



REPORT TO THE
LEGISLATURE

FEBRUARY 2026

Community air monitoring pilot grants progress

Progress on what the MPCA will do with
sensor data that comes from the community
air monitoring projects



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Report to the Legislature, February 2026

Legislative charge

The MPCA is required to report to the Minnesota Legislature:

Report to the legislature. No later than February 15, 2026, the commissioner must submit a report to the chairs and ranking minority members of the legislative committees with primary jurisdiction over environment policy and finance on the results of the grant program, including:*

(1) any changes in the agency's air-monitoring network that will occur as a result of data developed under the program;

(2) any actions the agency has taken or proposes to take to reduce levels of pollution that impact the areas that received grants under the program; and

(3) any recommendations for legislation, including whether the program should be extended or expanded.

*2023 HF2310; Chapter 60 article 8, Sec 6; *and date modified to February 15, 2026 from March 15, 2025 in 2024 HF3911; Chapter 116, article 2, Sec 26.*

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Executive summary

Air sensors are lower-cost tools that can help communities understand their air quality. In 2023, the Minnesota Legislature awarded the Minnesota Pollution Control Agency (MPCA) \$5 million for pilot grants for nonprofits to develop and implement programs to use air sensors to understand local air quality. In 2025, the MPCA distributed funding for three community air monitoring pilot grants to the University of Minnesota Urban Research and Outreach-Engagement Center (U of M UROC), the Great Plains Institute (GPI), and the OSLUV Project (OSLUV).

U of M UROC's project, Clean Air for All, will deploy stationary and mobile air sensors and lead public health outreach focused on the West Broadway corridor of North Minneapolis. GPI's project, AIRNET, will develop a center for current and future community air monitoring assistance, starting with six community-developed projects in six different neighborhoods in Minneapolis and Saint Paul. OSLUV will lead Neighbors for Clean Air, focusing on metal pollution in the Hamline-Midway and Frogtown neighborhoods of Saint Paul.

The legislation required the MPCA to write a report discussing changes to the regulatory monitoring network, and actions the agency would take based on the community air monitoring pilot grants' data. These grants were distributed in June 2025, and while the projects have begun, the agency does not yet have sufficient data to analyze from these projects to consider specific changes to the MPCA's work. The MPCA has developed a process for how the agency will review and potentially act on data from these projects when we have sufficient data.

This report includes background on air sensors, information on the projects funded by the community air monitoring pilot grants program, and information on the process the MPCA will use to review and potentially act on the data from these projects.

Background

Air sensors are lower-cost instruments to gather air quality conditions. Air sensors are often categorized as devices that directly report a pollutant in the air, are smaller in size, and are often lower cost which supports a broader number of locations. Sensors often use easily accessible technology like particle counters that pass a beam of light to count very small particles. Some use ionizing technology to determine which chemical is present and in what concentration. These are often much simpler versions of the technology that is used in regulatory monitors, which makes them more readily available, but they have less reliable data quality. Since sensors are often operated with fewer requirements to ensure proper operation and data quality, their use in a regulatory setting is limited to their role in providing general concentrations of air pollutants. These lower-cost instruments give near real time information about air quality to help people understand how air quality could impact them.

This technology has progressed rapidly over the past two decades. Twenty years ago, only a few sensors were widely available or were limited to academic research purposes. Now over 100 easily accessible sensors exist, measuring a variety of pollutants. Air sensors can be used for a variety of purposes including science education, conducting formal research, and measuring local air quality to better understand sources of pollution. The MPCA uses air sensors mostly to understand sources and levels of pollution in areas not near a regulatory monitor.

History: The MPCA and air sensors

The MPCA has been a relatively early adopter of air sensor use. It has also been a leader in the Midwest as a regulatory agency utilizing sensors for non-regulatory purposes. Most of this work has occurred in the Twin Cities metropolitan area.

In 2016, the MPCA began initial work on local air quality research, specifically examining whether there was a difference in air quality across different ZIP codes in the Twin Cities. The project helped explore questions such as: Minnesota's air quality was generally good, but what were the differences between neighborhoods throughout Minneapolis and St. Paul? Air sensors were an innovative solution to begin this monitoring effort.

To expand this initial work, the MPCA sought and received grant funding from the Legislative-Citizen Commission on Minnesota Resources (LCCMR) in 2019 and then began the urban air quality monitoring project with a goal to understand the spatial and temporal differences in air quality among the urban neighborhoods of the Twin Cities. The agency deployed 44 air sensors across each ZIP code in Minneapolis and St. Paul. That project demonstrated how air sensors can be used, their limitations, the importance of quality data, and the means to examine and interpret it.

Additionally, MPCA meteorologists have deployed sensors since 2020 to track air quality and forecast the Air Quality Index (AQI). This effort added several sensors to remote areas of Minnesota and has been especially helpful as wildfire smoke has become an increasing issue in Minnesota. More recently, MPCA staff have placed sensors along the northern border of the state of Minnesota to improve AQI forecasting of smoke that crosses the Canadian border. Through a grant from U.S. Environmental Protection Agency (US EPA), the MPCA placed at least one sensor in each of the seven counties along the northern border, including a site in the northwest angle of the state. (See a map of sensors in the AirSeRV database below.)

The MPCA has used sensors to temporarily examine air quality around facilities. For instance, the MPCA deployed sensors to better understand the air quality impacts from a fire at the Northern Metals facility in Becker in 2020. Air sensors gauged health impacts for the local community and tracked the smoke from Becker into neighboring towns including Minneapolis and St. Paul. The MPCA also used sensors to estimate fine particle matter (PM) levels near Northern Iron in St. Paul before establishing a regulatory-grade metals monitor. The MPCA watched data for anomalies, tracked PM levels near the facility, and how it compared to modeling. While data was not available for comparisons to the national standards, trends still emerged that showed the area near the facility may have a higher risk for air pollution.

The MPCA has also assisted communities with technical support for air sensor projects, including the City of Minneapolis's grant from the US EPA, offering loan of the AQMesh sensors from the LCCMR grant. Later projects with Minnesota State-Mankato and Olmsted County have utilized MPCA technical support, and a partnership with the Mille Lacs Band of Ojibwe will include MPCA analysis and access to the Band's Purple Air data from across Minnesota. Sensors in remote areas, where the nearest monitor is potentially hundreds of miles away, will help MPCA meteorologists with wildfire smoke and AQI

forecasting. Finding common ground and interest across different types of sensor projects with many partners across the state has broadened the reach of relevant, local air quality data. All MPCA’s sensor data is freely available for the public to access and use.

The MPCA has developed systems to make sensor data public through a portal called [AirSERV](#). Funded by the US EPA, the MPCA developed the AirSERV portal separately from the pilot projects. This portal will track and visualize varied sensor data from MPCA sensors, the pilot projects, the Mille Lacs Band of Ojibwe projects, and potential future projects.

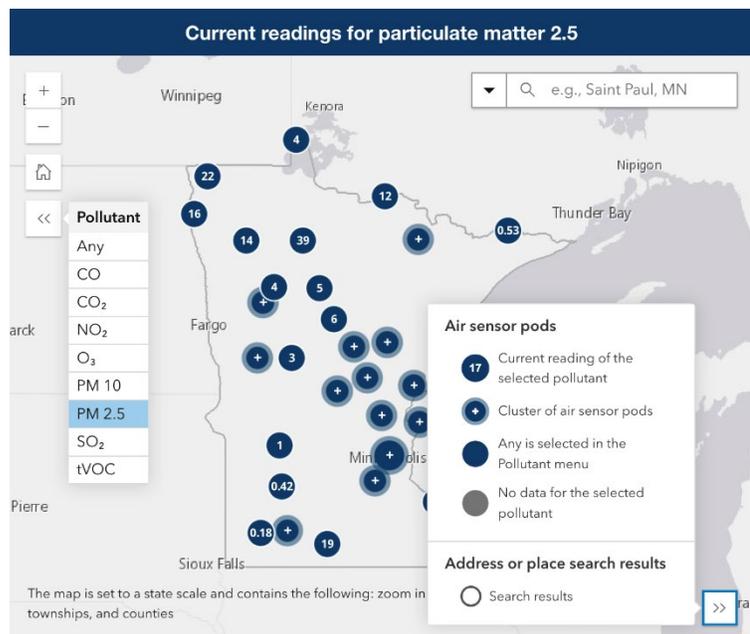
Sensor research in Minnesota has built upon knowledge gained from each project. The MPCA’s LCCMR project in 2019-2021 gave some insight into air quality but ultimately indicated that one sensor per ZIP-code was too far apart to understand hyperlocal air quality impacts. In 2021, the Minneapolis community air monitoring project further identified areas of concern and guided sensor placement in neighborhoods most impacted by air pollution. The MPCA has been a close partner through this project helping interpret the data using the Air Quality Index scale. While widespread analysis has not been completed on Minneapolis’ sensors, temporary impacts from various sources have helped neighborhoods begin to understand their air quality and what they can do about it. For example, one daycare in Minneapolis uses an air sensor to determine if the kids go outside for recess. Another sensor tracks burning of non-wood materials in a Minneapolis neighborhood, which allows the city to identify specific locations that need further public education.

