



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 6

1201 ELM STREET, SUITE 500  
DALLAS, TEXAS 75270 – 2102

November 4, 2019

Mr. Richard C. Chism  
Director, Monitoring Division (MC 165)  
Texas Commission on Environmental Quality  
Post Office Box 13087  
Austin, TX 78711-3087

Dear Mr. Chism:

Thank you for your correspondence submitting the Texas Commission on Environmental Quality's (TCEQ) 2019 Annual Monitoring Network Plan (2019 Plan) for ambient air. The U.S. Environmental Protection Agency (EPA) has completed its review of the 2019 Plan to ensure it meets the requirements of 40 Code of Federal Regulations (CFR) Part 58 and its appendices.

We appreciate your cooperation and work to submit your 2019 Plan, which we received on July 8, 2019. We applaud the efforts of the TCEQ to manage and maintain the ambient air monitoring network in Texas.

The network review process presents an opportunity for the EPA and the TCEQ to collaborate on air monitoring network design. *See* 40 CFR Part 58, Appendix D, Section 1.1.2. The EPA has conducted its review of the 2019 Plan and proposed network modifications to ensure the air quality surveillance system continues to meet applicable requirements.

I am pleased to inform you that your 2019 Plan is approved with comments in accordance with 40 CFR § 58.10. Your 2019 Plan also includes the Enhanced Monitoring Plan (EMP) for ozone and ozone precursors and meteorology in Appendix M, and we are pleased to inform you that your EMP is approved in accordance with 40 CFR Part 58 Appendix D Section 5(h). We acknowledge that, at the time the 2019 Plan was submitted, the Midlothian Old Fort Worth Road (OFW), and El Paso Chamizal air monitoring sites were no longer meeting the siting criteria in 40 CFR Part 58 Appendix E, and appreciate the additional information provided September 26th and October 3rd. We understand that El Paso Chamizal is now meeting requirements, and that progress is being made with the Midlothian OFW site. Please continue to keep us informed regarding the progress at Midlothian, with a written update every 90 days until the situation is resolved.

Also, in accordance with 40 CFR §58.14, many of the proposed system modifications in the 2019 Plan are approved. However, the following proposed system modification is not approved with the 2019 Plan: discontinuation of PM<sub>2.5</sub> non-NAAQS comparable TEOM monitor at the Ascarate Park site (AQS ID 48-141-0055).

Details of our review are enclosed. We intend to set up a telephone conference to discuss our comments with you. By this letter we also acknowledge receipt of the SO<sub>2</sub> annual report required under §51.1205(b) which was received with the 2019 network plan.

We look forward to our continued partnership with the TCEQ on our common goals to establish and maintain a successful monitoring network for the state of Texas. If you have any questions, please contact me at (214) 665-6435, or your staff may contact Ms. Frances Verhalen, Air Monitoring and Grants Section Chief, at (214) 665-2172.

Sincerely,

11/4/2019

**X** Frances Verhalen, acting for

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Jeff Robinson

Signed by: FRANCES VERHALEN

**Branch Chief**

**Air Permits, Monitoring & Grants Branch**

Enclosure

Texas Commission on Environmental Quality  
2019 Annual Ambient Air Monitoring Network Plan  
Technical Comments

Texas' 2019 Annual Monitoring Network Plan (ANP), dated July 1, 2019, was received on July 8, 2019. This plan will be referred to as the "2019 Plan" throughout the remainder of this document. In accordance with the requirements of 40 Code of Federal Regulations (CFR) Part 58 and its appendices, the U.S. Environmental Protection Agency (EPA) has reviewed the 2019 Plan and our comments are provided below. The comments below reflect the EPA's efforts in collaboration with the Texas Commission on Environmental Quality (TCEQ) to maintain an accurate and efficient ambient air monitoring network.

**General Comments**

We appreciate the TCEQ's submittal of the 2019 Plan in accordance with 40 CFR §58.10.

