

**Division of Water**

**Request for Legislation**

**The Division of Water seeks ordinance authority to enter into a direct award contract with Thermo Fisher for the purchase of an add-on to CWD's existing liquid chromatography machine. The add-on will be a mass spectrometer for high-end analyses of drinking water contaminants. Related items are also required.**

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**Background/Purpose:**

Cleveland Water conducts 160,000 tests annually to check on the production and delivery of drinking water. Many are used to comply with Ohio EPA rules and regulations. Other tests we perform are operational, to evaluate treatment processes, chemical feed systems, chemical deliveries and waste streams. Regulations are requiring more stringent and exacting analyses, including those for contaminants that are not even limited yet, such as PFAS.

To meet some of these future requirements, the Division of Water purchased a high performance liquid chromatograph in 2016 from Thermo Electron North American LLC ("Thermo Fisher.") The machine has the capabilities to analyze a number of contaminants. It was purchased competitively at the time, with the specific requirement that the machine be expandable to become a liquid chromatograph tandem mass spectrometer (LC MS/MS) through the purchase of a compatible add-on component. This component will enable the Division of Water to conduct very high-end analyses on contaminants we currently subcontract out for. Additionally, we can begin analyzing potential future regulated contaminants such as PFAS, pharmaceuticals, hormones, personal care products, algal toxins and other exotic contaminants that may be found in water.

The ability to analyze these contaminants in-house is very important, not only to control our data, but also to better understand potential occurrences and to prepare for potential future capital needs.

The purchase of the add-on component and related items from Thermo Fisher will cost \$219,436.63. Components from competitors are not compatible with CWD's existing machine. The Division of Water would otherwise need to purchase an entire liquid chromatograph tandem mass spectrometer at a cost of approximately \$400,000. As a result, the Division of Water is requesting this purchase be direct awarded to Thermo Fisher.

**Scope of Work/Commodities/Services:**

The scope of work includes the purchase of the items required to convert the current unit into a LC MS/MS. Appropriate glassware, proprietary fluids and filters, onsite training and software tutorials, maintenance service, program software, and other necessary appurtenances will also be needed.

**Anticipated Costs and funding source:**

CWD General Operating Fund or Capital Funds will be used as appropriate.

**Schedule or Term of Contract:**

Legislation will lead to a direct award with Thermo Fisher for the purchase of the tandem mass spectrometer detector, appurtenances, non-consumables, travel and online technical support for three years. The City will receive a three-year factory warranty, plus the option to purchase two additional years (years four and five) of an extended warranty. The cost of this complete package is \$219,436.63.