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#### SUPPLEMENTAL BID BULLETIN

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December 19, 2023

# Project ID: GOODS2024-EPA-01 Project Name: ESTABLISHMENT OF LABORATORY EQUIPMENT FOR NEWLY CONSTRUCTED UNIVERSITY RESEARCH, DEVELOPMENT AND EXTENSION CENTER ABC: P 15,000,000.00

#### ADDENDUM NO. 1

This addendum No. 1 is issued to modify or amend items in the Bid Documents. This shall form an integral part of the Bid Documents.

	Original Document	Amendment
Submission and Opening of Bids	Submission of Bids: <del>December 26, 2023</del> , 10:00AM	Submission of Bids: <mark>December 28, 2023,</mark> 10:00AM
	Opening of Bids: <del>December 26, 2023</del> , 10:15AM	Opening of Bids: December 28, 2023, 10:15AM
Schedule of Requirements (page 28) Item Nos. 1 - 7	<del>Sixty (60)</del> calendar days upon receipt of Notice to Proceed	One Hundred Twenty (120) days upon receipt of Notice to Proceed
Technical Specification (page 31-38) Item No. 1 – 7		Additional Requirement: Prospective bidders have at least thirty- five (35) years of experience in the business as distributor (true to all equipment)
<b>Technical</b> <b>Specification</b> (page 32-33)	Specification: Technical Specs: * flame and graphite AAS in one unit * dual atomizer	Specification: Technical Specs: * flame and graphite AAS <u>(two-in-one)</u> * dual atomizer in one unit
Item No. 1. 1 unit Atomic Absorption Spectrometer (AAS)-Flame & Graphite-Furnace	<ul> <li>* easy operation and automatic switching between flame &amp; furnace</li> <li>* dual background correction function</li> <li>* user-friendly software for easy and manageable data processing</li> <li>* modern, smart and intuitive user interface</li> <li>* PNSDW and BSWM Compliant</li> <li>* 8 lamp turret/mount</li> <li>* analyses-ready system (equipment, accessories, standard solutions, reagents, gas, laboratory wares, consumables, etc.)</li> </ul>	<ul> <li>* easy operation and automatic switching between flame &amp; furnace</li> <li>* dual background correction function</li> <li>* user-friendly software for easy and manageable data processing</li> <li>* modern, smart and intuitive user interface</li> <li>* PNSDW and BSWM Compliant</li> <li>* 8 lamp turret/mount</li> <li>* analyses-ready system (equipment, accessories, standard solutions, reagents, gas, laboratory wares, consumables, etc.)</li> </ul>
	<ol> <li>Flame</li> <li>* can determine at least 60 elements</li> <li>* ppb to high ppm levels</li> </ol>	<ol> <li>Flame</li> <li>can determine at least 60 elements</li> <li>ppb to high ppm levels</li> </ol>

