



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
 CME90068

PAGE
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF
 ROBERTA WAGNER
 304-558-0067

RFQ COPY
 TYPE NAME/ADDRESS HERE

VENDOR

SHIP TO

HEALTH AND HUMAN RESOURCES
 VARIOUS LOCALES AS INDICATED
 BY ORDER

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
12/15/2008				

BID OPENING DATE: 01/22/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	EA	490-55	LIQUID CHROMATOGRAPH/MASS SPECTROMETER/MASS SPECTROMETER (LC/MS/MS), WATERS ACQUITY/TQD, ITEM #176001263 OR EQUAL.		
0002	1	EA	490-55	MASS LYNX 4.1 M55 & XP TQD, WATERS ITEM #176001255 OR EQUAL.		
0003	1	EA	490-55	CORD KIT USA, WATERS ITEM #205000414 OR EQUAL		
0004	2	EA	490-55	ACQUITY UPLC, COLUMN HEATER, SOLVENT MANAGER, SAMPLE MANAGER; WATERS ITEM #176015000 OR EQUAL.		

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

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GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid
3. All quotations are governed by the *West Virginia Code* and the *Legislative Rules* of the Purchasing Division.
4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
5. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
6. Payment may only be made after the delivery and acceptance of goods or services.
7. Interest may be paid for late payment in accordance with the *West Virginia Code*.
8. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*
9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes
10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller
11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract, including without limitation the validity of this Purchase Order/Contract.
12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
13. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, this Contract may be deemed null and void, and terminated without further order.
14. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web site (<http://www.state.wv.us/admin/purchase/vrc/hipaa.htm>) is hereby made part of the agreement. Provided that, the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
15. **WEST VIRGINIA ALCOHOL & DRUG-FREE WORKPLACE ACT:** If this Contract constitutes a public improvement construction contract as set forth in Article 1D, Chapter 21 of the West Virginia Code ("The West Virginia Alcohol and Drug-Free Workplace Act"), then the following language shall hereby become part of this Contract: "The contractor and its subcontractors shall implement and maintain a written drug-free workplace policy in compliance with the West Virginia Alcohol and Drug-Free Workplace Act, as set forth in Article 1D, Chapter 21 of the West Virginia Code. The contractor and its subcontractors shall provide a sworn statement in writing, under the penalties of perjury, that they maintain a valid drug-free work place policy in compliance with the West Virginia and Drug-Free Workplace Act. It is understood and agreed that this Contract shall be cancelled by the awarding authority if the Contractor: 1) Fails to implement its drug-free workplace policy; 2) Fails to provide information regarding implementation of the contractor's drug-free workplace policy at the request of the public authority; or 3) Provides to the public authority false information regarding the contractor's drug-free workplace policy."

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division.
2. **SPECIFICATIONS:** Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Complete all sections of the quotation form.
4. Unit prices shall prevail in case of discrepancy.
5. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
6. **BID SUBMISSION:** All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130



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0005	2	EA		490-55		
				ACQUITY BEH C18 COLUMN 3 PACK, WATERS ITEM		
				#176000864 OR EQUAL..		
0006	2	EA		490-55		
				20" FLAT PANEL MONITOR, WATERS ITEM #668000273		
				OR EQUAL..		
0007	1	EA		490-55		
				TARGETLYNX V4.1, WATERS ITEM #176001086, OR EQUAL		
0008	1	EA		490-55		
				LIQUID CHROMATOGRAPH/TIME OF FLIGHT MASS		
				SPECTROMETER (LC/TOF-MS) WATERS ACQUITY/LCT PREMIER XE		
				ITEM #176001227, OR EQUAL..		

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0009	1	EA		490-55		
MASS LYNX 4.1, M55 & XP TQD, WATERS ITEM #176001114 OR EQUAL.						
0010	1	EA		490-55		
CHROMALYNX V4.1, WATERS ITEM #176001063 OR EQUAL VENDORS TO PROVIDE THIS EQUIPMENT AND ACCESSORIES PER THE ATTACHED SPECIFICATIONS OR EQUAL. CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN. BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID, AND IS TERMINATED WITHOUT FURTHER ORDER. INQUIRIES						

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<p>WRITTEN QUESTIONS SHALL BE ACCEPTED THROUGH CLOSE OF BUSINESS ON 1/6/2009. QUESTIONS MAY BE SENT VIA USPS, FAX, COURIER OR E-MAIL. IN ORDER TO ASSURE NO VENDOR RECEIVES AN UNFAIR ADVANTAGE, NO SUBSTANTIVE QUESTIONS WILL BE ANSWERED ORALLY. IF POSSIBLE, E-MAIL QUESTIONS ARE PREFERRED. ADDRESS INQUIRIES TO:</p> <p>ROBERTA WAGNER DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25311 FAX: 304-558-4115 E-MAIL: ROBERTA.A.WAGNER@WV.GOV</p> <p>THE MODEL/BRAND/SPECIFICATIONS NAMED HEREIN ESTABLISH THE ACCEPTABLE LEVEL OF QUALITY ONLY AND ARE NOT INTENDED TO REFLECT A PREFERENCE OR FAVOR ANY PARTICULAR BRAND OR VENDOR. VENDORS WHO ARE BIDDING ALTERNATES SHOULD SO STATE AND INCLUDE PERTINENT LITERATURE AND SPECIFICATIONS. FAILURE TO PROVIDE INFORMATION FOR ANY ALTERNATES MAY BE GROUNDS FOR REJECTION OF THE BID. THE STATE RESERVES THE RIGHT TO WAIVE MINOR IRREGULARITIES IN BIDS OR SPECIFICATION IN ACCORDANCE WITH SECTION 148-1-4 (F) OF THE WEST VIRGINIA LEGISLATIVE RULES AND REGULATIONS.</p> <p style="text-align: center;">NOTICE</p>						

