



May 17, 2023

Texas Commission on Environmental Quality (TCEQ)

P.O Box 13087

Attention: Holly Landuyt, MC-165

Austin, Texas 78711-3087

Sent via: tceqamnp@tceq.texas.gov

RE: 2023 Draft Air Monitoring Network Plan (AMNP)

Dear Ms. Landuyt:

Air Alliance Houston (AAH) appreciates the opportunity to comment on the Texas Commission on Environmental Quality's (TCEQ) 2023 Draft Air Monitoring Network Plan (AMNP). AAH recognizes that the draft AMNP meets and, in some cases, exceeds the federal regulatory requirements outlined at 40 CFR 58.10 and corresponding Appendices. We also remain pleased at the addition of the three (3) new regulatory monitors in environmental justice communities in the Houston-Woodlands-Sugar Land CBSA (Houston CBSA) and look forward to their full deployment.

Below, we share our comments on and recommendations for the AMNP regarding current and future opportunities that we believe will continue to strengthen regulatory air monitoring in the Houston CBSA and across the state:

1. Need for Continued Expansion of Air Monitoring in Houston Due to Local Context Changes

Throughout the draft AMNP, it is stated that no substantive changes to the current monitor network, including for the Houston CBSA, are indicated by current data or regulation. We respectfully request a reconsideration of these statements for the AMNP as explained below:

There is a continued proliferation of air pollution sources in the Houston CBSA and multiple known impending expansions of both stationary and mobile emissions sources, including the North Houston Highway Improvement Project (NHHIP), the Hardy Toll Road Downtown Connector, Carbon Capture and Sequestration (CCUS) and Hydrogen "hubs," and the "advanced"

recycling sites outlined in the Houston Recycling Collaboration, many of which will be located in environmental justice communities throughout the Houston CBSA including Independence Heights, Near Northside, Fifth Ward, and the North Shore of the Houston Ship Channel (Baytown, Channelview, Cloverleaf, etc.).

Given this local context, we believe that continued focus and attention on collecting the most comprehensive air monitoring data for the Houston CBSA remains of the highest priority. To that end, we would like to respectfully request that TCEQ begin the process of engaging with community members to locate additional regulatory air monitors in or near the following environmental justice communities:

- Near Northside (Houston): to monitor the potential air pollution impacts of mobile emissions from the double expansion of the North Houston Highway Improvement Project (NHHIP) and the new Hardy Toll Road Downtown Connector, and their addition to the cumulative existing air pollution burden in the area from concrete batch plants, metal recyclers, Superfund sites, and railyards.
- The North Shore of the Houston Ship Channel (e.g., cities of Baytown, Channelview, and Cloverleaf): to monitor the potential air pollution impacts of Exxon Mobil's quadruple-expansions of its Olefins Unit, new CCUS "hub," new Hydrogen "hub," and "advanced" recycling plant.
- South Houston (e.g. Sunnyside, Minnetex, South Park, South Acres/Crestmont Park): to monitor the potential air pollution impacts of one of the largest concrete batch plant clusters in the county with close to 25 concrete batch plants, concrete crushers, and other aggregate production operations within the approximately 50 square miles that comprise these neighborhoods. The area also already possesses a significant presence of U.S. Environmental Protection Agency (EPA) Toxic Release Inventory (TRI) facilities and multiple Superfund and municipal solid waste sites that maintain no effective buffers from nearby sensitive land uses, thus exposing residents to harm. This cumulative area currently possesses little to no TCEQ air monitor coverage.
- Aldine and East Aldine (unincorporated Harris County): these neighborhoods also constitute a large gap in the TCEQ's current air monitoring network, due to the number of air pollution sources present: eight (8) concrete batch plants, 12 TRI facilities, six (6) MSW sites, and one (1) Superfund site - all located close to residential areas,

schools, parks, churches, and other sensitive use. Moreover, the number of concrete batch plants continues to increase there as more companies seek new or expansion permits. The TCEQ only maintains one (1) air monitor in the area, which is extremely inadequate for the number of air pollution sources present in these communities.

