



MISSISSIPPI STATE DEPARTMENT OF HEALTH

April 4, 2017

INVITATION FOR BID RFx NO 3160001438

The Mississippi State Department of Health plans to purchase the following, and invites your bid:

BID TOTAL Per Unit \$ _____

BID TOTAL For (2) Units\$ _____

Minimum Bid Specifications to purchase two (2) Gas Chromatograph systems with dual Electron Capture Detector (ECD). Each Gas Chromatograph ECD must be capable of analyzing drinking water for organic compounds by EPA Methods 552.2, 515.4 and 505. All components and features for both instruments must be exactly the same or duplicate instruments. The systems must be new and not refurbished or demonstration instruments.

This bid will be awarded on a total overall review of the specifications listed. The vendor is responsible for providing relevant documentation and demonstration that the instrument quoted in response to the bid meets all of the specifications listed.

All Bids to be f.o.b. destination.

E-Verify Compliance – Contractor/Seller represents and warrants that it will ensure its compliance with the Mississippi Employment Protection Act (Senate Bill 2988 from the 2008 Regular Legislative Session) and will register and participate in the status verification system for all newly hired employees. The term "employee" as used herein means any person that is hired to perform work within the State of Mississippi. As used herein "status verification system" means the Illegal Immigration Reform and Immigrations Responsibility Act of 1996 that is operated by the United States Department of Homeland Security, also known as the E-Verify Program, or any other successor electronic certification system replacing the E-Verify Program. Contractor/Seller agrees to maintain records of such compliance and upon request of the State, provide a copy of each such verification to the State. Contractor/Seller further represents and warrants that any person assigned to perform services hereunder meets the employment eligibility requirements of all immigration laws of the State of Mississippi. Contractor/Seller understands and agrees that any breach of these warranties may subject Contractor/Seller to the following: (a) termination of the Agreement and Ineligibility for any state or public contract in Mississippi for up to three (3) years, with notice of such (b) the loss of any license, permit, certification or other document granted to Contractor/Seller by an agency, department or governmental entity for the right to do business in Mississippi for up to one (1) year, or (c) both. In the event of such termination/cancellation, Contractor/Seller would also be liable for any additional costs incurred by the State due to contract cancellation or loss of license or permit.

E-Payments – Payments by The Mississippi State Department of Health shall be made and remittance information provided electronically as directed by The State of Mississippi. These payments shall be deposited into the bank account of the Contractor's Choice. The State may, at its sole discretion, require the Contractor to submit invoices and supporting documentation electronically at any time during the terms of this agreement. Contractor understands and agrees that the State is exempt from the payment of taxes. All payments shall be in United States currency.

Applicable Law – This purchase shall be governed by and construed in accordance with the laws of the State of Mississippi, excluding its conflicts of law provisions, and any litigation with respect thereto shall be brought in the courts of the State of Mississippi. The vendor shall comply with applicable federal, state and local laws and regulations.

Payment Terms – MS Code Section 31-7-305(3) allows a state entity to pay invoices within 45 days without penalty.

Bid terms are welcome; however, they will not be used as criteria for awarding the bid.

Prospective bidders are to contact Jennifer Dotson at (601) 576-7635 or by e-mail at Jennifer.dotson@msdh.ms.gov if there are any questions regarding this bid.

Prior to the time specified for the bid opening, sealed bids along with any other documentation required must be hand delivered or mailed to **Mississippi State Department of Health, PURCHASING DEPARTMENT, ROOM 137A, THE UNDERWOOD BUILDING, 570 E. WOODROW WILSON, JACKSON, MISSISSIPPI 39216 OR POST OFFICE BOX 1700, JACKSON, MS 39215-1700.**

Bids must be received, dated and time stamped prior to 10:30 a.m., CST/DST, _Wednesday, April 26, 2017 at which time bids will be opened. No bids will be accepted after the established bid opening time. **Bids will be opened and read at 10:30 a.m., CST/DST in Suite 134 Conference Room, Underwood Building, 570 E. Woodrow Wilson, Jackson, Mississippi.**

In addition, it is requested that bidders also submit a bid on-line in the State of Mississippi electronic procurement system, MAGIC, however, it is not mandatory. In order to submit bids, bidders must be registered as a vendor in MAGIC system and have an I.D. number and password assigned at the time of registration. Technical assistance may be found at <http://www.dfa.ms.gov/dfa-offices/mmrs/mississippi-suppliers-vendors/>

If a bidder submits both a paper bid and an on-line bid, the paper bid will take precedence if there is a discrepancy between the two.

