



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
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JAN - 2 2013

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

Dear Mr. Chism:

Thank you for submitting the Texas Commission on Environmental Quality's (TCEQ) 2012 Annual Air Monitoring Network Plan. The U.S. Environmental Protection Agency (EPA) has completed its analysis of the TCEQ's 2012 Annual Air Monitoring Network Plan to ensure it meets those requirements of 40 CFR Part 58 and its appendices that confer approval authority on the Regional Administrator, now delegated to the Associate Director for Air. The network assessment process presents an opportunity for the EPA and TCEQ to collaborate on the air monitoring network design. *See* 40 CFR Part 58 App. D, 1.1.2.

We appreciate your cooperation and work to submit your 2012 network plan for our review and consideration for approval. The EPA has reviewed your proposed changes for lead, ozone, nitrogen dioxide (NO₂), carbon monoxide, sulfur dioxide, and particulate matter monitors for the air monitoring network. I am pleased to inform you that the Texas Annual Air Monitoring Network Plan is approved by EPA Region 6 in accordance with 40 CFR §58.10 and §58.14, with the exception of the plan for NO₂ monitoring on which EPA will act in the future. While we are approving your network plan, there are some proposed changes we cannot approve as explained in the enclosure which details our review of the TCEQ air monitoring network. Per 40 CFR §58.10(a)(5) plans for establishing NO₂ monitoring sites are submitted to the EPA Administrator for action.

We look forward to our continued collaborations with the TCEQ. If you have any questions, please contact me at (214) 665-3102, or you may contact Ms. Maria Martinez, Air Quality Analysis Section Chief, at (214) 665-2230.

Sincerely yours,

A handwritten signature in black ink that reads "Thomas H. Diggs".

Thomas H. Diggs
Associate Director for Air

Enclosure

Texas Commission on Environmental Quality (TCEQ)
2012 Annual Air Monitoring Network Plan Comments

The Environmental Protection Agency (EPA) has reviewed your 2012 Annual Ambient Air Network Plan and comments are provided below.

1. Nitrogen Dioxide (NO₂) Network

Pending action by the EPA Administrator, EPA Region 6 preliminarily believes the selection of the Dallas Hinton site [Air Quality System (AQS) Site ID 48-113-0069], the Houston Clinton Drive site (AQS Site ID 48-201-1035), the Austin Northwest site (AQS Site ID 48-453-0014), and the San Antonio Northwest site (AQS Site ID 48-029-0032), meet the requirements for the area-wide NO₂ monitoring for the Dallas-Fort Worth, Houston, Austin, and San Antonio core based statistical areas (CBSAs) as required by 40 CFR Part 58, Appendix D 4.3.3. In order to continue to meet the goals of the area-wide NO₂ monitoring, EPA concurs with the proposed relocation of the NO₂ monitor currently located at the San Antonio Camp Bullis site (AQS Site ID 48-029-0052) to the San Antonio Northwest site (AQS Site ID 48-029-0032) by January 1, 2013.

We note your acknowledgement that the El Paso Ascarate site (AQS Site ID 48-141-0055), Houston Clinton Drive site (AQS Site ID 48-201-1035), Dallas-Arlington Municipal Airport site (AQS Site ID 48-439-3011), and the Beaumont-Port Arthur Nederland High School site (AQS Site ID 48-245-1035) should be considered among the additional NO₂ monitors intended to help protect susceptible and vulnerable populations as required by 40 CFR Part 58, Appendix D 4.3.4.

EPA Region 6 also acknowledges your preliminary work in identifying potential near-road NO₂ sites for the Dallas-Fort Worth and Houston CBSAs that would meet the requirements of 40 CFR Part 58, Appendix D 4.3.2. We will continue to work with TCEQ to ensure the near-road NO₂ sites are operational as expeditiously as possible. At this time we concur with the proposed near-road NO₂ location choices based on the supplemental information provided by TCEQ in Appendix A of this document. We look forward to working with TCEQ to implement near-road PM_{2.5} monitoring as per the PM_{2.5} National Ambient Air Quality Standards (NAAQS) revisions signed by EPA Administrator Jackson on December 14, 2012.

