UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

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

OCT 27 2016

Dear Mr. Chism:

Thank you for your correspondence submitting the Texas Commission on Environmental Quality's (TCEQ) 2016 Annual Monitoring Network Plan. The U.S. Environmental Protection Agency (EPA) has completed its review of the TCEQ's 2016 Annual Monitoring Network Plan to ensure it meets the requirements of 40 Code of Federal Regulations (CFR) Part 58 that are under the oversight of the Regional Administrator and delegated to the Associate Director for Air.

We appreciate your cooperation and work to submit your 2016 network plan, and we recognize the efforts of the TCEQ to maintain the ambient air monitoring network in Texas. The network review process presents an opportunity for the EPA and the TCEQ to collaborate on the air monitoring network design. *See* 40 CFR Part 58, Appendix D, Section 1.1.2. The EPA has reviewed the plan in accordance with 40 CFR Part 58, including the status of changes for the TCEQ Ambient Air Monitoring Network.

I am pleased to inform you that, with the exception of the Brownsville site (Air Quality System Site Identification Number 48-061-0006), which is no longer meeting the site criteria defined in 40 CFR Part 58, Appendix E, the TCEQ 2016 ambient air monitoring network plan is approved with comments in accordance with 40 CFR §58.10. Details of our review of your air monitoring network plan are provided in the enclosure. We plan to contact you to set up a brief telephone conference to discuss our comments with you.

We look forward to our continued collaboration with the TCEQ on Texas' ambient air monitoring network. If you have any questions, please contact me at (214) 665-7548, or your staff may contact Ms. Frances Verhalen, Air Monitoring and Grants Section Chief, at (214) 665-2172.

Sincerely yours,

Mark Hansen
Associate Director for
Air, Multimedia Division

Enclosure

Texas Commission on Environmental Quality
2016 Annual Ambient Air Monitoring Network Plan
Technical Comments

The 2016 Texas Annual Monitoring Network Plan, dated June 30, 2016, was received on July 1, 2016. This plan will be referred to as the "2016 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 2016 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 2016 Plan in accordance with 40 CFR §58.10. We also appreciate that the TCEQ identifies the timeframe considered in the plan: "the current Texas network, as well as recommended changes to the network, from July 1, 2015, through December 31, 2017".

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. As indicated in the 2016 Plan, with the exception of the Brownsville site (AQS ID: 48-061-0006) which is no longer meeting the site criteria defined in 40 CFR Part 58, Appendix E, "all monitoring sites are meeting the requirements defined in 40 CFR Part 58 Appendices A, B, C, D, and E" (the 2016 Plan, p. 3). See 40 CFR §58.10(a), as amended. We acknowledge the TCEQ's audit findings that all monitoring sites are meeting the requirements of 40 CFR Part 58 and its appendices with the exception of the Brownsville site which is no longer meeting the siting criteria in 40 CFR Part 58 Appendix E due to a utility structure constructed in the monitoring path of the sampler inlets after the site was deployed.

Electronic versions of proposals, plans and tables
For future plans:

- at the time the annual monitoring network plan proposal becomes available for public review, please send a web link for the proposal by email to Ms. Frances Verhalen at verhalen.frances@epa.gov and to Ms. Ellen Belk at belk.ellen@epa.gov.
- please send an electronic version of the plan in addition to the hardcopy.
- please send an electronic version of the site list.

Electronic versions may be sent to Ms. Verhalen and to Ms. Belk at the email addresses above.

Review of Annual Network Plan (ANP) and Air Quality System (AQS)
We are in the process of reviewing information in the ANP in comparison with AQS, and will let you know our findings.

Network changes involving possible discontinuations of State/Local Air Monitoring Station (SLAMS) monitors: implications for State Implementation Plans

When considering the possible discontinuance of a monitoring site, please consider maintenance areas. We note that if a maintenance plan needs to be modified or relaxed in the future, it may be much easier to accomplish with up-to-date monitoring data.

