

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
**Bid Receiving Public Works and Government
Services Canada/Réception des soumissions
Travaux publics et Services gouvernementaux
Canada**
800 Burrard Street, Room 219
800, rue Burrard, pièce 219
Vancouver, BC V6Z 0B9
Bid Fax: (604) 775-7526

**REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Title - Sujet UHPLC/MS/MS	
Solicitation No. - N° de l'invitation H3551-145104/A	Date 2015-01-02
Client Reference No. - N° de référence du client H3551-145104	
GETS Reference No. - N° de référence de SEAG PW-\$VAN-531-7410	
File No. - N° de dossier VAN-4-37286 (531)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2015-02-17	Time Zone Fuseau horaire Pacific Standard Time PST
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Mak, Goretti M.	Buyer Id - Id de l'acheteur van531
Telephone No. - N° de téléphone (604) 775-7649 ()	FAX No. - N° de FAX (604) 775-7526
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF HEALTH WRL RAPB 3155 WILLINDON GREEN BURNABY British Columbia V5G4P2 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution

Public Works and Government Services Canada - Pacific
Region
219 - 800 Burrard Street
800, rue Burrard, pièce 219
Vancouver, BC V6Z 0B9

Delivery Required - Livraison exigée See Herein	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

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van531

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**TITLE: ULTA-HIGH PERFORMANCE LIQUID CHROMATOGRAPHY TRIPLE
QUADRUPOLE MASS SPECTROMETER (UHPLC/MS/MS)**

SEE ATTACHED

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TITLE: ULTA-HIGH PERFORMANCE LIQUID CHROMATOGRAPHY TRIPLE QUADRUPOLE MASS SPECTROMETER (UHPLC/MS/MS)

PART 1 - GENERAL INFORMATION

1.1 Requirement

The requirement is detailed under Article 6.2 of the resulting contract clauses.

1.2 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2014-09-25) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days
Insert: 90 days

2.1.1 SACC Manual Clauses

2.1.1.1 SACC clause 4001 (2013-01-28) Hardware Purchase, Lease and Maintenance

2.2 Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

2.2.1 Improvement of Requirement During Solicitation Period

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of

competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least 10 days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than 7 calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in British Columbia.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid (3 hard copies)

Section II: Financial Bid (1 hard copy)

Section III: Certifications (1 hard copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green](#)

Procurement (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I: Technical Bid

In their technical bid, bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work. Full technical specifications and descriptive materials must be submitted with the proposed product. Failure to provide these materials with the proposal will result in the proposal being declared non-responsive.

In order to demonstrate compliance to the technical requirements, it is requested that the Bidder's Technical Bid include at a minimum the following:

- (a) a completed Annex B, indicating compliance to the specifications, supplying hardware details and providing reference locations to supporting documentation and technical brochures included in the Bid, and;
- (b) Technical brochures and supporting documents should be cross-referenced with Annex B and pertinent information demonstrating compliance should be clearly marked

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

It is the Bidder's responsibility to provide a comprehensible and sufficiently detailed bid that will permit a complete evaluation in accordance with the criteria set out in the bid solicitation.

Unless specified otherwise in the bid solicitation, Canada will evaluate only the documentation provided with a bidder's bid. Canada will not evaluate information such as references to Web site addresses where additional information can be found, or technical manuals or brochures not submitted with the bid.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Applicable Taxes must be shown separately.

3.1.1 Exchange Rate Fluctuation

3.1.1.1 C3011T (2013-11-06), Exchange Rate Fluctuation

Section III: Certifications

Bidders must submit the certifications required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

See Annex G - Bid Preparation, Evaluation Criteria and Basis of Selection.

4.1.1.2 Point Rated Technical Criteria

See Annex G - Bid Preparation, Evaluation Criteria and Basis of Selection.

4.1.2 Financial Evaluation

The maximum funding available for the Contract resulting from the bid solicitation is **\$417,000.00 (Applicable Taxes extra)**. Bids valued in excess of this amount will be considered non-responsive. This disclosure does not commit Canada to pay the maximum funding available.

4.2 Basis of Selection

See Annex G - Bid Preparation, Evaluation Criteria and Basis of Selection.

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and associated information to be awarded a contract.

The certifications provided by bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default in carrying out any of its obligations under the Contract, if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority may render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to comply with the request of the Contracting Authority and to provide the certifications within the time frame provided will render the bid non-responsive.

5.1.1 Integrity Provisions - Associated Information

By submitting a bid, the Bidder certifies that the Bidder and its Affiliates are in compliance with the provisions as stated in Section 01 Integrity Provisions - Bid of Standard Instructions . The associated

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information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

5.1.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" list (http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from [Employment and Social Development Canada \(ESDC\) - Labour's](#) website.

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list at the time of contract award.

PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

6.1 Security Requirements

There is no security requirement applicable to this Contract.

6.2 Requirement

The Contractor must provide an ultra-high performance liquid chromatography triple quadrupole mass spectrometer (UHPLC/MS/MS) in accordance with the Requirement at Annex "A", Technical Requirement at Annex "B" and the Contractor's technical bid entitled _____, dated _____.

6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

6.3.1 General Conditions

2010A (2014-11-27), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

6.3.2 Supplemental General Conditions

4001 (2013-01-28) Hardware Purchase, Lease and Maintenance, apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Period of Contract

The period of the Contract is from date of Contract to end of the maintenance/warranty period.

6.4.2 Delivery Date

6.4.2.1 Initial Goods

While delivery of all related equipment, the completion of all installation, testing and contract related work is required by **March 31, 2014**, the best delivery that could be offered is _____.

6.4.2.2 Optional Goods

The Contractor must make the complete delivery within _____ calendar days from the effective date of the order.

6.4.3 Shipping Instructions

6.4.3.1 Initial Goods

Shipping Instructions - Free on Board Destination

FOB Destination, including all delivery charges and customs duties and Applicable Taxes.

6.4.3.2 Optional Goods

Shipping Instructions - Free on Board (Origin)

FOB (Canadian Origin), including all customs duties and Applicable Taxes. All delivery charges are extra

6.4.3.3 Delivery and Unloading

1. Delivery trucks must be equipped with an unloading device which will permit unloading at sites with no hydraulic, stationary or other type of unloading facility.
2. When making deliveries, sufficient personnel must be provided to permit unloading of any type of vehicle without the assistance of federal government personnel.
3. At some sites, the delivery truck must be unloaded while parked at the curb. When material is placed on the sidewalk, it must be placed in proximity to the designated entrance so as to be readily accessible to transport by mechanical handling equipment utilized by site personnel.

