



REGION 6

DALLAS, TX 75270

January 24, 2024

Mrs. Brandy Brooks
Deputy Director, Monitoring Division
Texas Commission on Environmental Quality
Post Office Box 13087
Austin, Texas 78711-3087

Dear Mrs. Brooks:

Thank you for your correspondence from the Texas Commission on Environmental Quality (TCEQ) submitting the Texas 2023 Annual Monitoring Network Plan (2023 Plan) for ambient air. Also, thank you for the additional submittals you provided this Fall regarding relocating monitoring from Midlothian Old Fort Worth (OFW) to Midlothian North Ward Road (October 30, 2023), and for establishing a second near-road monitoring site in San Antonio (November 13, 2023). The U.S. Environmental Protection Agency (EPA) has completed its review of the 2023 Plan to ensure it meets the minimum requirements of 40 Code of Federal Regulations (CFR) Part 58 and its appendices.

We appreciate your efforts in submitting a timely 2023 Plan, which we received on June 30, 2023. Also, we appreciate the efforts of the TCEQ to manage and maintain the ambient air monitoring network in Texas in compliance with the minimum air monitoring requirements under the Clean Air Act.

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 conducted its review of the 2023 Plan, including proposed network modifications, to ensure the air quality surveillance system continues to meet minimum applicable air monitoring requirements. The EPA is approving the 2023 Plan as meeting the minimum requirements per 40 CFR Part 58 and Appendices, including Section 58.10 and Section 58.14, except for monitoring for nitric oxide (NO), nitrogen dioxide (NO₂), nitrogen oxides (NO_x), ozone (O₃), particulate matter 2.5 (PM_{2.5}), and meteorology at the University of Texas El Paso (UTEP) site, which has not been operational since November 2021. The EPA and the TCEQ have been communicating about restoring monitoring at or near this site and the EPA anticipate receiving the additional specific information from the TCEQ in the very near future. Details of our review of the 2023 Plan, including environmental justice considerations, are enclosed. For the sulfur dioxide (SO₂) annual report received as an appendix to the 2023 Plan, the EPA provided a

response in a separate letter to you, dated August 30, 2023. We are available to discuss our review with you if you have any questions.

Also, similar to last year, we again wanted to provide some recommendations for the TCEQ to consider. One recommendation is for installing one or more O₃ monitors in the Permian Basin to ensure that the impacts of the burgeoning oil production are accurately monitored and recorded, pursuant to 40 CFR Part 58, Appendix D, Section 4.1. Monitors in the Carlsbad area in New Mexico indicate that the Permian Basin emissions are leading to measured concentrations above the national O₃ standard of 70 parts per billion. We believe that information regarding the levels of O₃ in Texas should also be collected for the health benefits of both citizens in Texas and New Mexico. Minimum O₃ monitoring requirements outlined in Table D-2 of Appendix D to Part 58 do not account for the full breadth of additional factors that would be considered in designing a complete O₃ monitoring program for an area, such as: geographic size, population density, complexity of terrain and meteorology, adjacent O₃ monitoring programs, air pollution transport from neighboring areas, and measured air quality in comparison to all forms of the O₃ National Ambient Air Quality Standards (NAAQS) (i.e., 8-hour and 1-hour forms). Air monitoring networks must be designed to account for all these area characteristics. The EPA Regional Administrator and the responsible State or local air monitoring agency must work together to design and/or maintain the most appropriate O₃ network to service the variety of data needs in an area. Therefore, we strongly encourage the TCEQ to evaluate siting options and potential options for near-term installation of additional monitoring in the Permian Basin for O₃ and its precursors, NO_x and volatile organic compounds (VOCs), in order to achieve a complete and comprehensive O₃ monitoring program for the area. The EPA highly recommends installing of one or more monitors in the Permian Basin to complement the monitoring already occurring in the New Mexico portion of the Permian Basin region.

Another ongoing recommendation is for additional PM_{2.5} monitoring in the west Dallas community. This recommendation is based on review of PM_{2.5} data and trends in the area, including Purple Air sensor measurements as well as monitoring data at the Convention Center site (AQS 48-113-0050 were also considered. These PM_{2.5} data indicate possible spikes and upward trends in PM_{2.5}. Although review of PM_{2.5} data in the west Dallas community by the TCEQ was encouraged last year, we did not receive a response or information that TCEQ had reviewed air monitor or sensor data in the area. We continue to recommend that the TCEQ engage in discussions with the community about the current data, and any possible opportunities to site a PM_{2.5} monitor in the west Dallas area to better understand the PM_{2.5} levels in the community. A new monitor located in the west Dallas community could be either a microscale located monitor to determine if there is a local source issue and/or a neighborhood scale located monitor to determine if there is a broader PM_{2.5} issue in the area.