The MPCA advanced its sensor work over the last ten years through these partnerships and projects, and currently is leader in sensor use. Sensors can produce an enormous amount of data – the 80 sensors deployed in Minneapolis can generate over a million data points in one day. Managing the data and helping partners make decisions have been the top priorities for the agency throughout these projects. Clearly communicating air quality information in plain language is also a priority for the MPCA, and sensors are a great starting point for some of these community conversations.

Minnesota legislative funding

The 2023 legislature (HF2310; see appendix for full appropriation language) appropriated \$5 million for community air monitoring grants. These grants fund community-led projects to place air sensors in the seven-county metro area. The grants could fund:

- sensor purchasing
- installation
- operation costs
- planning
- training
- data system development
- outreach efforts
- reporting expenditures



The legislation instructed the MPCA to consider if grants could be used in partnership between a non-profit organization and a technical partner with projects based within the Twin Cities metro area. The legislation required the MPCA to prioritize projects in areas of high illness associated with exposure to air pollution, in areas near facilities that had received penalties due to air quality rule violations within the last two years, or in environmental justice areas as defined in Minn. Stat. § 116.065. Projects that promote public access to data and conduct community outreach actions were also given preference by the legislation. Grantees are required to share the data with the MPCA and ideally the public, and submit a report with results, findings, and recommendations for agency action.

Input from the public

This grant program was designed to be accessible to community groups, achievable by applicants, and meet the legislative direction of the program. To inform the development of the program, MPCA held an open input period in winter 2024 and asked questions such as:

- How should the funding be used?
- What barriers do you see to undertaking a project like this?
- Would potential project proposers be able to follow the US EPA guidelines for setting up an air sensor network?
- How should the MPCA consider and evaluate various aspects (such as: the approach to outreach and engagement) of a project for awarding funds?

The MPCA received 18 responses to the request for input. Responses showed a need for ongoing community engagement, and a need to clearly communicate results and data with communities after the project ends. In communicating the technical aspects of any potential sensor projects, through linked US EPA guidelines, the MPCA also determined that to develop high-quality, technically sound, and community-based projects, partnerships would be necessary to accomplish this work. To allow for this partnership development, a longer application period of three months was allowed.

The request for proposals and evaluation

Grants that the MPCA or any other agency awards are guided by several statutes that the Department of Administration's Office of Grant Management uses as guidance and additional policies for grantmaking. The team working on the community air monitoring pilot grants did extra work to get input and shape the program so it would be meaningful to the community within the statutes and policies of the Office of Grants Management.

Based on the comments from the input period, and staff expertise, the MPCA developed the request for proposals. The data from these sensors needed to meet a high standard for the agency to be able to make decisions about placement of regulatory monitors, policy development, or other related actions as directed by the legislation. While there are no specific requirements for data quality for sensors like there are for regulatory monitors, data quality requirements for these grants were developed using US EPA Air Sensor guidance.¹ Therefore, the MPCA wanted to ensure the applicants understood the data quality needs of the program and their monitoring plans included sound data quality assessment.

¹ US EPA Air Sensor Toolbox <https://www.epa.gov/air-sensor-toolbox>

After the feedback period, the MPCA developed a Request for Proposals with three major evaluation categories:

- technical expertise and data management plan
- community engagement plan, environmental justice (EJ), and vulnerable population benefits
- project facilitation

Feedback from respondents highlighted a need for a robust outreach plan for community involvement. More points were therefore allotted to the community experience and engagement evaluation category than to the data and technical expertise category. Additional points were also awarded for overall project facilitation, a detailed budget, and staff qualifications.

The MPCA had an open request for proposals from March 27, 2024 to July 26, 2024. The MPCA staff held an informational webinar on April 25, 2024, to present materials and respond to questions about the RFP. The original plan included a 90-day application period, but an additional three weeks was granted following an applicant's request for an extension.

The MPCA worked with two partners to help with these grant applications. Minnesota Technical Assistance Program (MnTAP) and the Great Lakes Thriving Communities Technical Assistance Center (funded by the US EPA) helped facilitate the development of technical partnerships. The state's grant process does not allow agency staff to connect interested parties with each other and must remain impartial during an open grant period. However, to meet the requirements of the legislation, it was important that grantees have strong community connections and demonstrate good scientific project planning and implementation skills. MnTAP and Great Lakes Thriving Communities Technical Assistance Center were able to serve the role of connecting community-based applicants to technical assistance organizations.

The agency facilitates grants on a reimbursement-based system. The proposals were evaluated on a 100-point scale. The table below was offered in the request for proposals and used in evaluating the grants.

The legislature did not include any specific funding for the agency to administer the grant program, managing grants, and store or analyze data. However, Minn. Stat. § 16B.98, subd. 14, allows the Agency to spend 10% of any grant to manage a competitive grant program. The MPCA decided to utilize only about 3.5% of these funds (\$170,000) to draft the RFP, help manage the grants and approve plans and documents from the grantees. The total funding amount made available for grantees was \$4,830,000.

The agency received five applications requesting \$9,075,032. After completing the evaluation process, the MPCA awarded three grants. Because there wasn't enough funding to cover all applicants, state policy required that the top two projects were fully funded, and the third received a reduced award of the funds remaining.

Awarded projects and progress

The MPCA awarded funding to the University of Minnesota Urban Research and Outreach-Engagement Center, the Great Plains Institute, and The OSLUV Project to install sensors, analyze data, and share findings with the public. The funding to complete these grants is available until June 30, 2027, which allows for nearly two years of data gathering and exploration, as well as some time for analysis, visualization, and data interpretation.

The OSLUV Project

The OSLUV Project (OSLUV) will collaborate with the Frogtown and Hamline-Midway communities in Saint Paul to gather air quality data under the project name Neighbors for Clean Air. These communities, located near major roadways, have experienced some of the highest rates of asthma-related emergency department visits and hospitalizations across all age groups in comparison to state and metro averages.

OSLUV received \$1,473,250 for this project which focuses on metals sampling. In partnership with the neighborhood organizations and technical partners, they will deploy 30 outdoor metal samplers at homes in these two neighborhoods. People hosting the samplers will receive a stipend. The samplers proposed under the project will collect samples to determine the levels of metals at the sampler location, with analysis taking place at a certified analytical laboratory with a federally approved analytical method. This method can accurately determine the levels of 36 different metals, including those that are harmful to human health, including lead, arsenic, chromium, and others. With no widely available and inexpensive sensors for measuring metals, this approach will provide the best-quality data possible to address specific community concerns about metal pollution in the project neighborhoods.

This project aims to make air quality information easily accessible to support the health and well-being of these communities. Through technical partnerships with a for-profit technical partner JustAir (providing a public data dashboard, quality assurance management, and data reporting) and the nonprofit Minnesota State University, Mankato (St. Paul campus) (providing metals sampler design, operation, data analysis and interpretation), Neighbors for Clean Air will measure air quality in the two neighborhoods and engage with the public through workshops, social media, and tabling at events, followed by recommendations to community and key stakeholders based on the data at project completion.

As of December 31, 2025, Neighbors for Clean Air has finalized subcontracts, has pilot samplers operational in the Hamline-Midway neighborhood, and has held community meetings to identify priority locations for the remainder of the proposed metals samplers.