6.4.4 Inspection and Acceptance

The Project Authority is the Inspection Authority. All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection by the Inspection Authority or representative. Should any report, document, good or service not be in accordance with the requirements of the Statement of Work and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment.

6.4.5 Option to Extend the Contract - Warranty / Maintenance and Support Extension

The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to 5 additional one year period(s) under the same conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions as set out in the Basis of Payment.

Canada may exercise this option at any time by sending a written notice to the Contractor at least 30 calendar days before the expiry date of the Contract. The option may only be exercised by the Contracting Authority, and will be evidenced for administrative purposes only, through a contract amendment.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Goretti Mak, Supply Specialist
Public Works and Government Services Canada
Acquisitions Branch Vancouver
Room 219 - 800 Burrard Street, Vancouver, BC V6Z 0B9

Telephone: (604) 775-7649
Facsimile: (604) 775-7526
E-mail address: Goretti.Mak@pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform

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work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

6.5.2 Technical Authority (to be completed at Contract award)

The Technical Authority for the Contract is:

Name: _____
Title: _____
Organization: _____
Address: _____

Telephone : _____
Facsimile: _____
E-mail address: _____

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6.5.3 Contractor's Representative

Name and telephone number of the person responsible for:

6.5.3.1 General enquiries

Name: _____
Title: _____
Tel: _____
Fax: _____
E-mail: _____

6.5.3.2 Warranty Repairs

The contact person for warranty repairs to be performed on site as it may be necessary is as follows:

Name: _____
Title: _____
Tel: _____
E-mail: _____

6.5.3.3 Emergency Service

The Contractor shall be required to provide on-site emergency service. The contact person is as follows:

Name: _____
Title: _____
Tel: _____
Toll free: _____
Fax: _____
E-mail: _____

6.6 Payment

6.6.1 Basis of Payment - Firm Price, Firm Unit Price(s) or Firm Lot Price(s)

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm unit price as specified in Annex B for a cost of \$ _____ (*insert the amount at contract award*). Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.6.1.1 Initial Goods - pricing

FOB Destination, including all delivery charges and customs duties and Applicable Taxes.

6.6.1.2 Optional Goods

Shipping Instructions - Free on Board (Origin)

FOB (Canadian Origin), including all customs duties and Applicable Taxes. All delivery charges are extra.

6.6.1.3 Prepaid Transportation Costs

The Contractor must prepay transportation costs. Prepaid transportation costs must be shown as a separate item on the invoice, supported by a certified copy of the prepaid transportation bill of lading.

6.6.1.4 Advance Payment

Canada will pay the Contractor in advance for the warranty / maintenance and support services if:

- (a) An accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- (b) All such documents have been verified by Canada.

Payment in advance does not prevent Canada from exercising any or all potential remedies in relation to this payment or any of the Work, if the Work performed later prove to be unacceptable.

6.6.2 Limitation of Price

SACC Manual clause C6000C (2011-05-16) Limitation of Price

6.6.3 Single Payment

SACC Manual clause H1000C (2008-5-12) Single Payment

6.7 Invoicing Instructions

6.7.1 The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

6.7.2 Invoices must be distributed as follows:

6.7.2.1 The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.

6.8 Certifications

6.8.1 Compliance

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The continuous compliance with the certifications provided by the Contractor in its bid and the ongoing cooperation in providing associated information are conditions of the Contract. Certifications are subject to verification by Canada during the entire period of the Contract. If the Contractor does not comply with any certification, fails to provide the associated information, or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

6.8.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "[FCP Limited Eligibility to Bid](#)" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

6.9 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in British Columbia.

6.10 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- 6.10.1 the Articles of Agreement;
- 6.10.2 the supplemental general conditions 4001 (2013-01-28);
- 6.10.3 the general conditions 2010A (2014-11-27);
- 6.10.4 Annex A, Requirement;
- 6.10.5 Annex B, Technical Requirement;
- 6.10.6 Annex C, Basic of Payment;
- 6.10.7 the Contractor's bid dated _____ (*insert date of bid*) (*If the bid was clarified or amended, insert at the time of contract award: " , as clarified on _____ " or " , as amended on _____ " and insert date(s) of clarification(s) or amendment(s)*)

6.11 Electrical Equipment

All electrical equipment supplied under the Contract must be certified or approved for use in accordance with the Canadian Electrical Code, Part 1, before delivery, by a certification organization accredited by the Standards Council of Canada.

ANNEX "A"

REQUIREMENT

1. Scope

1.1. Title

Ultra High Performance Liquid Chromatography Tandem/Triple Quadrupole Mass Spectrometer (UHPLC/MS/MS)

1.2. Introduction

The Western Region Laboratory (WRL) of the Regions and Program Branch (RAPB), Health Canada, requires an ultra-high performance liquid chromatography triple quadrupole mass spectrometer (UHPLC/MS/MS) to replace its existing instrument, a Waters QToF Micro, which is 9 years old and is no longer operational. This replacement UHPLC/MS/MS system is intended for the quantitative and qualitative analysis of a wide variety of trace level organic chemical compounds. This instrument is required for the delivery of several high priority projects with the Food Directorate and HECSB, i.e., detection and determination of trace level of Persistent Organic Pollutants (POPs) in Canadian food sources and the detection of PAH metabolites in Canadian blood samples. The data generated is fundamental to the development of exposure estimates and risk assessments, leading to sound science-based risk management strategies ensuring the health of Canadians. With ever more chemicals contaminants present in our food source there are growing demands to detect these chemicals at the lowest concentration possible. New generations of UHPLC/MS/MS systems have technologies that increase the sensitivity. With the purchase of a new UHPLC/MS/MS, we aim to be able to detect chemical contaminants that were not possible with our current instruments.

1.3. Objectives of the Requirement

WRL requires the supply, installation and set-up of a UHPLC/MS/MS instrument system for the analysis of organic chemical contaminants in Canadian food sources and for the bio-monitoring of organic chemical contaminants found in the bodies of Canadians. The system must be installed on-site and the laboratory staff must be trained on its usage. The system must come equipped with the appropriate software for trace organic chemical analysis. The complete system will include: ultra-high performance liquid chromatography system, triple quadrupole mass spectrometer, computer and software.