*Operation of monitoring network in accordance with 40 CFR Part 58 and Appendices A, B, C, D and E*  
We appreciate the TCEQ's operation of the ambient air monitoring network in accordance with federal requirements. We acknowledge that, at the time the 2019 Plan was submitted, the Midlothian Old Fort Worth Road (OFW), and El Paso Chamizal air monitoring sites were no longer meeting the siting criteria in 40 CFR Part 58 Appendix E, and appreciate the additional information provided by email September 26th and October 4th. We understand that El Paso Chamizal is now meeting requirements, with tree trimming right after the ANP submittal, and that significant progress has been made toward relocating the Midlothian OFW site. Please continue to keep us informed regarding Midlothian OFW, with a written update every 90 days until the situation is resolved.

Thank you for your efforts to ensure that the information in the ANP and the Air Quality System (AQS) database is complete and consistent. Please continue to update the AQS database, and to correlate the AQS with the ANP.

**Ozone (O<sub>3</sub>) Monitoring** (40 CFR Part 58, Appendix D Section 4.1)

The TCEQ is currently meeting and exceeding the network design requirements for ambient air quality monitoring for ozone. See 40 CFR Part 58, Appendix D Section 4.1.

The EPA agrees with the TCEQ that the ozone data in the EPA Air Quality System (AQS) database from the Southeast Texas Regional Planning Commission (SETRPC) Sabine Pass (AQS ID 48-245-0101) and Jefferson County Airport (AQS ID 48-245-0102) sites in the Beaumont, Texas area continue to be a valuable resource to data users.

The EPA approves the deployment of an ozone federal Special Purpose Monitor (SPM) to the El Paso Ojo de Agua site (AQS #48-141-1021) by March 31, 2020 for improved spatial coverage of ozone concentrations in the El Paso area.

The EPA approves the changing of network designations from SLAMS to PAMS for three Dallas-Fort Worth (DFW)-area ozone monitors: Dallas North (AQS #48-113-0075), Keller (AQS #48-439-2003)

and Cleburne (AQS #48-251-0003), effective January 1, 2020, to satisfy a part of the TCEQ's EMP for ozone, ozone precursors and meteorology.

**Carbon Monoxide (CO) Monitoring** (40 CFR Part 58, Appendix D Section 4.2)

The TCEQ is currently meeting and exceeding the network design requirements for ambient air quality monitoring for CO. See 40 CFR Part 58, Appendix D Section 4.2.

The EPA acknowledges the previous approval of the decommissioning of the carbon monoxide monitor at the Beaumont Nederland site (AQS ID 48-245-1035) since it is not required by 40 CFR 58, Appendix D Section 4.2. The decommissioning of the Beaumont Nederland CO monitor was effective November 15, 2018.

The EPA acknowledges the previous approval of the designation of the CO monitor at the Houston Clinton site (AQS ID 48-201-1035) from PAMS/SLAMS to SPM since it is not required by 40 CFR 58, Appendix D Section 4.2, and since carbon monoxide monitoring will continue at the nearby Houston Deer Park (AQS ID 48-201-1039) and Houston North Loop near-road (AQS 48-201-1052) sites. The designation of the Houston Clinton CO monitor from PAMS/SLAMS to SPM was effective January 1, 2019.

The EPA approves the replacement of the San Antonio I-35 site (AQS #48-029-1069) regular CO monitor with a high-sensitivity CO monitor by December 31, 2019 for higher resolution CO measurements.

**Nitrogen Dioxide (NO<sub>2</sub>) Monitoring** (40 CFR Part 58, Appendix D Section 4.3)

The TCEQ is currently meeting and exceeding the network design requirements for ambient air quality monitoring for NO<sub>2</sub>. See 40 CFR Part 58, Appendix D Section 4.3.

The EPA acknowledges the previous approval of the startup of true, direct-measured NO<sub>2</sub> sampling at the Dallas Hinton (AQS ID 48-113-0069) and Houston Deer Park (AQS ID 48-201-1039) PAMS sites beginning no later than June 1, 2019, using the direct Teledyne T500U cavity attenuated phase shift NO<sub>2</sub> analyzers (EQNA-0514-212), to meet new PAMS requirements according to 40 CFR Part 58, Appendix D, Section 5. True NO<sub>2</sub> measurements began at the Houston Deer Park site on February 26, 2019, and at the Dallas Hinton site on May 30, 2019.

The EPA approves the change in network designation for NO<sub>x</sub> at the San Antonio Camp Bullis site (AQS #48-029-0052) and at the DFW Eagle Mountain Lake site (AQS #48-439-0075) from state initiative to federal SPM beginning January 1, 2020, to support modeling and regional data analyses. This NO<sub>x</sub> data will be added to the EPA AQS database also beginning January 1, 2020.