Great Plains Institute

The Great Plains Institute is partnering with two for-profit technical partners TD Enviro (providing in-depth air monitoring support, training, and data analysis) and JustAir (providing data management and public data dashboards). Together, they will implement AIRNET, an air quality monitoring plan across six metro area communities for two years. The communities are East Phillips Neighborhood Institute, North End Neighborhood Organization, Payne-Phalen Community Council, Greater East Side Community Council, West 7th/Fort Road Federation, and Union Park District Council. AIRNET will provide live monitoring data following strict quality assurance practices and incorporate community input and needs in the design phase.

GPI received \$1,390,493 for these six smaller projects across Minneapolis and Saint Paul, with shared outcomes of using data to work with the City of St. Paul, Met Council, MnDOT, and the MPCA to come up with solutions to decrease air pollution emissions from transportation and other sources of air pollution in the project communities.

As of December 31, 2025, AIRNET has completed two rounds of community meetings with three community partners, developed air monitoring plans for all six communities, identified and purchased equipment tailored to community interests, and is conducting collocation of sensors at an MPCA monitoring site. Based on those community meetings, individual project goals were determined, and appropriate technologies were chosen to fit those goals. A common theme across all projects was

pollution from areas with heavy transportation, as well as from permitted facilities in and near the community. Based on those concerns, many of the projects are focusing on fine particle pollution (PM_{2.5}) and other pollutants correlated to truck traffic (including nitrogen dioxide (NO₂) and black carbon.

University of Minnesota Urban Research and Outreach-Engagement Center

The University of Minnesota Urban Research and Outreach-Engagement Center, under the project title Clean Air for All, is deploying 23 QuantaQ Modulair air sensors for fine particle and gaseous pollutants along the West Broadway corridor of North Minneapolis. The project will include a stationary node sensor network, mobile lab pollutant mapping, and indoor air mitigation efforts. Its two main foci are data collection and analysis, as well as a robust set of initiatives to promote community engagement in air quality education and associated health risks prevention. The mobile lab will be used to identify specific sources and “hotspots,” by mapping pollution at a much higher geographic density than is possible with stationary sensors. Quarterly mobile measurements will detect and map thousands of air toxics not detectable by stationary low-cost sensors, in addition to the same pollutants measured by low-cost sensors for comparison.

U of M UROC received \$1,968,257 for these efforts, which include several outreach activities such as workshops, K-12 educational activities, awareness campaigns, an air quality education study, and the development of a community clean air center. These will be achieved through a partnership with the nonprofits Liberty Community Church, 21st Century Academy, and Northside Healing Center, located in North Minneapolis.

As of December 31, 2025, Clean Air for All has purchased equipment tailored to community interests and completed collocation of sensors at an MPCA monitoring site to compare sensor performance with regulatory ambient air monitors. They are hosting community meetings to determine specific sensor locations.

Requirements of the MPCA

The MPCA is responsible to evaluate how the sensor data collected by community groups can be used in the agency’s work to improve human health and the environment. The Legislature required the MPCA explore three requirements:

- 1) Any changes to the agency’s air monitoring network that will occur as a result of data developed under the program.
- 2) Any actions the agency has taken or proposes to take to reduce levels of pollution that impact the areas receiving grants under the program.
- 3) Any recommendations for legislation, including whether the program should be extended or expanded.

The following section outlines what the agency can and cannot do with sensor data, and how the MPCA can use data from these projects.

Minnesota’s regulatory monitoring network

Air sensors are good for screening approximate pollution concentration, understanding small scale differences, and examining trends. Air sensors are different from the regulatory monitors that the MPCA

operates to compare air quality to national air quality standards and benchmarks. Both air sensors and regulatory monitors have a role to play in understanding Minnesota's air quality.

Regulatory air monitoring is complex and costly. The instruments used must meet requirements established by EPA or other established methods. The field instruments require operators to maintain and collect samples on a prescribed basis and conduct checks to ensure the instruments are operating correctly. Additional requirements may require sample retrieval and laboratory analysis. All regulatory monitoring efforts must undergo rigorous quality assurance of instrument operation, sample collection, and laboratory analysis, be subjected to standardized data analysis, and ultimately be certified by the MPCA.

Each regulatory monitor must be sited for a specific purpose. According to the MPCA's [2026 Monitoring Network Plan](#), 63 sites in Minnesota monitor for ambient air quality statewide, and 31 of those sites are located in seven metropolitan counties. These sites monitor different pollutants and are established to meet one or more monitoring objectives of the Agency. Some sites monitor background concentrations of air pollution, some monitor for regional levels of air pollutants, and some are specifically to monitor nearby sources of air pollution. These monitors follow federal regulations for siting, quality assurance, and longevity.

The regulatory monitoring network quantifies and measures ambient air quality against standards and health benchmarks. The National Ambient Air Quality Standards (NAAQS) are health-based standards established by the US EPA that all states must meet. The monitoring network plans describe the siting of regulatory ambient air monitors that show compliance with NAAQS, and levels of other air toxics of concern. The regulatory monitoring network, and associated laboratory and data quality assurance programs are resource intensive and require continuous funding – they must meet US EPA requirements and be able to withstand legal scrutiny. While the MPCA has an ambient monitoring network that meets the US EPA's requirements, it is not possible to site and maintain enough of these complex and costly monitors to provide adequate coverage to inform a local scale understanding of air quality at a neighborhood level.

Sensors are a relatively inexpensive way to understand air quality at neighborhood scale. The MPCA uses a statewide air sensor network to inform air quality alerts, screen for pollutants, and detect trends, but these sensors do not have the same rigor as a regulatory monitor. In particular, there are no requirements that sensors be visited by a trained operator and tested to ensure they sensors are working properly and for many sensors there is no way to test a sensor for proper operation. Not all air data needs to be able to withstand legal scrutiny depending on the purpose of the data. Sensors are best perceived as measuring general concentrations of air pollutants, rather than the exact concentration as would be expected from a regulatory monitor. However, when sensor data shows increasing trends or unusual variability, compared to other sensors or regulatory monitors, that data could spark action on a local level. These actions could be to investigate source(s) of large quantities of wood smoke, or help a daycare decide if their children should play outside due to traffic and neighborhood fine particulate pollution. The MPCA would not use sensor data alone to take enforcement action on a facility, but sensor data may be used as weight of evidence in addressing air quality concerns with a facility or may lead to further investigations at the facility.

Using air sensors as a screening tool

Sensor data can be used to:

- Understand how air pollution differs between locations and over time at a fine scale. Trends can be drawn from these data.
- Screen for the presence of certain pollutants.
- Provide data in small increments of time (e.g. 1-min or 10-min).
- Increase public knowledge of the Air Quality Index (AQI) and how people can protect themselves.
- Compare data to community lived experience.

Trends

Sensors can sample every hour or even every few minutes. This allows us to understand changes in air pollution throughout one day or over a few days. A sensor located near a busy road may show higher air pollution during the rush hours and less pollution during weekends and holidays. A significant spike in pollution levels might be associated with an event like when high levels of fine particulate matter are seen after fireworks displays on Independence Day. Trends help the MPCA understand what is normal and what is anomalous like Independence Day fireworks.

Often, the source of pollution is difficult to determine with sensors. For example, low-cost sensors cannot determine the difference between particulate matter from wood smoke and diesel fine particles. Looking at trends must correlate with additional data either from community observation, known nearby sources, meteorological data, or other methods.

Presence of certain pollutants

There are hundreds of air pollutants, and sensors can be used to detect the presence of certain pollutants in a given location and approximate concentration. Knowing what types of pollution are present in a location helps the agency determine if further investigation is needed into a source or concentration of air pollution.

Some sensors are able to collect samples for laboratory analysis such as the Sensit SPod. This is a sensor that can detect volatile organic compounds (VOC) and can take physical samples that can be analyzed in a laboratory to determine which VOCs are present and their concentrations in that sample.

Understanding the presence of a specific pollutant can help determine actions to take, such as additional research to understand what the source of that pollutant was or find out if there is a leak of a harmful air pollutant nearby. Currently sensors can detect about 70 pollutants, but as sensor technology continues to evolve, the scope of pollutants they can detect will expand in the coming years.

Timely data

One of the best attributes of a sensor is its ability to provide data in near real-time. Many regulatory monitor data take weeks to obtain due to the need for laboratory analysis and quality assurance. However, since sensors are only screening tools, data is available quicker. This allows for near-real-time online maps to communicate air quality information, which informs the public on how to protect themselves from air pollution when there is a local air quality issue.