No facsimile (FAX) bids will be accepted. This bid must be signed by a person with authority to bind the bidder. Failure to comply with this provision, any other provision of this Invitation for Bid, or any provision of State or Federal Law or regulation regarding the submission of bids will cause the bid to be rejected.

Submitted bids/responses will be available for review at the bid opening.

Approval for any award of this Invitation For Bid may have to be obtained by the Mississippi State Department of Health from the State of Mississippi Public Procurement Review Board. Any award notice, successful or unsuccessful, will be provided in written form and sent to all participants of the Invitation For Bid.

The Mississippi State Department of Health reserves the right to define equals, to reject any or all bids, and waive all informalities.

**PLEASE MARK YOUR ENVELOPE: Bid Due 10:30 a.m. CST/DST,
Wednesday, April 26, 2017.**

RFx# 3160001438

NAME OF COMPANY _____

QUOTED BY _____

SIGNATURE _____

TELEPHONE _____

E-MAIL _____

RFx No 3160001438 - Specifications for Gas Chromatograph with dual Electron Capture Detector with a dedicated Autosampler

The Mississippi Public Health Laboratory (MPHL) plans to purchase two (2) Gas Chromatograph systems with a dual Electron Capture Detector (ECD). Each Gas Chromatograph ECD must be capable of analyzing drinking water by EPA Methods 552.2, 515.4 and 505, processing a minimum of 14 samples in one 8 hour work shift. All components and features for both instruments must be exactly the same or duplicate instruments. The systems must be new and not a refurbished or a demonstration instrument. Quotations in response to the bid must meet the following specifications for each component for each Gas Chromatograph system:

Gas Chromatograph (GC)

- Must feature an external control panel to provide easy accessibility to the GC and immediate interactions with it. The panel must be easy to view from multiple angles, have quick response, and feature workflow icons that follow production workflows.
- The control panel of the GC should provide all needed data, including all temperature and pressure/flow parameters, type of carrier gas, carrier gas column pressure, flow rates, split flow, detector gas flow rates and all detector parameters.
- There must be a dedicated automated routine that allows assisted leak check procedure and a dedicated automated routine allows automatically evaluating and storing the column pneumatic resistance which will allow an automated correction of the nominal column.
- It must be able to calculate the carrier gas linear velocity and the column void time

Autosampler (one for each GC system)

- Must be capable of adding internal standard to the sample injection
- Must have liquid sample injection modes including regular mode, fast mode and sandwich mode.
- The Autosampler must offer the option of automatically performing the following operations:
 - Sample Dilution, with a different liquid present in a vial or solvent reservoir installed on the autosampler
 - Standard Dilution, to prepare a calibration curve
 - Standard addition, to add internal standards to a sample
- The autosampler must feature an X-Y-Z axis design without the use of transfer lines
- During stand-by operations syringes must be positioned away from any GC hot source.
- Must have auto alignment
- Must allow installation of two needle length syringes, so as to be able to address any injection mode or injector type.
- Must allow installation and automation of syringes featuring volumes from 0.5 to 1000ul.
- Syringes must be easily changed by operator without any special tools
- Vial capacity of at least 100 2mL vials and 6 wash/waste vials so that samples may be loaded to run over 48 hours.
- Vial Bottom Sensing capability
- The autosampler must include a bar code reader for automatic sample identification and tracking, capable of reading in any vial position.