The EPA approves the changing of network designations from SLAMS to PAMS for the Houston Conroe NO<sub>x</sub> monitor (AQS #48-339-0078) and for the DFW Dallas North NO<sub>x</sub> monitor (AQS #48-113-0075), effective January 1, 2020, to satisfy a part of the TCEQ's EMP for ozone, ozone precursors and meteorology.

The EPA approves the changing of network designations from state initiative to PAMS for the DFW Keller NO<sub>x</sub> monitor (AQS #48-439-2003), and the addition of the NO<sub>x</sub> data to the EPA AQS database, effective January 1, 2020, to satisfy a part of the TCEQ's EMP for ozone, ozone precursors and meteorology.

The EPA approves the changing of network designations from state initiative to federal SPM for the Corsicana NO<sub>x</sub> and ozone monitors (AQS #48-349-1051), effective January 1, 2020, to support modeling and regional data analyses.

The EPA looks forward to receiving more detailed information regarding the TCEQ recommendation to deploy NO<sub>x</sub> and ozone monitors to a new Houston West End site by August 31, 2020.

#### **Sulfur Dioxide (SO<sub>2</sub>) Monitoring** (40 CFR Part 58, Appendix D Section 4.4)

The TCEQ is currently meeting the network design requirements for ambient air quality monitoring for SO<sub>2</sub>. See 40 CFR Part 58, Appendix D Section 4.4.

As noted in the 2019 ANP, EPA previously concurred with TCEQ's proposed relocation of the Port Arthur 7<sup>th</sup> Street SO<sub>2</sub> monitor. TCEQ considered this relocation to be temporary while an evaluation was being conducted of other locations based on updated emission modeling. Based on this evaluation, on August 9, 2019, TCEQ submitted a proposal to relocate the monitor, and EPA approved the request on August 23, 2019.

#### **SO<sub>2</sub> Annual Report**

Additionally, separate from the ANP review, we acknowledge receipt of the SO<sub>2</sub> annual report required under §51.1205(b), which was received with the 2019 ANP Plan on July 8, 2019. The EPA notes that annual SO<sub>2</sub> emissions for Lamb, Limestone, Robertson, and Wilbarger counties all decreased from 2016 to 2017. While annual SO<sub>2</sub> emissions for Atascosa, Fort Bend, and Goliad counties each increased from 2016 to 2017, average annual emissions for 2015 to 2017 are lower than the original designation modeling data for 2012 to 2014 for each of these areas. The EPA agrees with the State's conclusion that no additional SO<sub>2</sub> modeling is needed to determine compliance because the areas surrounding these sources are in attainment of the 2010 one-hour SO<sub>2</sub> primary NAAQS.

#### **Lead (Pb) Monitoring** (40 CFR Part 58, Appendix D Section 4.5)

The TCEQ is currently meeting and exceeding the network design requirements for ambient air quality monitoring for Pb. See 40 CFR Part 58, Appendix D Section 4.5.

The TCEQ is currently operating five Pb monitoring sites: five source-oriented/population exposure sites. Two Pb monitoring sites have collocation, and the network is exceeding federal monitoring requirements.

The TCEQ has requested to discontinue monitoring at four locations: Frisco 7 (AQS ID 48-085-0007), Frisco 5<sup>th</sup> St. (AQS ID 48-085-0003), Amarillo SH 136 (AQS ID 48-375-0024), and the collocated monitor at Ojo De Agua (AQS ID 48-141-1021). All four sites Pb monitors have 38 months of data

showing them to be well below the National Ambient Air Quality Standards (NAAQS). The EPA previously approved in October of 2017 the TCEQ's recommendation to discontinue monitoring at the Frisco 7 and Frisco 5<sup>th</sup> St. locations. The EPA approves the TCEQ's recommendation to discontinue monitoring at both Ojo De Agua (collocated monitor only) and Amarillo SH 136. Dates for shutdown at each of the four sites were provided in the ANP.