We appreciate TCEQ's planning and efforts to relocate the NO_x monitor from the Austin Audubon Society site (AQS Site ID 48-453-0020) to the Austin Northwest site (AQS Site ID 48-453-0014) as of April 2012.

2. Sulfur Dioxide (SO₂) Network

We appreciate the TCEQ's planning and efforts to have all newly required SO₂ monitors deployed. The EPA agrees that TCEQ is meeting EPA SO₂ monitoring network regulatory requirements in the following CBSAs: Dallas-Fort Worth-Arlington, Longview, Beaumont-Port Arthur, and Houston-Sugar Land-Baytown. Utilizing the most recent U.S. Census population estimates and point source emission inventory data, the TCEQ re-evaluated SO₂ monitoring requirements and determined that only one SO₂ monitor is required in the San Antonio-New

Braunfels CBSA. This supplemental information provided by TCEQ for this re-evaluation can be found in Appendix B of this document. After joint collaboration with TCEQ, it was determined that one SO₂ site is still required in the Austin-Round Rock and Amarillo CBSAs. We look forward to our ongoing joint collaboration to ensure the deployment of the three new SO₂ monitors in the San Antonio-New Braunfels, Austin-Round Rock, and Amarillo CBSAs.

3. Lead (Pb) Network

We appreciate TCEQ's recurring reviews of all Pb waivers to ensure that they continue to meet waiver eligibility requirements. EPA Region 6 approved the Pb monitoring 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 in our 2011 Annual Network Plan response letter.

We appreciate TCEQ's commitment to resubmit these Pb monitoring waivers every five years in compliance with Appendix D 4.5(a)(ii) and 40 CFR §58.10(b)(10). Please note that if any of the approved Pb monitoring waiver circumstances significantly change, as might follow from a facility Pb emissions increase, the Pb monitoring waiver requests must be submitted sooner than 2015.

EPA notes that Stinson Municipal Airport Pb Monitoring site is operational and began sampling as of July 23, 2012. We appreciate TCEQ's planning and efforts to deploy this monitor. Please note that the Stinson Municipal Airport Pb monitoring site may become a permanent monitoring site in the TCEQ network, in order to meet EPA requirements, if the rolling 3-month average of the monitoring data is above 50% of the NAAQS.

As referenced in your current 2012 Annual Network Plan, we expect resolution of the conflicts between your Emissions Inventory and EPA's Toxics Release Inventory with consequential implementation of any required 0.5 tons per year (tpy) source monitoring or submittal of corresponding Pb monitoring waiver documentation before the submittal of the TCEQ 2013 Annual Network Plan.

We appreciate TCEQ's planning and efforts to deploy the El Paso Ascarate Park SE site (AQS Site ID 48-141-0055) National Core multi-pollutant monitoring station (NCore) Pb monitor, the Dallas Hinton site (AQS Site ID 48-113-0069) NCore Pb monitor, and the Houston Deer Park #2 site (AQS Site ID 48-201-1039) NCore Pb monitor prior to December 27, 2011.

We appreciate TCEQ's planning and efforts to relocate the Pb monitor from the El Paso Kern site (AQS Site ID 48-141-0033) to the El Paso UTEP site (AQS Site ID 48-141-0037) as of April 2012.

4. Ozone (O₃) Network

We appreciate TCEQ's planning and efforts to locate the new required O₃ site in the Killeen-Temple-Fort Hood CBSA to meet the minimum O₃ monitoring requirements of 40 CFR Part 58, Appendix D, Table D-2. Throughout discussions with TCEQ, it has been noted that due to the

population of the Killeen-Temple-Fort Hood metropolitan statistical area (MSA) being greater than 350,000 and the design value of the Killeen site (AQS Site ID 48-027-1047) being 70 parts per billion (ppb), we request that the Temple monitor be deployed as early as possible in 2013. We look forward to our continued collaboration in order to deploy this monitor.

5. Carbon Monoxide (CO) Network

EPA concurs with the proposal to maintain the carbon monoxide (CO) monitor at the Laredo Bridge site (AQS Site ID 48-479-0017).