1.4. Background and Specific Scope of the Requirement

Existing equipment is 9 years old and this instrument is out of service and no longer supported by the supplier. With ever more chemical contaminants present in our food sources, there are growing demands that we detect these chemicals at the lowest concentration possible. New generations of UHPLC/MS/MS systems have new technologies making them more sensitive in detecting trace levels of chemicals. The purchase of a UHPLC/MS/MS will enable the detection of chemical contaminants that might not be possible with our current instruments. The addition of a UHPLC/MS/MS in place of an outdated UHPLC-QToF MS also will help increase the scope of work and project delivery. This new instrument will enable WRL chemists to develop robust analytical methods for the determination of various chemicals in an ever lower concentration which is currently very difficult to achieve with the instruments available in house.

2. Requirements

2.1. Tasks, Activities, Deliverables and Milestones

The instrument will come equipped with a complete ultra-high performance liquid chromatography system, a triple quadrupole mass spectrometer, operating computer, and qualitative and quantitative analysis software that allows detection, interpretation and determination of trace organic chemicals in the environmental samples. Specification requirements of the UHPLC/MS/MS System will be detailed in the technical evaluation criteria provided by WRL. WRL will consider/accept both demonstration models and/or certified refurbished models offered by the original manufacturers (not third party vendors or resellers). Additional merits will be given to manufacturers that can provide a trade-in offer or dispose of our Q-ToF MS.

2.2. Standards (Specs covered in Annex B)

Instrument system must meet all applicable ISO, UL and CSA standards. All instruments must be CSA certified and listed.

All Installation Qualification (IQ), Operation Qualification (OQ), and Performance Qualification (PQ) will be performed and certified by the manufacturer.

2.3 Method and Source of Acceptance

Manufacturer has to set up the UHPLC/MS/MS system after delivery and ensure it is in optimal working condition by performing and certifying all IQ, OQ, and PQ that is necessary. Manufacturer will need to provide a summary of the installation, documentation and data showing the installed instrument meets the optimal operating specifications.

2.4 Reporting Requirements

Manufacturer will need to provide a report detailing the installation such as an installation protocol summary and/or all data and documentation that demonstrate how the instrument meet each specification for optimal operation.

The Contractor must submit electronic/email update to the Project Authority outlining the shipping date and expected delivery date.

3. Additional Information

3.1. Canada's Obligations

Building access.

Access to staff member to help coordinate delivery, installation, and training.

3.2. Contractor's Obligations

- Unless otherwise specified, the Contractor must use its own equipment and software for the performance of this Requirement.
- Title to the equipment/furnishings charged against this Contract shall vest in Canada upon payment of invoiced amounts and must remain so vested at all times.
- For each item of equipment/furnishings that is purchased, the Contractor is to record the name, manufacturer, model number, serial number, optional equipment, supplier and price and forward this information to the Project Authority.
- The Contractor must label all equipment/furnishings as being the property of Canada.

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- Notwithstanding the fact that the equipment/furnishings under this Contract become vested in Canada, the equipment/furnishings must remain within the custody and control of the Contractor until such time as the Project Authority provides instructions for its delivery. During this period of time, the Contractor must take reasonable and proper care of the equipment/furnishings.

3.3. Language of Work

English .

4. Project Schedule

4.1. Schedule and Estimated Level of Effort (Work Breakdown Structure)

ANNEX "B"

TECHNICAL REQUIREMENT

B.1 Ultra-High Performance Liquid Chromatography Triple Quadrupole Mass Spectrometer (UHPLC-MS/MS) System

The ultra High Performance Liquid Chromatography Tandem/Triple Quadrupole Mass Spectrometer (UHPLC/MS/MS) system must consist of, but not be limited to, the following major components, complete with all software/hardware and interfacing necessary to make a fully integrated system. The instrument must be able to demonstrate low detection limits for trace chemical analysis as well as being accurate, precise, robust and low maintenance.

- Ultra High Performance LC binary or quaternary pump
- Autodegasser
- Thermostated autosampler
- Thermostated column compartment
- A triple quadrupole mass spectrometer
- Operating computer
- Operating/Data system software
- Operating/Data system hardware
- System implementation and training
- Service & support
- System performance specifications
- System warranty

B.2 Ultra High Performance Liquid Chromatography Subsystem (UHPLC)

2.2.1 The UHPLC Subsystem must be an integrated part of the total system and designed for unattended operation. The UHPLC system must be under complete control of the operating/data computer system.

MANDATORY

2.2.2 The UHPLC system must include ultra-high performance LC pumps in a binary or quaternary configuration, an autodegasser, a thermostated autosampler, and a thermostated column compartment.

MANDATORY

2.2.3 The LC's mobile phase back pressures, flow rates, leak detection and flows to inlets and detectors must be electronically controlled via the computer system. **MANDATORY**

2.2.4 All required tubings, fittings, and regulators for system installation must be included. **MANDATORY**

2.2.5 The LC method must be part of the full method along with Automatic Sampling parameters, Mass Spectrometer settings, Data Processing options and Reporting Options. **MANDATORY**

2.2.6 The LC must be capable of performing as a 'fast', 'ultra-high performance' LC and as conventional LC. When used as an 'ultra-performance' LC system, it can provide analysis run times at least 75% shorter than conventional HPLC with no loss of resolution. This can be accomplished through a combination of higher operating pressures and flows, new column separation technologies, or by other means. **MANDATORY**

2.2.7 The LC must be able to run sub 2 µm particle size columns at a flow rate of up to 2.0 mL/min. **MANDATORY**

2.2.8 The LC flow rate range must be 0.050 to 2 mL/min or higher (up to 5 mL/min).

2.2.9 The LC must accommodate 2 solvents during a gradient run, or more solvents and selectable from 4 different solvent reservoirs. This should be accomplished by means of additional integrated high performance pumps or automated switching valves.

2.2.10 The LC maximum operating pressure is at least 12,000 psi.

2.2.11 The LC minimum capacity is 48 vials or more up to 2 mL capacity each.

2.2.12 The LC Degasser is automatic and continuous on-line vacuum degassing

2.2.13 The LC pH range is pH 2 to 12.

2.2.14 The LC Column Thermostat Compartment maintains temperatures in the range 15°C to 60 °C or higher in no more than 1°C increments.

2.2.15 The LC Column Thermostat Compartment must accommodate more than 2 columns and up to 6 columns.

2.2.16 The LC Injection Volume is 0.1 to 100 µL or higher in 0.1 µL increments with no hardware changes.

2.2.17 The LC Large Volume Injection is 10 to 2000 µL in 10 µL increments.

2.2.18 The LC Carryover (UV) is <0.004 % or better.

2.2.19 The LC integral heater and cooler for samples is programmable from 4-40 °C, in no more than 1°C increment.

2.2.20 The LC Column switching valve is included and under software control. **MANDATORY**

2.2.21 The LC In-line degasser is stackable self-contained with internal volume less than 1 mL per channel and is capable of accommodating up to 5 mL/min per channel.