Because many air sensors are inexpensive, they are deployed in higher density across the state and inform MPCA meteorologists about air quality conditions. The wider coverage area allows forecasters to better track how air pollution, such as wildfire smoke, moves through the state. It also allows the MPCA to quickly extend or cancel air quality alerts based on the movement of wildfire smoke.

Sensor data is often displayed using the AQI scale. The AQI was developed by the US EPA to provide a simple, uniform way to report daily air quality conditions. Displaying sensor data with the AQI scale allows for residents to monitor the air quality and to make decisions on how to protect themselves. A system that displays data on the AQI scale help people take actions to protect their health to make informed decisions about their health and increase awareness of the risks associated with air pollution. Many sensors with open access maps use the AQI scale to display PM_{2.5} data.

Minnesota Outdoor Air Quality Guidance for Schools and Child Care

The following recommendations will help schools and child care staff determine when and how to adjust outdoor activities when air quality starts to reach unhealthy levels. Adjust activities accordingly to help children stay active while protecting their health.

OUTDOOR ACTIVITY DURATION

Air Quality Index	15 minutes to 1 hour	1 to 4 hours	4-plus hours
Good (0-50)	Good day to be outside!	Good day to be outside!	Good day to be outside!
Moderate (51-100)	No limitations for most children. For students with health conditions, consider alternatives or modified participation.	Be aware and monitor students with health conditions for changes in their health. Limit activities to light intensity.	Consider moving students inside or to an area with better air quality. Limit to less intense activities and/or limit duration of activity.
Unhealthy for Sensitive Groups* (101-150)	Limit activities to light intensity. Take breaks every 20 minutes. Make indoor space and activities available for sensitive children.	Limit activities to light intensity. Take breaks every 20 minutes. Activities with moderate to heavy exercise intensity should be canceled, rescheduled, or moved indoors.	Limit activities to light intensity and less than four hours in duration. Take breaks every 20 minutes. Activities with moderate to heavy exercise intensity should be canceled, rescheduled, or moved indoors.
Unhealthy (151-200)	Cancel or reschedule all outdoor activities. Keep all students indoors and activity levels light.	Cancel or reschedule all outdoor activities. Keep all students indoors and activity levels light.	Cancel or reschedule all outdoor activities. Keep all students indoors and activity levels light.
Very Unhealthy (201-300)			
Hazardous (301-500)			

*Unhealthy for Sensitive Groups: People with health conditions, or their caregivers, should manage conditions medically. Watch for symptoms, and for worsening symptoms, and have medications handy. Take action with a health care provider as needed.

Compare to lived experience

Studies from cities across the nation show that air pollution concentrations are often hyper-local. Spikes from pollution come from sources such as recreational fires, industrial sources, idling traffic, or wood burning stoves. The MPCA receives complaints from members of the public about air pollution concerns in their local area, but the regulatory monitoring network is not designed to determine the source of localized air pollution if it is small and brief such as occurs from a backyard fire. Placing air quality sensors in the areas of concern for the public may allow for better tracking of small-scale pollution events. This data can inform actions by local government units like cities or townships. For instance, noticing dust in an area with unpaved roads, the local community could suggest paving. The city of Minneapolis has used air sensor data to create a new ordinance for saunas to require electric furnaces because the wood burning furnaces were impacting neighbors' air quality. Having such hyper-local data allows the community members to engage their neighbors, the local businesses, policy makers, and the MPCA to take action to improve air quality in their neighborhood.

Sensor data review

The legislative funding also requires the MPCA to outline what action the agency will take based on the data from these sensor pilot projects. While data are not available yet, this section outlines how the agency may use data in the future.

The MPCA has a large quantity of sensor data and will receive even more data from these legislatively funded projects. Since sensor data cannot be compared directly to air quality standards, analyzing the data is complex and next steps must be considered on a case-by-case basis. Sometimes sensor data may indicate air in an area is similar to the air quality regionally. Differences between different locations does not always indicate a problem. Sometimes data may indicate there are differences, trends, or the presence of pollutants that indicate some additional investigation is warranted.

Reviewing sensor data involves evaluating the data for trends, presence of certain pollutants, and elevated levels compared to other sensors or regulatory monitors. If data is elevated or show increased trends, the situation may warrant further investigation. The data might indicate a local issue that is not related wildfires or other regional air quality events. From past sensor projects data that showed increasing trends and further inquiry included:

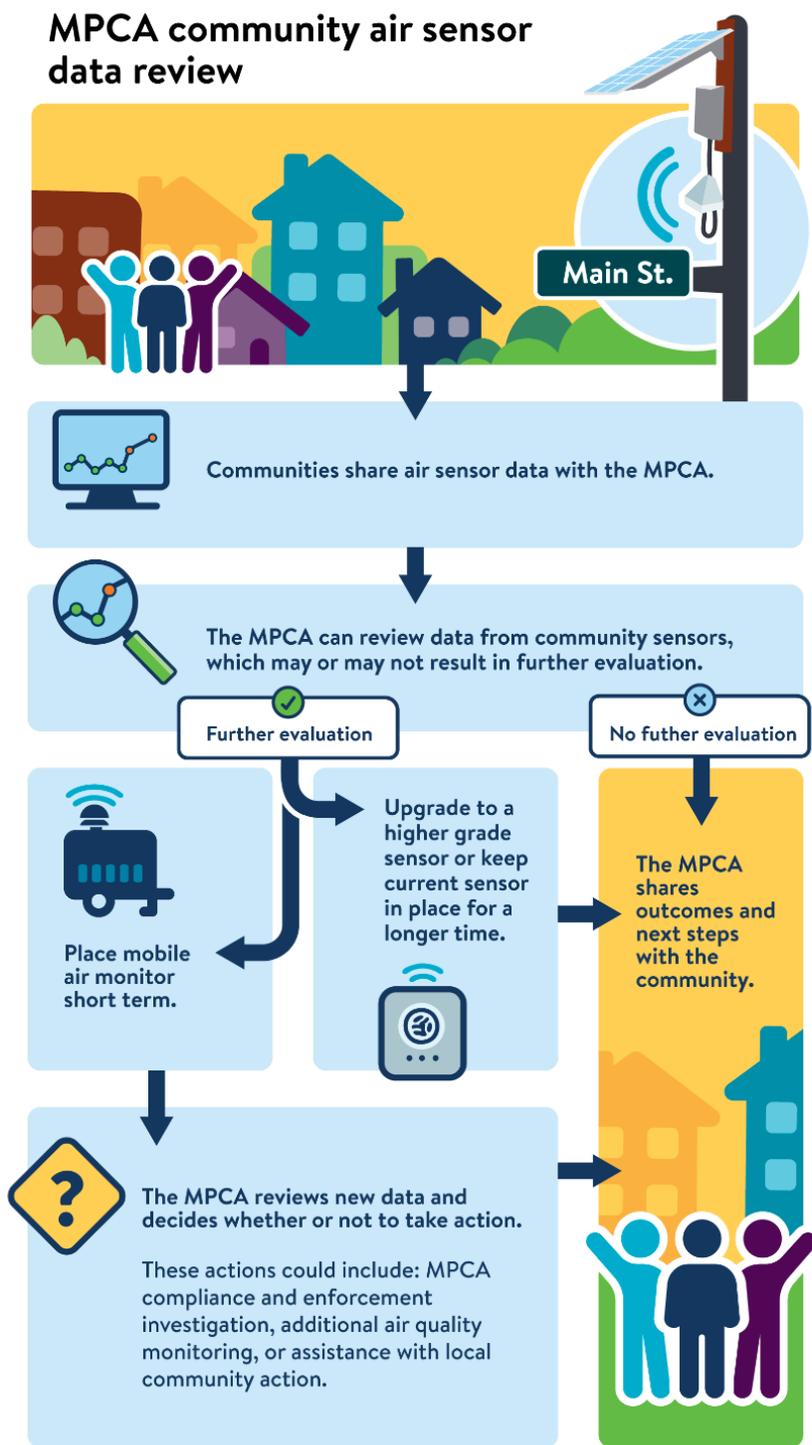
- Elevated nitrogen dioxide levels near the airport.
- Sensors near wood burning appliances to show nearby exposure.
- Sensors in a neighborhood near unpermitted facilities with dust issues.
- Elevated fine particle levels identified as diesel emissions from nearby trains.

