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After reviewing the [EPA's guidebook](#) for setting up and maintaining an [air monitoring network](#), can your organization easily follow these guidelines?
Maybe, would require additional technical support

Yes, this is manageable with partners

Other (please specify)

The EPA guidebook "Enhanced Air Sensor Guidebook" that was posted is 195 pages long - far too long and too complex for nearly all citizens to understand without a training course.

What barriers do you see in undertaking this project?
Overall technical expertise

Data collection and documentation

Other (please specify)

This would be a complex project for citizen monitoring. As a minimum, performing citizen monitoring in a way that makes it useful to citizen groups would require a substantial training program supported by MPCA, plus supervision during site selection, involvement in data interpretation, and involvement in instrument maintenance.

In addition to covering the cost of the sensors and their maintenance, how would you use the grant funding?
Secure location, including power and Wi-Fi

Staffing to maintain the sensors

Data collection and sharing

Other (please specify)

I think a program like this would require considerable support from MPCA, perhaps a full time staff member to share across a network for say, 20 sensor locations.

How should the MPCA consider an applicant's approach to community outreach and engagement during the grant application process?

See responses above. But finally, how would a citizens' groups use the data? Broad interpretation would require external (e.g., MPCA) support to validate data and to help visualize and interpret it. For example, data from 1 sensor doesn't say nearly as much as data from 20 sensors, which would show spatial patterns and perhaps point toward potential sources. Also, for ozone, the pattern of precursors is also important; typically exhaust fumes in the am react in the atmosphere to produce ozone in the afternoon, which often means that ozone peaks are located considerably (miles) downwind from the source of primary pollutants. MPCA should be directly involved with data collection and interpretation, and importantly, in communicating findings from the citizens monitoring program in terms THEY can understand.

What other information should the MPCA consider during the community air monitoring grant process?

Can involvement of specific citizen volunteers be assured during the life of the program? It is somewhat unlikely that one person would be the main sampler during a multiyear program, which means that continuous training of new individuals would have to be conducted. This will require a sustained commitment (and funding) for MPCA staff to support the operation.

On the positive side, other citizen monitoring programs, notably MPCA's citizens lake secchi disk program (now about 30 years old) has provided excellent data on trends in water quality. It also appears (from a Wisconsin study) that individual citizens who "drop out" often do so because they have moved upward to other types of environmental programs. For the proposed program, I suggest tracking the volunteers over time, to see how the experience with air monitoring has informed their subsequent roles in citizen environmental programs.