- Galena Park, Texas: of all communities in the AAH low-cost sensor network (described in more detail below), Galena Park is the most concerning. The data from our seven (7) monitors in Galena Park show consistent exceedances of multiple NAAQS. This is not surprising since Galena Park is inundated with multiple sources of air pollution. We recognize that the Clinton Drive monitor is currently collecting data from Galena Park. However, we believe the sheer volume of pollution sources, including those on the west side of the city, necessitate a second regulatory station.

Furthermore, rigorous air monitoring will be needed to monitor improvement plans in response to the Houston area's recent designation as "severe nonattainment" for Ozone and the proposed reduction in the NAAQS for PM_{2.5}, which would place at least four (4) of the current Houston CBSA regulatory air monitors in exceedance of the standard.

2. Consideration of Community Air Monitoring Networks Alongside Regulatory Monitoring

Local low-cost and citizen-scientist community air monitoring networks are filling data gaps in regulatory air monitoring, contextualizing the causes of air quality concerns, and engaging impacted community members in the air quality issues in their neighborhoods. In recognition of their value, the EPA has made significant investments in these low-cost sensor networks; most recently, in November 2022, with an award of \$53.4 million to support 132 air monitoring projects including eight (8) in Texas. More such funding and projects are expected because of the Inflation Reduction Act (IRA). In addition, the EPA is actively considering frameworks and methods for how the results of community air monitoring can inform regulatory monitoring in a formal manner.

AAH currently operates the largest community air monitoring network in the Houston and Harris County area with a total of 53 sensors all located on sensitive land uses (residences, churches, community centers, and schools). Of these, we have five (5) networked monitor communities with at least six (6) sensors in strategically placed locations and a real-time data dashboard accessible by community members. These five (5) networked communities are the cities

of Galena Park/Jacinto City and Pasadena, the Houston neighborhoods of Gulfton, Kashmere Gardens/Fifth Ward, and Northline/Near Northside. All environmental justice communities (see Figure 1). With the data from these monitors, we have worked with residents to develop written Community Action Plans outlining the steps they will take to improve air quality in their neighborhoods. These plans would not have been possible without the hyper-local air quality data collected by our low-cost sensor networks.

