are located in Appendix E.

**Table 2: Pb Rolling 3-Month Average Design Values**

Site Name	AQS #	Design Value (µg/m <sup>3</sup> )			
		2009	2010	2011	2012
Skyline Park	481410058	0.03	0.03	0.03	0.02
Houston East	482011034	0.01	0.01	0.01	0.01



**Figure 1: Pb Rolling 3-Month Average Design Values**

### Current Pb waivers

In 2010, the TCEQ submitted waiver requests for the source-oriented Pb monitoring required at the Red River Army Depot near Texarkana, the U.S. Army Fort Hood facility near Killeen, and the Oxbow Calcining facility in Port Arthur. In 2011, the TCEQ also submitted waiver requests for the source-oriented Pb monitoring required at Coletto Creek Power LP in Goliad County and San Miguel Electric Cooperative, Incorporated in Atascosa County. These waivers were approved by EPA Region 6. The TCEQ has reviewed these sites as part of this year's network assessment and determined that they continue to meet eligibility requirements. In 2015 and 2016, the TCEQ will reapply for these waivers as required by Title 40 CFR Part 58, Appendix D, 4.5(a)(ii).

In February 2013, TCEQ submitted a waiver request for the source-oriented Pb monitoring required at the Lower Colorado River Authority Fayette Power Plant in Fayette County. This waiver request is pending EPA approval.

### Special Airport Pb Study

The 2010 amendments to the Pb NAAQS require a Pb monitoring study at selected airports with Pb EI data above 0.50 tpy but less than 1.0 tpy. EPA identified these airports as having characteristics that may cause or contribute to ambient Pb concentrations that approach or exceed the NAAQS.

As part of this one year study, the TCEQ deployed a new Pb monitoring station at Stinson Municipal Airport in Bexar County. This new site, San Antonio 99<sup>th</sup> Street (AQS 480291052), is currently operational and began sampling July 23, 2012. TCEQ acknowledges that while the San Antonio 99<sup>th</sup> Street (AQS 480291052) site may become a permanent monitoring site in the TCEQ network if the rolling 3-month average of the monitoring data is above 50% of the NAAQS, current measured values are well below this level. After one complete year of monitoring, TCEQ will assess the data to determine whether all of the 3-month rolling averages are below 50% of the Pb NAAQS.

Should the 3-month rolling averages remain below 50% of the Pb NAAQS the TCEQ will propose decommissioning of this site.

### **Ozone (O<sub>3</sub>)**

Title 40 CFR Part 58, Appendix D, 4.1, requires O<sub>3</sub> monitoring in MSAs with populations above 350,000 people. Monitors are also required in MSAs with lower populations if measured O<sub>3</sub> values within that MSA are within 85% of the NAAQS. After assessing O<sub>3</sub> monitoring requirements using the most recently available population estimates and design values, the TCEQ determined that no additional O<sub>3</sub> monitors are required beyond the Killeen-Temple O<sub>3</sub> monitor that was previously proposed in the 2012 annual monitoring network plan. The site is proposed to be located in the northwest portion of Temple, within West Temple Park. Deployment of the site is pending site agreement negotiations and will be completed by early Fall 2013. A map depicting the location of the proposed site is located in Appendix F.