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<p>A SIGNED BID MUST BE SUBMITTED TO:</p> <p>DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130</p> <p>PLEASE NOTE: A CONVENIENCE COPY WOULD BE APPRECIATED.</p> <p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p> <p>BUYER: -----RW/FILE 22-----</p> <p>RFQ. NO.: -----CME90068-----</p> <p>BID OPENING DATE: -----1/22/2009-----</p> <p>BID OPENING TIME: -----1:30 PM-----</p> <p>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:</p> <p>-----</p> <p>CONTACT PERSON (PLEASE PRINT CLEARLY):</p> <p>-----</p>						

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LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
***** THIS IS THE END OF RFQ CME90068 ***** TOTAL:						

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System Specifications and Requirements for a Liquid Chromatograph/Mass Spectrometer/Mass Spectrometer (LC/MS/MS)

Solvent Delivery System Requirements:

1. **Flow Rate:** Must be 0.010-2.0 ml/min, in 0.001 ml increments.
2. **Pressure Stability:** Must be $\leq 0.5\%$ of system backpressure or 50 p.s.i at 10,000 p.s.i.
3. **Gradient Profiles:** Even pre-configured gradient profile shapes must be linear, 2 step, 4 convex, 4 concave.
4. **Delay Volume:** Must be ≥ 120 μ L, independent of system pressure (with standard mixer 50 μ L).
5. **Solvent Selection:** Binary solvent delivery system must allow the user to choose between two mobile phase for each of the two solvent channels for a total of four solvent choices.
6. **Compressibility Compensation:** Must be automatic and continuous compressibility compensation, requiring no user intervention.
7. **Degassing System:** Must have a built in high efficiency, low volume, 6 chamber vacuum degassing system with a separate channel for each mobile phase solvent and 2 channels for Sample Manager wash solvents.
8. **Flow Precision:** Must be $\leq 0.075\%$ RSD or ± 0.02 min SD, based on retention time with flow accuracy of $\pm 1\%$.
9. **Compositional accuracy:** Must be $\leq 0.5\%$ and compositional precision must be $\leq 0.15\%$ RSD or ± 0.04 min SD. The solvent delivery system must include an automated software assisted purge function for ease of solvent changing and system purging/priming.
10. **UPLC Pressure Requirement:** The solvent delivery system must be able to operate at pressures up to 15000 psi up to 1 ml/min, 9000 psi up to 2 ml/min as required for UPLC analysis.
11. **Seal Wash:** Must be integral, active and programmable plunger seal wash system.
12. **Flow Characteristics:** The Solvent Delivery System must be able to run, at flow rates above 0.5 ml/min, newer, smaller particle size columns, such as those with sub-2.0 μ m diameter particles. The system must not require any hardware modifications to be able to run these columns. The system must be also able to run HPLC columns with particle sizes of 3.0, 3.5, 5.0, 7.0 μ m without any modifications to the system hardware.
13. **Inlet Valves:** The Solvent Delivery System must be equipped with controlled intake valves to deliver faster system priming and startup times. More robust operation and highly repeatable system performance are achieved even with difficult-to-pump solvents because disturbances to solvent flow in inlet lines are minimized. The valves actuation is precisely controllable, and the algorithms responsible for its operation respond instantly to the fast, pressure-sensing capability of the Solvent Delivery System.

Sample Management System Requirements:

1. **Sample Configurations:** The Sample Management System must be able to accommodate the following sample configurations without the use of an external sample handling device:
 - 2 x 96 well plates
 - 2 x 384 well plates
 - 2 racks of 2 ml vials (48 vials/rack)
 - 2 racks of 4 ml vials (24 vials/rack)
 - 2 racks of 0.65 ml microcentrifuge tubes (48 tubes/rack)
 - 2 racks of 1.5 ml microcentrifuge tubes (24/rack)
2. **Injections:** Must accommodate 1 to 99 injections per sample, dependant on sample volume available and injection volume.
3. **Injection Modes:** The Sample Manager must support up to THREE injections modes : full loop, partial loop and partial loop using needle overfill (PLNO)
4. **Injection Volume:** Injection volume range must be 0.5 – 50 ul in 0.1ul increments, partial or full loop mode.
5. **Sample Size:** Minimum sample required is 5 ul, using 2ml Maximum Recovery Vials.
6. **Needle Wash:** Needle wash system must wash with up to two solvents to minimize carryover.
7. **Wash Solvent:** Must include fresh solvent for the needle wash with each injection to prevent possibility of carryover.
8. **Random Access:** Must have random access to any vial for multi-method operation.
9. **Injection Precision:** Sample delivery precision must be 0.3% RSD, with a full injector loop, 5-50 ul.
10. **Injection Linearity:** Must be >0.999 coefficient of deviation from 2-10 ul.
11. **Carryover:** Must be better than 0.005% or 2.0 nL of the compound assayed, whichever is greater.
12. **Sample Temperature:** Sample compartment must be controlled from 4 to 40 °C, programmable in 1 °C increments.
13. **Parallel Injection Capability:** The Sample manager must be able to load the injector loop before completion of the last injection.
14. **Injection Loop Isolation:** The injector loop must be removed from the system flow path during injection to minimize carryover and to decrease injection cycle time.

Column Heater Compartment Requirements:

1. **Column Temperature Range:** Must be 5 deg C above ambient to 90 deg C.

Other System Requirements:

1. **Remote Control:** The system must not have a keypad, all instrument control functions must be available through MassLynx or Empower build 1154/2154 software, through third part Control Software and through the Standalone Console software application, or equivalent.