Even if sensor data shows a verified trend, it does not mean MPCA can or needs to take action. For instance, sometimes the MPCA does not have authority to impact that source of pollution. In the case of the high nitrogen dioxide levels near the airport, MPCA staff expected that these elevated levels came from the airplanes. The agency does not have the authority to regulate pollution from airports or airplanes. Other times a source might be better handled through local action, such as paving a road.

With sensors reporting data in one-minute increments, each sensor creates a significant amount of data, which will take staff considerable time to fully analyze. MPCA staff will rely on the analysis of the grantees, or in the case of other sensor projects, their project leads, for flagging trend data, but the MPCA will need to verify before any potential further action. This sensor data, especially as part of the legislative funding, is valuable and the MPCA has received an US EPA grant to fund a temporary sensor data analyst. In the future, the MPCA will need to find additional funding for continued analysis of sensor data.

Some potential actions that could be taken with sensor data include local activities to address local pollution sources, such as paving a road, public education campaigns or individual conversations to talk to neighbors who burn wood for heat or recreation purposes, or local governments could create new

Figure 1. The MPCA’s process for reviewing air sensor data



ordinances to avoid nuisance air pollution. In some exceptional cases, sensor data may warrant further investigation with additional air monitoring and MPCA may decide to investigate sensor data further. This could include maintaining a sensor at the location for a longer period or adding additional sensor nearby to verify the air quality measurements. It may include deploying a higher-grade sensor. A higher-grade sensor may detect additional pollutants or the same pollutant at a more detailed level. A higher-grade sensor may be able to identify individual pollutants, instead of just a category of pollutants such as VOCs. This may explain the pollution or event causing the pollution.

Another option for some cases may be to deploy the MPCA’s mobile air monitor. The mobile monitor may be helpful in certain cases where regulatory action may be a possibility in the future, which could be determined by limited time deployment.

The MPCA’s new mobile monitoring system houses regulatory-grade equipment, including portable mass spectrometer to measure VOC air toxics, a

continuous metals monitor, a fine particulate monitor, a Hydrogen Sulfide (H₂S) monitor, and can be equipped to measure all the criteria pollutants. This equipment will be enclosed in a trailer and placed at a site for additional investigation. The mobile monitor is intended to investigate air quality around facilities and with a priority to understand air quality in environmental justice areas. Sensor data can be

used as one tool to help identify priorities for locations to investigate with the mobile monitoring platform.

The mobile monitoring trailer has a specific siting prioritization process, and limits for how long it may deploy at a single site, but overall, it is meant to be used over a short time. Since the mobile monitor will not be able to be posted for long periods of time, pollutants or issues that can vary year to year or season to season will not be detected by the mobile monitor. For longer periods of study, sensor data monitoring for a longer period of time may be required.

After a study with the mobile monitor, the MPCA would need to evaluate whether further action is possible or necessary based on analysis of the data. Potential actions might include: no additional action, further investigations using sensors, or involving the MPCA Compliance and Enforcement (C&E) team for more direct investigation and possible enforcement actions if a regulated facility is involved. Examples of C&E actions include the installment of additional pollution control equipment, updated or new air modeling, potential required regulated monitoring and many other actions. Further analysis via sensors could occur for several reasons – seasonal variability, site issues, re-prioritization, or the need for higher-grade sensor over a longer period of time.

In rare cases, the MPCA may decide to take the resource-intensive action to shift resources to install a permanent regulatory monitoring site based on data from sensors and the mobile monitor. Siting a new regulatory monitor can take over a year and requires many resources. Once a monitor need is determined, there are several steps for siting a monitor. The agency must acquire a lease for the land, power, and other requirements for the site, and then conduct modeling to ensure the monitor is placed correctly for the pollutants in question. Adding a new monitoring site is a major commitment of resources for the agency and cannot be done without either new funding or shifting resources away from existing sites. These challenges limit the MPCA's ability to move or add regulatory monitors or sites.

Localized data from air sensors is valuable in understanding local air quality. Sensor data can lead to local action, as well as identify places for additional investigation. The MPCA has tools available for these investigations, but the MPCA operates with limited resources and must prioritize across findings. Additional resources would be needed for additional actions based on sensor data.

Considerations for future legislation

As required by HF2310 language, the MPCA is required to note any recommendations for legislation. The MPCA offers these considerations for future legislation:

- ❖ Through feedback, we received two requests for funding to cover the full state. Both the City of Mankato and the Mille Lacs Band of Ojibwe expressed interest in doing projects but were not in the seven-county metro area and thus not eligible to apply for this grant.
- ❖ Sensor projects take a long time to establish, gather community input, purchase and deploy sensors, collect, troubleshoot, and analyze data – all while returning to the community to educate, ask questions, and share findings. Extending timelines to allow the agency to receive feedback and for grantees to develop these projects with the community would be beneficial in the future.
- ❖ After this investment in community air monitoring is complete, additional funding to allow these projects to continue would be possible with minimal investment. When projects only gather data for one or two years, temporal changes may hide long-term issues that could be

highlighted from a longer record. If sensors are still recording valid data and working well, continuing their deployment would be beneficial and require minimal additional investment.

Conclusion

Community air monitoring is a powerful tool for tracking air quality on a neighborhood level. Funding these kinds of projects and investing in communities disproportionately burdened by air pollution ensures that chronically overlooked areas get the attention, air pollution reductions, and financial investments they need. All three funded projects are deeply rooted in community outreach and engagement, include local investment, and intend to bring about improvements to local air quality through lasting partnerships and environmental education. Through this community-focused grant program, the MPCA funded projects that addressed air pollution concerns identified by specific communities, including issues related to transportation emissions and permitted facilities.

This grant program has informed future air sensor data planning, which includes a process for evaluating air sensor data for potential additional investigation and action. This approach advances the agency's data-driven, non-regulatory air monitoring work and will be applied to current projects and future community-focused efforts.

Regardless of what the MPCA can or cannot do with the data from these projects, the agency is confident that these projects will guide communities to develop future sensor projects and elevate the quality of our own projects. Sensor work is often built upon past learning, as this project has built on other projects. State staff will have more experience with sensors because of this work. More people will be informed, more data will be gathered, people will have learned new skills, and ultimately, more people will engage with air quality to help protect themselves and their environment.

Appendix

HF2310 Language

Request for Proposals and Addendum extending the deadline

Sec. 6. COMMUNITY AIR-MONITORING SYSTEMS; PILOT GRANT PROGRAM.

Subdivision 1. **Definitions.** (a) For purposes of this section, the terms in this subdivision have the meanings given.

(b) "Agency" means the Minnesota Pollution Control Agency.

(c) "Commissioner" means the commissioner of the Minnesota Pollution Control Agency.

(d) "Community air-monitoring system" means a system of devices monitoring ambient air quality at many locations within a small geographic area that is subject to air pollution from a variety of stationary and mobile sources **in** order to obtain frequent measurements of pollution levels, to detect differences **in** exposure to pollution over distances no larger than a city block, and to identify areas where pollution levels are inordinately elevated.

(e) "Nonprofit organization" means an organization that is exempt from taxation under section 501(c)(3) of the Internal Revenue Code.

Subd. 2. **Establishing program.** A pilot grant program for community air-monitoring systems is established in the agency to measure air pollution levels at many locations within a community.

Subd. 3. **Eligible applicants.** Grants under this section may be awarded to applicants:

(1) consisting of a partnership between a nonprofit organization located in or working with residents located in the area in which the community air-monitoring system is to be deployed and an entity that has experience deploying, operating, and interpreting data from air-monitoring systems; and

(2) located **in** the seven-county metropolitan area.