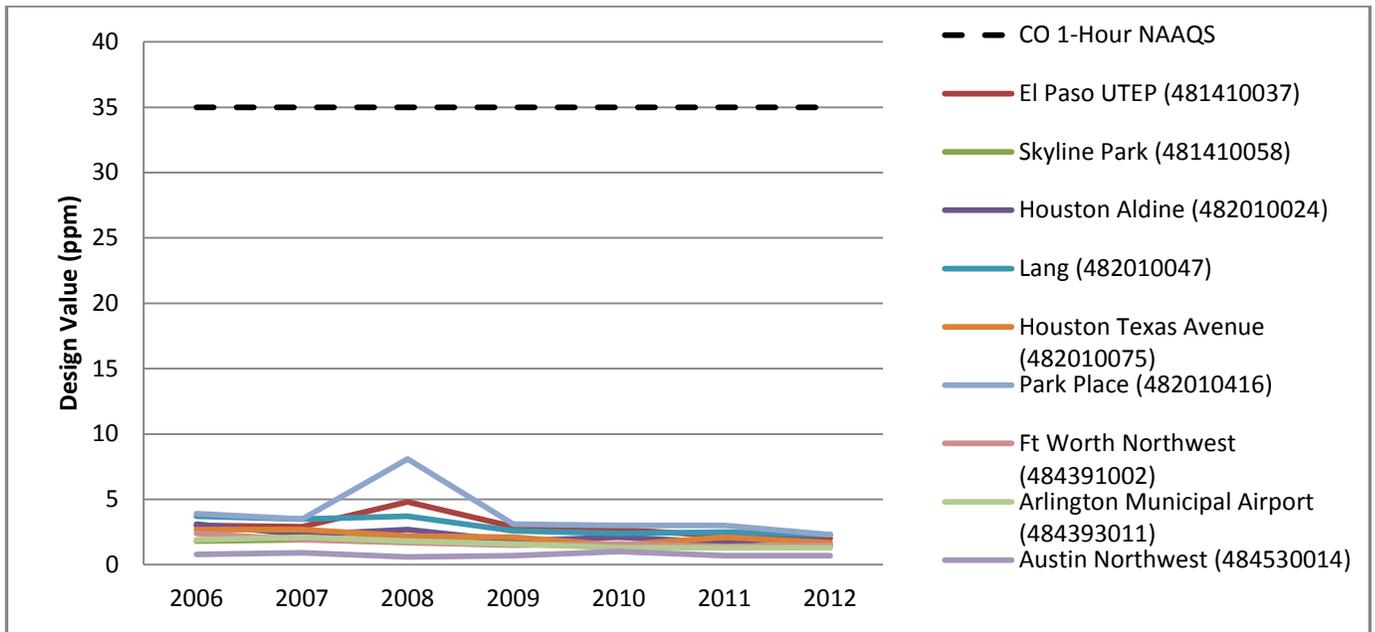
### **Carbon Monoxide (CO)**

Title 40 CFR Part 58, Appendix D, 4.2, requires high sensitivity CO monitors at NCore sites and one PAMS site per area, and the future deployment of CO monitors at near-road sites in 2015 and 2017. The TCEQ exceeds these requirements through the operations of 19 CO monitors and 4 high sensitivity CO monitors throughout the state. The CO monitors located at the sites listed below are beyond minimum requirements and have maintained design values well below the 1-hour and 8-hour CO NAAQS. As a result, TCEQ is proposing to decommission these monitors. Tables 3 and 4 show the 1-hour and 8-hour design values for these sites from 2006 through 2012. Figures 2 and 3 show the data trend at these sites. Maps of these sites are located in Appendix G.

- El Paso UTEP (AQS 481410037)
- Skyline Park (AQS 481410058)
- Houston Aldine (AQS 482010024)
- Lang (AQS 482010047)
- Houston Texas Avenue (AQS 482010075)
- Park Place (AQS 482010416)
- Fort Worth Northwest (AQS 484391002)
- Arlington Municipal Airport (AQS 484393011)
- Austin Northwest (AQS 484530014)

