

## SEALED BID INVITATION (Supplies, Material, Equipment, Services)

Bidders must state and identify the product offered, such as manufacturer's name, trade name, brand name and quality next to each item. ***WE MUST KNOW WHAT HAS BEEN OFFERED.*** By virtue of the offeror's signature below, proposer certifies that the product (s) or service (s) bid are in compliance with the City's terms, conditions and specifications in all aspects.

**COMPLETE ORIGINAL COPY (including ALL pages) OF THIS BID MUST BE SUBMITTED IN A SEALED ENVELOPE:**

TIME: 10:00 A.M. LOCAL TIME

PLACE: Purchasing Division, Room 201, City Hall, Worcester, Massachusetts

MARK SEALED ENVELOPE: "Sealed Bid No. 8595-1-J6, Gas Chromatogram/Mass Spectrometer / DPW"

The name and address of the bidder must appear in the upper left hand corner of the envelope. The City of Worcester is not responsible for bids not properly marked.

**All bids received will be publicly opened and read in the Bid Room, City Hall at date and time shown above. NO BID WILL BE ACCEPTED AFTER TIME AND DATE SPECIFIED**

**BIDDER TO COMPLETE ITEMS BELOW**

Item No.	QTY	Description	Mfg.	Model	Bid Price
1	1	<p>Furnish and deliver one (1) Gas Chromatogram Instrument with a Mass Spectrometer per the attached specifications and requirements of the City of Worcester Department of Public Works.</p> <p>Questions pertaining to this bid <b>MUST</b> be directed to Jerry Kucera via e-mail at <a href="mailto:kucerajs@worcesterma.gov">kucerajs@worcesterma.gov</a></p>	_____	_____	<p>See Attached Specs/Pricing Pages</p> <p>\$ _____</p>

<b>ABOVE ARE FOR (DEPT.)</b> <u>          WORCESTER DEPT. OF PUBLIC WORKS          </u>	<b>BIDDER</b> _____
<b>DELIVERY TO BE F.O.B. (LOCATION)</b> <u>71 STONEHOUSE HILL ROAD,</u> <u>HOLDEN, MA 01520</u>	<b>ADDRESS</b> _____
<b>DELIVERY IS REQUIRED BY:</b> <u>WITHIN 90 DAYS FROM DATE OF ISSUANCE</u>	<b>CITY/TOWN</b> _____
<b>BIDDER TO SPECIFY:</b>	<b>STATE</b> _____ <b>ZIP</b> _____
<b>DELIVER</b> _____ <b>WEEKS FROM DATE OF ORDER</b> _____	<b>AUTHORIZED SIGNATURE</b> _____
<b>PROMPT PAY DISCOUNT:</b> _____ <b>% 30 DAYS, NET 45 DAYS</b>	<b>TITLE</b> _____ <b>TEL.:</b> _____
	<b>DATE:</b> _____
	<b>EMAIL:</b> _____