Subd. 4. **Eligible projects.** Grants may be awarded under this section to applicants whose proposals:

(1) use a variety of air-monitoring technologies approved for use by the commissioner, including but not limited to stationary monitors, sensor-based handheld devices, and mobile devices that can be attached to vehicles or drones to measure air pollution levels;

(2) obtain data at fixed locations and from handheld monitoring devices that are carried by residents of the community on designated walking routes in the targeted community and that can provide high-frequency measurements;

(3) use the monitoring data to generate maps of pollution levels throughout the monitored area; and

(4) provide monitoring data to the agency to help inform:

(i) agency decisions, including placement of the agency's stationary air monitors and the development of programs to reduce air emissions; and

(ii) decisions by other governmental bodies regarding transportation or land use

planning. Subd. 5. **Eligible expenditures.** Grants may be used only for:

(1) planning the configuration and deployment of the community air-monitoring system;

(2) purchasing and installing air-monitoring devices as part of the community air-monitoring system;

(3) training and paying persons to operate stationary, handheld, and mobile devices to measure air pollution;

(4) developing data and mapping systems to analyze, organize, and present the air-monitoring data collected; and

(5) writing a final report on the project, as required under subdivision 9.

Subd. 6. **Application and grant award process.** An eligible applicant must submit an application to the commissioner on a form prescribed by the commissioner. The commissioner must develop administrative procedures governing the application and grant award process. The commissioner must act as fiscal agent for the grant program and is responsible for receiving and reviewing grant applications and awarding grants under this section.

Subd. 7. **Grant awards; priorities.** In awarding grants under this section, the commissioner must give priority to proposed projects that:

(1) take place:

(i) in areas with high rates of illness associated with exposure to air pollution, including asthma, chronic obstructive pulmonary disease, heart disease, chronic bronchitis, and cancer;

(ii) in or within one mile of a census tract where a facility with a state individual air permit has undergone an enforcement action that required the payment of a civil penalty in the previous two years; or

(iii) in an environmental justice area as defined in Minnesota Statutes, section 116.065;

(2) promote public access to and transparency of air-monitoring data developed through the project; and

(3) conduct outreach activities to promote community awareness of and engagement with the project.

Subd. 8. **Report to agency.** No later than 90 days after a project ends, a grantee must submit a written report to the commissioner describing the project's findings and results and any recommendations for agency actions, programs, or activities to reduce levels of air pollution measured by the community air-monitoring system. The grantee must also submit to the commissioner all air-monitoring data developed by the project.

Subd. 9. **Report to legislature.** No later than March 15, 2025, the commissioner must submit a report to the chairs and ranking minority members of the legislative committees with primary jurisdiction over environment policy and finance on the results of the grant program, including:

(1) any changes in the agency's air-monitoring network that will occur as a result of data developed under the program;

(2) any actions the agency has taken or proposes to take to reduce levels of pollution that impact the areas that received grants under the program; and

(3) any recommendations for legislation, including whether the program should be extended or expanded.

EFFECTIVE DATE. This section is effective the day following final enactment.

Metro Community Air Monitoring Pilot Grant Program Request for Proposals (RFP) FY24

The RFP assists applicants in applying for and managing state grants. This document describes the State Fiscal Year 2024 (FY24) Metro Community Air Monitoring Pilot grant round, including information on who may apply for funding, the funding priorities, match requirements, activities eligible for funding, and other information that will help applicants plan their project and submit a competitive application. **Applications are due no later than 4:30 p.m. Central Time on (June 28, 2024).**

The applicant should check the [SWIFT Supplier Portal](#) for any updates, including questions and answers and addendums.

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A grant application form and a sample grant agreement can be found in the [SWIFT Supplier Portal](#).

1. Project overview

The Minnesota Pollution Control Agency (MPCA) requests proposals from eligible applicants to fund a community air monitoring pilot grant program. Eligible applicants include community non-profits and partnering organizations who will develop a network of neighborhood air monitoring in the 7-county metro region (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington). Partnerships with other entities to achieve all aspects of the project is expected. The project(s) are prioritized to be in environmental justice communities, have extensive community engagement, and will use a variety of sensors to gather data on a variety of pollutants. This grant is designed to monitor air quality on a neighborhood scale (deployment of fixed continuous monitoring sensors as dense as is reasonably possible and spatiotemporal (mobile) sensors are deployed such that they cover each block within the network) in communities disproportionately impacted by air pollution, to engage those communities in outreach and cooperation, and to provide data to the MPCA that can help with decision making.

Reports will be made on a quarterly basis with the following requirements:

- Audited and raw data collected up to and including the current reporting period.
- A narrative summary of the data and any interpretations made to that point.
- Number of sensors deployed and location.
- Outreach and engagement activities planned or done.

2. Funding

Approximately \$4.85 million in funding is available. The grant will fund between two and five projects to non-profit groups capable of (or partnering with entities capable of) neighborhood scale air monitoring.

Minimum grant amount will be \$750,000 per project.

The grant is administered under Minn. Stat. §HF2310-4, Section 6, subd.2

Collaboration

The MPCA recognizes that not all non-profits may have the expertise in both air monitoring and community engagement. As such, multi-organization collaboration with any non-profit grantee is encouraged to fill gaps in technical capacity and to broaden the reach of the community goals of the grant.

The MPCA has partnered with the Minnesota Technical Assistance Program ([MnTAP](#)) and the Great Lakes Thriving Communities Technical Assistance Center ([TCTAC](#)) to help facilitate technical partnerships. Interested groups or individuals are encouraged to reach out to these groups via janep2@umn.edu. Contact details will also be available on the [Air Sensors/Community Air Monitoring website](#). Potential technical partners can be added to a list that MnTAP will provide to applicants. Interested applicants can reach out to MnTAP to request this list while the RFP is open.

Reimbursement schedule

Reimbursement for eligible costs will be paid upon submission of progress reports and invoices received quarterly. Invoices should include copies of invoices paid by the grantee, total hours worked per subtask, and any other documentation of relevant costs the grantee expects to be reimbursed for.

3. Eligible and ineligible applicants

Eligible applicants

- Non-profits within any of the 7 counties in the metro region, who can perform neighborhood scale air monitoring themselves, or that are partnering with entities that have expertise in neighborhood scale air monitoring are eligible to apply.
 - Have experience and connections working with residents located in the area in which the community air-monitoring system is to be deployed.
- For profit and municipalities only as a partnering entity.

Ineligible applicants

- Individuals
- Entities that are currently suspended or debarred by the State of Minnesota and/or the federal government are ineligible applicants.
- The MPCA may also deem an applicant ineligible because of, but not limited to: enforcement issues, labor standards, tax status, or other such issues.

4. Eligible and ineligible projects

Eligible projects

Applicants must meet the minimum requirements to be fully considered for this grant opportunity.

- Projects located within the 7-county metro region of Minnesota. Project involves residents located in the area in which the community air-monitoring system is to be deployed.
- Demonstrated technical expertise for administering an air sensor program.
 - This includes criteria used in scoring, such as a Q/A plan, technological readiness of proposed solutions & sensors included in the plan, the data management plan, etc.
- Demonstrated connection to community and knowledge of a community's needs related to air pollution.
 - This includes criteria used in scoring, such as questions related to what you trying to learn from this project, what projects have you completed in your community, your experience communicating complex subjects, past experience with EJ communities, and the proposed plan for outreach and data visualization and interpretation to community.
- Demonstrated reasonable ability to facilitate a project of this scale.
 - This includes criteria used in scoring, such as budget , and staff working on proposed project and qualifications via staff matrix.

Ineligible projects

- Any project that does not fit the intention of the program as described above.
- Projects focused on research and development (R & D) of a particular technology or business.
- Projects focused on anything other than community focused air monitoring.

5. Eligible and ineligible costs

Eligible costs

- Installing air-monitoring devices, including but not limited to delivering equipment and sensors, materials related to device installation
- Salaries & staff-time
- Stipends or monetary contributions to community members assisting the project
- Costs related to community engagement including but not limited to, facility rentals, printing and postage
- New computer(s), tablets, and software, if unique to the project
- Purchase or rental of new mobile communication devices such as cell phones, if unique to the project

Ineligible costs

Ineligible costs include costs that are not directly related to the project. The following costs, including but not limited to, even if they are directly related to the project, are ineligible:

- Overhead
- Any expenses incurred before the grant agreement is fully executed including applicant's expense for preparing the eligibility and cost applications
- Any expenses incurred during workplan application and final workplan development
- Bad debts, late payment fees, finance charges or contingency funds, interest, and investment management fees
- Attorney fees
- Engineering/consultant fees
- Lobbying, lobbyists, and political contributions
- Mark-up on purchases and/or subcontracts

- Taxes (except as noted above as eligible)
- Activities addressing permit fees
- Activities addressing enforcement actions that involve a financial penalty
- Memberships (including subscriptions and dues)
- Food
- Alcoholic refreshments
- Entertainment, gifts, prizes, decorations and events
- Merit awards and bonuses

6. Priorities

Priority will be given to proposed projects that take place:

- in areas with high rates of illness associated with exposure to air pollution, including asthma, chronic obstructive pulmonary disease, heart disease, chronic bronchitis, and cancer;
- in or within one mile of a census tract where a facility with a state individual air permit has undergone an enforcement action that required the payment of a civil penalty in the previous two years; or
- in an environmental justice area as defined in Minnesota Statutes, section 116.065;

Projects also are given priority if they promote public access to and transparency of air-monitoring data developed through the project; and conduct outreach activities to promote community awareness of and engagement with the project.