2.2.22 The LC must include any other items, including hardware and software not explicitly stated, required for the system to be qualified as per protocols stipulated by the vendor and accompanying documentation thereof. **MANDATORY**

2.2.23 Value added items and/or other accessories or components that will enhance the performance or capacities of the proposed system (e.g. Online SPE/extraction/sample prep, 2D LC, DAD detector, or etc).

2.3 Mass Spectrometer Subsystem

2.3.1 The MS/MS Subsystem must be an integrated part of the total system and designed for unattended operation and dedicated to perform UHPLC/MS/MS. The MS/MS Subsystem must include a triple quadrupole type mass spectrometer, all relevant operating/data system software, operating/data system hardware, system implementation and training, service & support and system performance specifications. **MANDATORY**

2.3.2 The mass spectrometer must include the appropriate source for Electrospray (ESI) and Atmospheric Chemical Ionization (APCI). **MANDATORY**

2.3.3 The system must have MS/MS sensitivity of detecting 1 pg of reserpine on column with a 10,000:1 signal to noise (S/N) in ESI positive mode minimum and a MS/MS sensitivity of detecting 1 pg of chloramphenicol on column at a 3000:1 S/N minimum in ESI negative mode.

2.3.4 Provide peer reviewed journal article that can demonstrate the sensitivity, accuracy, precision and robustness of the MS/MS system (e.g. Peer reviewed method validation journal articles). Points will be given for peer reviewed journal articles demonstrating the above criteria in each of the following areas: how the instrument demonstrates the ability to overcome matrix effects (i.e. Ion suppression, ion enhancement) in chemical residue analysis in food/biological samples, pesticide analysis in food or analysis of hexabromocyclododecane in food/biological samples, or analysis of polycyclic aromatic hydrocarbon and their metabolites (specifically the analysis of the Benzo[a]pyrene tetrols) in food/biological samples. Articles with other chemical contaminant residue/trace chemical analysis in food/biological samples may be counted also.

2.3.5 The system must demonstrate low detection limits, accuracy, precision, and robustness by using test samples send out by WRL.

2.3.6 The system must have mass accuracy (MS mode) of at least 0.1 and mass resolution of 0.4 A.M.U. The system must also have a mass stability of 0.1 Da over 24 hours with normal operating temperature and after it has reached vacuum and electronics equilibrium. **MANDATORY**

2.3.7 MS Range: minimum m/z 5-1,200 or wider range.

2.3.8 The minimum MRM dwell time should be 1 msec.

2.3.9 Linear dynamic range must be 4 orders of magnitude minimum or higher.

2.3.10 Scan speed: must be at minimum 10,000 Da/second or higher.

2.3.11 Positive and negative mode polarities: capable of switching and stabilization between positive and negative mode rapidly. Ideally, the system should be able to perform positive-negative ionization mode switching during one data acquisition run in 50 ms or less.

2.3.12 Detector specification: high speed analog-to-digital conversion rate and data acquisition speed.

2.3.13 The system must include all vacuum pumps required for instrument operation.
MANDATORY

2.3.14 Gas supplies required for ESI and APCI interfaces must be provided. This must be accomplished either through full operability using the existing nitrogen generator (Parker Balston model N2-45), or the mass spectrometer must include a standalone nitrogen gas generator (and accompanying air compressor if incompatible with existing on-site air compressor) that provides high purity sheath gas for ESI and APCI interfaces. **MANDATORY**

2.3.15 Instrument tune capability: should have a built-in automatic mass calibration, an "auto-tune" capability, and an automated MS/MS optimizer routine for optimizing the source, inlet voltage, collision energy and other ion optics for an analyte of interest.

2.3.16 Provide tandem MS/MS with Multiple Reaction Monitoring (MRM) transition capability **(MANDATORY)**.

2.3.17 The system's Data Acquisition function should allow for automated optimization of instrument parameters for an analyte. Should allow automated optimization of MS/MS voltages and collision energies for each analyte for a minimum of 4 product ions per analyte. Should allow optimization for a minimum of 4 product ions in a single run. Please provide background on this function.

2.3.18 The system's Data acquisition should allow acquisition using dynamic MRM scheduling rather than time domains and should also allow threshold triggering of the parent ion to monitor a minimum of 4 product ions per parent ion or full scan spectra.

2.3.19 MS software compatibility: The MS software should permit simple, direct data transfer to popular programs such as Microsoft Word, Excel, Power Point, etc. and generate .pdf format files, export images and text files, and save data in standard format(s) readable by other MS software packages etc.

2.3.20 Provide an uninterrupted power supply (UPS) that can support the UHPLC/MS/MS system and all peripherals (such as the operating computer) in the case of a building electrical power failure.
MANDATORY

2.3.21 Value added items and/or other accessories or components that will enhance the performance or capacities of the proposed system (ex. APPI probe, ESCI probe, Direct insertion probe, and etc.)

2.4 Operating/Data Computer System: Software

2.4.1 Operating system: The PC computer system's operating system should be Microsoft Windows 7, 64 bit and should conform to Health Canada's network security requirements.

2.4.2 Network compatibility: The PC computer should provide built-in networking compatible with popular network protocols: TCP/IP, Novell, DecNet, etc.

2.4.3 Multi-tasking capabilities: the PC should provide multi-tasking capabilities and be able to acquire and process data in real time.

2.4.4 Graphical display: full graphical instrument control window with the ability to display system parameters concurrently in real time.

2.4.5 Diagnostics tools: provide internal diagnostics including error checking, troubleshooting and a complete fault log.

2.4.6 Calibration tools: various calibration modes including external and internal calibration. Multilevel linear and multilevel non-linear calibration capacity.

2.4.7 Software Help: comprehensive context sensitive help including hypertext links and index.

2.4.8 Instrument control: full control of instrumentation operation including fully automated system start-up and shut down, initial instrument calibration, parameter optimization, routine operations, calibration, data processing, report generation, etc.

2.4.9 Data processing: full data processing and reprocessing capabilities including control or editing of chromatogram integration, compound identification, calibration curves, quantitation

and reporting parameters without the need to re-run samples.

2.4.10 Data analysis: be able to export data in Excel Format.

2.4.11 The software should include comprehensive tools for statistical analysis, data mining, and visualization, such as Analysis of variance (ANOVA), Principal component analysis (PCA), t-tests.

2.4.12 Sample sequence control: ability to insert samples without stopping and restarting a previously started acquisition sequence.