6. Particulate Matter of 10 Microns or Less (PM₁₀) Network

EPA has reviewed the TCEQ PM₁₀ air monitoring network for collocation and we noted TCEQ's use of the following monitoring methods in AQS: Manual Reference Method RFPS-1087-062, Manual Reference Method RFPS-1287-063, Manual Reference Method RFPS-1287-064, Manual Reference Method RFPS-0202-141, and Method 000 (multiple methods in AQS). According to 40 CFR Part 58 Appendix A Section 3.3.1, for each network of manual PM₁₀ methods, select 15% of the monitoring sites within the primary quality assurance organization for collocated sampling. The collocated sites must be the PM₁₀ sites having annual mean particulate matter concentrations among the highest 25% of the annual mean concentrations for all the sites in the network.

EPA notes that TCEQ is currently meeting collocated requirements for Manual Reference Method RFPS-1287-064 and Manual Reference Method RFPS-0202-141 sites of the PM₁₀ network.

In regards to Manual Reference Method RFPS-1087-062, EPA concurs with your proposal to collocate PM₁₀ monitors at the El Paso Socorro Hueco site (AQS Site ID 48-141-0057) and the Laredo Border site (AQS Site ID 48-479-0016) in order to meet the collocation regulations. We note that these approved changes to the TCEQ network will be completed before and reflected in the submittal of the 2013 TCEQ Annual Network Plan, as agreed during previous discussions with TCEQ.

EPA does not approve the TCEQ proposal to decommission the PM₁₀ collocated monitors from the Texas City Fire Station site (AQS Site ID 48-1670-004), the Corpus Christi Dona Park site (AQS Site ID 48-355-0034), and the Fort Worth Stage Coach site (AQS Site ID 48-439-3010). If these sites were to be decommissioned, the portion of the TCEQ PM₁₀ utilizing Manual Reference Method RFPS-1287-063 would no longer meet the PM₁₀ collocation requirements, since only one collocated Manual Reference Method RFPS-1287-063 would remain. At this time, TCEQ is required to operate 4 collocated monitoring sites utilizing Manual Reference Method RFPS-1287-063.

EPA does not approve the TCEQ proposal to decommission the PM₁₀ collocated monitor at the Dallas Convention Center site (AQS Site ID 48-113-0050). If this site was to be decommissioned, the portion of the TCEQ PM₁₀ utilizing Method 000 would no longer meet the PM₁₀ collocation requirements, since this would eliminate all collocated sites utilizing this

method. At this time TCEQ is required to operate one PM₁₀ collocated site designated as method 000 (multiple methods in AQS). We look forward to future discussions with TCEQ regarding this method code in AQS.

EPA concurs with TCEQ's decision to refrain from deploying a continuous PM₁₀ monitor at the Houston Clinton site (AQS Site ID 48-201-1035). However, the TCEQ must retain the filter-based PM₁₀ monitors at the Houston Clinton site (AQS Site ID 48-201-1035).

7. Particulate Matter of 2.5 Microns or Less (PM_{2.5}) Network

EPA notes that TCEQ has continued to operate the PM_{2.5} monitors at the Corpus Christi Huisache site (AQS Site ID 48-355-0032). Due to the PM_{2.5} NAAQS revisions on December 14, 2012, EPA no longer approves TCEQ's request to decommission the primary PM_{2.5} federal reference method (FRM) monitor at the Corpus Christi Huisache site (AQS Site ID 48-355-0032). The annual design value at the Corpus Christi Huisache site (AQS Site ID 48-355-0032) is 10.3 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), which is 86% of the new annual PM_{2.5} NAAQS (12 $\mu\text{g}/\text{m}^3$) and the 24-hour design value is 24 $\mu\text{g}/\text{m}^3$, which is 69% of the PM_{2.5} 24-hour NAAQS (35 $\mu\text{g}/\text{m}^3$). Since the annual design value for the Corpus Christi Huisache site (AQS Site ID 48-355-0032) is within 80% of the new PM_{2.5} NAAQS (12 $\mu\text{g}/\text{m}^3$) we cannot approve this proposed change to the TCEQ network. We look forward to future discussions with TCEQ concerning the relocation of the PM_{2.5} collocated FRM monitor currently located at the Corpus Christi Huisache site (AQS Site ID 48-355-0032).

