



CITY OF MADISON • FINANCE DEPARTMENT • PURCHASING SERVICES

Non-Competitive Selection Request

Date: 06/12/2023

Requisition Number: (8 characters)

Requestor Name: Jessica Price

Requestor Phone Number: 608 267 1992

Requestor Email: jprice2@cityofmadison.com

Fund: 1400 CAPITAL PROJECT

Agency: 19 MAYOR

Major: ☒ 53*** Supplies/Goods☐ 541** Utilities☐ 542** Building/Facility Maintenance/Repair☐ 543** Software/Equipment Maintenance/Repair☐ 544** Public Works Maintenance/Repair☐ 545** Training/HR-Related Services☐ 546** Consulting/Professional Services☐ 548** Grants/Loans/Insurance/Other Services

Total Purchase Amount: \$141,500.00

Vendor Name: QuantAQ

Product/Service Description: MODULAIR-PM Air Quality Sensors

☐ **\$50,000 and UNDER**

This form will be sent to the Purchasing Supervisor for review.

☒ **OVER \$50,000**

Complete this form and draft a resolution using the sample resolutions provided by the City Attorney to your Budget Analyst. **Your resolution will not be added to the Finance Committee agenda without this form.**

Check the box(es) for the exception criteria you feel are applicable:

- ☐ 1. Public exigency (emergency) will not permit the delay incident to advertising or other competitive processes.
- ☒ 2. The services or goods required are available from only one person or firm (i.e., **true** sole source).
- ☐ 3. The services are for professional services to be provided by attorneys.
- ☐ 4. The services are to be rendered by a university, college, or other educational institution.
- ☐ 5. No acceptable bids have been received after formal advertising.
- ☐ 6. Service fees are established by law or professional code.

- ☐ 7. A particular consultant has provided services to the City on a similar or continuing project in the recent past, and it would be economical to the City on the basis of time and money to retain the same consultant.
- ☐ 8. Otherwise authorized by law, rule, resolution, or regulation. Explain:
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- ☐ If procurement is being paid with Federal or State grant funds, the vendor was identified by name in the approved Grant Application. (OPTIONAL)

REASON FOR REQUEST

WHY A COMPETITIVE SELECTION PROCESS CANNOT BE USED:

Provide **detailed** explanation below. For a true sole source, provide all information to explain why this product or service can only be purchased from this vendor. For one-of-a-kind items not sold through distributors, explain the unique performance features of the product requested that are not available from any other product. For services, detail the unique qualifications this vendor possesses, or other reason(s) that meet the criteria selected above. Identify specific, measurable factors and qualifications.

The City of Madison successfully applied for funding through the U.S. EPA's Enhanced Air Quality Monitoring for Communities grant program for a project titled "Building Sensor and Community Partnership Networks for Air Quality in Madison, Wisconsin." These funds will be used to support installation of a network of air quality sensors throughout the City of Madison to identify areas experiencing particulate matter (PM) air pollution and support community engagement to provide greater awareness, education, and action to address air quality and health disparities.

EPA required project proposals to identify air quality monitoring technology to be used, and the City of Madison proposed to use QuantAQ MODULAIR-PM sensors in our successful application. With RES 23-00385 enacted on 5/19/2023, the City of Madison amended the 2023 adopted Mayor's Office Sustainability Improvements capital budget to accept a \$429,746 grant award from the U.S. EPA to implement this project.

This non-competitive selection request is for purchase of the QuantAQ MODULAIR-PM sensors as described and budgeted in the grant award. These sensors provide unique particulate matter sensing capabilities and are only available from QuantAQ.

The QuantAQ MODULAIR-PM system uses a unique combination of both Nephelometry & Optical Particle Counting within the device to obtain reliable PM1, PM2.5, PM10 concentrations alongside full, unrestricted access to all raw sensor outputs from the system in real-time via the QuantAQ Cloud. There are no other devices on the market that combine a nephelometer and optical particle counter and few that offer unrestricted access to raw sensor data.

In addition to the unique sensor hardware configuration, QuantAQ provides transparent descriptions of the physics-based PM integration models for PM1, PM2.5, and PM10 outputs. A detailed technical application note describing the QuantAQ approach is available here - <https://www.quant-aq.com/technical-notes>.

QuantAQ's work regarding sensor quantification and calibration model development is also published in open-access, peer reviewed scientific publications accessible here - <https://www.quant-aq.com/science>. To-date no other low-cost AQ sensor system providers have led their own peer reviewed publications on sensor development.

The combined Neph+OPC patent that covers the QuantAQ PM sensing component is filed under US 17/495,766 "AIR MEASUREMENT DEVICE" (and claims priority on US 63/088,000). Generally speaking, this patent covers the idea of combining the spectra of both a nephelometer and optical particle counter to reduce the uncertainty in PM measurements.

COMMENTS REGARDING PURCHASES OVER \$50,000

The City of Madison has not previously paid QuantAQ any money.

Date: 06/14/2023

Submit