

Kathryn Zyla
Executive Director
Georgetown Climate Center
500 First St. NW; 8th Floor
Washington DC 20001

March 23, 2022

Environmental Protection Agency
Mail Code: 3901
1200 Pennsylvania Avenue,
N.W. Washington, D.C. 20460

Dear EPA Office of Grants and Debarment,

To reduce greenhouse gas (GHG) emissions, improve air quality, and advance clean transportation options, environment, energy, and transportation agencies from across the Northeast and Mid-Atlantic region have been working together since 2010 as part of the Transportation and Climate Initiative (TCI). Through this effort, states and the District of Columbia have worked to improve processes for gathering input from the public to better understand how low-carbon transportation strategies could center equity and advance environmental, climate, and transportation justice. A consistent theme in the input jurisdictions have received from communities and organizations is their interest in expanded community-based air quality monitoring to help inform and shape the development and implementation of clean transportation policies and programs.

In response, jurisdictions in this region have recently initiated a new workgroup, facilitated by the Georgetown Climate Center, focused on community-based air quality monitoring. The primary focus of this workgroup is to establish a new “community of practice,” to serve as a regional forum for sharing information and building capacity within agencies and communities to develop and maintain community-based air quality monitoring programs. The group aims to focus its efforts in particular on frontline communities that have borne a disproportionate exposure to air pollution, much of which comes from mobile sources. Workgroup participants include agency officials from Connecticut, District of Columbia, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

With limited state and local resources available to ramp up air quality monitoring activities, this new community of practice will help participating jurisdictions more rapidly achieve their shared goals: expanding the quantity, quality, and availability of reliable community-level information regarding levels of potential pollution exposure from transportation sources. By leveraging information, data, and lessons learned from multiple programs throughout the region over the past decade, this community of practice can also serve as a valuable resource to inform timely policy actions by local

and state governments to reduce harmful air emissions. We also expect the group's work to support effective implementation and evaluation of new projects in the Northeast and mid-Atlantic corridor that may be awarded grants through EPA's new Enhanced Air Quality Monitoring for Communities grant solicitation.¹

In the coming weeks, jurisdictions participating in this effort will be developing and advancing a work plan that will serve as the overarching framework for coordinating strategic activities.

Programmatic priorities will include sharing information, data, and strategies for communicating air quality monitoring results with the public, including through webinars and workshops. Participants expect to share lessons learned and emerging ideas on topics ranging from air quality monitoring technologies to policy actions that can effectively reduce transportation emissions and improve air quality for overburdened communities.

The work plan will be further informed by conversations that participating agency officials will have with residents and organizations within each of their respective jurisdictions. Participating jurisdictions aim to build on regional conversations and other ongoing public outreach efforts to further engage the public around air quality monitoring in overburdened communities.

Outreach, education, hyper-local sensor networks, and partnerships are essential elements of effective community-level air quality monitoring, but will take time to implement. At the same time, there are many simple and effective actions that can be easily undertaken quickly even as jurisdictions pursue those longer-term initiatives. Here are examples of what four TCI jurisdictions are already doing to conduct air quality monitoring in ways that inform decision making and policy actions that are responsive to community needs:

- The Massachusetts Department of Environmental Protection (MassDEP) partnered with city officials and local communities to establish an ongoing community-based air quality monitoring project in Chelsea, MA – including a permanent monitor meeting EPA siting criteria and nine PurpleAir sensors in locations chosen by the community. A member of the community notified MassDEP of concerns about smoke coming from an industrial facility at a specific time and date. MassDEP observed a temporary data spike at a nearby air sensor at the same time the smoke was observed, and notified the MassDEP Regional Permit Chief. As a result, the permit section of MassDEP plans to inspect the facility to ensure it is compliant with applicable regulations.
- The Rhode Island Department of Environmental Management (RIDEM) is currently operating a network of monitors around the Port of Providence with funding received from a Community-Scale Air Toxics Monitoring grant. In addition to monitoring for Volatile Organic Compounds (VOCs) and PM2.5, staff are regularly monitoring odors around the Port. Community members