2. **System Volume:** Total effective system volume must be less than 120 uL, independent of system pressure. This includes a 10 uL injector loop.
3. **Diagnostics:** The System must have diagnostic capabilities: ability to store up to 16 diagnostic data channels, for a total of 96 hours, including piston pressures, system pressure, sample manager pressures, temperature, including ambient, lamp hours, lamp ignitions. The diagnostic data must be collected when the instrument is powered up, regardless of the number of runs or run time set.
4. **Diagnostic reporting:** The system must create a standard format .pdf file listing all the diagnostic parameters, including firmware version, usage, such as solvent pumped and number of injections as well as maximum system pressure, error, diagnostic user and informational messages will be documented.
5. **Maintenance Information:** The system must provide full maintenance information such as counters for total lamp hour usage, number of ignitions, solvent usage, number of injections etc.
6. **Export of Diagnostic Data:** The system must export diagnostic data, uni-directionally across the internet if enabled by the Connections INSIGHT Agent installed on the same PC that runs Third Party, Console Software, Empower or MassLynx software that controls the system. If a significant event condition is encountered, system performance parameters are passed to a Server via a secure Internet connection. Information is analyzed where an alert can be generated.
7. **Graphical Diagnostics:** The system must allow the user to access all diagnostic functions through a graphical interface.
8. **UPLC Integration:** The acquisition must apply effective filtering and integration algorithms that are optimized for ultra fast UPLC separations enabled by the detector's fast data rates.
9. **Leak Detection:** The system must be equipped with Leak sensing for unattended operation. The sensors must alert the user from the software and graphically locate the location of a leak. The Leak sensors must be capable of resetting in less than 5 minutes. All or a subset of the leak sensors can be enabled or disabled.

Detector System Requirements:

The Detector must be a compact, benchtop, tandem quadrupole mass spectrometer designed for UPLC/MS/MS when configured. The Detector must provide a simple, robust platform for quantitative LC/MS/MS enabled by hi-speed MRM (Multiple Reaction Monitoring) and ESCi® multimode ionization. The system must also incorporate IntelliStart™ Technology for automated system optimization and status monitoring. This ensures high quality data is routinely available to all levels of operators. The system must be available on either MassLynx™ or Empower™ 2 Software, or equivalent.

IntelliStart Technology

1. **System Parameter Checking and Alerts:** System must be capable of checking all operating parameters and indicating visually and verbally whether or not conditions are acceptable to begin an analysis. Operator must be alerted if any system parameter, either UPLC or MS/MS is out of specification.

2. **Integrated sample/calibrant delivery :** System must allow for direct injection of both calibrant and sample, including combining direct injection with UPLC flow for calibration and instrument tuning.
3. **Programmable divert valve:** Divert valve must be programmable to allow flow to be automatically diverted to waste when the system is idle.
4. **Automated Mass Calibration:** Instrument Setup must automate calibration and resolution optimization for varying scan speeds (up to 10,000 amu/s)
5. **Automated Sample Tuning:** Sample tune must allow the operator to input targeted analyte masses, select the fluidics port and scheme for method development, and set method flow rate.
6. **Automated Methods Development:** System must automatically create an optimized set of MS/MS parameters for selected analytes, including cone voltages, optimum MRM parameters, SIR parameters, and confirmation masses.
7. **Performance Check:** System must run a predetermined sample set and evaluate all parameters, including tune, calibration, and quantitative parameters and indicate a pass/fail status for subsequent analysis

SYSTEM GENERAL SPECIFICATIONS

1. **ESCI combined source must be:**
 - a. Combined source for simultaneous electrospray/APCI operation or equal.
 - b. ZSpray™ dual-orthogonal source for robust sampling or equal.
 - c. Vacuum isolation valve or equal.
 - d. Tool-free sampling cone removal or equal.
 - e. Plug and play probes or equal.
 - f. De-clustering cone gas or equal.
 - g. Software control of all gas flows or equal.
2. **Ionization modes:**

ESCI multimode ionization must be included as standard.
3. **Ion Source Transfer Optics:**

Must include a high efficiency hexapole ion guide.
4. **Mass analyzer:**

Must include two high resolution quadrupole analyzers (MS1/MS2) plus pre-filters to maximize resolution and transmission while preventing contamination of the main analyzers.
5. **Collision cell:**
 - a. Must include T-Wave™ or equal collision cell traveling wave device with beam focusing at ion entry and exit for optimum ion transfer and confinement, allowing fast MS/MS acquisition.
 - b. Must include software programmable gas flow.
6. **Detector must be:**
 - a. Low noise, off axis, long life photomultiplier detector.
 - b. Must include digital dynamic range up to 4×10^6 .

7. **Vacuum system must include:**
 - a. Single, split flow air-cooled Pfeiffer Vacuum turbomolecular pump evacuating the source and analyzer or equal.
 - b. One Leybold Sogevac SV40BI rotary backing pump or equal.
8. **Software:**
 - a. Must be Mass Lynx 4.1, or equivalent
 - b. MassLynx, or equivalent must include OpenLynx™ and QuanLynx™ Application Managers as standard.
9. **Dimensions must be:**
 - a. Width: 35.6 cm (14.0 in.) maximum
 - b. Height: 53.3 cm (21.0 in.) maximum
 - c. Depth: 84.8 cm (33.5 in.) maximum
10. **Regulatory approvals must include:**
IVD, NRTL, and CE.