The EPA has been in communication with the TCEQ about several issues with the Terrell Temtex (AQS ID 48-257-0020) site. These issues include, but are not limited to, operator errors, electrical issues at the monitoring site, and improper siting of the collocated monitors. The EPA was informed that the electrical issues have been corrected, as well as the siting of the collocated monitor. The operator errors have been addressed by the TCEQ. The EPA understands that TCEQ plans to recertify several years of data from the site.

### **Pb Collocation**

The TCEQ is currently meeting and exceeding the required number of collocated Pb monitors as detailed in 40 CFR Part 58, Appendix A, Section 3.3.4.3. The EPA appreciates TCEQ updating Appendix B for the Terrell Temtex Pb collocated monitor sampling frequency.

The TCEQ request to change the sampling frequency of the Frisco Eubanks collocated monitor at the Frisco Eubanks site (AQS ID 48-085-0009), from 1-in-6 days to 1-in-12 days, is approved.

### **Particulate Matter (PM) Monitoring**

The TCEQ is currently meeting the network design requirements for ambient air quality monitoring for PM. See 40 CFR Part 58, Appendix D, Sections 4.6 and 4.7.

### **Particulate Matter of 10 Microns or Less (PM<sub>10</sub>) (40 CFR Part 58, Appendix D Section 4.6)**

The TCEQ request to install a Continuous PM<sub>10</sub> monitor at the Houston North Wayside site (AQS ID 48-201-0046) is approved.

The TCEQ requests to change the sampling frequency of the Manual PM<sub>10</sub> FRM QA Collocated monitors at the Clinton (AQS ID 48-201-1035), Convention Center (AQS ID 48-113-0050), Ojo De Agua (AQS ID 48-141-1021), Socorro Hueco (AQS ID 48-141-0057) from 1-in-6 days to 1-in-12 days, are approved.

As stated in the EPA August 1, 2018, letter, the relocation of the PM<sub>10</sub> monitor at the Riverside site (AQS ID 48-141-0038) was approved. We appreciate the update about the status of this activity.

As stated in the EPA March 28, 2019, letter, the discontinuation of the PM<sub>10</sub> monitor at the Selma site (AQS ID 48-029-0053) and the installation of a PM<sub>10</sub> monitor at the San Antonio Bulverde Parkway site (AQS ID 48-029-1087) were approved.

We appreciate the updates about the discontinuation of PM<sub>10</sub> monitors at Dallas North (AQS ID 48-113-0075), Houston Aldine (AQS ID 48-113-0024), Houston Deer Park (AQS ID 48-201-1039), Karnack (AQS ID 48-203-0002), and Stage Coach (AQS ID 48-439-3010).

The EPA future review of the TCEQ request to locate a PM<sub>10</sub> monitor in the Portland-Gregory is contingent on information submittal by the TCEQ about the proposed new location.

### **Particulate Matter of 2.5 Microns or Less (PM<sub>2.5</sub>) (40 CFR Part 58, Appendix D Section 4.7)**

#### ***PM<sub>2.5</sub> Network General***

For future plans, please include identification of any monitors that are suitable and monitors that are not suitable for comparison against the annual PM<sub>2.5</sub> NAAQS as described in §58.30.

#### ***PM<sub>2.5</sub> Network Updates Since Last Year***

We appreciate the update about the PM<sub>2.5</sub> NAAQS comparable 2025 monitor discontinuations and installations of Continuous BAM 1022 monitors at the Austin North Interstate 35 (AQS ID 48-453-1068), Fort Worth California Parkway North (AQS ID 48-439-1053), Fort Worth Northwest (AQS ID 48-439-1002), and San Antonio Interstate 35 (AQS ID 48-029-1069) sites. The updates were provided in the 2019 Plan and in an August 23, 2019, email. We approved these modifications on October 19, 2018.

We appreciate the update about the plans to discontinue the PM<sub>2.5</sub> NAAQS comparable 2025 monitors and install Continuous BAM 1022 monitors at the Convention Center (AQS ID 48-113-0050) and Houston North Loop (AQS ID 48-201-1052) sites. We approved these modification plans on October 19, 2018. We request you update us when the monitor replacements are complete.

We appreciate the update about the PM<sub>2.5</sub> non-NAAQS comparable TEOM monitor discontinuations and installations of Continuous BAM 1022 monitors at the Amarillo A&M (AQS ID 48-375-0320), Lubbock 12<sup>th</sup> Street (AQS ID 48-303-1028), Odessa Gonzales (AQS ID 48-135-1014), Denton Airport South (AQS ID 48-121-0034), and San Antonio Northwest (48-029-0032) sites. The updates were provided in the 2019 Plan and in an August 23, 2019, email. We approved these modifications on October 19, 2018.