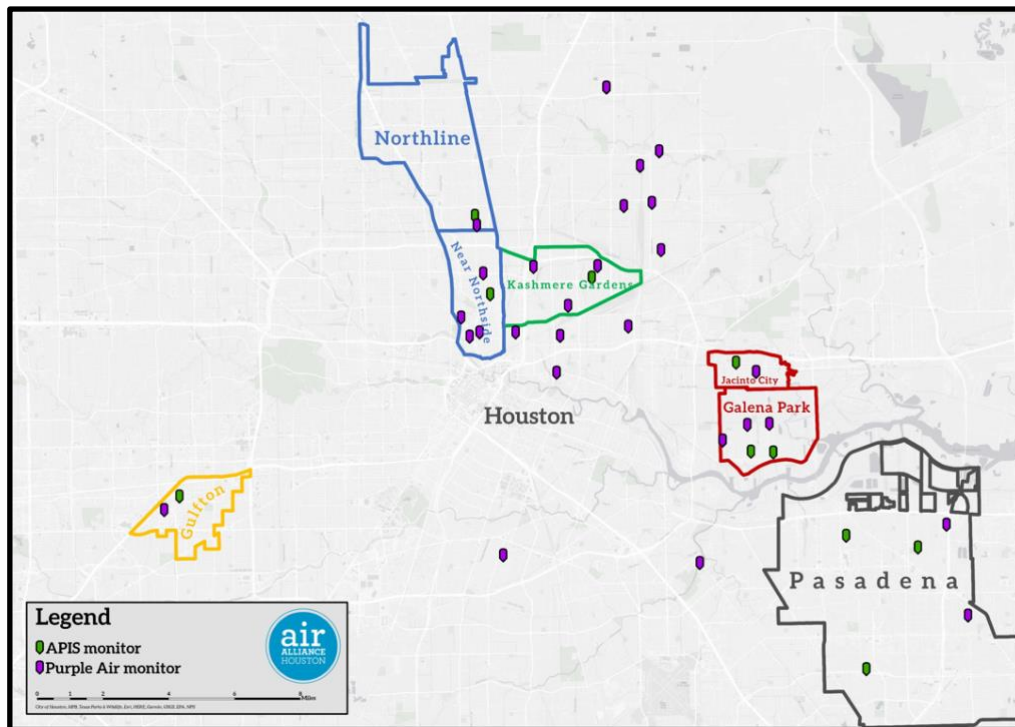
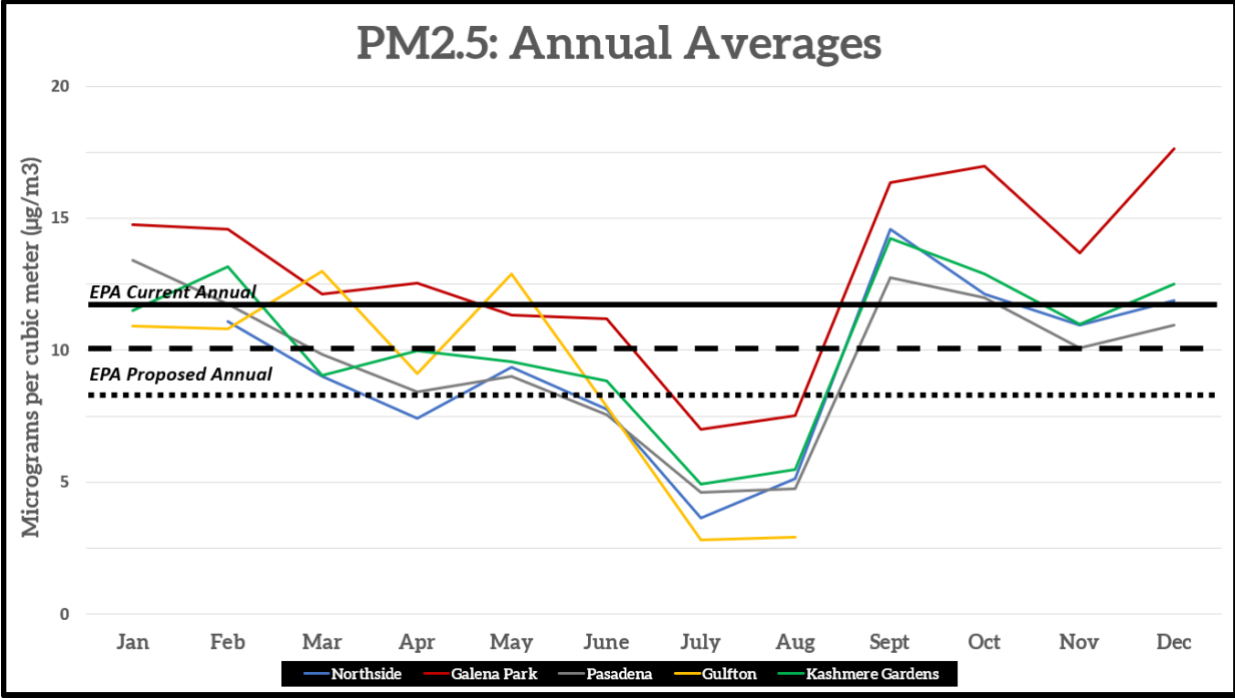