## CONDITIONS

- 1) Prompt pay discounts will be considered when determining the low bid except when discounts are for a period of less than 30 days. In this event discounts will not be taken into consideration when determining low bid.
- 2) Time, in connection with discount offered, will be computed from date of completion and/or delivery and acceptance at destination, or from date correct bill or voucher properly certified by the contractor is received if the latter date is later than the date of completion and acceptance and/or delivery and acceptance.
- 3) As the City of Worcester is exempt from the payment of Federal Excise Taxes, and Massachusetts Sales Tax, prices quoted herein are not to include these taxes.
- 4) **All prices are to be firm F.O.B. Delivered Destination, City of Worcester, Massachusetts, unless otherwise indicated by the City. Time reserved for award is ninety days.**
- 5) In case of error in the extension prices quoted herein, the unit price will govern.
- 6) It is understood and agreed that should any price reductions occur between the opening of this bid and completion of any delivery of any order, the benefit of all such reductions will be extended to the City.
- 7) The City of Worcester reserves the right to reject any and all bids, wholly or in part, and to make awards in a manner deemed in the best interest of the City.
- 8) Awards will be made to the bidder quoting the lowest net price in accordance with specifications.
- 9) The bidder to who a contract is awarded guarantees to the City of Worcester all equipment, materials and/or workmanship for a period of one (1) year after final inspection and acceptance and shall replace promptly any defective equipment, materials and/or workmanship required without additional cost to the City.
- 10) It is understood and agreed that in the event of failure on the part of the bidder to indicate date of delivery and/or completion, delivery and/or completion will be made within twelve (12) days from date of purchase.
- 11) The Bidder must certify that no official or employee of the City of Worcester, Massachusetts is pecuniarily interested in this quotation or in the contract which the bidder offers to execute or in expected profits to arise therefrom, unless there has been compliance with provisions of G.L. C.43 Sec. 27, and that this quotation is made in good faith without fraud or collusion or connection with any other person submitting a quotation.
- 12) This inquiry implies no obligation on the part of the buyer, City of Worcester, Mass. Quotations will not be considered unless returned on this form. Your proposal should be forwarded to the office of the Purchasing Department, City of Worcester in a sealed envelope, plainly marked: "Quotation on (item requested)" - also, please show Bid Number.
- 13) It is understood and agreed that it shall be a material breach of any contract resulting from this bid for the Contractor to engage in any practice which shall violate any provisions of Massachusetts General Laws, Chapter 151B, relative to discrimination in hiring, discharge, compensation, or terms, conditions or privileges of employment because of race, color, religious creed, national origin, sex, age or ancestry.
- 14) Any prospective bidder requesting a change in or interpretation of existing specifications of terms and conditions must do so within five (5) days (Saturdays, Sundays and Holidays excluded) BEFORE scheduled bid opening date. All requests are to be in writing (e-mailed to [kucerajs@worcesterma.gov](mailto:kucerajs@worcesterma.gov)) to the Purchasing Department. No changes will be considered or any interpretation issued unless request is in our hands within five (5) days (Saturdays, Sundays and Holidays excluded) BEFORE scheduled bid opening date.
- 15) Bids which are incomplete, not properly endorsed, or signed, or otherwise contrary to these instructions may be rejected as informal by the Purchasing Agent. **CONDITIONAL BIDS WILL NOT BE ACCEPTED.**

## **CERTIFICATE OF GOOD FAITH FORM AS REQUIRED BY M.G.L. c. 30B**

UNDER MASSACHUSETTS GENERAL LAWS, CHAPTER 30B: SECTION 10, THE FOLLOWING  
CERTIFICATION MUST BE PROVIDED:

Section 10. A person submitting a bid or a proposal for the procurement or disposal of supplies, or services to any governmental body shall certify in writing, on the bid or proposal, as follows:

" The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals."

(Please Print)

\_\_\_\_\_  
Name of Person Signing Bid

\_\_\_\_\_  
Signature of Person Signing Bid

\_\_\_\_\_  
Company

**No award will be made without vendor certification of the above.**

### **IMPORTANT NOTICE TO BIDDERS:**

**BIDDERS ARE ADVISED NOT TO TAKE ANY EXCEPTIONS TO THE CITY'S TERMS & CONDITIONS.**

**BIDS THAT INCLUDE COMPANY TERMS & CONDITIONS WHICH CONFLICT WITH THOSE OF THE CITY MAY BE REJECTED.**

Questions pertaining to this bid must be submitted to Jerry Kucera via email at [kucerajs@worcesterma.gov](mailto:kucerajs@worcesterma.gov)

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## Section 1: OVERVIEW

### **Introduction**

This Invitation for Bids is issued by the City of Worcester Water Filtration Plant Laboratory to obtain bids from manufacturers offering a Gas Chromatogram instrument with a Mass Spectrometer Detector. Also known as a GC/MS for short.

## **Request for Bid Summary**

The goals of a new GC/MS system:

- To increase laboratory capabilities in performing VOC analysis in house.
- To run quarterly total trihalomethanes (THMs) samples that we would pay to sub-contract to other laboratories.
- To improve laboratory turnaround times for VOC and THM analysis.
- To quickly analyze VOCs in emergency situations.
- To have the capability to analyze samples taken within the city (usually in homeowner basements) to determine if leaks are city water or ground waters.
- All aspects of the installation must be included in the bid proposal.
  - Instrument unpacking
  - Instrument set-up
  - Instrument gas hook-ups and plumbing as needed.
  - Hook-up sample transfer lines with the existing autosampler
  - Setting up the control CPU and any peripherals.
  - Installation of any control software
  - Initial instrument operation verification during installation. All systems must be working in a proper manner before insulation can be signed off on.
- Please refer to Section **Technical Specifications** for a more complete outline of the desired features and functionality requested in this bid.