2.5 Operating/Data Computer System: Hardware

2.5.1 The PC must be at minimum an Intel quad core type processor or equivalent or better operating at 2.5 GHz or higher. **MANDATORY**

2.5.2 The PC must have 6 GB (or greater) RAM. **MANDATORY**

2.5.3 The PC must have 1 Tb (or greater) hard drive. **MANDATORY**

2.5.4 The PC must have 16x (or greater) DVD-/+r RW drive. **MANDATORY**

2.5.5 The desktop must feature a dedicated graphics card with 1 GB RAM (or greater) for fast chromatogram rendition. The dedicated graphics card must be able to support dual monitor configuration. **MANDATORY**

2.5.6 If the instrument requires a dedicated network card for communications then an Additional 10/100/1000 Base-T LAN interface must be provided for access to the laboratory's Network. The hardware must support 2 network cables. **MANDATORY**

2.5.7 The PC must be equipped with minimum one 24" LCD colour monitors that feature a minimum resolution of 1280x1024. **MANDATORY**

2.6 System Implementation and Training

2.6.1 All subsystem of the UHPLC/MS/MS system must be CSA approved. **MANDATORY**

2.6.2 The Contractor must provide pre-installation site specifications to ensure site-readiness for installation. **MANDATORY**

2.6.3 The Contractor must supply performance verification documentation before acceptance and payment. **MANDATORY**

2.6.4 Removal and disposal of obsolete unit: The contractor should provide removal and disposal of our existing system (consisting of a Waters QToF Micro, and external oil-based roughing pumps and related accessories). Cost for removal, disposal, and trade-in will be used for evaluation of the bid.

2.6.5 The Contractor must include a minimum of 4 days of on-site training by qualified staff for a minimum of 3 WRL staff members. **MANDATORY**

2.6.6 Provide additional in-depth on-site training on the operation and application of the system by qualified staff from the contractor up to 10 days.

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2.6.7 The Contractor should provide CD/DVD with instrument and on-board continuing training for instrument not connected to the internet and on-line continuing training.

2.6.8 The Contractor must include with the system 1 set of consumable parts and tool kit necessary for maintaining operation during its first year of operation. **MANDATORY**

2.7 Warranty, Service & Support

2.7.1 The UHPLC/MS/MS System must include a one year (or greater) onsite warranty and maintenance agreement on all components, inclusive of all parts, labour and living and travel expenses. The warranty must also include all onsite & telephone support. The warranty will begin on the DATE OF ACCEPTANCE of the system by the Technical Authority. The DATE OF ACCEPTANCE will be determined (after installation) by the Contractor demonstrating that the SYSTEM meets all of the user's requirements, and the manufacturer's performance specifications. **MANDATORY**

2.7.2 Provide additional onsite total warranty of the UHPLC/MS/MS system up to five year in increments of one year (including one annual preventive maintenance visit).

2.7.3 The On-site service technicians must be on site within 3 business days of a service request. **MANDATORY**

2.7.4 The Telephone support service calls must be responded to within one business day. **MANDATORY**

2.7.5 The Application chemists must be available for method development, customized on-site or on-line applications support or other technical support. **MANDATORY**

2.7.6 The Contractor must be responsible for the service and repair of the whole system. **MANDATORY**

2.7.7 Long term technical support: provide instrument technical support for 7 years or greater.

ANNEX "C"

BASIS OF PAYMENT

C.1 Pricing Requirements

The contractor must supply, deliver and install all equipment, accessories and materials necessary for a fully functional ultra-high performance liquid chromatography triple quadrupole mass spectrometer (UHPLC/MS/MS). Any materials and equipment necessary for the proper operation of the system not specified or described shall be deemed as part of the specification.

Any technological upgrades, such as new software versions, system ROM upgrades, etc., that are released after the system is ordered but before delivery and acceptance, shall be included at no charge. The cost(s) of any items(s) omitted from the quote that are required to meet system requirements and specifications as described herein, are to be the sole responsibility of the contractor.

C.2 Firm Price

All prices are firm in Canadian dollars include delivery, set-up, labour and installation costs to Health Canada at 3155 Willingdon Green, Burnaby, BC, Canada, GST and/or HST, FOB destination, Canadian customs duties and excise taxes included.

Make _____ Model _____

Item #	Description	Qty	U of I	Unit Price	Ext. Total
Initial Goods					
1	UHPLC/MS/MS	1	each	\$	\$
2	Freight	1	lot	\$	\$
3	Installation and verification/commissioning charge - including all parts, labour, travel and living expenses	1	lot	\$	\$
4	On-site training for a minimum of 3 users	1	lot	\$	\$
5	One-year on-site parts and labour warranty /preventative maintenance for the System	1	lot	\$	\$
Total Initial Contract Value					\$

C.3 Optional Features

Item #	Description	Unit of I	Unit Price
6	Atmospheric Pressure Chemical Ionization (APCI) Probe	each	\$
7	Atmospheric Pressure Photoionization (APPI) Probe	each	
8	Other accessories or components that will enhance the performance or capacities of the proposed system. Detailed listing and prices must be provided.		
9	Year 2 on-site warranty/preventative maintenance for the system including all parts, labour, travel and living expenses	1 Lot	\$

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10	Year 3 on-site warranty/preventative maintenance for the system including all parts, labour, travel and living expenses	1 Lot	\$
11	Year 4 on-site warranty/preventative maintenance for the system including all parts, labour, travel and living expenses	1 Lot	\$
12	Year 5 on-site warranty/preventative maintenance for the system including all parts, labour, travel and living expenses	1 Lot	\$

C.4 Best Delivery Date

While delivery is requested by March 31, 2015, the best delivery that could be offered is _____ .

ANNEX "D"

BID PREPARATION, EVALUATION CRITERIA AND BASIS OF SELECTION

D.1 Evaluation Procedures

Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria. An evaluation team composed of representatives of Canada will evaluate the bids.

As noted in Part 3, Section II: Technical Bid, the UHPLC/MS/MS system must include all parts/equipment/software necessary for analysis. It is incumbent upon the bidder to recommend a specific hardware configuration for a COMPLETE SYSTEM that is demonstrated suitable in the supplied documents. Bidders must submit documentation with their bid package that CLEARLY AND PRECISELY DEMONSTRATES how their system complies with the required specifications.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Bidders should clearly identify in their submission document the specific criteria addressed by each section, and indicate clearly if additional supporting information for one section is provided in another section of the bid, to enable the evaluators to find and score the information.

D.2 Mandatory - Interpretation

The words "must", "shall", "essential" and "will" are to be interpreted as mandatory requirements. This may include documents to be supplied or types of information to be provided. Statements which contain the words "should", "would", "may" and "desirable" are to be interpreted as preferred but not mandatory at bid close.