EPA appreciates TCEQ's clarification regarding the continued operation of the PM_{2.5} FRM monitor at the Fort Worth Northwest site (AQS Site ID 48-439-1002).

In order to reflect the timely implementation of network efficiencies, please complete the following approved changes to the TCEQ network before, or propose a timeline in, the submittal of the 2013 TCEQ Annual Network Plan:

- We concur with relocating the PM_{2.5} tapered element oscillating microbalance (TEOM) monitor from the El Paso Sun Metro site (AQS Site ID 48-141-0053) to the El Paso Socorro Hueco site (AQS Site ID 48-141-0057),
- We concur with the deployment of a FRM every sixth day sampling PM_{2.5} monitor at the Galveston 99th Street site (AQS Site ID 48-167-1034) in order to support exceptional event analyses,
- We concur with the continued operation of the required PM_{2.5} FRM sampling on an every sixth day basis at the Corpus Christi Dona Park site (AQS Site ID 48-355-0034),
- We concur with relocating the PM_{2.5} TEOM from the Corpus Christi West site (AQS Site ID 48-355-0025) to the Corpus Christi Dona Park site (AQS Site ID 48-355-0034),
- We concur with the decommissioning of the speciated PM_{2.5} analysis at the Austin Audubon Society site (AQS Site ID 48-453-0020), but the retention of the PM_{2.5} gravimetric FRM analysis to meet Federal requirements,
- We concur with the continued operation of the required PM_{2.5} FRM sampling on an every sixth day basis at the Austin Webberville Road site (AQS Site ID 48-453-0021),
- We concur with relocating the PM_{2.5} TEOM from the Austin Northwest site (AQS Site ID 48-453-0014) to the Austin Webberville Road site (AQS Site ID 48-453-0021),

- We concur with the continued operation of the required PM_{2.5} FRM sampling on an every sixth day basis at the Baytown site (AQS Site ID 48-201-0058),
- We also concur with the relocation of the PM_{2.5} TEOM from the Channelview site (AQS Site ID 48-201-0026) to the Baytown site (AQS Site ID 48-201-0058),
- And we concur with TCEQ's proposal to replace the PM_{2.5} speciation monitor with a continuous PM_{2.5} monitor at the Isla Blanca site (AQS Site ID 48-061-2004).

8. Reactive Nitrogen Compounds (NO_x) Network

EPA appreciates TCEQ's efforts to raise all regulatory total reactive nitrogen compound (NO_x) converters to the required 10 meter height at applicable monitoring sites in order to meet PAMS and NCore requirements. We understand that the height of the converters were raised at the Houston Deer Park #2 site (AQS Site ID 48-201-1039) and the El Paso Chamizal site (AQS Site ID 48-141-0044) in 2010, at the Dallas Hinton site (AQS Site ID 48-113-0069) in 2011, and at the Denton Airport South site (AQS Site ID 48-121-0034) in 2012. In order to reflect the timely implementation of network efficiencies, we request the height of the converters at the Houston Aldine site (AQS Site ID 48-201-0024) and the SETRPC 40 Sabine Pass site (AQS Site ID 48-245-0101) be completed before, or propose a timeline in, the submittal of the 2013 TCEQ Annual Network Plan.

9. Volatile Organic Compound (VOC) Monitoring

TCEQ requested special project funding for an additional Automated Gas Chromatograph (AutoGC) on the east side of El Paso in order to better characterize the El Paso-Juarez airshed (Paso del Norte airshed). This special project was funded in order to provide monitoring from at least September 1, 2012 through August 31, 2013. Therefore, EPA does not approve the proposal to discontinue the Automated Gas Chromatograph (AutoGC) monitoring at the El Paso Delta site (AQS Site ID 48-141-1011).