## **Minimum Vendor Qualifications**

- All bidders must show a minimum of 10 years of experience manufacturing and installing gas chromatography/mass spec instrumentation.
- All bidders shall provide a minimum of three (3) references who utilize the proposed product, and the product must meet the minimum requirements set forth within the EPA's Safe Drinking Water Act (SDWA).
- Vendor must have a permanent physical presence within the contiguous United States.

## **Company Information**

The Proposer must supply an outline of the company. Please include headquarter locations, manufacturing locations for all major components. Also, for the assembly and testing of instrumentation.

## **References**

- The proposer must include references for the insulation technician, including the number of similar installations they have performed.
- As part of their Technical Proposal, Bidders must submit a list of at least three (3), or more Laboratories that use the same Instrumentation as being proposed for consideration. A minimum of two (2) of the labs must meet the minimum requirements set forth within the EPA's Safe Drinking Water Act (SDWA).

Laboratory Name and Address

Contact Name, Title and Phone Number

How long has the Laboratory been using the proposed instrumentation.

## **Questions and Inquiries**

It shall be the responsibility of the Respondents to inquire about any portion of the bid that is not fully understood or that is susceptible to more than one interpretation prior to the question period closing.

- All questions concerning the bid must be submitted via email only, to the Jerry Kucera, (Kucerajs@worcesterma.gov) and shall reference the page number, section heading, and paragraph, if applicable.

## **SECTION 2: General INSTRUCTIONS AND CONDITIONS**

### **Purpose**

The purpose of this bid is to provide interested parties with information sufficient to enable them to submit proper bids for GC/MS instrumentation.

### **Examination of the bid**

Bidders shall examine all information and materials contained within this bid. This shall include, but not be limited to, all relevant laws and regulations of the Commonwealth of Massachusetts and the United States Government. Failure to do so shall be at the Bidder's risk.

## **Responsibilities of the Prime Proposer**

The City shall consider the Successful Bidder to be the sole point of contact regarding all contractual matters, including the performance, service of, and payment for services and supplies rendered.

## **Firm Price**

Prices offered by the Bidder shall remain firm and not subject to increase during the term of the bid closing, bid submission, bid evaluation, final delivery, and installation of instrumentation.

## **Terminology**

Terms used in this bid are not intended to imply or denote a particular product and are not to be construed as restrictive in any way. Any references in this bid to specific products or suppliers are intended for illustrative or explanatory purposes only with no endorsement intended or implied by the City.

## **No Assignment**

Assignment by the Bidder to any third party of any contract based on this bid or any monies due shall be absolutely prohibited.

## **Rights to Submitted Material**

All proposals, responses, inquiries, or correspondence relating to or in reference to this bid, and all reports, charts, displays, schedules, exhibits, and other documentation submitted by Bidders shall become the property of the City when received. The City shall have no obligation to return any such submitted material.

Supporting technical manuals shall be returned at the request of the Bidder and at the Bidders expense. The City retains the right to use any or all system ideas presented in any bid in response to the bid, whether amended or not. Selection or rejection of any bid does not affect this right.

## **Liquidated Damages**

The Bidder agrees to meet the agreed-upon delivery schedule for all equipment. The Bidder further agrees to pay the City, as liquidated damages, \$500 per day for each calendar day beyond the agreed-upon delivery schedule or extension thereof that any delivery is delayed.

## **Sales and Excise Taxes**

Purchases by the City of Worcester are exempt from any Federal, State or Municipal Sales and/or Excise Tax. Tax exemption certificates shall be furnished upon request.

## **Records Retention**

Bidders shall retain their transactional records for at least six (6) years after final payment.

### **Product warranty**

The instrument manufacturer shall warranty the GC/MS for one full year from the date of installation.