PERFORMANCE SPECIFICATIONS

1. **Acquisition modes must be:**
 - a. Full scan MS (MS1 or MS2)
 - b. Selected ion recording (SIR)
 - c. Product ion scan
 - d. Precursor ion scan
 - e. Constant neutral loss/gain
 - f. Multiple reaction monitoring (MRM)
2. **Mass range**
2 to 2000 m/z
3. **Scan speed**
Up to 10,000 Daltons/sec
4. **Mass stability**
<0.1 Daltons over 8 hr
5. **Linearity of response**
The linearity of response relative to sample concentration, for a specified compound, must be five orders of magnitude from the limit of detection.
6. **Polarity switching**
Must be ≤20 ms switching time between positive and negative ion modes without significant degradation in data quality.
7. **MRM acquisition cycle time**
Minimum dwell time must be 5 ms per channel. Minimum inter-channel and inter-scan delays must be 5 ms. Functions must be configured in retention windows, including mixed mode and overlapping, to optimize cycle time for each analyte.

8 Inter-channel cross talk

The inter-channel cross talk between two MRM transitions, acquired using an MRM dwell time of 10 ms and an inter-channel delay time of 10 ms, must be fewer than 0.02%.

9. Mass resolution

Must be tunable manually or automatically (IntelliStart) or equal to desired resolution. The valley between the 2034.63 Da and 2035.63 Da peaks must be <12% of the average height of the two peaks.

10. RM sensitivity (ESI+)

For a direct loop injection of reserpine (5 pg) at a flow rate of 200 uL/min the chromatographic signal to noise for the transition 609>195 m/z must be greater than 1000:1.

11. RM sensitivity (ESI-)

For a direct loop injection of chloramphenicol (5 pg) at a flow rate of 200 uL/min, the chromatographic signal-to-noise ratio for the transition 321 > 152 m/z must be greater than 180:1.

12. RM sensitivity (APCI+)

For a direct loop injection of 17- α -hydroxyprogesterone (100 pg) at a flow rate of 1 mL/min, the chromatographic signal-to-noise ratio for the transition 331 > 109 m/z must be greater than 150:1.

13. MRM Signal to noise definition

Signal is defined as the height of the chromatographic peak of interest and noise is defined as the RMS of a continuous section of the mass chromatogram.

UPLC-MS/MS Workstation and Software**1. General Software Specifications**

- a. Software must accommodate simultaneous positive and negative ion data during a single UPLC/MS/MS chromatographic run
- b. Software must allow for switching of cone voltage and collision energy on a per function basis during a single UPLC/MS/MS chromatographic run
- c. Software must support automatic tuning for automated MS/MS setup
- d. Software must support automated MS/MS tuning for analytical components
- e. Software must support automated monitoring of instrument vacuum, gas flows, and voltages to warn the user of out of tolerance parameters

2. Target Compound Software, or equivalent

- a. System must include the **Target Lynx** software package, or equivalent for positive identification of targeted compounds, including the following confirmatory checks:
 - Analytes above a Maximum Reporting Level (MRM)
 - Analyte confirmatory ion ratios are outside specified limits
 - One or more analyte signal-to-noise ratios are below a defined value

- An analyte retention time or relative retention time is outside limits
 - An analyte concentration is below set LOD and LQD thresholds
 - The standard deviation of response for QC standards exceeds a defined value
 - The blank response is too high
 - The coefficient of determination (r^2) of the calibration curve exceeds a defined Value
- b System must include a library for Toxicology screening, and a project with all files necessary for the acquisition (tune page, UPLC method, MRM method) and processing for target compounds using Target Lynx software
 - c Automatic Adjustment of Ion Ratios: the software must be able to compensate for variation in ion ratios, typically due to changes in tuning conditions, for a specified compound. By including a reference standard in the sample sequence the expected ion ratios for the target compounds and succeeding samples must be automatically adjusted to match the ratios for the target compounds in the reference standard, so that manual adjustment of ion ratios is not required upon retuning of the instrument.
 - d Cross compound calibration curves: the software must allow calibration curves to be applied to additional compounds in an analysis mixture for which standards or curves do not exist.
 - e Vendor must provide support for equipment and software.

3 Workstation Hardware

System must have an Intel Core 2 Duo E6400 processor or equivalent operating at 2 13 MHz or faster. Operating system: Windows XP Professional SP2. System Warranty: Three Years Onsite for PC hardware.

System Warranty:

1. UPLC/MS/MS Warranty Coverage

All UPLC and MS/MS components and hardware must be covered by a one year on-site repair service.

2. Workstation Warranty

Computer workstation and monitor must be covered by a three year on-site warranty service

Additional Requirements:

1. Delivery and installation of hardware and software must be within 90 days of the approved purchase order.
2. Software familiarization must be performed at installation to the OCME staff.
3. Vendor must manufacture both MS/MS and TOF systems.
4. Vendor must supply all available MS/MS libraries – toxicology, drug, and pesticide.
5. Training of Office of the Chief Medical Examiner's personnel must include 2 days of custom on-site training to be provided within 4 weeks after installation of equipment at the expense of the vendor. Training will incorporate OCME staff, and will take place at the OCME Toxicology laboratory located at 619 Virginia Street, West, Charleston, WV 25302.
6. Due to space constraints, LC and MS footprint must not exceed 30 inches.