- The autosampler method, sequences etc. must be performed within the Chromeleon 7.2 Chromatography Data System without additional external software.
- Must be able to perform sequential injection in two inlets using different methods and injection modes, regardless of the type of injector.
- Must handle any Large Volume injection techniques. (PTV-LV, LV Splitless, LV- On column)
- Must be able to achieve combined multiple solvent rinsing with two (2) or more different solvents.

Dual Split/splitless injectors

- The Split/Splitless injectors must be able to be un-installed, swapped, or replaced with another injector of the same or different kind by the operator without any special tool.
- The injector must be able to operate with capillary, wide bore and packed columns.
- The injector must feature an optimized, modular thermal profile for split and splitless injection with a cold head to allow for quick maintenance.
- The injector must permits large volume splitless injection (up to 50 microliters) without requiring pressure pulse to quantitatively recover the whole sample, and without any further hardware requirement.
- Must support hot/cold split and splitless modes as well as large volume injections (solvent split) and On Column.
- Capable of temperature programming.

Oven (per GC system)

- Must be dual columns with DB-1701 and DB-5.625 columns.
- The column oven must have an operating range of 25°C to 400°C.
- The oven must support a fast start-up to quickly start operations and for power savings:
- The oven mainframe must include all the necessary electrical and gas connections for injectors and detectors without the use of tubing and wires to obstruct the oven top.
- Injectors and detectors positions are clearly defined for a quick user-installation.

Pneumatic controls

- Electronic pneumatic controls must be an integral part of injector and detector.
- Must not require extra tubing and wires to operate electrical valves, and deliver carrier, detector and make-up gases to injectors and detectors.
- The digital carrier gas controller must allow operation in constant and programmed flow and pressure modes.

Helium Saver

- Must be able to reduce the consumption of helium gas during the time the GC is not performing an analytical run (idle time).

Dual Detectors (per GC system)

- The instrument design must allow the user for an easy interchangeability of the detectors by the operator without special tools.
- The GC must have complete integrated control of all parameters (no external control module) for the following detectors: FID, TCD, NPD, ECD.

- The GC must house and be able to operate with two detectors simultaneously on the same oven.

Electron Capture Detector (per GC system)

- Radioactive Source: 370 MBq equal to 10 mCi, ⁶³Ni
- MDL: <6 fg/s lindane
- Linear Dynamic Range: >10⁴ with lindane
- Maximum Temperature: 400 °C in 0.1 °C steps
- Integrated Electronic Controls of the following gases are part of the detector module: 0 to 500 mL/min makeup; Make-up Gas: Nitrogen or 95% argon/5% methane
- Data Acquisition Rate: up to 300 Hz

Computer (computer, monitor, keyboard, mouse and printer for each GC system)

- Windows 7 with monitor, keyboard and mouse
- HP laser printer with duplex capability

Software Specifications

- Must have the ability to operate under Microsoft Windows 7 or higher operating systems.
- Must have Chromeleon 7.2 Chromatography Data System capable of printing reports required by the EPA methods, specifically:
 - System suitability report:
 - Instrument Sensitivity – Signal /Noise
 - Chromatographic Performance – Peak Gaussian Factor
 - Column Performance – Resolution
 - Control Charts of areas and of recovery
 - Method Detection Limit Study reports
- Instrument software updates must be provided free of charge.

Training

- Must have 2 day dedicated on-site training for analytical software.
- Must have 2 day dedicated on-site training for instrument.
- Must have off-site training available for instrument and software.
- Off-site vendor training, if required, must be itemized and included in the quotation.

Installation requirements

- Must be able to operate with electrical requirements of 120V.
- On-site installation must be included in the quotation.
- Instrument must be installed and ready for use by the customer within six weeks of receipt of a purchase order.

Service

- Must provide a toll free telephone number for technical assistance that is accessible Monday through Friday from 8:00 A.M. - 5:00 P.M. CST/CDT.
- Must provide on-site technical assistance within 72 hours of service call.
- Must provide on-site service calls to perform preventive maintenance as required by the manufacturer.

- A service agreement must be available for purchase, after the expiration of the warranty period, throughout the life of the instrument.
- Parts must be available as part of the service agreement or for direct purchase throughout the life of the instrument.