Brownsville Site

Since the Brownsville site (Air Quality System Site Identification number (AQS ID): 48-061-0006) is no longer meeting siting criteria (the 2016 Plan p. 3), an option would be to discontinue the ozone and carbon monoxide (CO) monitors at the site, to move the gravimetric $PM_{2.5}$ monitor to the Harlingen site (AQS ID: 48-061-0023), and then to completely decommission the Brownsville monitoring site. We would be open to a discontinuation request for the ozone monitor at the Brownsville site because the current 2013-2015 8-hour ozone design value (59 parts per billion (ppb)) is less than 85% of the 8-hour ozone National Ambient Air Quality Standard (NAAQS) of 70 ppb. We would be open to a discontinuation request for the CO monitor at Brownsville because it is not a required monitor and it is currently recording very low data for CO: 1 ppm for the 2015 8-hour CO design value (11% of the NAAQS), and 1.9 ppm for the 2015 1-hour CO design value (5% of the NAAQS). Please keep us informed of TCEQ's investigation and decision regarding options for site relocation to meet siting criteria.

Average Daily Temperature and Average Daily Pressure Reporting

The TCEQ's request to discontinue the submittal of average daily temperature and average daily pressure from manual $PM_{2.5}$ samplers, and average temperature and average pressure recorded at Pb sites, effective May 1, 2016 (the 2016 Plan, p. 23), is consistent with current 40 CFR 58.16 requirements for monitors that are not National Core Multi-pollutant Monitoring Station (NCore) and not Photochemical Assessment Monitoring Station (PAMS) monitors, and is approved. We note that the EPA changed these regulatory requirements on March 28, 2016 (81 FR 17248) and that the changes were effective on April 27, 2016. We note that reporting meteorological data to AQS is still required for NCORE and PAMS sites.

Population Estimates

The EPA appreciates the TCEQ's use of the revised Metropolitan Statistical Area (MSA) definitions and current population estimates from the U.S Census Bureau.

Nitrogen Dioxide (NO_2) Monitoring

The EPA concurs with the removal of the NCore network designation in AQS for the NO_2 monitors at the El Paso Chamizal (AQS ID: 48-141-0044) and Houston Deer Park (AQS ID: 48-201-1039) sites (the 2016 Plan, p. 6). The NO_2 monitors at those two sites will continue to operate and fulfill PAMS and SLAMS NO_2 network requirements.

Near-Road Monitoring Sites

On May 16, 2016, the EPA proposed to revise the minimum monitoring requirements for near-road NO_2 monitoring that are due by January 1, 2017, by removing the existing requirements for near-road NO_2 monitoring stations in Core-based Statistical Areas (CBSAs) having populations between 500,000 and 1,000,000 persons (see 81 FR 30224). Assuming the EPA finalizes these revisions as proposed, and considering current population estimates, it is anticipated that any requirements for near-road NO_2 monitoring in the El Paso and the McAllen-Edinburg-Mission CBSA's would no longer apply.

We acknowledge that the TCEQ will deploy the additional $PM_{2.5}$ and CO monitors at the existing near-road-sites in Austin (AQS ID: 48-453-1068) and San Antonio (AQS ID: 48-029-1069) by January 1, 2017, in accordance with 40 CFR Part 58, Appendix D, Sections 4.7 and 4.2.1.

Carbon Monoxide (CO) Monitoring

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.

Sulfur Dioxide (SO_2) Monitoring

The TCEQ operates 25 SO_2 monitors, 3 of which are at NCore multipollutant monitoring station sites. No additional monitors are necessary to meet the requirements according to the SO_2 Population Weighted Emissions Index. The TCEQ is proposing to add 11 additional monitors to meet the requirements of the SO_2 Data Requirements Rule (DRR) published on August 21, 2015 (80 FR 51052). The 11 monitor siting proposals included in Appendix E of TCEQ's 2016 ANP have been previously approved in separate letters from the EPA to the TCEQ. Refer to these individual approval letters for specific information related to each approval. With these approvals granted, we expect the monitors will be operational by January 1, 2017, as required by the DRR.

The TCEQ is meeting the network design requirements for ambient air quality monitoring for SO_2. See 40 CFR Part 58, Appendix D Section 4.4.