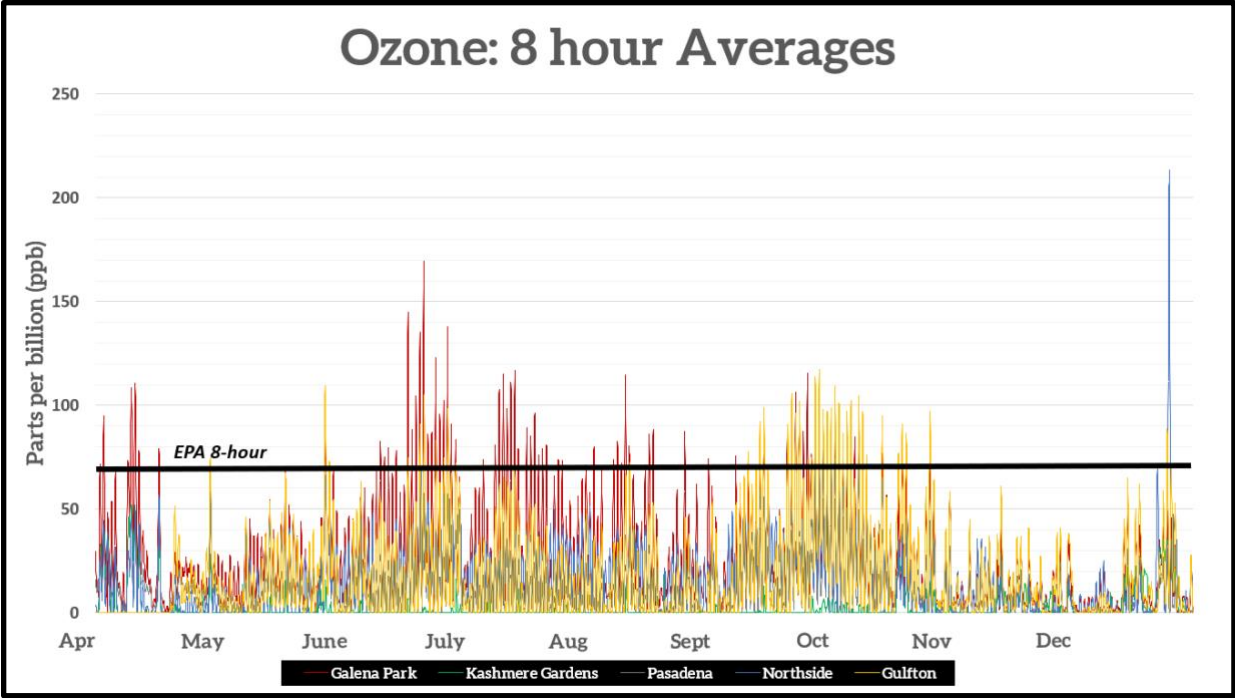
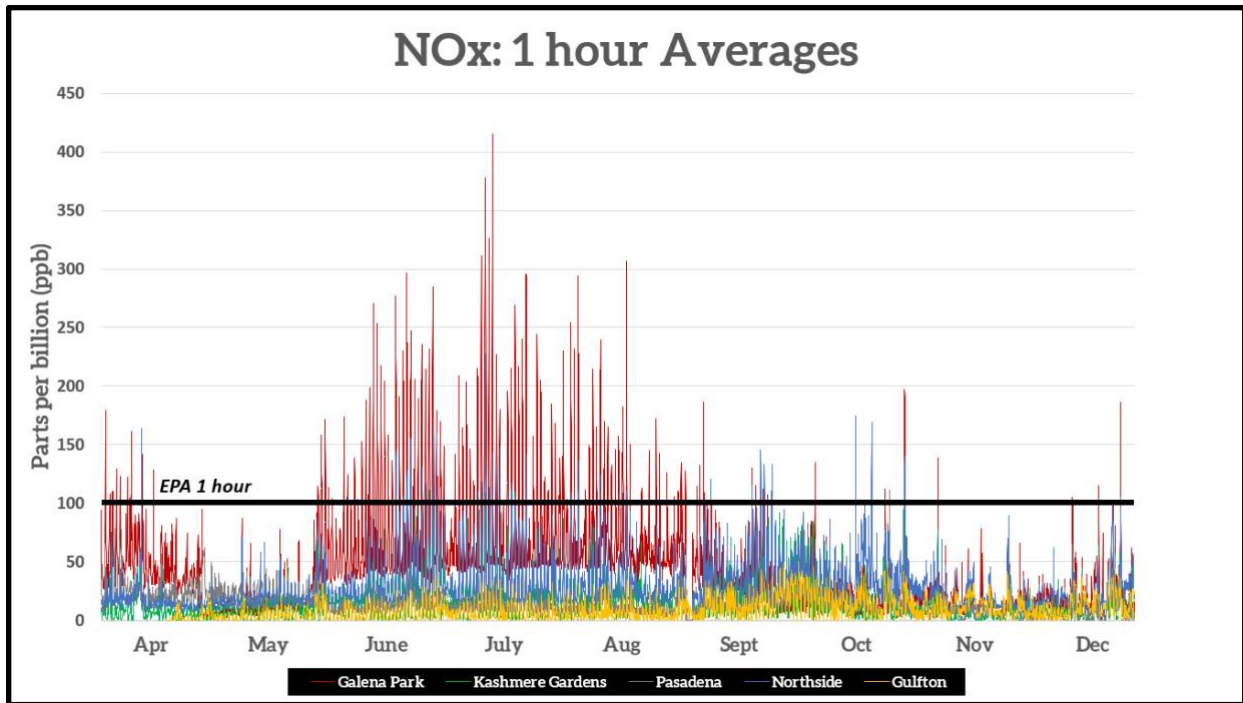