A further recommendation, in response to ongoing community concerns, is for installation of an additional TCEQ operated SO₂ monitor in Jefferson County (Port Arthur, Texas) giving primary consideration of the siting towards further characterizing air quality in the neighborhood nearest the large SO₂ sources in the area.

We acknowledge the environmental justice considerations provided in the 2023 Plan based on previously received Plan comments: the addition of monitors proposed at the existing Houston Bayland Park site, deployed on April 22, 2022, and at new sites in the Houston Fifth Ward and Pleasantville

areas, anticipated by the end of December 2023, as well as a new site in the Gregory-Portland area in San Patricio County / Corpus Christi, anticipated by the end of December 2024. We encourage the TCEQ to continue to evaluate areas with respect to environmental justice related to ambient air monitoring.

We look forward to our continued partnership with the TCEQ on our common goals to establish and maintain an approvable and comprehensive monitoring network. If you have any questions, please contact me at (214) 665-7593, or your staff may contact Mr. Jeffrey Robinson, Branch Manager, Air Permits, Monitoring and Grants Branch, at (214) 665-6435.

Sincerely,

David F. Garcia
Director
Air and Radiation Division

Enclosure: Technical Comments

Technical Comments

2023 Annual Monitoring Network Plan

The Texas 2023 Annual Monitoring Network Plan (AMNP) was received on June 30, 2023 (2023 Plan). 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 2023 Plan and our comments are provided below. These comments reflect the EPA's efforts in collaboration with the Texas Commission on Environmental Quality (TCEQ) to maintain minimum monitoring requirements required under Part 58.

General Comments

We appreciate the TCEQ's submittal of the 2023 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, E. Overall, we appreciate the TCEQ's operation of the ambient air monitoring network in accordance with minimum federal requirements.

As indicated in the 2023 Plan, the following is an exception to the TCEQ's operation of the monitoring network in accordance with 40 CFR Part 58 and Appendices: at the time the 2023 Plan was submitted, the Austin Audubon Society Air Monitoring Site (AQS ID 48-453-0020) was not meeting siting criteria due to recent tree growth. The site is in an Audubon reserve and the property owner agreed to trim the trees once the endangered Golden Cheeked Warbler nesting season was over (estimated September 2023). Please let us know when site conditions return to compliance.

Air Quality System (AQS). Thank you for your efforts to ensure that the information in the AMNP and the AQS is complete and consistent. Please continue to update the AQS, and to correlate the details of each monitoring location in the AMNP with the AQS.

Areas with Environmental Justice Concerns. We acknowledge the environmental justice considerations provided in the 2023 Plan based on previously received AMNP comments: the addition of monitors proposed at the existing Houston Bayland Park site, deployed on April 22, 2022, and at new sites in the Houston Fifth Ward and Pleasantville areas, anticipated by the end of December 2023, as well as a new site in the Gregory-Portland area in San Patricio County / Corpus Christi, anticipated by the end of December 2024; these monitors are not specifically required by federal monitoring requirements in 40 CFR Part 58, but rather are at the discretion of Texas. We encourage the TCEQ to continue to evaluate areas with respect to environmental justice related to ambient air monitoring.

Ozone (O₃) Monitoring (40 CFR Part 58, Appendix D Section 4.1)

The TCEQ is currently meeting the minimum network design requirements for ambient air quality monitoring for ozone. As discussed in the letter above, we recommend installing one or more monitors in the Permian Basin area.

The El Paso UTEP monitoring site (AQS ID 48-141-0037) has been offline since the winter of 2021. The EPA and the TCEQ have been communicating about restoring monitoring at or near these sites, and the EPA anticipates receiving the additional specific information from the TCEQ soon.

Photochemical Assessment Monitoring Stations (PAMS) (40 CFR Part 58, Appendix D Section 5)

The TCEQ is currently meeting the minimum network design requirements for ambient air quality monitoring for PAMS.