D.3 Technical Evaluation

D.3.1 Mandatory Technical Criteria

D.3.1.1 The Bidder must meet all of the minimum mandatory criteria in order to be considered. Failure to meet any of the mandatory requirements will result in the bid being deemed non-compliant. Bidders should demonstrate that they meet each mandatory criterion within their bid by providing supporting documentation or a description of compliance.

Make and Model: _____

Item	Specifications	Compliant? Yes/No	Point Assigned	Supporting Documentation or Statement of Compliance (please indicate where this information can be found in your Bid)
	UHPLC/MS/MS System		Total Points / 110	
2.2.1	The UHPLC Subsystem must be an integrated part of the total system and designed for unattended operation. The			

	UHPLC system must be under complete control of the operating/data computer system.			
2.2.2	The UHPLC system must include ultra-high performance LC pumps in a binary or quaternary configuration, an autodegasser, a thermostated autosampler, and a thermostated column compartment.			
2.2.3	The LC's mobile phase back pressures, flow rates, leak detection and flows to inlets and detectors must be electronically controlled via the computer system.			
2.2.4	All required tubings, fittings, and regulators for system installation must be included.			
2.2.5	The LC method must be part of the full method along with Automatic Sampling parameters, Mass Spectrometer settings, Data Processing options and Reporting Options.			
2.2.6	The LC must be capable of performing as a 'fast', 'ultra-high performance' LC and as conventional LC. When used as an 'ultra-performance' LC system, it can provide analysis run times at least 75% shorter than conventional HPLC with no loss of resolution. This can be accomplished through a combination of higher operating pressures and flows, new column separation technologies, or by other means.			
2.2.7	The LC must be able to run sub 2 µm particle size columns at a flow rate of up to 2.0 mL/min.			
2.2.8	Flow rate range: 0.050 to 2 mL/min or higher (up to 5 mL/min).		5	
2.2.9	Accommodate 2 solvents during a gradient run or more solvents and be able to select from 4 different solvent reservoirs.		10	
2.2.10	The LC maximum operating pressure is at least 12,000 psi.		5	
2.2.11	Autosampler must have minimum capacity: 48 vials or more up to 2 mL capacity each.		5	
2.2.12	Degasser: automatic and continuous on-line vacuum degassing.		5	
2.2.13	pH range: pH 2 to 12.		5	
2.2.14	Column thermostat compartment: Maintain temperatures in range from 15°C to 60 °C or higher in no more than 1°C increments.		10	
2.2.15	The LC Column Thermostat Compartment must accommodate more than 2 columns and up to 6 columns.		10	
2.2.16	The LC injection volume is 0.1 to 100 µL or higher in 0.1 µL increments with no hardware changes.		10	
2.2.17	Large Volume Injection: 10 to 2000 µL or higher in 10 µL increments.		10	
2.2.18	Injection carryover (UV): <0.004 % or better.		5	
2.2.19	Integral heater and cooler for samples vials: programmable from 4-40 °C, in no more than 1°C increments.		5	
2.2.20	The LC Column switching valve is included and under software control.			
2.2.21	In-line degasser: stackable self-contained with internal volume less than 1 mL per channel. Capable of accommodating up to 5 mL/min per channel.		5	

2.2.22	The LC must include any other items, including hardware and software not explicitly stated, required for the system to be qualified as per protocols stipulated by the vendor and accompanying documentation thereof.			
2.2.23	Value added items and/or other accessories or components that will enhance the performance or capacities of the proposed system (e.g. Online SPE/extraction/sample prep, 2D LC, DAD detector, or etc). <i>Note: Bidders must provide details of the value added item and how it will enhance overall performance.</i>		20	
	Mass Spectrometer Sub System		Total Points / 310	
2.3.1	The MS/MS Subsystem must be an integrated part of the total system and designed for unattended operation and dedicated to perform UHPLC/MS/MS. The MS/MS Subsystem must include a triple quadrupole type mass spectrometer, all relevant operating/data system software, operating/data system hardware, system implementation and training, service & support and system performance specifications.			
2.3.2	The mass spectrometer must include the appropriate source for Electrospray (ESI) and Atmospheric Chemical Ionization (APCI).			
2.3.3	The system must have MS/MS sensitivity of detecting 1 pg of reserpine on column with a 10,000:1 signal to noise (S/N) in ESI positive mode minimum and a MS/MS sensitivity of detecting 1 pg of chloramphenicol on column at a 3000:1 S/N minimum in ESI negative mode.		20	
2.3.4	Provide peer reviewed journal article that can demonstrate the sensitivity, accuracy, precision and robustness of the MS/MS system (ex. Peer reviewed method validation journal articles). Points will be given for peer reviewed journal articles demonstrating the above criteria in each of the following areas: how the instrument demonstrates the ability to overcome matrix effects (ex. Ion suppression, ion enhancement) in chemical residue analysis in food/biological samples (30 points); pesticide analysis in food or analysis of hexabromocyclododecane in food/biological samples (10 points); analysis of polycyclic aromatic hydrocarbon and their metabolites (specifically the analysis of the Benzo[a]pyrene tetrols) in food/biological samples (10 points). Articles with other chemical contaminant residue/trace chemical analysis in		60	

	food/biological samples may be counted also (10 points).			
2.3.5	The system must demonstrate low detection limits (30 points for the lowest LOD), accuracy (20 points), precision (20 points) and robustness (20 points) by using samples send out by WRL.		90	
2.3.6	The system must have mass accuracy (MS mode) of at least 0.1 and mass resolution of 0.4 A.M.U. The system must also have a mass stability of 0.1 Da over 24 hours with normal operating temperature and after it has reached vacuum and electronics equilibrium.			
2.3.7	MS Range: minimum m/z 5-1,200 or wider range.		10	
2.3.8	The minimum MRM dwell time should be 1 msec.		5	
2.3.9	Linear dynamic range must be 4 orders of magnitude minimum or higher.		10	
2.3.10	Scan speed: must be at minimum 10,000 Da/second or higher.		5	
2.3.11	Positive and negative mode polarities: capable of switching and stabilization between positive and negative mode rapidly. Ideally, the system should be able to perform positive-negative ionization mode switching during one data acquisition run in 50 ms or less. Bidder must explain in detail if this can occur only between scans.		10	
2.3.12	Detector specification: Provide analog-to-digital conversion rate and data acquisition speed.		10	
2.3.13	The system must include all vacuum pumps required for instrument operation.			
2.3.14	Gas supplies required for ESI and APCI interfaces must be provided. This must be accomplished either through full operability using the existing nitrogen generator (Parker Balston model N2-45), or the mass spectrometer must include a standalone nitrogen gas generator (and accompanying air compressor if incompatible with existing on-site air compressor) that provides high purity sheath gas for ESI and APCI interfaces			
2.3.15	Instrument tune capability: should have a built-in automatic mass calibration, an "auto-tune" capability, and an automated MS/MS optimizer routine for optimizing the source, inlet voltage, collision energy and other ion optics for an analyte of interest.		10	
2.3.16	The tandem MS/MS with Multiple Reaction Monitoring (MRM) transition capability.			
2.3.17	The system's Data Acquisition function should allow for automated optimization of instrument parameters for an analyte. Should allow automated optimization of MS/MS voltages and collision energies for each analyte for a minimum of 4 product ions per analyte. Should allow optimization for a minimum of 4 product ions in a single run. Please provide background on this function. Bidder must provide details of achieving this optimization function.		20	
2.3.18	The system's Data acquisition should allow		20	