We appreciate the update about the plans to discontinue the PM<sub>2.5</sub> non-NAAQS comparable TEOM monitors and install Continuous BAM 1022 monitors at the Houston Aldine (AQS ID 48-201-0024), Corsicana Airport (AQS ID 48-349-1051), and Kaufman (AQS ID 48-257-0005) sites. We approved these modification plans on October 19, 2018. We request you update us when the monitor replacements are complete.

We appreciate the update about the discontinuation of PM<sub>2.5</sub> TEOM and 2025 monitors along with the installation of Continuous BAM 1022 monitors at the Galveston 99<sup>th</sup> Street (AQS ID 48-167-1034), Calaveras Lake (AQS ID 48-029-0059), and Texarkana (48-037-1031) sites. We approved these modifications on October 19, 2018.

We appreciate the update about the plans to discontinue the PM<sub>2.5</sub> TEOM and 2025 monitors and install Continuous BAM 1022 monitors at the Haws Athletic Center (AQS ID 58-439-1006) sites. We

approved these modification plans on October 19, 2018. We request you update us when the monitor replacements are complete.

We appreciate the update about the PM<sub>2.5</sub> non-NAAQS comparable TEOM SPM monitor discontinuation at the Arlington Municipal Airport (AQS ID 48-439-3011) site. We approved these modification plans on October 19, 2018.

We appreciate the update about the installation of the PM<sub>2.5</sub> Continuous BAM 1022 monitor at the Temple Georgia site (AQS ID 48-027-1045). We appreciate the update about the plans to establish the A&M Finfeather site (AQS ID 48-041-1086) and install a PM<sub>2.5</sub> Continuous BAM 1022 monitor. EPA approved the modifications on February 20, 2019. We request you update us when the A&M Finfeather monitor is installed.

We appreciate the update about the plans to move the Isla Blanca Park site (AQS ID 48-061-2004) which EPA approved on March 20, 2019.

We noted that AQS indicates the Fayette County PM<sub>2.5</sub> monitor was discontinued on December 4, 2018.

We appreciate the update about the sampling frequency at the Dallas Hinton PM<sub>2.5</sub> NAAQS comparable monitor (AQS ID 48-113-0069).

### ***PM<sub>2.5</sub> Network Proposed Revisions***

The TCEQ request to discontinue the PM<sub>2.5</sub> non-NAAQS comparable TEOM monitor at the Ascarate Park site (AQS ID 48-141-0055) is not approved. In support of the basic air monitoring objectives, networks must be designed to provide information about peak air pollution levels in an area. Networks must include monitoring sites located to determine the highest concentration expected to occur in the areas covered by the network, see 40 CFR 58 Appendix D section 1.1.1. For the last three years, the Ascarate Park site has reflected the highest PM<sub>2.5</sub> concentrations for the El Paso area.

The TCEQ requests to install a Continuous PM<sub>2.5</sub> BAM 1022 monitor at the Ojo de Aqua site (AQS ID 48-141-1021) and a PM<sub>2.5</sub> Continuous PM<sub>2.5</sub> TEOM monitor at the Houston North Wayside site (AQS ID 48-201-0046) are approved.

The TCEQ requests to install Continuous PM<sub>2.5</sub> BAM 1022 monitors at the Austin Northwest (AQS ID 48-453-0014), Conroe (AQS ID 48-339-0078), Socorro Hueco (AQS ID 48-141-0057), and Seabrook (AQS ID 48-201-1050) sites are approved. The TCEQ requests to discontinue the existing Continuous PM<sub>2.5</sub> TEOM monitors at these sites are approved (AQS IDs 48-453-0014-88502-3, 48-339-0078-88502-3, 48-141-0057-88502-3, 48-201-1050-88502-3).

The TCEQ requests to install Continuous PM<sub>2.5</sub> BAM 1022 monitor at the Edinburg site (AQS ID 48-215-1046) is approved. The TCEQ request to discontinue the existing Manual PM<sub>2.5</sub> 2025 monitor at this site is approved (AQS ID 48-215-1046-88101-1).

