



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Travaux publics et Services gouvernementaux
Canada

Voir dans le document/

See herein

NA

Québec

NA

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

Vendor/Firm Name and Address

Raison sociale et adresse du

fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Travaux publics et Services gouvernementaux Canada
Place Bonaventure, portail Sud-Oue
800, rue de La Gauchetière Ouest
7e étage, suite 7300
Montréal
Québec
H5A 1L6

Title - Sujet Field Flow Fractionation system	
Solicitation No. - N° de l'invitation K8D10-210111/A	Date 2020-09-28
Client Reference No. - N° de référence du client K8D10-210111	
GETS Reference No. - N° de référence de SEAG PW-\$MTA-070-15863	
File No. - N° de dossier MTA-0-43088 (070)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2020-11-09	Time Zone Fuseau horaire Heure Normale du l'Est HNE
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Therien, Renée-Ann	Buyer Id - Id de l'acheteur mta070
Telephone No. - N° de téléphone (514) 703-4947 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Environnement et Changement Climatique Canada 105 rue McGill Montreal Quebec H2Y 2E7 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée Voir doc.	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

TABLE OF CONTENTS

TABLE OF CONTENTS	1
PART 1 - GENERAL INFORMATION	3
1.1 SECURITY REQUIREMENTS	3
1.2 STATEMENT OF REQUIREMENT	3
1.3 DEBRIEFINGS	3
1.4 EPOST CONNECT SERVICE	3
PART 2 - BIDDER INSTRUCTIONS	3
2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS	3
2.2 SUBMISSION OF BIDS.....	3
2.3 ENQUIRIES - BID SOLICITATION.....	4
2.4 APPLICABLE LAWS.....	4
2.5 BID CHALLENGE AND RECOURSE MECHANISMS.....	4
PART 3 - BID PREPARATION INSTRUCTIONS.....	5
3.1 BID PREPARATION INSTRUCTIONS	5
PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION	5
4.1 EVALUATION PROCEDURES.....	5
4.2 BASIS OF SELECTION.....	6
4.2.1 SACC MANUAL CLAUSES.....	6
PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION	6
5.1 CERTIFICATIONS REQUIRED WITH THE BID	7
5.2 CERTIFICATIONS PRECEDENT TO CONTRACT AWARD AND ADDITIONAL INFORMATION	7
PART 6 - RESULTING CONTRACT CLAUSES	7
6.1 SECURITY REQUIREMENTS	7
6.2 STATEMENT OF REQUIREMENT	7
6.3 STANDARD CLAUSES AND CONDITIONS.....	8
6.4 TERM OF CONTRACT	8
6.5 AUTHORITIES	8
6.6 PAYMENT	9
6.6.5 INVOICING INSTRUCTIONS	10
6.7 CERTIFICATIONS AND ADDITIONAL INFORMATION.....	10
6.8 APPLICABLE LAWS.....	10
6.9 PRIORITY OF DOCUMENTS	10
6.10 SACC MANUAL CLAUSES	11
6.11 DISPUTE RESOLUTION.....	11
ANNEX « A ».....	12
REQUIREMENT.....	12
ANNEX « B ».....	15
BASIS OF PAYMENT	15
TABLE 2 : OTHER GOODS.....	16

Solicitation No. - N° de l'invitation
K8D10-210111/A
Client Ref. No. - N° de réf. du client
K8D10-210111

Amd. No. - N° de la modif.
File No. - N° du dossier
MTA-0-43088

Buyer ID - Id de l'acheteur
MTA070
CCC No./N° CCC - FMS No./N° VME

ANNEX « C »	17
MANDATORY TECHNICAL CRITERIA TO BE DEMONSTRATED.....	17
ANNEX « D »	19
ELECTRONIC PAYMENT INSTRUMENTS.....	19
ANNEX « E »	20
COMPLETE LIST OF COMPANY BOARD OF DIRECTORS	20

PART 1 - GENERAL INFORMATION

1.1 Security Requirements

There are no security requirements associated with this requirement.

1.2 Statement of Requirement

The Statement of Requirement is detailed in Annex « **A** » - Requirement (attached).

1.3 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.

1.4 epost Connect service

This bid solicitation allows bidders to use the epost Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation, for further information.