Figure 1: Map of AAH Community Air Monitoring Program (CAMP) Locations

In addition, data from our sensor network routinely documents air pollutant levels exceeding multiple NAAQS for extended periods of time (see Figures 2-5 below).

Our low-cost sensor network is slated to grow in the next year to include Northeast Houston/Settegast, Channelview, and Baytown. Other community-based organizations like ours have also installed low-cost sensor networks throughout Harris County and in neighboring Fort Bend County. As the footprint of these networks grows and as their data are increasingly used to drive local community action, we believe it is in the best interest of TCEQ and the AMNP to develop a framework for how data collected by low-cost sensor networks can inform regulatory monitoring. AAH would gladly participate in a process to develop a workable framework.





Figures 2 - 4: Aggregated Data from the AAH Community Air Monitors in 5 EJ Communities with NAAQS Comparisons

Summary conclusions			
NOX	VOC	O3	PM2.5
<p>LONG TERM:</p> <p>Galena Park / Jacinto City: Highest average (3x EPA annual standard)</p>	<p>LONG TERM:</p> <p>Pasadena : Highest average, especially over the summer</p>	<p>LONG TERM:</p> <p>Gulfton: Highest average followed by Galena Park and Near Northside / Northline</p>	<p>LONG TERM:</p> <p>Galena Park: Highest average Followed by Kashmere Gardens and Northline</p>
<p>SHORT TERM:</p> <p>Galena Park / Jacinto City: 3,022 exceedances of EPA 1 hour standard</p>	<p>SHORT TERM:</p> <p>Pasadena: Highest and most prolonged & frequent peaks</p>	<p>SHORT TERM:</p> <p>Galena Park: 867 exceedances of EPA 8-hour standard</p>	<p>SHORT TERM:</p> <p>Galena Park: 22 exceedances of EPA 24-hour standard</p>

Figure 5: Overall Findings from 1 Year of AAH Community Air Monitoring in 5 EJ Communities

4. Support for Canister Monitoring for the Pleasantville Community

Lastly, we join with community members and other environmental justice organizations in supporting the deployment of a state-initiative special purpose VOC canister to the new Houston Pleasantville Elementary School monitoring site in 2023. The Pleasantville community in Houston has been plagued by multiple sources of industry (e.g., refineries, petrochemicals) and tailpipe emissions for decades, including known carcinogens. Without this secondary VOC canister, neither TCEQ nor residents will have a complete understanding of the extent of their exposure.

We appreciate the opportunity to comment on the 2023 Draft AMNP. Overall, we applaud TCEQ's efforts to monitor ambient air quality at levels that exceed federal requirements and to continue to add increased air monitoring capacity in Houston's environmental justice communities. We hope to continue to collaborate with the TCEQ on our common goal of ensuring all people have the right to breathe clean air. If there are any questions about this letter, please feel free to contact me at any time either by telephone at (713) 539-1894 or by email at jennifer@airalliancehouston.org.

Respectfully submitted,



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