We approve the request for the discontinuation of seven Photochemical Assessment Monitoring Stations (PAMS) VOC canister monitors since these monitors go beyond the minimum PAMS requirements for the DFW, Houston, and El Paso PAMS areas. The seven proposed VOC canister monitors for decommissioning are at the following sites: Italy, Dallas (AQS Site ID 48-139-1044), Ascarate Park SE, El Paso (AQS Site ID 48-141-0055), Galveston 99th Street (AQS Site ID 48-167-1034), Houston Aldine (AQS Site ID 48-201-0024), Northwest Harris County (AQS Site ID 48-201-0029), Kaufman, Dallas (AQS Site ID 48-257-0005), and the Houston Conroe Relocated site (AQS Site ID 48-339-0078).

10. Multi-pollutant Monitoring Sites

Baytown Eastpoint Site

We appreciate TCEQ's planning and efforts in the relocation of the Houston Regional Office site (AQS Site ID 48-201-0070) O₃, SO₂, and meteorological monitors to the new Baytown Eastpoint site (AQS Site ID 48-201-1017) in east Houston as of June 2012.

Harlingen Teege Site

In EPA's response letter to TCEQ's 2011 Annual Network Plan, we concurred with the relocation of the Mercedes, TX site (AQS Site ID 48-215-1048) O₃ and meteorological monitors to the Harlingen area in order to meet minimum O₃ monitoring requirements of 40 CFR Part 58, Appendix D, Table D-2. EPA also concurred with the decommissioning of the semi-volatile organic compounds (SVOC), canister, and solar radiation monitors at the Mercedes, TX site (AQS Site ID 48-215-1048). We note that the Harlingen Teege site (AQS Site ID 48-061-1023) O₃ monitor was operational and began sampling as of October 9, 2012. We appreciate TCEQ's planning and efforts to relocate these monitors.

El Paso Socorro Hueco Site (new Socorro Site)

EPA concurs with TCEQ's request to relocate the El Paso Socorro site (AQS Site ID 48-141-0057) monitors to the El Paso Socorro Hueco site (the site AQS Site ID will remain 48-141-0057). The current monitors identified in the TCEQ 2012 Annual Network Plan Appendix A at the El Paso Socorro site (AQS Site ID 48-141-0057) include an O₃ monitor, a SVOC special purpose monitor (SPM), and one PM₁₀ filter-based monitor. As stated previously in this document, we also concur with TCEQ's request to operate a collocated PM₁₀ monitor at the new site. TCEQ has committed to ensure that the monitors will be decommissioned and relocated no later than January 1, 2013.

EPA approves the relocation of the PM_{2.5} TEOM, SVOC SPM, and canister samplers at the El Paso Sun Metro site (AQS Site ID 48-141-0053) to the new El Paso Socorro Hueco site (AQS Site ID 48-141-0057). We look forward to future discussions to verify TCEQ's plans for the SVOC monitors at the El Paso Socorro site (AQS Site ID 48-141-0057) and the El Paso Sun Metro site (AQS Site ID 48-141-0053).

We also concur with the decommissioning of the CO monitor, the SO₂ monitor, and meteorological monitors currently located at the El Paso Sun Metro site (AQS Site ID 48-141-0053). The 3-year design values for the CO monitor at the El Paso Sun Metro site (AQS Site ID 48-141-0053) was 2.2 parts per million (ppm) for the 8-hour averages, which is 23% of the CO 8-hour primary NAAQS (9 ppm), and 4.0 ppm for the 1-hour averages, which is 11% of the CO 1-hour primary NAAQS (35 ppm). The 3-year design value for the SO₂ monitor at the El Paso Sun Metro site (AQS Site ID 48-141-0053) was 11 ppb for the 1-hour averages, which is 15% of the SO₂ 1-hr primary NAAQS (75 ppb). TCEQ has committed to ensure that the monitors will be decommissioned and relocated no later than January 1, 2013.