This grant will also award points to a non-profit with an Executive Director, Tribal Chair, or other member in the Executive Leadership role that identifies as Black, Indigenous, and/or Person of Color.

It is the policy of the State of Minnesota to ensure fairness, precision, equity and consistency in competitive grant awards. This includes implementing diversity and inclusion in grant-making. [The Policy on Rating Criteria for Competitive Grant Review](#) establishes the expectation that grant programs intentionally identify how the grant serves diverse populations, especially populations experiencing inequities and/or disparities.

The dual purpose of this project is to both engage communities affected by air pollution, and to provide high quality data to the MPCA (and local communities) for use in decision making. As such, consideration will be given to qualities in plans that highlight both the community side of the project, and the technical air monitoring network side.

7. Application submission instructions

All applicants must complete and submit the Grant Application Form and budget.

A list of criteria expected to be included in projects can be found in Appendix A.

Applications must be received electronically in SWIFT by **June 28, 2024**. Application submissions received after the deadline will not be considered eligible. Application forms should be submitted in their original file types (Word).

Applications must be submitted through the [SWIFT Supplier Portal](#). Note: The RFP is termed an “Event” within SWIFT. MPCA is not responsible for any errors or delays caused by technology-related issues.

Applicants do not need to log in to view the RFP and associated documents in the SWIFT system. Applicants interested in applying will need to register as a bidder in the system by clicking on the [SWIFT Supplier Portal](#), then *Register for an Account and Register as a Bidder*.

Note: If an applicant is already registered in the SWIFT system as a Supplier, they do not need to register as a bidder. They will need their Supplier ID.

Questions regarding submitting an application can be directed to the Vendor Assistance Help Desk at 651-201-8100, option 1 or by clicking on *Supplier Portal Help* within the [SWIFT Supplier Portal](#).

Applications submitted via any other method, including but not limited to email, fax, mail, in-person deliveries, will not be accepted.

8. Application questions

The MPCA is obligated to be transparent in all aspects surrounding grant work. To meet this obligation, all questions must be submitted in the same manner, and answers are only provided via the [SWIFT Supplier Portal](#). It is the applicant's responsibility to check the [SWIFT Supplier Portal](#) and MPCA website for the most recent updates.

Applicants who have any questions regarding this RFP must email questions to grants.pca@state.mn.us, subject line: "**Community Air Monitoring**", no later than **June 14, 2024**. Answers to questions will be posted frequently in the [SWIFT Supplier Portal](#).

MPCA personnel are not authorized to discuss this RFP with applicants outside of the question and answer forum. Contact regarding this RFP with any MPCA personnel may result in disqualification.

9. Application review process

Formal review of applications will be conducted by a team of MPCA staff. Late proposals will not be considered for review.

Stage 1: Eligibility Review:

The MPCA will determine if eligibility requirements are met. Any application found to be ineligible will be eliminated from further evaluation. Minimum requirements:

- Applicant is eligible
- Application is received on time
- Project is eligible
- Must meet minimum requirements

Stage 2: Application scoring

Only applications meeting the eligibility criteria under Stage 1 will be considered for scoring in Stage 2. Reviewers will evaluate applications using the weighted criteria listed on the last page of this document in Exhibit A.

In addition to the ability to partially award projects, the MPCA reserves the right to withdraw the award offer or refrain from awarding a grant in the event that program funding is made unavailable or none of the proposed projects meet the requirements of the grant. If the MPCA concludes that no project has sufficient potential to implement the desired environmental outcome in Minnesota, the MPCA may or may not reinstate the RFP process. In the event that additional funding is made available, the MPCA reserves the right to award additional grant funds to eligible applicants who were not originally funded.

The review team will consider an applicant's past performance (pursuant to Minn. Stat. § 16B.97 and Grants Management, Policy Number 08-13), and may disqualify an applicant if it finds documented evidence of poor performance under a grant in the past five years.

Notification

The MPCA anticipates notifying applicants of award status within 60 days after closing of the application period.

10. Grantee responsibilities

Awardees are required to be a registered vendor in SWIFT and will sign the grant agreement using DocuSign. To register, go to the Supplier Portal webpage in [SWIFT](#) and click on the *Register for an Account link and then Register as a Supplier*.

Grant agreement

Each awardee must enter into a grant agreement. The agreement will address the conditions of the award. Once the agreement is signed, the recipient is expected to comply with all conditions.

A sample State of Minnesota agreement can be found on the [SWIFT Supplier Portal](#) for your reference. Much of the language reflected in the agreement is required by statute.

Reporting requirements

The grantee will be required to submit quarterly reports per the requirements in the project overview section, as well as a final report by June 30, 2027. The final report will include the types and numbers of air sensors deployed, any data collected not already included in quarterly reports, a summary of findings based on the air monitoring, and a summary of community outreach and engagement efforts that occurred over the course of the project.

Public data

Applications are private or nonpublic until opened. Once the applications are opened, the name and address of the applicant and the amount requested is public. All other data in an application is private or nonpublic data until all agreements are fully executed. After all agreements are fully executed, all remaining data in the applications is public with the exception of trade secret data as defined and classified in Minn. Stat. § 13.37. A statement by a grantee that the application is copyrighted or otherwise protected does not prevent public access to the application (Minn. Stat. § 13.599, subd. 3).

Conflict of interest

We will take steps to prevent individual and organizational conflicts of interest, both in reference to applicants and reviewers per [Minn. Stat. §16B.98](#) and [Conflict of Interest Policy for State Grant-Making](#).

Organizational conflicts of interest occur when:

- a grantee or applicant is unable or potentially unable to render impartial assistance or advice to the Department due to competing duties or loyalties
- a grantee's or applicant's objectivity in carrying out the grant is or might be otherwise impaired due to competing duties or loyalties

In cases where a conflict of interest is suspected, disclosed, or discovered, the applicants or grantees will be notified and actions may be pursued, including but not limited to disqualification from eligibility for the grant award or termination of the grant agreement.

Grant Monitoring

[Minn. Stat. §16B.97](#) and [Policy on Grant Monitoring](#) require the following:

- One monitoring visit during the grant period on all state grants of \$50,000 and higher
- Annual monitoring visits during the grant period on all grants of \$250,000 and higher
- Conducting a financial reconciliation of grantee's expenditures at least once during the grant period on grants of \$50,000 and higher. For this purpose, the grantee must make expense receipts, employee timesheets, invoices, and any other supporting documents available upon request by the State.

The monitoring schedule will be determined at a later date.

Financial Review Process

All Non-Governmental Organizations (NGO's) applying for grants in the state of Minnesota must undergo a financial review prior to a grant award made of \$25,000 and higher.

In order to comply with [Policy 08-06, Financial Review of Nongovernmental Organizations](#), the MPCA will ask applicants to submit one of the following documents, based on the following criteria:

- Grant applicants with annual income of under \$50,000, or who have not been in existence long enough to have a completed IRS Form 990 or audit should submit their most recent board-reviewed financial statements.
- Grant applicants with total annual revenue of \$50,000 or more and less than \$750,000 should submit their most recent IRS Form 990.
- Grant applicants with total annual revenue of over \$750,000 should submit their most recent certified financial audit.