System Specifications and Requirements for a Liquid Chromatograph/Time of Flight Mass Spectrometer (LC/TOF-MS)

Solvent Delivery System Requirements:

1. **Flow Rate:** Must be 0.010-2.0 ml/min, in 0.001 ml increments.
2. **Pressure Stability:** Must be $\leq 0.5\%$ of system backpressure or 50 p.s.i at 10,000 p.s.i.
3. **Gradient Profiles:** Even pre-configured gradient profile shapes (linear, 2 step, 4 convex, 4 concave)
4. **Delay Volume:** Must be ≥ 120 μ L, independent of system pressure (with standard mixer 50 μ L)
5. **Solvent Selection:** Binary solvent delivery system must allow the user to choose between two mobile phase for each of the two solvent channels for a total of four solvent choices.
6. **Compressibility Compensation:** Must allow automatic and continuous compressibility compensation, requiring no user intervention.
7. **Degassing System:** Must be built in high efficiency, low volume, 6 chamber vacuum degassing system with a separate channel for each mobile phase solvent and 2 channels for Sample Manager wash solvents.
8. **Flow Precision:** Must be $\leq 0.075\%$ RSD or ± 0.02 min SD, based on retention time with flow accuracy of $\pm 1\%$.
9. **Compositional accuracy:** Must be $< 0.5\%$ and compositional precision is $< 0.15\%$ RSD or ± 0.04 min SD. The solvent delivery system must include an automated software assisted purge function for ease of solvent changing and system purging/priming
10. **UPLC Pressure Requirement:** The solvent delivery system must be able to operate at pressures up to 15000 psi up to 1 ml/min, 9000 psi up to 2 ml/min as required for UPLC analysis.
11. **Seal Wash:** Must be integral, active and programmable plunger seal wash system.
12. **Flow Characteristics:** The Solvent Delivery System must be able to run, at flow rates above 0.5 ml/min, newer, smaller particle size columns, such as those with sub-2.0 μ m diameter particles. The system must not require any hardware modifications to be able to run these columns. The system must be also able to run HPLC columns with particle sizes of 3.0, 3.5, 5.0, 7.0 μ m without any modifications to the system hardware.
13. **Inlet Valves:** The Solvent Delivery System must be equipped with controlled intake valves to deliver faster system priming and startup times. More robust operation and highly repeatable system performance are achieved even with difficult-to-pump solvents because disturbances to solvent flow in inlet lines are minimized. The valves actuation must be precisely controllable, and the algorithms responsible for its operation respond instantly to the fast, pressure-sensing capability of the Solvent Delivery System.

Sample Management System Requirements:

1. **Sample Configurations:** The Sample Management System must be able to accommodate the following sample configurations without the use of an external sample handling device:
 - 2 x 96 well plates
 - 2 x 384 well plates
 - 2 racks of 2 ml vials (48 vials/rack)
 - 2 racks of 4 ml vials (24 vials/rack)
 - 2 racks of 0.65 ml microcentrifuge tubes (48 tubes/rack)
 - 2 racks of 1.5 ml microcentrifuge tubes (24/rack)
2. **Injections:** Must allow 1 to 99 injections per sample, dependant on sample volume available and injection volume.
3. **Injection Modes:** The Sample Manager must support up to THREE injections modes : full loop, partial loop and partial loop using needle overfill (PLNO)
4. **Injection Volume:** Injection volume range must be 0.5 – 50 uL in 0.1 uL increments, partial or full loop mode.
5. **Sample Size:** Minimum sample required must be 5 uL, using 2 mL Maximum Recovery Vials.
6. **Needle Wash:** Needle wash system must wash with up to two solvents to minimize carryover
7. **Wash Solvent:** Must include fresh solvent for the needle wash with each injection to prevent possibility of carryover.
8. **Random Access:** Must allow random access to any vial for multi-method operation.
9. **Injection Precision:** Sample delivery precision must be 0.3% RSD, with a full injector loop, 5-50 uL.
10. **Injection Linearity:** Must be >0.999 coefficient of deviation from 2-10 uL.
11. **Carryover:** Must be better than 0.005% or 2.0 nL of the compound assayed, whichever is greater.
12. **Sample Temperature:** Sample compartment must be controlled from 4 to 40 °C, programmable in 1 °C increments.
13. **Parallel Injection Capability:** The Sample manager must be able to load the injector loop before completion of the last injection
14. **Injection Loop Isolation:** The injector loop must be removed from the system flow path during injection to minimize carryover and to decrease injection cycle time.

Column Heater Compartment Requirements:

1. Column Temperature Range: Must be 5 deg C above ambient to 90 deg C.

Other System Requirements:

1. **Remote Control:** The system must not have a keypad and all instrument control functions must be available through MassLynx or Empower build 1154/2154 software, through third part Control Software and through the Standalone Console software application, or equivalent.
2. **System Volume:** Total effective system volume must be less than 120 uL, independent of system pressure. This must include a 10 uL injector loop.

3. **Diagnostics:** The System must have diagnostic capabilities: ability to store up to 16 diagnostic data channels, for a total of 96 hours, including piston pressures, system pressure, sample manager pressures, temperature, including ambient, lamp hours, lamp ignitions. The diagnostic data must be collected when the instrument is powered up, regardless of the number of runs or run time set.
4. **Diagnostic reporting:** The system must create a standard format pdf file listing all the diagnostic parameters, including firmware version, usage, such as solvent pumped and number of injections as well as maximum system pressure, error, diagnostic user and informational messages will be documented.
5. **Maintenance Information:** The system must provide full maintenance information such as counters for total lamp hour usage, number of ignitions, solvent usage, number of injections etc.
6. **Export of Diagnostic Data:** The system must export diagnostic data, uni-directionally across the internet if enabled by the Connections INSIGHT Agent installed on the same PC that runs Third Party, Console Software, Empower or MassLynx software that controls the system, or equivalent. If a significant event condition is encountered, system performance parameters are passed to a Server via a secure Internet connection. Information must be analyzed where an alert can be generated.
7. **Graphical Diagnostics:** The system must allow the user to access all diagnostic functions through a graphical interface
8. **UPLC Integration:** The acquisition must apply effective filtering and integration algorithms that are optimized for ultra fast UPLC separations enabled by the detector's fast data rates
9. **Leak Detection:** The system must be equipped with Leak sensing for unattended operation. The sensors must alert the user from the software and graphically locate the location of a leak. The Leak sensors must be capable of resetting in less than 5 minutes. All or a subset of the leak sensors can be enabled or disabled.