**Table 3: CO 1-Hour Design Values**

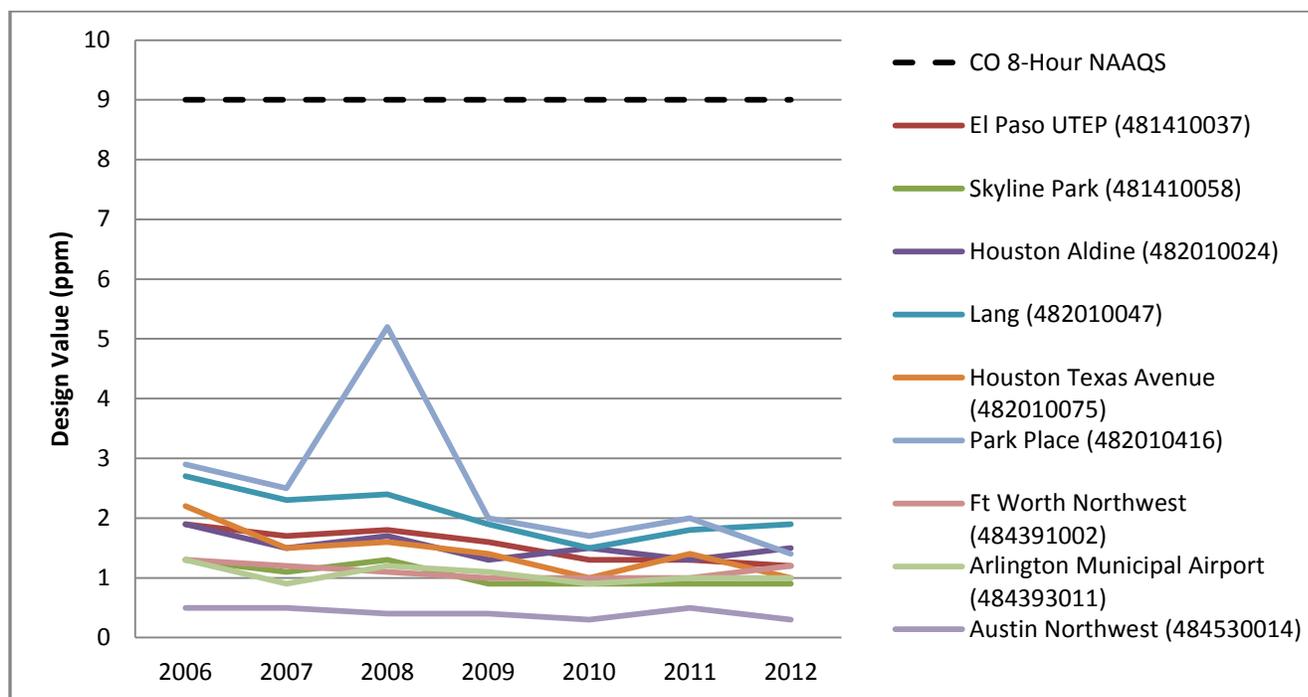
Site Name	AQS #	1-Hour Design Values (ppm)						
		2006	2007	2008	2009	2010	2011	2012
El Paso UTEP	481410037	3.0	2.9	4.8	2.9	2.7	2.2	2.0
Skyline Park	481410058	1.8	1.9	2.1	1.6	1.4	1.5	1.4
Houston Aldine	482010024	3.1	2.3	2.7	1.8	2.1	1.7	2.3
Lang	482010047	3.7	3.5	3.7	2.6	2.4	2.5	2.3
Houston Texas Avenue	482010075	2.7	2.7	2.2	2.1	1.5	2.1	1.7
Park Place	482010416	3.9	3.5	8.1	3.1	3.0	3.0	2.3
Fort Worth Northwest	484391002	2.4	1.9	1.7	1.5	1.6	1.4	1.5
Arlington Municipal Airport	484393011	1.9	2.1	1.8	1.6	1.3	1.3	1.3
Austin Northwest	484530014	0.8	0.9	0.6	0.7	1.0	0.7	0.7



**Figure 2: CO 1-Hour Design Values**

**Table 4: CO 8-Hour Design Values**

Site Name	AQS #	8-Hour Design Values (ppm)						
		2006	2007	2008	2009	2010	2011	2012
El Paso UTEP	481410037	1.9	1.7	1.8	1.6	1.3	1.3	1.2
Skyline Park	481410058	1.3	1.1	1.3	0.9	0.9	0.9	0.9
Houston Aldine	482010024	1.9	1.5	1.7	1.3	1.5	1.3	1.5
Lang	482010047	2.7	2.3	2.4	1.9	1.5	1.8	1.9
Houston Texas Avenue	482010075	2.2	1.5	1.6	1.4	1.0	1.4	1.0
Park Place	482010416	2.9	2.5	5.2	2.0	1.7	2.0	1.4
Fort Worth Northwest	484391002	1.3	1.2	1.1	1.0	1.0	1.0	1.2
Arlington Municipal Airport	484393011	1.3	0.9	1.2	1.1	0.9	1.0	1.0
Austin Northwest	484530014	0.5	0.5	0.4	0.4	0.3	0.5	0.3