Lead (Pb) Monitoring

The TCEQ is currently operating thirteen Pb monitoring sites, three of which have collocation, and is exceeding federal monitoring requirements. Because Pb monitors are no longer required at NCore sites due to revisions to 40 CFR 58, Appendix D, the EPA approves your request to discontinue the three Pb monitors at the NCore sites: Houston Deer Park #2 (AQS ID: 48-201-1039), Dallas Hinton (AQS ID: 48-113-0069), and El Paso Chamizal (AQS ID: 48-141-0044). AQS shows that three years of complete data have been collected at these sites.

Pb Collocation

The TCEQ is currently exceeding the required number of collocated Pb monitors as detailed in 40 CFR Part 58, Appendix A, Section 3.3.4.3. The EPA approves your request to relocate a collocated Pb monitor from the Frisco 7 site to the Terrell Temtex site in order to maintain collocation at the highest three-month, rolling-average concentration in the network.

Ozone (O_3) Monitoring

The TCEQ is currently meeting and exceeding the network design requirements for ambient air quality monitoring for O_3. See 40 CFR Part 58, Appendix D Section 4.1. The EPA acknowledges that no changes occurred in the Texas O_3 monitoring network in 2016.

Volatile Organic Compounds, Carbonyls and Meteorology

The EPA acknowledges that no changes occurred in the TCEQ Automated Gas Chromatograph (Auto-GC), canister, carbonyl and meteorology networks in 2016.

Particulate Matter (PM) Monitoring

Particulate Matter of 10 Microns or More (PM_{10})

We would like to clarify that the requirement for collocation of PM_{10} monitoring is that 15% of *manual* monitor sites must be collocated. Continuous PM_{10} monitors do not have a collocation requirement. See 40 CFR 58 Appendix A 3.3.4.

Please review the AQS site identification numbers in Table 6. We noted that the AQS number does not match the site name for any of the sites listed except for Clinton. The Maximum Concentration and Annual Average Concentration match the values associated with the Site Names; therefore, our review was based on the site name and the associated concentrations presented.

Based on the requirements for monitoring in the Houston-Woodlands-Sugar Land MSA, for the remaining seven PM_{10} monitors in the area, and the historically low concentration, the EPA approves the request to discontinue the Pasadena HL&P PM_{10} monitor since it meets the requirements for discontinuation under 40 CFR §58.14(c)(1). Please provide an update to us on the date the monitor is discontinued, and update AQS accordingly.

The EPA also approves TCEQ's request to discontinue the collocated PM_{10} monitors at Laredo Vidaurri (AQS ID: 48-479-0016), Dona Park (AQS ID: 48-355-0034), and Texas City Fire Station (AQS ID: 48-167-0004), since they meet the requirements for discontinuation under 40 CFR §58.14(c)(1). As indicated, the primary monitors at these 3 sites will remain active. Please provide an update to us on the date the monitors are discontinued, and update AQS accordingly.

We note that according to AQS, the monitor at Edinburg East Freddy Gonzalez Drive (AQS ID: 48-215-1046) was operational using Method 141 on July 16, 2015. This matches the information provided in your 2016 Plan.

For the Tyler MSA, the table in Appendix H indicates that there are zero required PM_{10} monitors and one existing monitor. Table A and AQS have no record of a PM_{10} monitor currently operating in Tyler. Please correct Appendix H to reflect zero current PM_{10} monitors in operation in the Tyler MSA.

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

For future plans, please include identification of any sites that are suitable and sites that are not suitable for comparison against the annual $PM_{2.5}$ NAAQS as described in §58.30.

According to Appendix A and AQS, Brownsville-Harlingen MSA has two $PM_{2.5}$ continuous monitoring sites, Brownsville (AQS ID: 48-061-0006) and Isla Blanca Park (AQS ID: 48-061-2004). Table 7 only indicates that 1 continuous monitor is operated in Brownsville-Harlingen. Please correct Table 7.

As noted, the TCEQ is required to have four collocated $PM_{2.5}$ monitors to meet collocation requirements. Three collocation monitors are currently operational. The EPA has approved the fourth collocation monitor site at El Paso Chamizal (AQS ID: 48-141-0044). (See letter from Mr. Hansen to Mr. Chism in response to the 2015 ANP dated October 26, 2015.) Please provide an update to us on the date the monitor is installed, and update AQS accordingly.