The TCEQ requests to install Continuous PM<sub>2.5</sub> BAM 1022 monitors at the El Paso UTEP (AQS ID 48-141-0037) and Karnack (AQS ID 48-203-0002) sites are approved. The TCEQ requests to discontinue

the existing Manual PM<sub>2.5</sub> 2025 monitors and the Continuous PM<sub>2.5</sub> TEOM monitors at each of these sites are approved.

The TCEQ requests to discontinue the PM<sub>2.5</sub> non-NAAQS comparable TEOM monitor at the Houston Deer Park site (AQS ID 48-201-1039) and the PM<sub>2.5</sub> NAAQS comparable 2025 QA Collocated monitor at the El Paso Chamizal site (AQS ID 48-141-0044-88101-4) are approved.

The TCEQ request to discontinue the PM<sub>2.5</sub> 2025 and URG Speciation monitors at the Houston Aldine site (AQS ID 48-201-0024) and install the monitors at the Clinton site (AQS ID 48-201-1035) is approved.

The EPA future review of the TCEQ request to relocate the Palo Alto site (AQS ID 48-029-0676) is contingent on information submitted by the TCEQ about the proposed new location. The network change entails the proposed discontinuation of a non-NAAQS Continuous PM<sub>2.5</sub> monitor and deployment of a Continuous PM<sub>2.5</sub> monitor measuring NAAQS comparable data. As a reminder, the EPA October 19, 2018, response to the prior Annual Network Plan also stated the future review of the site relocation request is contingent on information from TCEQ about the proposed new location rather than being an ‘approved change’ as indicated in Table 7 of the 2019 ANP.

The EPA future reviews of the TCEQ requests to relocate the Continuous, Manual, and speciation PM<sub>2.5</sub> monitors at the Midlothian site (AQS ID 48-139-0016), and the Continuous PM<sub>2.5</sub> monitor at the Austin Northwest site (AQS ID 48-453-0014) are contingent on information submittal by the TCEQ about the proposed new locations.

### ***PM<sub>2.5</sub> Network Proposed QA Collocation***

The PM<sub>2.5</sub> Quality Assurance (QA) Collocation requirements of 40 CFR 58 Appendix A Section 3.2.3 apply to monitors that measure NAAQS comparable data (and do not apply to monitors reporting non-NAAQS comparable data). The TCEQ operates primary PM<sub>2.5</sub> NAAQS-comparable 2025 and BAM 1022 monitors using the FRM 145 and FEM 209 methods, respectively.

With the EPA letter of October 19, 2018, a total of five sites are approved for QA Collocation for the FEM 209 method (Austin Webberville AQS ID 48-453-0021, Corpus Christi Huisache AQS ID 48-355-0032, Houston Aldine AQS ID 48-201-0024, Fort Worth California Parkway AQS ID 48-439-1053, San Antonio Northwest AQS ID 48-029-0032). The installation of the PM<sub>2.5</sub> Continuous PM<sub>2.5</sub> BAM 1022 monitors discussed above will require an additional sixth PM<sub>2.5</sub> QA Collocation site for the FEM 209 Method. Prior to the installation of the thirty seventh primary BAM 1022 monitor in the network, TCEQ and EPA plan to coordinate on the selection of the sixth PM<sub>2.5</sub> QA Collocation site for the FEM 209 Method.

With the approval of the discontinuation of the QA Collocated monitor at El Paso Chamizal (AQS ID 48-141-0044-88101-4), there will be two sites providing QA Collocation for the FRM 145 method (Dallas Hinton AQS ID 48-113-0050, and Clinton AQS ID 48-201-1035).

During the proposed network changes, the TCEQ is responsible for ensuring that QA Collocation requirements continue to be met for all PM methods.

## **Carbonyls Monitoring**

The EPA acknowledges the previous approval of the sampling of three 8-hour carbonyl samples on a 1-in-3-day schedule at the Houston Deer Park site (AQS ID 48-201-1039) and at the Dallas Hinton site (AQS ID 48-113-0069) for June-August in accordance with 40 CFR Part 58, Appendix D, Section 5. This sampling schedule was effective on October 31, 2018.