### **Support of product**

The manufacturer must guarantee product support (through service contract), as well as availability of components and consumables for no less than 10 years.

### **System demonstration**

A system demonstration will be required before any final system selection and evaluation of this bid. The demo can be at a nearby manufacturer's location, laboratory or onsite at the WWLP lab.

### **All New Equipment**

The Gas Chromatograph and Mass Spectrometer must be all "new" equipment (also be the latest model). No equipment used as demo or previously used equipment will be accepted.

## **SECTION 3: TECHNICAL SPECIFICATIONS**

### **Gas Chromatograph**

- The Gas Chromatograph must use a 30-meter fused silica capillary column as stated by the EPA 524.2 Method.
- Must have an integrated keypad (or touchscreen) for manual entry of parameters and built-in screen readout of settings and instrument status.
- The system must have capabilities for independent temperature set- points for inlets, column oven, transfer lines and interfaced detectors.
- Must be capable of rapid cool down cycle (minimum acceptable would be on the order of 450°C to 50°C within <10 minutes.)
- GC must have a minimum of two inlets that could work independently with multiple detectors (if needed).
- GC System is to be equipped with all method approved columns for the following methods:



VOC (Full panel) using EPA 524.2

THM using EPA 524.2

- GC must be equipped with electronic pneumatics to automate and maintain pressures for both inlets and column. All pneumatics must be controlled electronically by the instrument software without the use of manually adjusted knobs or valves. The flow of gas through the system must be accurately measured by internal meters that are displayed in the instrument software interface. The software must have sensors to detect pressure drops (to detect leaks).
- The instrument shall have an electronically controlled gas conservation mode that will reduce the consumption of Helium gas during periods when the instrument is idle. This mode must be fully automated and reduce flow after sample run is completed, and/or the instrument is idle for a period.
- GC system must include (initial) in-line gas filters for all pressurized gas sources if required by installation manuals.
- WWFP Lab will provide pressurized gas sources utilizing materials as required by the Site installation documentation provided by the selected vendor.

**Mass Spectrometer:**

- Mass spectrometer will be equipped with a high-performance turbo-molecular pump.
- The Mass spectrometer must be capable of electron ionization at nominal electron energy of 70 eV.
- The Mass spectrometer mass scan range must be from 1 to no less than 550 amu.
- The mass spectrometer must consist of an inert electron source, and a single quadrupole.
- Quadrupole and Ion Source must be sufficiently robust to allow for easy manual cleaning of any components (in case they become contaminated). Thin film coatings are not acceptable.
- The Ion source should be easy to maintain and clean, with minimal down time for cleaning (less than an hour) from start to finish.

- The system must have a dual filament system. One that doesn't require removal of the source to switch from one filament to the other (in the case of a filament failure.)
- The scan rate of the mass spec should be capable of no less than 10000 u/sec and provide simultaneous full scan and selective ion monitoring.
- The system must have capability to meet BFB (bromofluorobenzene) tuning requirements as stated in EPA method 524.2, and the ability to perform automated tunes (PFTBA standard,) as well as customized tuning procedures.
- The mass spectrometer must allow for both the transfer line and the ion source to be independently heated up to 350°C.
- System must have the compatibility to use either Helium or Hydrogen as a carrier gas. Helium being the main gas being used.
- The instrument must have built-in safety features to use Hydrogen gas safely if the need arises.

## **System Control and Software**

- The system must include all the software to run the instrument and peripherals on day one.
- The system must include a CPU with a minimum of 1 TB hard drive with controlling software installed.
- The software must have the ability to export/import sample data to and from a LIMS system.
- Software must be intuitive and easy to navigate by a reasonably experienced laboratory analyst (this can be evaluated by a demo).

## **PRICING PAGE – GAS CHROMOTOGRAPH / MASS SPECTROMETER SYSTEM**

Bidders shall include pricing below for all items and accessories/components as noted in this invitation for bids. No additional charges are allowed.

Award to be based on the total price for an all-inclusive system.

Product bid: \_\_\_\_\_

Total Bid Price: \$ \_\_\_\_\_

Bidder Name: \_\_\_\_\_

Bidder Contact: \_\_\_\_\_

Bidder Email: \_\_\_\_\_