**Figure 3: CO 8-Hour Design Values**

## Particulate Matter of 10 Microns or Less (PM<sub>10</sub>)

Title 40 CFR Part 58, Appendix D, 4.6, requires PM<sub>10</sub> monitoring in MSAs with populations equal to or greater than 500,000 people. Monitors may also be required in MSAs with lower populations if measured PM<sub>10</sub> values within that MSA are between 80% to 120% of the NAAQS. After evaluating PM<sub>10</sub> monitoring requirements using the most recently available U.S. Census population data and measured PM<sub>10</sub> concentrations, the TCEQ determined that minimum monitoring requirements for all areas are met or exceeded. Therefore, no additional PM<sub>10</sub> monitors are planned at this time.

TCEQ also re-evaluated PM<sub>10</sub> collocation requirements in Title 40 CFR Part 58, Appendix A, 3.3.1, which requires PM<sub>10</sub> collocation at 15% of the sites within the network. A minimum of one collocated QC monitor is required per method, and these collocated monitors must be located at sites that measure within the highest 25<sup>th</sup> percentile within the network. Currently, TCEQ operates 27 PM<sub>10</sub> samplers, with a total of 7 collocated QC monitors. Based on existing requirements, only 5 PM<sub>10</sub> collocated QC monitors are required to meet federal requirements. In 2012, TCEQ deployed new PM<sub>10</sub> collocated QC monitors at the Laredo Vidaurri (AQS 484790016) and Socorro Hueco (AQS 481410057) sites as measurements at these sites were expected to be among the highest 25<sup>th</sup> percentile within the TCEQ network. However, the collocated QC monitors deployed at these sites do not use the same sampling method as the primary monitors. TCEQ commits to replacing the collocated monitors at these sites by December 2013 with monitors that are the same sampling method as the primary monitors. Once these replacements monitors are deployed, TCEQ will meet all PM<sub>10</sub> collocation requirements shown in Table 5.

Additionally, TCEQ proposes to decommission two collocated QC monitors that are in excess of minimum requirements. The collocated QC monitors at Stage Coach (AQS 484393010) and Texas City Fire Station (AQS 481670004) are located at low design value sites and are not needed to meet collocation requirements. TCEQ will continue collocated QC monitoring at the Tillman (AQS 481410002), Clinton (AQS 482011035), Convention Center (AQS 481130050), Houston Deer Park #2 (AQS 482011039), Laredo Vidaurri (AQS 484790016), and Socorro Hueco (AQS 481410057) sites. The PM<sub>10</sub> network assessment is located in Appendix H.

**Table 5: Summary of PM<sub>10</sub> Collocation Requirements**

Sampling Method Code	Total # Primary Monitors	Required # Collocated Monitors	Current # Collocated Monitors	Additional Collocated Monitors Needed	Excess Collocated Monitors	Excess Collocated Monitors for Decommission
62	11	2	1	1*	0	
63	3	1	3	0	2	Texas City Fire Station
64	5	1	2	0	1	Stage Coach
141	8	1	2	0	1	
<b>Total</b>	<b>27</b>	<b>5</b>	<b>8</b>	<b>1*</b>	<b>4</b>	

\* Will be addressed with the replacement of the collocated QC monitors at Socorro Hueco and Laredo Vidaurri.

## **Particulate Matter of 2.5 Microns or Less (PM<sub>2.5</sub>)**

Title 40 CFR Part 58, Appendix D, 4.7, requires PM<sub>2.5</sub> monitoring in MSA with populations above 500,000 people and in MSAs with lower populations if measured PM<sub>2.5</sub> values for an MSA are within 85% of the NAAQS. On December 14, 2012, the EPA finalized revisions to the PM<sub>2.5</sub> primary NAAQS, lowering the standard from 15 micrograms per cubic meter (µg/m<sup>3</sup>) to 12 µg/m<sup>3</sup> for an annual average. The TCEQ evaluated PM<sub>2.5</sub> annual averages from 2010 through 2012 from existing monitors to ensure continued compliance with the federal monitoring requirements based on the revised standard. In order to meet PM<sub>2.5</sub> monitoring requirements, the TCEQ plans to add a PM<sub>2.5</sub> federal reference method (FRM) gravimetric monitor to the Austin Northwest (AQS 484530014) site by January 1, 2014. In addition, a PM<sub>2.5</sub> FRM gravimetric monitor will be deployed at a new site in the McAllen-Edinburg-Mission CBSA by January 1, 2014. A map depicting the proposed location of the Austin-Round Rock-San Marcos FRM monitor is located in Appendix I.