With regard to the proposed changes to the $PM_{2.5}$ regulatory network, the EPA concurs with the request to deploy a $PM_{2.5}$ Federal Reference Method (FRM) monitor at the existing near-road station in San Antonio Interstate 35 site (AQS ID: 48-029-1069). The EPA also concurs with the relocation of the $PM_{2.5}$ FRM monitoring site from the Austin Audubon Society site (AQS ID: 48-453-0020) to the Austin North Interstate 35 site (AQS ID: 48-453-1068). Both the San Antonio Interstate 35 and Austin North Interstate 35 sites should operate on a 1-in-3 day sampling schedule as indicated. To ensure minimum operating requirements are met for the Austin MSA, if possible, the TCEQ should deploy a monitor to the Austin North Interstate 35 site prior to discontinuing the Austin Audubon Society site. If this is not possible, efforts should be made to minimize the period the Austin MSA is without a second monitoring site. Please keep us informed of the status of these sites, including the dates of operation for both sites, and the date of discontinuation for the Austin Audubon site. Also, be sure to update this information in AQS.

TCEQ requested a reduction in the sampling frequency of the FRM monitor at the Texarkana New Boston site (AQS ID: 48-037-1031). According to 58.12(d)(1)(ii), a manual monitor sited at the same site with a continuous $PM_{2.5}$ monitor may be operated on a 1-in-6 day schedule. As there is a continuous monitor at the Texarkana New Boston site, the EPA approves the reduction in sampling frequency for the FRM monitor at this site from 1-in-3 days to 1-in-6 days.

The EPA approves TCEQ's recommendations to discontinue the $PM_{2.5}$ Special Purpose Monitor (SPM) Tapered Element Oscillating Microbalance (TEOM) monitors at the following locations: Dallas Hinton (AQS ID: 48-113-0069), Kingwood (AQS ID: 48-201-1042), Italy (AQS ID: 48-139-1044), and Odessa Hays Elementary School (AQS ID: 48-135-0003). Discontinuation is approved consistent with 40 C.F.R. § 58.14(a), since data collection needed for NAAQS implementation is uncompromised and the pertinent 40 CFR Part 58, Appendix D requirements continue to be met.

With regard to the *Summary: Status of Previously Recommended Changes*, we note that the Texarkana monitoring site relocation from the Texarkana site (AQS ID: 48-037-0004) to the Texarkana New Boston site (AQS ID: 48-037-1031) was approved by the EPA on March 23, 2016. AQS indicates that the monitor end date for Texarkana was February 25, 2016, and the monitor start date for Texarkana was March 23, 2016. As the relocation was not approved until March 23, please adjust the end date in AQS for the Texarkana site to March 23, 2016. As a reminder, adjustments to the SLAMS network should not be made prior to receiving approval from the EPA.

The EPA appreciates the efforts the TCEQ made to relocate the Texarkana site, as well as deploying monitors for $PM_{2.5}$ in the Brownsville MSA and McAllen-Edinburg-Mission MSA. We also appreciate the updates on the discontinuation of the $PM_{2.5}$ TEOM at the City Public Service Pecan Valley site (AQS ID: 48-029-0055).

Photochemical Assessment Monitoring Stations (PAMS)

We appreciate that the following changes (except as noted in 2. below) were made in Appendix A and AQS for some of the PAMS meteorological parameters under the column titled "AQS Network & Monitor Type":

1. Relative Humidity was changed from SPM to PAMS at the Dallas Hinton site (AQS Site ID: 48-113-0069)

2. UV Radiation was changed from SPM to PAMS at the El Paso UTEP site (AQS Site ID: 48-141-0037) in Appendix A, but still needs to be changed in AQS in the monitor description report (AMP 390)
3. Solar Radiation was changed from SPM to PAMS at the El Paso Chamizal site (AQS Site ID: 48-141-0044)
4. Relative Humidity was changed from SPM to PAMS at the Houston Aldine site (AQS Site ID: 48-201-0024).