Grantee Bidding Requirements

Grantees that are non-governmental organizations (NGO's) must follow:

Any grant-funded services and/or materials that are expected to cost:

- \$100,000 or more must undergo a formal notice and bidding process
- Between \$25,000 and \$99,999 must be competitively awarded based on a minimum of three verbal quotes or bids
- Between \$10,000 and \$24,999 must be competitively awarded based on a minimum of two verbal quotes or bids or awarded to a targeted vendor

For grant-funded projects that include construction work and have a total project cost of \$25,000 or more, prevailing wage rules apply per; [Minn. Stat. §§ 177.41](#) through [177.44](#). The bid request must state the project is subject to *prevailing wage*.

These rules require that the wages of laborers and workers should be comparable to wages paid for similar work in the community as a whole. A prevailing wage form should accompany these bid submittals.

The grantee must take all necessary affirmative steps to assure that targeted vendors from businesses with [active certifications through these entities are used when possible](#):

- [State Department of Administration's Certified Targeted Group, Economically Disadvantaged and Veteran-Owned Vendor List](#).
- Metropolitan Council's Targeted Vendor list: [Minnesota Unified Certification Program](#).
- Small Business Certification Program through Hennepin County, Ramsey County, and City of St. Paul: [Central Certification Program](#).

The grantee must maintain:

- Written standards of conduct covering conflicts of interest and governing the actions of its employees engaged in the selection, award, and administration of contracts.
- Support documentation of the purchasing and/or bidding process utilized to contract services in their financial records, including support documentation justifying a single/sole source bid, if applicable.

The grantee must not contract with vendors who are suspended or debarred in Minnesota:

<https://mn.gov/admin/osp/government/suspended-debarred/>

Audits

Per [Minn. Stat. § 16B.98](#) Subdivision 8, the grantee's books, records, documents, and accounting procedures and practices of the grantee or other party that are relevant to the grant or transaction are subject to examination by the granting agency and either the legislative auditor or the state auditor, as appropriate. This requirement will last for a minimum of six years from the grant agreement end date, receipt, and approval of all final reports, or the required period of time to satisfy all state and program retention requirements, whichever is later.

Affirmative Action and Non-Discrimination requirements for all Grantees:

- A. The grantee agrees not to discriminate against any employee or applicant for employment because of race, color, creed, religion, national origin, sex, marital status, status in regard to public assistance, membership or activity in a local commission, disability, sexual orientation, or age in regard to any position for which the

employee or applicant for employment is qualified. [Minn. Stat. §363A.02](#). The grantee agrees to take affirmative steps to employ, advance in employment, upgrade, train, and recruit minority persons, women, and persons with disabilities.

- B. The grantee must not discriminate against any employee or applicant for employment because of physical or mental disability in regard to any position for which the employee or applicant for employment is qualified. The grantee agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled persons without discrimination based upon their physical or mental disability in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. Minnesota Rules, part [5000.3500](#)
- C. The grantee agrees to comply with the rules and relevant orders of the Minnesota Department of Human Rights issued pursuant to the Minnesota Human Rights Act.

Voter Registration Requirement:

The grantee will comply with [Minn. Stat. § 201.162](#) by providing voter registration services for its employees and for the public served by the grantee.

Exhibit A: Application evaluation score sheet

A 100 – point scale will be used to evaluate eligible applications and develop final recommendations. Projects will be evaluated and ranked according to the following criteria (please refer to the application for specific questions that need to be addressed in the proposal):

	Maximum points
<p>Technical expertise and plan (40 points max)</p> <ul style="list-style-type: none"> • Technological readiness of proposed solutions & sensor types and variety (up to 10 points) • Quality Assurance & Quality Control plan (up to 10 points) • Data management plan (up to 10 points) • Deployment plan (up to 10 points) 	40
<p>Community engagement plan, environmental justice (EJ) and vulnerable population benefits (45 points max)</p> <ul style="list-style-type: none"> • What are you trying to learn from this project?(up to 5 points) • What projects have you completed in your community?(up to 5 points) • How have you communicated complex subjects to an interested audience, and how do you plan to communicate about this project?(up to 5 points) • Past experience with environmental justice(up to 10 points) • Proposed plan for outreach and data visualization to community(up to 15 points) • Priority given to projects based on location described in Priorities section, and application (EJ, Facilities, Health)(up to 5 points) 	45
<p>Project facilitation (15 points max)</p> <ul style="list-style-type: none"> • Budget(up to 5 points) • Staff working on proposed project and qualifications (staff matrix) (up to 5 points) • Executive Director, Tribal Chair, or other member in the Executive Leadership role identifies as Black, Indigenous, and/or Person of Color. (up to 5 points) 	15
Total score	100

Appendix A: Technical criteria expected in projects

Projects should include the following criteria in order to meet the stated goals of this grant:

- Community based analysis and outreach
 - Community will be involved in decision making surrounding what pollutants to monitor and where the monitoring will occur.
 - Plans for translating and interpreting data and messages.
- Community engagement and partnerships
 - Public reporting portals, newsletters, etc.
- Sensor types (category/model) will be submitted to and approved by the MPCA prior to deployment. A variety of high-quality sensors will be required.
- Categories of sensors may include but are not limited to: fine particles, Volatile Organic Compounds (VOCs), metals, Ozone, Nitrogen Oxides, Carbon Monoxide, Sulfur Dioxide, Hazardous Air Pollutants (HAPs).
 - Collect data on a neighborhood scale resolution.
 - Deploy sensors. Deployment of fixed continuous monitoring sensors as dense as is reasonably possible and spatiotemporal (mobile) sensors are deployed such that they cover each block within the network.
 - Undertake Quality Assurance (QA) of sensors and data.
- Sensor calibration Standard Operating Procedures (SOPs) will be required and approved by the MPCA prior to data collection.
 - Initial SOPs required with deployment plan, before sensors are deployed.
 - Final SOPs required, and timeline considered in the workplan.
- Data validation - Quality Control (QC)
 - Unless already certified, co-location of like sensors will occur prior to data collection, and basic statistics to show that they trend together will be provided to the MPCA.
 - Access to permanent reference facilities may be provided by the MPCA for co-location calibration with regulatory monitors.
 - Drift Analysis of the sensors should occur and be incorporated into data correction.
 - Resource: [Quality Assurance & Documentation Citizen Science Handbook](#)
- Develop a comprehensive data management plan to include but not limited to:
 - MPCA is allowed access to any cloud based data.
 - Final download link (via FTP or similar mechanism) for full dataset by end of project.
 - Performance metrics (# of active sensors, % uptime over network, etc.) provided by end of project.
- Data will be visualized (i.e. graphs, maps, etc.) and made publicly available to promote access to and transparency of community air monitoring data.
- Deployment plan suggested due date is December 31, 2024.
- Checkpoints for engineering solutions to novel deployments are included in the workplan.
- Quarterly reports with data (see Project Overview).

Optional:

- A variety of monitoring strategies is encouraged, including but not limited to seasonal monitoring, specific monitoring, and reactive monitoring.
- Screening locations for potential future permanent reference monitors is encouraged.

REQUEST FOR PROPOSAL (RFP) ADDENDUM

Addendum No.: 4 Date of Addendum: 6/14/24

Due Date, Time: ~~June 28, 2024~~ July 26, 2024 at 4:30pm

Proposal due date has changed

Title: Metro Community Air Monitoring Pilot Grant

SCOPE OF ADDENDUM

The RFP is revised as follows with ~~strike through~~ for deletions and underlining for insertions:

Revision 1

The RFP, page 1 is amended as follows:

The RFP assists applicants in applying for state grants. This document describes the **Metro Community Air Monitoring Pilot Grant** grant round, including information on who may apply for funding priorities, activities eligible for funding and other information that will help the applicants plan their project and submit a competitive application. **Applications are due no later than ~~June 28, 2024~~ July 26, 2024, at 4:30pm Central Time (CT).**

Revision 2

The RFP, section 7 “Application submission instructions” is amended as follows:

Applications must be received electronically by the MPCA no later than ~~June 28, 2024~~ July 26, 2024 at 4:30pm CT. Applications will be submitted through the [SWIFT Supplier Portal](#).

Revision 3

The Application, page 1 is amended as follows:

Applications are due no later than 4:30 p.m. Central Time (CT) on ~~June 28, 2024~~ July 26, 2024.

This addendum will become part of the Request for Proposal and must be submitted with the Request for Proposal Response.

RESPONDER NAME: Nicole Pedro

DATE: 6/14/2024