In March 2013, the TCEQ deployed a PM<sub>2.5</sub> FRM gravimetric monitor with speciation analysis at the Galveston 99<sup>th</sup> Street site (AQS 481671034). The sampler will operate every sixth day from September through March, and daily from April through August to support exceptional event analysis.

Through the 2010 annual monitoring network plan, the EPA approved the decommissioning of the PM<sub>2.5</sub> FRM monitor at the Texarkana site (AQS 480370004). However, due to the 2012 PM<sub>2.5</sub> NAAQS revision, this monitor will remain operational and a PM<sub>2.5</sub> Tapered Element Oscillating Microbalance (TEOM) monitor will be deployed by January 1, 2014, to support sampling frequency requirements. In the 2012 annual monitoring network plan, the TCEQ also proposed to decommission the Corpus Christi Huisache (AQS 483550032) PM<sub>2.5</sub> FRM monitor and to relocate the PM<sub>2.5</sub> FRM collocated QC monitor. Based on revisions to the PM<sub>2.5</sub> NAAQS, the TCEQ will retain both of these monitors at that site.

## **Volatile Organic Compounds (VOC)**

### **Automated Gas Chromatographs (AutoGCs)**

Title 40 CFR Part 58, Appendix D, 5.3, requires speciated VOC monitoring at two sites per O<sub>3</sub> nonattainment area. The TCEQ owns and operates eight AutoGCs as part of the PAMS network. These AutoGCs are sited throughout the state to aid in characterizing specific regional and local ambient air conditions in the state. Additionally, an AutoGC located at the El Paso Delta (AQS 481411011) site is funded by the EPA through a special purpose Border grant. No changes are proposed at this time.

### **Canisters**

Several PAMS canister monitors were approved by the EPA for decommissioning in the 2012 annual monitoring network plan because the monitors are beyond minimum requirements. The following canister samplers will be decommissioned by June 2013.

- Ascarate Park SE (AQS 481410055)
- Galveston 99th Street (AQS 481671034)

- Houston Aldine (AQS 482010024)
- Northwest Harris County (AQS 482010029)
- Kaufman (AQS 482570005)
- Conroe Relocated (AQS 483390078)

The Italy (AQS 481391044) canister sampler will not be decommissioned as originally proposed in the 2012 annual monitoring network plan. After further review, TCEQ determined that data from this monitor provided important and useful information regarding transport of VOCs into the Dallas/Fort Worth area.

### ***Status of Changes Proposed in 2012***

- Dona Park (AQS 483550034) - The TCEQ plans to continue the required FRM sampling on an every sixth day basis and to relocate the PM<sub>2.5</sub> TEOM monitor from Corpus Christi West (AQS 483550025) to this site by December 31, 2013, to meet sampling frequency requirements.
- Austin Audubon Society (AQS 484530020) - The TCEQ plans to discontinue the speciated PM<sub>2.5</sub> analysis by May 2013; however, TCEQ will continue the gravimetric FRM analysis to meet federal requirements.
- Baytown (AQS 482010058) - The TCEQ plans to continue the required FRM sampling on an every sixth day basis and relocate the PM<sub>2.5</sub> TEOM monitor from Channelview (AQS 482010026) to this site by December 31, 2013, to meet sampling frequency requirements.
- Isla Blanca Park (AQS 480612004) - The TCEQ plans to replace the PM<sub>2.5</sub> speciation monitor at this site with a continuous PM<sub>2.5</sub> TEOM monitor by December 31, 2013.
- Galveston 99th Street (AQS 481671034) - The TCEQ deployed a PM<sub>2.5</sub> FRM gravimetric monitor in March 2013 that samples daily from April through August and on an every sixth day basis from September through March. Speciation analysis is performed in addition to the FRM gravimetric analysis to support exceptional events flagging.
- Laredo Vidaurri (AQS 484790016) – The Laredo Border site was relocated to the nearby Laredo Vidaurri site in August 2012. Due to the close proximity of the relocation, the AQS number remained the same. A PM<sub>10</sub> collocated QC monitor was added in December 2012.
- Port Arthur West (AQS 482450011) –The TCEQ relocated the Port Arthur West site in July 2012. Due to the close proximity of the relocation, the site name and AQS number remained the same.