¹ Enhanced Air Quality Monitoring for Communities; RFA#: EPA-OAR-OAQPS-22-01.
<https://www.epa.gov/grants/enhanced-air-quality-monitoring-communities>

often notify RIDEM when odors are present, and at times will be given the necessary equipment to collect a VOC sample on their property when they feel odors are noxious. As a result of odor complaints this past summer, an inspection was performed at an asphalt facility that appeared to be producing noxious fumes, which resulted in the initiation of an enforcement action. RIDEM expects to see spikes in the PM2.5 data when seasonal asphalt production at this and other facilities begins again this spring. Regular monitoring for PM2.5 along with meteorological data collected will be useful in determining the source of odors in the future, helping to inform potential enforcement actions.

- The Maryland Department of the Environment (MDE) is working in partnership with the Town of Cheverly, a community just outside of the District of Columbia, to improve air quality. The effort was initiated by Dr. Sacoby Wilson, Associate Professor and Director of the Center for Community Engagement, Environmental Justice, and Health in the University of Maryland School of Public Health. The partnership involves a hyper-local air monitoring network, air-quality-related community capacity building, and an initial set of community driven actions to reduce exposure and risk to air pollution. In 2021, MDE used the hyper-local data and community input to run a targeted inspection program that looked at stationary and mobile sources. From that effort, several emission reduction actions are now being implemented. These include enhanced education and enforcement efforts on potentially illegal truck idling and fugitive dust, continuation of the targeted inspection program, and initiatives to clean up local diesel emissions. The community plays an active role in all of these initiatives. MDE has begun to implement similar partnerships in other Maryland communities with concerns over environmental justice.
- The District of Columbia's Department of Energy and Environment (DOEE) will begin its pilot mobile, hyper-local monitoring program this year. DOEE plans to collect precise, accurate hyper-local monitoring data using a mobile monitoring platform throughout three neighborhoods in DC to report on potential air pollution hotspots. This monitoring will include using high-performing, innovative sensors to take accurate readings of pollutants at high spatial and temporal resolutions. Measured pollutants will include particulate matter, nitric oxide, nitrogen dioxide, carbon monoxide, methane, ozone, Total Volatile Organic Compounds, and black carbon. DOEE also held Clearing the Air community workshops to help the public get to know DC's Air Quality Division (AQD). Topics covered in this series of workshops included how AQD performs inspections, policies, air quality trends, and how pollutants are monitored in DC.

These are just a few examples of the kinds of activities already underway in jurisdictions participating in the new community of practice workgroup. We look forward to sharing additional examples and updates as the workgroup's activities expand.

In addition to accelerating the expansion of on-the-ground air quality monitoring efforts, this air quality monitoring community of practice aims to foster sharing of information, lessons learned, and best practices. To that end, jurisdictions plan to actively engage with frontline communities,

community-based organizations, other agencies, public health experts in academia, other stakeholders, and trade associations such as the National Association of Clean Air Agencies. This coordinated activity can help to ensure that the workgroup's activities are complementary to ongoing federal efforts and will have a lasting impact.

The U.S. EPA's new "Enhanced Air Quality Monitoring for Communities" program represents an important and timely opportunity to help jump start both existing and nascent programs. I would like to extend an open invitation for EPA officials to speak to the workgroup in the future, and we would welcome your suggestions about other ways we can work together to accelerate air quality improvements for overburdened communities. We are committed to keeping lines of communication open and look forward to collaborating with EPA as this work progresses.

If you have any questions, please contact James Bradbury, Mitigation Program Director, Georgetown Climate Center (james.bradbury@georgetown.edu); Tracy Babbidge, Chief of the Bureau of Air Management, Connecticut Department of Energy and Environmental Protection (tracy.babbidge@ct.gov); or Christine Kirby, Assistant Commissioner for the Bureau of Air and Waste, Massachusetts Department of Environmental Protection (christine.kirby@mass.gov).

Thank you for your time and consideration.

Sincerely,

A handwritten signature in dark ink, appearing to read "Kathryn Zyla". The signature is fluid and cursive, with the first name "Kathryn" written in a larger, more prominent script than the last name "Zyla".

Kathryn Zyla
Executive Director, Georgetown Climate Center