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	* AAS standards	* AAS standards
	<ul> <li>2. Graphite-Furnace</li> <li>* sub-ppb to high ppb level</li> <li>* viewing camera</li> <li>* at least 10 pcs graphite tubes</li> </ul>	<ul> <li>2. Graphite-Furnace</li> <li>* sub-ppb to high ppb level</li> <li>* viewing camera</li> <li>* at least 10 pcs graphite tubes</li> </ul>
	<ul> <li>Safety Features:</li> <li>1. gas pressure monitor</li> <li>2. flame monitor</li> <li>3. vibration sensor/detector</li> <li>4. automatic gas leak detection/function</li> <li>5. exhaust system (canopy, ducting, exhaust fan, etc.)</li> <li>6. automatic shut-off</li> </ul>	Safety Features: 1. gas pressure monitor 2. flame monitor 3. vibration sensor/detector 4. automatic gas leak detection/function 5. exhaust system (canopy, ducting, exhaust fan, etc.) location of the equipment is on the 2nd floor; directly above it is the roof of the building (approximately 5-8 meters) 6. automatic shut-off
	<ul> <li>Mandatory Accessories and Inclusions:</li> <li>1. autosampler included</li> <li>2. User's Manual</li> <li>3. inclusion of 16 lamps, to be specified by the end user</li> <li>4. gas (acetylene,N2O, Ar), gas tanks, gas cage, gas regulators, gas lines</li> </ul>	Mandatory Accessories and Inclusions: 1. autosampler included for both flame and furnace analysis 2. User's Manual 3. inclusion of 16 lamps, to be specified by the end user 4. gas (acetylene,N2O, Ar), gas tanks, gas cage, gas regulators, gas lines Located at
	<ul> <li>5. complete PC system, Microsoft Windows 10 (64 bit), at least 21.5' LED color monitor, HD drive 1 TB, 8 GB RAM, Processor i-7, color printer, AVR</li> <li>6. Recirculating chiller/cooling water circulator</li> <li>7. 10 KVA UPS</li> <li>8. Hydride vapor generation with accessories</li> <li>9. silent-type air compressor</li> <li>10. sample preparation/digestion system and accessories</li> <li>11. one (1) HP split-type aircon</li> </ul>	the ground floor approximately 10-15 meters to the equipment which is located on the 2nd floor 5. complete PC system, Microsoft Windows 10 (64 bit), at least 21.5' LED color monitor, HD drive 1 TB, 8 GB RAM, Processor i-7, color printer, AVR 6. Recirculating chiller/cooling water circulator 7. 10 KVA UPS 8. Hydride vapor generation with accessories 9. silent-type air compressor 10. sample preparation/digestion system and accessories 11. one (1) HP split-type aircon
		12. microwave digester for sample preparation with 6-10 number of vessels 13. Hallow cathode lamp/ elctrode discharge lamp (EDL) for the 16 elements: (Calcium, Magnesium, Sodium, Zinc, Copper, Manganese, Iron, Boron, Barium, Aluminum, Cadmium, Arsenic, Lead, Nickel, Chromium, Cobalt)

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age 5 01 4		
Technical Specification (page 33-34) Item No. 2. 1 unit Gas Chromatography-	Technical Specs: * smart and highly efficient * modern, smart and intuitive user interface * quadrupole detector * high reliability of analytical results * analyses-ready system (equipment, accessories, standard solutions, reagents, gas, laboratory wares, consumables, etc.)	Technical Specs: * smart and highly efficient * modern, smart and intuitive user interface * quadrupole detector * high reliability of analytical results * analyses-ready system (equipment, accessories, standard solutions, reagents, gas, laboratory wares, consumables, etc.)
Mass Spectrometry	Safety Features: 1. with alert and safety functions 2. with energy and gas saving capabilities 3. easy to maintain 4. automatic gas leak detection/function 5. exhaust system (canopy, ducting, exhaust fan, etc.)	Safety Features: 1. with alert and safety functions 2. with energy and gas saving capabilities 3. easy to maintain 4. automatic gas leak detection/function 5. exhaust system (canopy, ducting, exhaust fan, etc.) Location of equipment : 2nd floor
	Mandatory Accessories and Inclusions: 1. ChemOffice (ChemDraw, 2D & 3D modeling apllication) for Mac and Windows	Location of exhaust: Rooftop, directly above the 2nd floor; 5-8 m Location of gas tank :Ground floor Estimated distance: _10-15 meters Mandatory Accessories and Inclusions: 1. ChemOffice (ChemDraw ultra, 2D & 3D modeling apllication) <u>– one time</u> payment, non-recurring payment; software can be used and accessed without restriction forever for Mac and Windows
	<ol> <li>latest NIST and other libraries for natural products, essential oils, flavor, fragrance, pesticides, VOCs, food, cosmetics, drugs, beverages, wine, beer, allergens, off- flavors and others</li> <li>automatic sample injection system</li> </ol>	<ul> <li>2. latest NIST and other libraries for natural products, essential oils, flavor, fragrance, pesticides, VOCs, food, cosmetics, drugs, beverages, wine, beer, allergens, off- flavors and others</li> <li>3. <u>2 in 1</u> automatic sample injection system <u>(liquid and head space</u> Note: minimum of 16 liquid sampler</li> </ul>
	<ul> <li>4. 10 KVA UPS</li> <li>5. complete PC system, Microsoft</li> <li>Windows 10 (64 bit), at least 21.5' LED color monitor, HD drive 1 TB, 8 GB</li> <li>RAM, Processor i-7, color printer, AVR</li> <li>6. silent type air compressor</li> <li>7. 1 HP split-type aircon</li> <li>8. gas, gas tanks, gas cage, gas regulators, gas lines</li> <li>9. User's Manual</li> <li>10. headspace sampler</li> </ul>	<ul> <li>turret/ 16 vials</li> <li>4. 10 KVA UPS</li> <li>5. complete PC system, Microsoft</li> <li>Windows 10 (64 bit), at least 21.5' LED</li> <li>color monitor, HD drive 1 TB, 8 GB</li> <li>RAM, Processor i-7, color printer, AVR</li> <li>6. One (1) unit dehumidifier</li> <li>7. 1 HP split-type aircon</li> <li>8. gas, gas tanks, gas cage, gas regulators, gas lines</li> <li>9. User's Manual</li> <li>10. headspace sampler</li> <li>11. 16 liquid sampler turret/ 16 vials</li> </ul>
	Terms & Conditions: 1. Delivery: <del>60 days</del> upon receipt of approved PO 2. Price offered includes installation, commissioning, maintenance, and training	<b>Terms &amp; Conditions:</b> 1. Delivery: <u>120 days</u> upon receipt of approved PO 2. Price offered includes installation, commissioning, maintenance, and training