Ionization Source:

1. **API Source:**

The instrument must be equipped with an atmospheric pressure ionization (API) LC interface that includes the source and spraying elements. Samples may be introduced by direct infusion via a syringe, or the system may be interfaced directly to a HPLC system.
2. **Source Design:**

The ion source must be a dual orthogonal design. The nebulized sprayer must be positioned orthogonally to the sampling orifice and be positioned off-axis for maximum source longevity and analyzer protection against "dirty" samples.
3. **LC Inlet:**

The LC inlet probe must be positioned vertically to minimize system footprint, reduce the length of connecting tubing and reduce the potential for chromatographic peak broadening.
4. **Maintenance:**

A source access door must be incorporated to allow easy access to the spraying elements for cleaning without the need to remove the ion source enclosure. A toughened glass window must be incorporated into the door to allow easy viewing of the source.
5. **Isolation Valve:**

An isolation valve must be fitted to the source to allow the source elements to be removed and cleaned without breaking instrument vacuum, maximizing instrument uptime.

6. **Declustering:**
The source must include the facility to de-cluster ions formed at atmospheric pressure.
7. **Cone Gas Control:**
The desolvation and cone gas must be supplied via digitally controlled mass flow meters and be controlled via the data system.
8. **Nitrogen Grade:**
The ion source must be able to use Zero Grade Nitrogen (standard lab grade) for the desolvation and cone gas.
9. **Positive/Negative Ionization:**
Positive and negative ionization capabilities must be included as standard on the instrument (0.3secs inter-scan delay).
10. **Source Voltages:**
All source voltages must be under data system control and must incorporate active read backs.
11. **Electrospray Source:**
Electrospray (ESI) must be provided as an option with the instrument. The ESI must incorporate a heated gas flow, separate from the probe nebulizer, for efficient desolvation. No supplement heater or probe is required to work over the 5-1000 uL/min flow range. The probe must incorporate the facility to adjust the sprayer tip length in-situ to allow easy optimization of ionization.
12. **Dual Electrospray Facility (Lock-Spray):**
The instrument must include as an option a dual electrospray facility to allow simplified exact mass measurements. The ionization source must incorporate a standard ESI probe, a secondary ESI probe that is positioned diametrically opposite to the standard probe to introduce a reference mass, and a motor driven baffle that is positioned between the two sprayers to allow indexed sampling of the two sprayers.
13. **Multi-Mode Source:**
A combined multi-mode ESI/APCl source (ESCi™) must be provided as standard with the instrument. ESI and APCl ionization is achieved using a single probe. Voltage supplies are alternated between the probe (ESI) and the corona pin (APCl) in rapid speeds (10msecs). The facility of combined ESI/APCl provides the facility of switching between the two ionization types during a single LCMS experiment. The data from both the ESI and APCl ionization modes must be contained within separate data streams within the single data file to maintain integrity of information.
14. **ESCi/Lock-Spray Operation:**
The dual ESI/APCl (ESCi) must operate with the dual electrospray (LockSpray) ionization source to allow simplified exact mass measurements for compounds of different polarities. This facility must be provided as standard with the instrument.

Oa-Time-of-Flight Mass Analyzer:

1. **Ion Transport:**
Ions produced in the source region of the instrument must be transmitted to the TOF analyzer via 3 high efficiency Rf ion guides.
2. **Ion Focusing:**

Prior to entering the TOF analyzer, the ion beam must be spatially and time focused using a series of digitally controlled lens and grids.

3. **Beam Geometry:**

The ion beam must be injected (pulsed) orthogonally into the TOF analyzer at a repetition rate up to 30kHz.

4. **Dual Mode Geometry:**

- a. The TOF analyzer must consist of a high precision reflectron mirror at the opposing end to the pusher to reverse the flight path of the ions towards the detector system (V Mode TOF geometry). The effective flight length in V Mode geometry must be 0.8m.
- b. An additional reflectron mirror must be incorporated into the TOF analyzer between the pusher and the detector, to allow ions to travel through the analyzer a second time (W Mode TOF geometry). The effective flight length in W Mode geometry must be 1.6m.

Resolution:

- a. The oa-TOF analyser must be capable of providing up to 15,000 FWHM resolution using W mode geometry.
- b. The oa-TOF analyzer must be capable of providing greater than 10,000 FWHM resolution at m/z values less than 200Da.
- c. The user must be able to easily select either V or W Mode via the data system to provide on-site spectral resolution of >6000 FWHM in V Mode and >12,000 FWHM in W Mode.

5. **Mass Range:**

The mass range of the analyser must be up to 30,000 m/z in V Mode (18,000 m/z in W Mode).

6. **Detector:**

- a. The detection system must incorporate a dual microchannel plate and anode assembly, electrically isolated for optimum positive and negative ion detection.
- b. Ion arrival times must be recorded using a time-to-digital converter (TDC) with an acquisition rate of 4 GHz to provide excellent peak definition and mass accuracy.

7. **Positive/Negative Switch Time:**

The switching time for positive/negative ion detection must occur during an LCMS experiment, with a minimum inter-scan delay time of 300milliseconds.

8. **Acquisition Rate:**

The TOF must be able to acquire full spectral data at rates up to 20 spectra/sec.

9. **Dynamic Range:**

The analyzer must have the capability of acquiring data over 4 orders of magnitude, enabled through the use of a dynamic range enhancement system via fast ion transmission switching.