- El Paso Sun Metro (AQS 481410053) –The TCEQ decommissioned this site due to the property being sold. The TCEQ relocated the PM<sub>2.5</sub> TEOM, semi-volatile organic compound (SVOC), and canister samplers to the Socorro Hueco site (AQS 481410057) and decommissioned the CO, SO<sub>2</sub>, and meteorological monitors in December 2012.
- San Antonio Downtown (AQS 480290046) – The TCEQ temporarily decommissioned the NO<sub>x</sub>/NO/NO<sub>2</sub> and CO monitors at this site in October 2010 due to major construction in the building. This site remained inactive and was fully decommissioned due to staffing resource allocation in preparation for the new near-road monitoring site.
- Austin Webberville Rd (AQS 484530021) – The TCEQ continued the required PM<sub>2.5</sub> FRM sampling on an every sixth day basis and deployed a PM<sub>2.5</sub> TEOM to this site in October 2012. TCEQ did not relocate the PM<sub>2.5</sub> TEOM from the Austin Northwest (AQS 484530014) site as previously proposed due to the planned deployment of a PM<sub>2.5</sub> FRM monitor at the Austin Northwest (AQS 484530014) site to meet PM<sub>2.5</sub> monitoring requirements.
- Total reactive nitrogen compound (NO<sub>y</sub>) converters – In order to meet PAMS and NCore requirements, the TCEQ raised all regulatory NO<sub>y</sub> converters to 10 meters. The converters were raised at Houston Deer Park #2 (AQS 482011039) and El Paso Chamizal (AQS 481410044) in 2010; at Dallas Hinton (AQS 481130069) in 2011; and at Denton Airport South (AQS 481210034), Houston Aldine (AQS 482010024) and SETRPC 40 Sabine Pass (AQS 482450101) in 2012.
- Mercedes (AQS 482151048) – The TCEQ relocated the O<sub>3</sub> and meteorological monitors from this site to the new Harlingen Teege (AQS 480611023) site and decommissioned the SVOC, canister, and solar radiation monitors in October 2012.
- Socorro Hueco (AQS 481410057) – The TCEQ relocated the O<sub>3</sub>, PM<sub>10</sub>, and meteorological monitors from the Socorro site to the new Socorro Hueco site in December 2012 and decommissioned the CO monitor. Due to the close proximity of the two sites, the AQS number remained the same. A PM<sub>10</sub> collocated QC monitor was added in December 2012.
- Tillman (AQS 481410002) – The TCEQ relocated this site due to the sale of the property. The monitors were relocated to the Ojo De Agua site (AQS 481411021) in April and May 2013.
- Austin Northwest (AQS484530014) – The TCEQ deployed an SO<sub>2</sub> monitor to this site in November 2012 to meet SO<sub>2</sub> monitoring requirements for the Austin-Round Rock MSA.

- Calaveras Lake (AQS 480290059) – The TCEQ deployed an SO<sub>2</sub> monitor to this site in December 2012 to meet SO<sub>2</sub> monitoring requirements for the San Antonio-New Braunfels MSA.
- Camp Bullis (AQS 480290052) – To meet NO<sub>2</sub> area-wide monitoring requirements for the San Antonio-New Braunfels MSA, the NO/NO<sub>2</sub>/NO<sub>x</sub> monitor from this site was relocated to the San Antonio Northwest (AQS 480290032) site in October 2012.

### ***Additional Changes***

- Dew Point Monitors – The TCEQ proposes to re-designate all dew point monitors in the TCEQ network as SPM. These monitors were previously used to meet humidity reporting requirements for the PAMS network but are now beyond minimum requirements. The TCEQ reports data measured by relative humidity sensors to meet this PAMS requirement.

### ***Instructions for Comments***

Any comments pertaining to this document should be sent to the following contact:

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