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) (<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](#) (2020-05-28) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

2.1.1 SACC Manual Clauses

[B1000T](#) (2014-06-26), Condition of material – Bid

2.2 Submission of Bids

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

PWGSC Québec Region Bid Receiving Unit

Only bids submitted using epost Connect service will be accepted. The Bidder must send an email requesting to open an epost Connect conversation to the following address:

TPSGC.RQReceptionSoumissions-QRSupplyTendersReception.PWGSC@tpsgc-pwgsc.gc.ca

Note: Bids will not be accepted if emailed directly to this email address. This email address is to be used to open an epost Connect conversation, as detailed in Standard Instructions [2003](#), or to send bids through an epost Connect message if the bidder is using its own licensing agreement for epost Connect.

It is the Bidder's responsibility to ensure the request for opening an epost Connect conversation is sent to the email address above at least six days before the solicitation closing date.

Bids transmitted by facsimile or hardcopy to PWGSC will not be accepted.

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than **ten (10) 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 Quebec.

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.

2.5 Bid Challenge and Recourse Mechanisms

- (a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.
- (b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's [Buy and Sell](#) website, under the heading "[Bid Challenge and Recourse Mechanisms](#)" contains information on potential complaint bodies such as:
 - Office of the Procurement Ombudsman (OPO)
 - Canadian International Trade Tribunal (CITT)
- (c) Suppliers should note that there are **strict deadlines** for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

The Bidder must submit its bid electronically in accordance with section 08 of the 2003 standard instructions. The epost Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

The bid must be gathered per section and separated as follows:

Section I: Technical Bid
Section II: Financial Bid
Section III: Certifications

Bids transmitted by facsimile or hardcopy will not be accepted.

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

Section I: Technical Bid (see annex A)

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Financial Bid (see annex B)

Bidders must submit their financial bid in accordance with the Basis of Payment.

3.1.1 Electronic Payment of Invoices – Bid

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex “D” Electronic Payment Instruments, to identify which ones are accepted.

If Annex “D” Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

3.1.2 Exchange Rate Fluctuation

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

3.1.3 SACC Manual Clauses

Section III: Certifications

Bidders must submit the certifications and additional information 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

The technical evaluation will be based on the technical mandatory criteria to be demonstrated detailed in Annex C. Every proposal must meet the technical mandatory criteria described in Annex C in order to be technically compliant.

It is mandatory to provide, with your bid, all technical / descriptive documents that allow the technical evaluation. Failure to comply will render your bid non-responsive.

Bidders should complete the grid in Annex C and include it with their proposal.

4.1.2 Financial Evaluation

Total Financial Evaluation Amount: Sum of the price of items A, B, C, D and E listed in Annex B - Basis of Payment, Table 1.

Financial evaluation will cover all items in Table 1 (Firm goods) of Annex " B "(Basis of Payment).

The prices requested in Annex "B" - Table 2 (other goods) will be used for guidance only. They will not be considered for the evaluation of the Request for Proposals.

4.1.2.1 Evaluation of Price - Canadian / Foreign Bidders

1. Bidders must submit firm prices, customs duties and excise taxes included, and Applicable Taxes excluded.
2. Unless the bid solicitation specifically requires bids to be submitted in Canadian currency, bids submitted in foreign currency will be converted to Canadian currency for evaluation purposes. The rate given by the Bank of Canada in effect on the bid solicitation closing date, or on another date specified in the bid solicitation, will be applied as a conversion factor to the bids submitted in foreign currency.
3. Bidders must provide prices Delivered Duty Paid (DDP) Montreal, Quebec, Canada Incoterms 2010 for shipments from a commercial contractor. Bids will be assessed on a DDP basis.

4.2 Basis of Selection

4.2.1 SACC Manual Clauses

[A0031T](#) (2010-08-16), Basis of Selection - Mandatory Technical Criteria

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

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

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default 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 will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information 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 provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation (see Annex E)

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

5.2.2 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" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](https://www.canada.ca/en/employment-social-development/canada/esdc-labour) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

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

6.1.1 There is no security requirement applicable to the Contract.

6.2 Statement of Requirement

The Contractor must provide the items detailed under the "Requirement" at **Annex "A"**.

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](#) (2020-05-28), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

6.3.2 Supplemental General Conditions

[4003](#) (2010-08-16) Licensed Software

[4004](#) (2013-04-25) Maintenance and Support Services for Licensed Software

6.4 Term of Contract

6.4.1 Period of the Contract

The period of the Contract is from the date of Contract award until January 25th, 2021.