Volatile Organic Compounds (VOC) Monitoring. The EPA appreciates the TCEQ's update to establish Special Purpose Monitoring (SPM) sites in the Houston Fifth Ward and the Gregory Portland areas for VOC and meteorological measurements. We understand that these monitors are expected to be operational by December 31, 2023, and December 31, 2024, respectively. These monitors are not specifically required by federal monitoring requirements in 40 CFR Part 58, but rather are at the discretion of the TCEQ. We request that you inform the EPA as these monitor deployments occur.

We also recognize the incorporation of a special purpose VOC canister monitor, based on AMNP comments, to the new Houston Pleasantville Elementary site into the 2023 Plan as state-initiative SPM. This monitor will also incorporate meteorological measurements. We request that you keep the EPA updated regarding this new site.

Carbonyl Monitoring. The EPA acknowledges that no changes were made or proposed to the TCEQ carbonyl monitoring network.

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

The TCEQ is currently meeting the minimum network design requirements for ambient air quality monitoring for CO.

The EPA acknowledges the previous approval by letter (dated November 4, 2019) of the replacement of the San Antonio I-35 site (AQS ID 48-029-1069) regular CO monitor with a high-sensitivity CO monitor for higher resolution CO measurements. We understand that this is now expected to be completed by December 2024. We request an update on when this replacement is finalized.

Nitrogen Dioxide (NO₂) Monitoring (40 CFR Part 58, Appendix D Section 4.3)

The TCEQ is currently meeting the minimum network design requirements in 40 CFR Part 58 Appendix D Section 4.3 for ambient air quality monitoring for NO₂. As discussed in our letter dated November 27, 2023, we look forward to receiving updates on the progress of the second near-road NO₂ monitor installation in San Antonio.

Sulfur Dioxide (SO₂) Monitoring (40 CFR Part 58, Appendix D Section 4.4)

The TCEQ is currently meeting the minimum network design requirements for ambient air quality monitoring for SO₂.

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

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

Terrell Temtex Pb Monitoring. We thank the TCEQ for submitting a request to EPA to relocate the site December 11, 2023; we approved this request on January 9, 2024.

Particulate Matter (PM) Monitoring (40 CFR Part 58, Appendix D, Sections 4.6 and 4.7)

The TCEQ is currently meeting the minimum network design requirements for ambient air quality monitoring for PM.

Particulate Matter of 10 Microns or Less (PM₁₀) (40 CFR Part 58, Appendix D Section 4.6)

The EPA future review of the TCEQ request to locate a PM₁₀ monitor in the Portland-Gregory area is contingent on information submitted by the TCEQ about the proposed new location.

The EPA approves the TCEQ's request to either relocate or discontinue PM₁₀ federal reference method (FRM) manual filter-based collocated quality control (QC) monitors at the Convention Center, Ojo De Agua, and Socorro Hueco monitoring sites when the primary monitor is replaced with a continuous PM₁₀ federal equivalent method (FEM) monitor. The EPA asks that the TCEQ provide the location of the proposed sites that the manual monitors will be moved to maintain the 15% collocation requirement.

Particulate Matter of 2.5 Microns or Less (PM_{2.5}) (40 CFR Part 58, Appendix D Section 4.7)

PM_{2.5} 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_{2.5} National Ambient Air Quality Standards (NAAQS), as described in Section 58.30.

PM_{2.5} Network Updates Since Last Year

We note the update on the temporary changes at the Midlothian Old Fort Worth (OFW) site; please keep us informed.

PM_{2.5} Network Proposed Revisions

The TCEQ requests to install a Continuous PM_{2.5} BAM 1022 monitor at the Ojo de Agua site (AQS ID 48-141-1021), and a PM_{2.5} Continuous PM_{2.5} TEOM monitor at the Houston North Wayside site (AQS ID 48-201-0046) are approved. We understand that the Houston North Wayside monitor deployment was completed on 05/04/2021. We request you update us when the monitor replacement at El Paso is complete.

The TCEQ requests to install Continuous PM_{2.5} BAM 1022 monitors at the Austin North Hills Drive (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_{2.5} 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). We understand that the monitor replacement was completed at the Austin North Hills site on October 15, 2020. We understand that the monitor replacement was completed at the Seabrook and Conroe sites on September 30, 2021. We request you update us when the monitor replacements are complete at Socorro Hueco.