The EPA also acknowledges the previous approval of 24-hour carbonyl sampling once every 6 days at the Houston Deer Park (AQS ID 48-201-1039) and Dallas Hinton (AQS ID 48-113-0069) sites for the months of April, May, September, and October for useful supplemental carbonyl sampling at those sites. This sampling schedule was also effective on October 31, 2018.

The EPA also acknowledges the previous approval of the decommissioning of carbonyl sampling at the El Paso Ascarate site (AQS ID 48-141-0055) by October 31, 2018, because it is not required, and the reduction of carbonyl sampling to one 24-hour sample every 6 days during the ozone season, April through October, at the Fort Worth Northwest (AQS ID 48-439-1002) and Houston Clinton (AQS ID 48-201-1035) sites beginning October 31, 2018, again because carbonyl sampling is not required by regulation at those sites.

Finally, the EPA approves the changing of network designation from federal SPM to PAMS for the Fort Worth Northwest carbonyl monitor (AQS #48-439-1002), effective January 1, 2020, to satisfy a part of the TCEQ's EMP for ozone, ozone precursors and meteorology.

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

The EPA acknowledges the previous approval of the removal of the PAMS/SLAMS/SPM federal network designations and data submittal to AQS for the VOC canisters at the Johnson County Luisa (AQS ID 48-251-1008), Fort Worth Northwest (AQS ID 48-439-1002) and Dallas Hinton (AQS ID 48-113-0069) sites effective December 31, 2018, since VOC canister sampling is not required by regulation at those sites.

The EPA acknowledges that no additional changes were made to the TCEQ VOC monitoring network.

## **Meteorology Monitoring**

The EPA acknowledges the previous approval of the deployment of new ceilometers to the La Porte Airport (AQS ID 48-201-1043) and Dallas Hinton (AQS ID 48-113-0069) sites to meet new PAMS requirements according to 40 CFR Part 58, Appendix D, Section 5. The new ceilometers were deployed to the La Porte Airport site on February 20, 2019 and to the Dallas Hinton site on January 9, 2019.

The EPA also acknowledges the previous approval of the addition of barometric pressure, precipitation, and UV radiation sensors to the Houston Deer Park (AQS ID 48-201-1039) and Dallas Hinton (AQS ID 48-113-0069) sites to meet new PAMS requirements according to 40 CFR Part 58, Appendix D, Section 5. These meteorological parameters were deployed to the Houston Deer Park site on May 11, 2019 and to the Dallas Hinton site on May 8, 2019.

The EPA approves the changing of network designations from federal SPM to PAMS for the DFW Dallas North (AQS #48-113-0075) and for the DFW Keller (AQS #48-439-2003) wind speed, wind direction, outdoor temperature, and solar radiation monitors, effective January 1, 2020, to satisfy a part of the TCEQ's EMP for ozone, ozone precursors and meteorology.

The EPA approves the deployment of a ceilometer to the San Antonio Northwest site (AQS #49-029-0032) by December 31, 2020 to provide upper air data to better evaluate ozone formation in the San Antonio MSA.

The EPA also approves the changing of network designations from state initiative to federal SPM for the Corsicana site (AQS #48-349-1051) wind speed, wind direction, outdoor temperature, relative humidity and dew point monitors, effective January 1, 2020.

### **Enhanced Monitoring Plan (EMP) for Ozone and Ozone Precursors and Meteorology**

According to 40 CFR Part 58 Appendix D Section 5(h), the TCEQ was required to submit by October 1, 2019, an EMP for ozone and ozone precursors and meteorology for moderate and above 8-hour ozone nonattainment areas. In Texas, both DFW and Houston are currently classified as moderate for the 2008 8-hour ozone standard. The TCEQ, in this Annual Network Plan, has submitted an EMP not only for DFW and Houston, but also for former ozone nonattainment areas in El Paso and Beaumont. The EPA approves the EMP for DFW, Houston, El Paso and Beaumont, which is found in Appendix M of this Annual Network Plan.

## **Non-Regulatory Network Review**

### **Semi-Volatile Organic Compounds**

The EPA approves of the removal of the non-regulatory SPM semi-volatile organic compound (SVOC) monitoring samplers at the Socorro Hueco (AQS ID 48-141-0057), Brownsville (AQS ID 48-061-0006) and Mission (AQS ID 48-215-0043) air monitoring sites by September 1, 2019.