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	by trained service engineers and application specialist/chemist. 3. Offer includes at least one (1) year warranty on parts and two (2) years on services 4. Availability of service engineers & technicians within 72 hours after receipt of call 5. EI source should be supplied and have an option to upgrade to a hydroinert source for Hydrogen carrier gas applications in the future.	by trained service engineers and application specialist/chemist. 3. Offer includes at least one (1) year warranty on parts and two (2) years on services 4. Availability of service engineers & technicians within 72 hours after receipt of call 5. EI source (hydrogen and helium) should be supplied and have an option to upgrade to a hydroinert source for Hydrogen carrier gas applications in the future.
	<ul> <li>6. Mass Spectrometer must utilize a Quadrupole Mass Filter independently heated and its temperature is to be user- selectable so that the system is kept clean and stable and allows robust operation and bake out.</li> <li>7. The Mass Spectrometer's detector should come with trace ion detection</li> </ul>	<ul> <li>6. Mass Spectrometer must utilize a Quadrupole Mass Filter independently heated and its temperature is to be user- selectable so that the system is kept clean and stable and allows robust operation and bake out or an equivalent technology that can reduce contamination.</li> <li>7. The Mass Spectrometer's detector should come with trace ion detection</li> </ul>
	technology to remove noise.	technology to remove noise. 8. Mass range: 0.6 – 1091 u
Technical Specification (page 35) Item No. 4. 1 unit Refrigerator	Specification: • HD Inverter Upright Chiller • Heavy Duty Quality • Energy Efficient Inverter Compressor • Super Quick Chill • 7 Level Temperature Control • Blower Fan • LED Lights • Recessed Handle • Key Lock • Fan On Glass Door to Prevent Moisture • Clean Back	Specification: • HD Inverter Upright Chiller • Heavy Duty Quality • Energy Efficient Inverter Compressor • Super Quick Chill • 7 Level Temperature Control • Blower Fan • LED Lights • Recessed Handle • Key Lock • Fan On Glass Door to Prevent Moisture • Clean Back • <u>7 cubic feet</u> • Two-door

For guidance and information of all concerned.