The TCEQ request to install a Continuous PM_{2.5} BAM 1022 monitor at the El Paso UTEP site (AQS ID 48-141-0037) was previously approved; specifically, the request was to:

“Replace the existing non-regulatory PM_{2.5} tapered element oscillating microbalance monitor with a PM_{2.5} FEM 209 primary monitor and changing the existing PM_{2.5} FRM 145 monitor to a QC-collocated monitor at the El Paso UTEP air monitoring site.” (See the TCEQ’s El Paso UTEP letter requesting a system modification dated August 2, 2021, and EPA’s response dated August 13, 2021).

The El Paso UTEP monitoring site (AQS ID 48-141-0037) has been offline since the winter of 2021. The EPA and the TCEQ have been communicating about restoring monitoring at or near these sites, and the EPA anticipates receiving the additional specific information from the TCEQ soon.

We note the TCEQ’s update on the deployment of a PM_{2.5} non-NAAQS comparable monitor to the Dallas County southern sector industrial corridor at the Dallas Bexar Street site. Approval for this action was dated April 10, 2020. We understand that this monitor started operating on February 1, 2022. We also understand that this monitor is listed as being replaced with a NAAQS comparable FEM continuous monitor by June 2024. We ask that the TCEQ keep us updated on this change.

The EPA appreciates the TCEQ’s efforts to continue to replace aging PM_{2.5} non-NAAQS comparable equipment with new FEM monitoring technology. We understand that the Houston Westhollow, Ascarate Park Southeast, Clinton, Dona Park, and Midlothian OFW sites with PM_{2.5} TEOM monitors were to be replaced by new PM_{2.5} FEM continuous monitors by December 31, 2021. We request that you update us as the monitor replacements occur. Thank you for the update on the Houston Westhollow monitor replacement. We understand that the Dona Park monitor was replaced with a deployment date of May 25, 2022. Please keep us updated as monitor replacements occur.

Regarding the proposal to deploy a PM_{2.5} FEM 209 collocated QC monitor at the Mission air monitoring site (AQS ID 48-215-0043) to complement the existing primary PM_{2.5} FEM method 209 monitor, this request is approved. In the 2023 Plan, the TCEQ states that they are reconsidering the deployment of this monitor due to the change no longer being necessary to meet PM_{2.5} collocation requirements. The EPA agrees with the TCEQ that the change is no longer necessary and asks that the TCEQ please keep us informed if they decide not to install the collocated monitor.

The EPA acknowledges the changing of network designation from state initiative to federal SPM for the Freeport South Avenue I PM_{2.5} FRM monitor. We request you update us when this action is complete. In the 2023 Plan, the TCEQ informed the EPA that the change in network designation had been implemented with a retroactive effective date of January 1, 2023. We appreciate the TCEQ's update on this matter.

PM_{2.5} Network Proposed QA Collocation

The PM_{2.5} 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_{2.5} NAAQS-comparable 2025 and BAM 1022 monitors using the FRM 145 and FEM 209 methods, respectively.

We appreciate the TCEQ's collocated monitors for PM; based on information provided by the TCEQ in the 2023 Plan, currently with 44 FEM monitors, 7 QC collocated monitoring sites are needed and are located as follows: (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), Port Author Memorial AQS ID 48-245-0021, Dona Park AQS ID 48-355-0034. The EPA appreciates the TCEQ's replacement of the aging equipment at the Houston Deer Park #2 site with a new PM_{2.5} FEM. We understand that this monitor is collocated with a PM_{2.5} FRM.

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

Meteorological Monitoring

The EPA appreciates the TCEQ's continued efforts to upgrade older meteorological technology to new all-in-one sonic weather sensors as equipment becomes available.

We note the relocation of meteorological monitors from the Houston Kirkpatrick site, which was discontinued on April 18, 2023, to the Houston Harvard Street site. These actions were acknowledged by the EPA in an email on May 2, 2023.

The EPA appreciates the TCEQ's update on the deployment of wind speed, wind direction, and outdoor temperature monitors at the Dallas Bexar Street site in the Dallas County southern sector, which is expected to be operational by December 31, 2023. Please keep us informed on when this action is completed. We also acknowledge the TCEQ's update on deployment of a ceilometer at the San Antonio Northwest site (AQS ID 48-029-0032), which is expected to be operational as equipment becomes

available in 2024. Approval for this action was previously provided by the EPA (letter dated November 4, 2019). Please keep us informed on when this action is completed.