Vacuum System:

1. **Differentially pumped, automated vacuum system:**

- a. There must be a single, air-cooled, three stage turbomolecular pump that

- evacuate the transfer and analyzer regions, eliminating the need to an external water chiller unit.
- b. There must be a single E1M18 rotary pump that evacuates the source region (provided as standard)
 - c. There must be a single E2M28 rotary pump that provides backing for the turbomolecular pump (provided as standard)
 - d. An active Pirani gauge must be fitted to the source region to monitor the pressure.
 - e. A Penning gauge must be fitted to the analyzer to monitor the vacuum.
 - f. Vacuum read backs and system vent/pump cycles must be digitally monitored and controlled, to provide total software control and ensure fail-safe operation in event of a power failure.
 - g. Isolation valves must be fitted to both rotary pumps to ensure that no oil is pumped back through the vacuum lines to the instrument in the event of an electricity supply failure of the rotary pumps.

Performance Specifications:

1. Mass Range:

The mass range of the instrument must be 20 to 30,000 m/z in V Mode and 20 to 18,000 m/z in W Mode.

2. Data Acquisition Rate:

The TOF analyzer must be capable of acquiring data up to 20 spectra/sec in both continuum and centroid data formats.

3. Cone Voltage:

The cone voltage must be programmable up to 200V to provide in source CID

4. Polarity Switching:

The instrument must be capable of switching ionization polarity during an LCMS acquisition with a minimum inter-scan delay of 300millisecs.

5. Time of Flight Mass Resolution Positive Ion:

(a) V Mode

>6000 FWHM measured on the [M+4H]⁴⁺ isotope cluster of melittin (m/z 712)

(b) W Mode

>12,000 FWHM measured on the [M+4H]⁴⁺ isotope cluster of melittin (m/z 712)

6. Time of Flight Mass Resolution Negative Ion:

(a) V Mode

>6000 FWHM measured on the [M-H]⁻ ion of raffinose (m/z 503)

(b) W Mode

>12,000 FWHM measured on the [M-H]⁻ ion of raffinose (m/z 503)

7. Electrospray Signal to Noise Sensitivity:

Using electrospray positive ionization, the average signal to noise (peak to peak) on 10 pg of reserpine must be greater than 100:1. This must be demonstrated using a 1 pg/uL solution of reserpine, injecting 10 uL of sample onto a C18, 2.1x30mm HPLC column at a flow rate of 300 uL/min. The mobile phase must consist of 75%/25% methanol/water containing 5mM ammonium acetate. Five repeat injections must be carried and the signal to noise should be calculated on the chromatogram produced by the molecular ion of

reserpine (m/z 609 2812).

8. Infusion Sensitivity—ESI Positive Ion:

This must be demonstrated using a solution of leucine enkephalin (50 pg/uL dissolved in 50/50 acetonitrile/water+0.1% formic acid) infused at 5 uL/min. In V Mode (>6000 FWHM), the $[M+H]^+$ ion at m/z 556 must demonstrate a signal height greater than 500 counts per second. In W Mode (>12,000 FWHM), the signal height must be greater than 250 counts per second.

9 Infusion Sensitivity—ESI Negative Ion:

This must be demonstrated using a solution of raffinose (500 pg/uL dissolved in 50/50 methanol/water) infused at 10 uL/min. In V Mode (>6000 FWHM), the signal height must be greater than 400 counts per second. In W Mode (>12,000 FWHM), the signal height must be greater than 200 counts per second.

10. Mass Measurement Accuracy:

Using the dual sprayer exact mass ion source in ESI positive ion, the mass measurement accuracy of the instrument must be demonstrated to be less than 3ppm RMS error. This must be demonstrated on the $[M+Na]^+$ ion of raffinose (m/z 527.1588) using a single point lock mass (leucine enkephalin, m/z 556.2771), at a resolution greater than 10,000 FWHM and based on 10 repeat measurements. Analyte and lock mass peaks must have sufficient intensity and be free from interference from other masses.

11. Low M/Z Resolution:

Must be greater than 10,000 FWHM measured on the m/z 181 ion from sodium formate (W Mode).

12. Ion Mode Polarity Switching Mass Accuracy:

At a resolution greater than 12,000 FWHM, the RMS error between the measured and accepted masses of peaks which have sufficient intensity and are free from interference from other masses must be less than 2.0mDa over the range 50 – 400Da and must be less than 5ppm over the range 400 – 900Da. The maximum acquisition rate is 2.5 scans/second. This is demonstrated using LockSpray, with a sodium formate solution as the analyte and leucine enkephalin ($[M+H]^+=556.2771$, $[M-H]^-=554.2615$) as the single point lock mass.

13 Isotope Ratios:

The RMS error between the measured and accepted isotope ratios of the A+1 and A+2 (where A = the monoisotopic molecular ion) of leucine enkephalin infused at 0.1 ions per push must be less than 2%.

Additional Hardware Features:

1. Syringe Pump:

An integral syringe pump, controlled through the instrument software, must be included. It must be operated over the flow rate range of 1-1000 uL/min and must be capable of accepting a wide variety of syringe sizes. It must include an autostop facility.

2. Electronic Injection Valve:

An electronic injection valve of Rheodyne design must be incorporated into the instrument and must be accessible from the front panel. The valve state must be controlled from either the front panel of the instrument or the control software. The electronic injection valve must be programmable from the software to allow it to be used as a divert valve for LCMS experiments.

3. Footprint:

1. LCT dimensions are 26 in x 33 in x 32 in (H x W x D) maximum.
2. UPLC dimensions are 26 in x 14 in x 29 in (H x W x D) maximum.