	acquisition using dynamic MRM scheduling rather than time domains for more than 1200 transitions in a single run and should also allow threshold triggering of the parent ion to monitor a minimum of 4 product ions per parent ion or full scan spectra. Bidder must provide details of achieving this data acquisition function.			
2.3.19	MS software compatibility: The MS software should permit simple, direct data transfer to popular programs such as Microsoft Word, Excel, Power Point, etc. and generate .pdf format files, export images and text files, and save data in standard format(s) readable by other MS software packages etc.		10	
2.3.20	Provide an uninterrupted power supply (UPS) that can support the UHPLC/MS/MS system and all peripherals (such as the operating computer) in the case of a building electrical power failure.			
2.3.21	Value added items and/or other accessories or components that will enhance the performance or capacities of the proposed system (ex. APPI probe, ESCI probe, Direct insertion probe, and etc.)		30	
	Operating/Data Computer System: Software		Total Points / 110	
2.4.1	Operating system: The PC computer system's operating system should be Microsoft Windows 7, 64 bit and should conform to Health Canada's network security requirements.		10	
2.4.2	Network compatibility: The PC computer should provide built-in networking compatible with popular network protocols: TCP/IP, Novell, DecNet, etc.		5	
2.4.3	Multi-tasking capabilities: the PC should provide multi-tasking capabilities and be able to acquire and process data in real time.		5	
2.4.4	Graphical display: full graphical instrument control window with the ability to display system parameters concurrently in real time.		10	
2.4.5	Diagnostics tools: provide internal diagnostics including error checking, troubleshooting and a complete fault log.		10	
2.4.6	Calibration tools: various calibration modes including external and internal calibration. Multilevel linear and multilevel non-linear calibration capacity.		10	
2.4.7	Software Help: comprehensive context sensitive help including hypertext links and index.		10	
2.4.8	Instrument control: full control of instrumentation operation including fully automated system start-up and shut down, initial instrument calibration, parameter optimization, routine operations, calibration, data processing, report generation, etc.		10	
2.4.9	Data processing: full data processing and reprocessing capabilities including control or editing of chromatogram integration, compound identification, calibration curves,		10	

	quantitation and reporting parameters without the need to re-run samples.			
2.4.10	Data analysis: be able to export data in Excel Format.		10	
2.4.11	The software should include comprehensive tools for statistical analysis, data mining, and visualization, such as Analysis of variance (ANOVA), Principal component analysis (PCA), t-tests.		10	
2.4.12	Sample sequence control: ability to insert samples without stopping and restarting a previously started acquisition sequence.		10	
	Operating/Data Computer System: Hardware			
2.5.1	The PC must be at minimum an Intel quad core type processor or equivalent or better operating at 2.5 GHz or higher.			
2.5.2	The PC must have 6 GB (or greater) RAM.			
2.5.3	The PC must have 1 Tb (or greater) hard drive.			
2.5.4	The PC must have 16x (or greater) DVD-/+r RW drive.			
2.5.5	The desktop must feature a dedicated graphics card with 1 GB RAM (or greater) for fast chromatogram rendition. The dedicated graphics card must be able to support dual monitor configuration.			
2.5.6	If the instrument requires a dedicated network card for communications then an Additional 10/100/1000 Base-T LAN interface must be provided for access to the laboratory's Network. The hardware must support 2 network cables.			
2.5.7	The PC must be equipped with minimum one 24" LCD colour monitors that feature a minimum resolution of 1280x1024.			
	System Implementation, and Training		Total Points / 70	
2.6.1	All subsystem of the UHPLC/MS/MS system must be CSA approved.			
2.6.2	The Contractor must provide pre-installation site specifications to ensure site-readiness for installation.			
2.6.3	The Contractor must supply performance verification documentation before acceptance and payment.			
2.6.4	Removal and disposal of obsolete unit: The contractor should provide removal and disposal of our existing system (consisting of a Waters QToF Micro, external oil-based roughing pumps and related accessories). Cost for removal, disposal, and trade-in will be used for evaluation of the bid.		30	
2.6.5	The Contractor must include a minimum of 4 days of on-site training by qualified staff for a minimum of 3 WRL staff members.			
2.6.6	Provide additional in-depth on-site training on the operation and application of the system by qualified staff from the contractor up to 10 days.		30	
2.6.7	The Contractor should provide CD/DVD with instrument and on-board continuing training for instrument not connected to the internet and on-line continuing training.		10	
2.6.8	The Contractor must include with the			

	system 1 set of consumable parts and tool kit necessary for maintaining operation during its first year of operation.			
	Warranty, Service and Support		Total Points / 35	
2.7.1	The UHPLC/MS/MS System must include a one year (or greater) onsite warranty and maintenance agreement on all components, inclusive of all parts, labour and living and travel expenses. The warranty must also include all onsite & telephone support. The warranty will begin on the DATE OF ACCEPTANCE of the system by the Technical Authority. The DATE OF ACCEPTANCE will be determined (after installation) by the Contractor demonstrating that the SYSTEM meets all of the user's requirements, and the manufacturer's performance specifications.			
2.7.2	Provide additional onsite total warranty of the UHPLC/MS/MS system up to five year in increments of one year (including one annual preventive maintenance visit).		30	
2.7.3	The On-site service technicians must be on site within 3 business days of a service request.			
2.7.4	The Telephone support service calls must be responded to within one business day.			
2.7.5	The Application chemists must be available for method development, customized on-site or on-line applications support or other technical support.			
2.7.6	The Contractor must be responsible for the service and repair of the whole system.			
2.7.7	Long term technical support: provide instrument technical support for 7 years or greater.		5	
	Total Instrument Package Suitability		Total Points / 30	
	State the suitability of the proposed system to meet the challenges of the work in WRL, including but not exclusive to the quantitative analysis of small molecules in food/environmental/biological samples, identification and quantitative analysis of persistent organic chemical contaminants and PAH metabolites		30	
			Total Points _____ / 665	

D.3.2 Point Rated Technical Criteria

For each rated criterion, where a maximum number of points is shown, evaluators may award any whole or partial point from zero up to the maximum number of points.