6.4.2 Delivery Date (To be completed by the Bidder)

All the deliverables must be received on or before _____.

6.4.3 Delivery Points

Delivery of the requirement will be made to delivery point(s) specified at **Annex "A"** of the Contract.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Renée-Ann Thérien

Procurement Agent

Public Works and Government Services Canada

Acquisitions Branch

800 de la Gauchetière Ouest, suite 7300, Montréal (Québec), Canada, H5A 1L6

Telephone: (514) 703-4947

Facsimile: (514) 496-3822

E-mail address: renee-ann.therien@tpsgc-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 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.

Solicitation No. - N° de l'invitation
K8D10-210111/A
Client Ref. No. - N° de réf. du client
K8D10-210111

Amd. No. - N° de la modif.
File No. - N° du dossier
MTA-0-43088

Buyer ID - Id de l'acheteur
MTA070
CCC No./N° CCC - FMS No./N° VME

6.5.2 Project Authority (to be completed by Canada at the time of award)

The Project Authority for the Contract is:

Name: _____
Title: _____
Organization: _____
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 (To be completed by the Bidder)

Name: _____
Title: _____
Organization: _____
Telephone No.: _____
Facsimile No.: _____
E-mail address: _____

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 price, as specified in Annex B, for a cost of _____ \$. (*amount will be inserted at contract award*). Customs duties 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.

Note: The Contract will be awarded in Canadian currency. The rate given by the Bank of Canada in effect on the bid solicitation closing date will be applied as a conversion factor.

6.6.2 Single Payment

SACC Manual Clauses:

H1001C (2008-05-12), Multiple Payments

6.6.3 SACC Manual Clauses

C2000C (2007-11-30), Taxes - Foreign-based Contractor

6.6.4 Electronic Payment of Invoices – Contract (Annex E)

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);

6.6.5 Invoicing Instructions

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.
2. Invoices must be distributed as follows:
 - a. The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.
 - b. One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

6.7 Certifications and Additional Information

6.7.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

6.8 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____ (*insert the name of the province or territory as specified by the Bidder in its bid, if applicable*).

6.9 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.

- (a) the Articles of Agreement;
- (b) Supplemental General Conditions 4003 (2010-08-16) Licensed Software
- (c) Supplemental General Conditions 4004 (2013-04-25) Maintenance and Support Services for Licensed Software
- (d) the general conditions 2010A (2020-05-28);
- (e) Annex A, Statement of Requirement;
- (f) Annex B, Basis of payment;
- (g) 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)*)

6.10 SACC Manual Clauses

SACC Reference	Section	Date
<u>A2000C</u>	Foreign Nationals (Canadian Contractor)	2006/06/16
<u>A2001C</u>	Foreign Nationals (Foreign Contractor)	2006/06/16
<u>A9068C</u>	Government Site Regulations	2010/01/11
<u>B1501C</u>	Electrical Equipment	2018/06/21
<u>D0018C</u>	Delivery and Unloading	2007/11/30
<u>G1005C</u>	Insurance – No Specific Requirement	2016/01/28

6.11 Dispute Resolution

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- (b) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (c) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (d) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "Dispute Resolution".

ANNEX « A »

REQUIREMENT

Statement of requirements: Field Flow Fractionation system

1. Definition of requirements

Environment Canada and Climate Change requires a Field Flow Fractionation Unit (FFF), which will be coupled to our inductively coupled argon plasma mass spectrometry (ICP-MS model ICAP-RQ from Thermo) for environmental qualitative and quantitative analysis in research on inorganic metal aquatic contaminants in particulate and colloidal forms, for the purpose of assessing their environmental persistence and transformation and their effects on aquatic organisms.

Our inorganic chemistry laboratory of the aquatic contaminants research division (ACRD) at Montréal carries out research projects under the Chemical Management Plan (CMP) and St. Lawrence Action Plan (SLAP) program on engineering metal nanoparticle characterization and natural metal colloids in their environmental forms. That is to say, found in trace concentrations in their original and degraded or transformed forms, therefore known and unknown compounds. The characterization of this type of substance requires a particle size separation system coupled with ICP-MS for detection.

The objective for the Montreal laboratory is to acquire a Field Flow Fractionation system (FFF) to achieve the new objectives of identification and detection of environmental monitoring projects for nanoparticles and natural colloids.