UPLC-MS/TOF Workstation and Software:

1. General Software Specifications:

- a. The MS control software must be a Windows based platform and have the ability to control both the MS and specified HPLC devices.
- b. The data processing software must incorporate an elemental composition calculator as standard. Included into the calculator must be algorithms for isotope pattern modeling that allow data interpretation of actual isotope patterns. A goodness of fit from actual to theoretical isotopes must be included. The ability to filter out incorrect elemental composition calculations through the use of intelligent spectral interpretation algorithms must be incorporated.
- c. An embedded personal computer acquisition system (EPCAS) must be incorporated to the chassis of the instrument to allow data acquisition and dynamic instrument control.
- d. The MS software must incorporate wizards that aid the user to set up the operation of the instrument. Functionality must include auto-calibration, set up of the detector gain and set up of the reference mass for exact mass measurement over the widest available dynamic range. The wizard functionality must provide dialog to keep the user updated on progress throughout the procedure.
- e. The following type of spectral data must be acquired on the instrument:
 - i. Multi-channel analysis (MCA, profile) data
 - ii. Continuum (profile) data
 - iii. Centroid (stick) data
- f. The instrument must have the ability to acquire simultaneous positive and negative ion data during an LCMS experiment.
- g. The instrument must be able to switch cone voltage on a per function basis to provide in source collision induced dissociation (CID).
- h. In centroid data acquisition, a single point lock mass must be specified to provide an exact mass measurement in real-time. The scan frequency at which the reference sprayer is sampled must be user specified.

2. Must include MS Deconvolution Software (Chromalynx Software Manager), or equivalent:

The system must include the Chromalynx Software Manager for MS deconvolution including accurate mass deconvolution for identification and screening of known and unknown compounds in complex mixtures, or equivalent.

- a. Spectral Deconvolution for the generation of "clean" mass spectra from closely eluting compounds in complex mixtures.
- b. Automated Library Searching. Results from elemental composition must all to be searched against available libraries.
- c. Semi-Quantitative Determinations. Chromalynx must generate a percentage figure corresponding.

- d. Chromatographic Comparison.
3. **Workstation Hardware**
System must have an Intel Core 2 Duo E6400 processor or equivalent operating at 2.13 MHz or faster. Operating system: Windows XP Professional SP2 System Warranty: Three Years Onsite for PC hardware.
4. Vendor must provide support for equipment and software.

System Warranty:

1. **UPLC/MS/MS Warranty Coverage**
All UPLC and MS/MS components and hardware must be covered by a one year on-site repair service.
2. **Workstation Warranty**
Computer workstation and monitor must be covered by a three year on-site warranty service.

Additional Requirements:

1. Delivery and installation of hardware and software must be within 120 days of the approved purchase order.
2. Software familiarization must be performed at installation to the OCME staff.
3. Vendor must manufacture both MS/MS and TOF systems
4. Vendor must supply all available MS/MS libraries – toxicology, drug, and pesticide
5. Training of Office of the Chief Medical Examiner's personnel must include 2 days of custom on-site training to be provided within 4 weeks after installation of equipment at the expense of the vendor. Training will incorporate OCME staff and will take place at the OCME Toxicology Laboratory located at 619 Virginia Street, West, Charleston, WV 25302.
6. Vendors bidding on alternate product/equipment must provide pertinent literature/specifications.

RFQ Cost Sheet

Bidders shall provide a cost for the following:

Waters Product Name	Waters Item #	Quantity	Cost
LC/TOF-MS Acquity/LCT Premier XE or equal	176001227	1	
TQD Tandem Quadrupole MS/MS or equal	176001263	1	
Mass Lynx 4.1, M55 & XP TQD or equal	176001114	1	
Mass Lynx 4.1, M55 & XP TQD or equal	176001255	1	
ChromaLynx V4.1 or equal	176001063	1	
Cord Kit USA or equal	205000414	1	
TargetLynx V4.1 or equal	176001086	1	
Acquity UPLC, Column heater, Solvent manager, Sample manager or equal	176015000	2	
Acquity BEH C18 column 3 pack or equal	176000864	2	
20" Flat Panel Monitor or equal	668000273	2	
GRAND TOTAL			

The award will be made to the vendor with the lowest overall total cost of the equipment which meets all requested specifications and requirements.

Payment will be made in arrears after receipt of completed order.

Vendor Signature

Date

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

VENDOR OWING A DEBT TO THE STATE:

West Virginia Code §5A-3-10a provides that: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:

West Virginia Code §21-1D-5 provides that: Any solicitation for a public improvement construction contract shall require each vendor that submits a bid for the work to submit at the same time an affidavit that the vendor has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the West Virginia Code. A public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the West Virginia Code and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the West Virginia Code may take place before their work on the public improvement is begun.

ANTITRUST:

In submitting a bid to any agency for the state of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the state of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the state of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the state of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership or person or entity submitting a bid for the same materials, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

LICENSING:

Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendors should visit www.state.wv.us/admin/purchase/privacy for the Notice of Agency Confidentiality Policies.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor acknowledges the information in this said affidavit and is in compliance with the requirements as stated.

Vendor's Name: _____

Authorized Signature: _____ Date: _____

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with **West Virginia Code, §5A-3-37** (Does not apply to construction contracts). **West Virginia Code, §5A-3-37**, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1. **Application is made for 2.5% resident vendor preference for the reason checked:**
 Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,
2. **Application is made for 2.5% resident vendor preference for the reason checked:**
 Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
3. **Application is made for 2.5% resident vendor preference for the reason checked:**
 Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
4. **Application is made for 5% resident vendor preference for the reason checked:**
 Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
5. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
 Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
6. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
 Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: _____ **Signed:** _____

Date: _____ **Title:** _____

**Check any combination of preference consideration(s) indicated above. which you are entitled to receive*