Bidders **MUST** achieve a **Minimum Total Score of 399 points** (60%) out of the **total 665** points available in order to be considered responsive. Failure by the Bidder to achieve the Minimum Total Score will render the Bidder's bid non-responsive and no further consideration will be given.

D.4 FINANCIAL EVALUATION

The price of the bid will be evaluated in Canadian dollars, Applicable taxes excluded, Canadian customs duties and excise taxes included.

D.5 BASIS OF SELECTION - Basis of Selection - Highest Combined Rating of Technical Merit (70%) and Price (30%)

A bid must comply with the requirements of the bid solicitation and meet all minimum mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price within budget will be recommended for award of a contract.

D.5.1 To be declared responsive, a bid must:

- (a) comply with all the requirements of the bid solicitation;
- (b) meet all the minimum mandatory evaluation criteria; and
- (c) obtain the required minimum points specified for the technical evaluation. The rating is performed on a scale 665. Minimum points of 399 (60%) of the total points must be achieved.

D.5.2 Bids not meeting (a) or (b) or (c) will be declared non-responsive. Neither the responsive bid obtaining the highest number of points nor the one with the lowest evaluated price will necessarily be accepted.

D.5.3 The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 70% for the technical merit and 30% for the price. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

D.5.4 Annex E illustrates an example where all three bids are responsive and the selection of the contractor is determined by a 70/30 ratio of technical merit and price, respectively.

D.5.5 The maximum funding available for the Contract resulting from the bid solicitation is **\$417,000.00 (Applicable Taxes extra)**. Bids valued in excess of this amount will be considered non-responsive. This disclosure does not commit Canada to pay the maximum funding available.

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ANNEX "E"

Example of Best Value Determination

Assuming three valid bids are received (each meets the minimum required technical score - and mandatory requirements, where applicable), and maximum technical score is 665 points.

Using a ratio of 70% technical vs. 30% price:

Details:

	Bid #1	Bid #2	Bid #3
Technical:	517 points	588 points	488 points
Price	\$392K	\$400K	\$410K

Calculation:

Bidder	Technical Points	Price Points	Total Points
Bid #1	$\frac{517}{588} \times 70 = 61.55$	$\frac{392}{400} \times 30 = 30.00$	91.55 points
Bid #2	$\frac{588}{588} \times 70 = 70.00$	$\frac{392}{400} \times 30 = 29.40$	99.40 points
Bid #3	$\frac{488}{588} \times 70 = 58.10$	$\frac{392}{410} \times 30 = 28.68$	86.78 points

* Highest technical score.

** Lowest price proposal (including all Options - as applicable)

Award to Bid #2 (Highest total score taking into consideration technical and price)

Note:

The above is only an example to show mathematically how the relationship between technical and price will be handled. The prices indicated DO NOT REPRESENT AN ESTIMATE OF THE COSTS ASSOCIATED WITH THIS PARTICULAR REQUIREMENT.

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ANNEX F

**COMPLETE LIST OF NAMES OF ALL INDIVIDUALS WHO ARE
CURRENTLY DIRECTORS OF THE BIDDER**

NAME

TITLE

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BID SUBMISSION FORM 1	
Bidder's full legal name	
Authorized Representative of Bidder for evaluation purposes (e.g., clarifications)	Name
	Title
	Address
	Telephone #
	Fax #
	Email
Bidder's Procurement Business Number (PBN) <i>[see the Standard Instructions 2003]</i>	
Jurisdiction of Contract: Province in Canada the bidder wishes to be the legal jurisdiction applicable to any resulting contract (if other than as specified in solicitation)	
Signature of Authorized Representative of Bidder	
Federal Contractors Program for Employment Equity (FCP EE) Certification: By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity " FCP Limited Eligibility to Bid " list (http://www.labour.gc.ca/eng/standards_equity/emp/fcp/list/inelig.shtml) available from Human Resources and Skills Development Canada (HRSDC) - Labour's website. Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the " FCP Limited Eligibility to Bid " list at the time of contract award.	
On behalf of the Bidder, by signing below, I confirm that I have read the entire bid solicitation including the documents incorporated by reference into the bid solicitation and I certify that: 1. The Bidder considers itself and its products able to meet all the mandatory requirements described in the bid solicitation; 2. This bid is valid for the period requested in the bid solicitation; 3. All the information provided in the bid is complete, true and accurate; and 4. If the Bidder is awarded a contract, it will accept all the terms and conditions set out in the resulting contract clauses included in the bid solicitation.	
Signature of Authorized Representative of Bidder	

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NOTE TO BIDDERS: Please use ONE of the two mailing labels below and affix it securely to the outside of the envelope or package containing your bid submitted by mail or courier. For bids submitted by facsimile (Bid receiving fax (604) 775-7526), use this sheet as the cover sheet. Always ensure your company name, return address; open bidding solicitation number and closing date appear legibly on the outside of your bid submission.

AVIS AUX FOURNISSEURS: Pour le retour par la poste ou par messenger, veuillez utiliser UNE des étiquettes d'envoi ci-dessous et apposez-la à l'extérieur de votre enveloppe ou du colis contenant votre offre. Pour les offres soumises par télécopieur (n° du télécopieur pour la réception des offres: (604) 775-7526), utilisez cette page comme bordereau de télécopie. Assurez-vous que le nom de votre compagnie, l'adresse de retour, le numéro de l'invitation ouverte à soumissionner et la date de clôture soient lisibles à l'extérieur de votre offre.

**Bid Receiving
Public Works & Government Services Canada
2nd FLOOR - 800 BURRARD STREET
VANCOUVER BC V6Z 0B9
Attention: Goretti Mak**

Solicitation No. H3551-145104/A

Solicitation Closes at : 2:00 PM PST

on : February 17, 2015

**Réception des soumissions
Travaux publics et services gouvernementaux Canada
800 rue Burrard, pièce 219
Colombie-Britannique (C.-B) V6Z 0B9
Attention: Goretti Mak**

N° de l'invitation : H3551-145104/A

**La réception des soumissions prend fin le : 17 Février, 2015
à: 14:00 PST**