San Antonio Downtown Site

EPA concurs with TCEQ's request to permanently decommission the CO and oxides of nitrogen (NO, NO₂, NO_x) monitors at the San Antonio Downtown site (AQS Site ID 48-029-0046). The 3-year design values for the CO monitor at the San Antonio Downtown site (AQS Site ID 48-029-0046) was 2.6 ppm for the 8-hour averages, which is 28% of the CO 8-hour primary NAAQS (9 ppm), and 4.7 ppm for the 1-hour averages, which is 13% of the CO 1-hour primary NAAQS (35 ppm). The 3-year design value for the NO₂ monitor at the San Antonio Downtown site (AQS Site ID 48-029-0046) was 54 ppb for the 1-hour averages, which is 54% of the NO₂ 1-hr primary NAAQS (100 ppb). In order to reflect the timely implementation of network

efficiencies, please complete the approved changes to the TCEQ network before, or propose a timeline in, the submittal of the 2013 TCEQ Annual Network Plan.

Ojo De Agua Site

EPA concurs with the relocation of the El Paso Tillman site (AQS Site ID 48-141-0002) to the approved Ojo De Agua site location identified by TCEQ during previous communications. We require TCEQ to complete the relocation of the collocated Pb monitors, collocated PM₁₀ monitors, the CO monitor, and meteorological monitors no later than January 1, 2013, since this request was originally approved in EPA's 2011 TCEQ Annual Network Plan response letter.

11. Changes Proposed in the 2011 ANR

We appreciate TCEQ's planning and efforts to either deploy or relocate the following sites:

- the La Porte Radar Profiler site (AQS Site ID 48-201-1043) in the Houston area as of May 2012,
- the Laredo Vidaurri site (AQS Site ID 48-479-0016) as of August 2012,
- the Port Arthur West site (AQS Site ID 48-245-0011) as of July 2012,
- the relocation of the Lynchburg Ferry site (AQS Site ID 48-201-1015) in Houston across the ship channel as of December 2011,

12. TCEQ Network Table (Appendix A of TCEQ 2012 Annual Network Plan)

EPA notes that since the 2011 TCEQ Annual Network Plan, the spatial scale for the Pb monitors at the Frisco Eubanks site (AQS Site ID 48-085-0009) and the Terrell Temtex site (AQS Site ID 48-257-0020) have changed from middle scale to neighborhood scale. We look forward to future discussions with TCEQ in order to determine the most appropriate spatial scale for these sites. Please note that EPA would like to discuss the spatial scale of any monitors before they are altered to ensure the most appropriate scale for each particular monitor.

EPA concurs with the continuation of the intensive carbonyl sampling at the Dallas Hinton site (AQS Site ID 48-113-0069). We note that the correct sampling frequency is eight, three-hour samples per day every three days from June 1 through August 31, as stated in the TCEQ 2012 Annual Network Plan document. However, the TCEQ network table identifies the sampling period as July through August. We request a revision to the sampling period in the 2013 TCEQ Annual Network Plan submittal.

EPA notes that the TCEQ 2012 Annual Network Plan Appendix A identified the Carbon PM_{2.5} sampler at the Houston Deer Park #2 site (AQS Site ID 48-201-1039) as part of the National Air Toxics Trends Stations (NATTS) Quality Assurance Project Plan (QAPP). Black Carbon is not a core compound required for NATTS and was therefore removed from the NATTS QAPP. Please clarify the sampler's purpose and operation. The Carbon PM_{2.5} sampler may need to be removed from Appendix A in the TCEQ 2013 Annual Network Plan submittal.

EPA notes that the TCEQ 2012 Annual Network Plan Appendix A identified the PM₁₀ Speciation sampler at the Houston Clinton Drive site (AQS Site ID 48-201-1035) as using the Hi Vol/Gravimetric/ICP-MS for its sampling method/analysis. It was noted that this sampling was

not covered in the SLAMS QAPP. The SLAMS QAPP provided information specifically for PM₁₀ nickel (Ni) and chromium (Cr) only at the Dallas Morrell site (AQS Site ID 48-113-0018) using the Hi Vol/ICP-AES. Please clarify the sampler's purpose and operation. The PM₁₀ Speciation sampler may need to be removed from Appendix A in the TCEQ 2013 Annual Network Plan submittal.

Please note that any PAMS and/or NCore monitoring sites must also be identified as SLAMS. We expect this condition to be reflected in the TCEQ's 2013 Annual Network Plan table.