2. Technical specifications:

The proposed field flow fractionation system must satisfy the following set of criteria:

- 2.1 The fractionation unit must be able to be coupled to an ICP-MS, ICAP-RQ model from Thermo operated with Qtegra software.
- 2.2 The continuous field flow fractionation unit must be able to be used with AF4 and hollow fiber type channels.
- 2.3 The hollow fiber channel must be able to have a volume smaller than or equal to 100 µl.
- 2.4 The unit must come with the supports to maintain the channels and all the parts necessary to assemble the channels (AF4 and hollow fiber).
- 2.5 The connectors for the channels, AF4 and "hollow fiber", must be able to maintain a minimum pressure greater than or equal to 30 bars.
- 2.6 Parts in contact with the sample or solvent must be metal free.
- 2.7 The spacers must include at least one 350-µm spacer or smaller.
- 2.8 The fractionation unit must be able to operate with a Dionex brand pump (ICS-3000) and a Dionex brand sampler (ICS-3000).

- 2.9 The channel membranes must be made of regenerated cellulose or polysulfone.
- 2.10 The porosity of the membranes must have a minimum cut-off of molecular weight of 10 kDa.
- 2.11 The fractionation unit must come with the metal free option.
- 2.12 The tubing and channels of the fractionation unit must be made of PEEK or equivalent.
- 2.13 The unit must be capable of injection of samples ranging from 10 to 1000 µL inclusively.
- 2.14 The fractionation unit must be capable of providing a separation of particles (natural and engineered) ranging from 1 nm to 10 µm inclusively.
- 2.15 The fractionation unit must permit flow control of both outflow and crossflow rates, with channel and crossflow rates each of at least 1 mL/min, and with a maximum total flow rate of >10 mL/min
- 2.16 The fractionation unit must be supplied by a single pump and this for all flow rates.

3. Software and information technology (IT) component

- 3.1 The system must come with software to control all of the components of the chromatography system: fractionation unit, feed pump and sampler.
- 3.2 The software must be compatible with a Dionex pump (ICS-3000) and a Dionex brand sampler (ICS-3000).
- 3.3 This same software must be compatible with Qtegra software from our ICP-MS. An option to upgrade the Qtegra software to operate the system components will also be accepted. The software will be installed on the ICP-MS control computer we have.
- 3.4 The system must come with all the connecting cords.
- 3.5 All the software offered must be able to be used in Windows environment.

4 Shipping

105 McGill st., 7th floor
Montreal, Qc. H2Y 2E7

Business hours for reception are 8:00.am to 12:00.pm and 1:00.pm to 4:00.pm, Monday through Friday

5 Installation and training

- 5.1 The system will be installed in our laboratory and training will be done on site.
- 5.2 Training must be given on site in Montreal, by a specialist who has the expertise for coupling the fractionation unit with an ICP-MS (ICap-RQ from Thermo), must be included.

6. Optional technical specifications

6.1 Isocratic pump

6.1.1 The flow fractionation system must be able to operate by means of a single isocratic pump for all flows (inlet, transverse and channel).

6.1.2 The adjustable pump flow must be able to vary from 0.001 to 10 mL / min. at pressures up to 600 bar. The pump must be in metal free version. Such pump could be optional.

6.2 Autosampler

A sampler compatible with the other components of the system must be in option. This must be able to allow the injection of volume varying between 1 and 100 µl. The sampler must come with the metal free option. This one must contain a plate with a capacity of 96 vials of 1.5 mL and the possibility of containing a plate with 384 wells.

ANNEX « B »

BASIS OF PAYMENT

Table 1 : Firm good

Item	Quantity	Price *
A) Field Flow Fractionation unit (FFF) and component for coupling to an ICP-MS Make: _____ Model _____ (Annex A, section 2)	1	\$ _____
B) Software and IT component Make: _____ Model _____ (Annex A, section 3)	1	\$ _____
C) On-site Installation (Annex A, section 5)	1	\$ _____
D) Training session on-site (Annex A, section 5)	1	\$ _____
E) Packaging, transport and delivery charges	1	\$ _____
TOTAL \$ (A+B+C+D+E)		\$ _____

***If other currency than \$CAD, indicate:** _____

***Customs duties and applicable taxes extra.**

Table 2 : Other goods

Item	Quantity	Price *
IMPORTANT : The prices requested for the goods below are used as an indication. They will not be considered for the evaluation of the Request for Proposals.		
A) Isocratic pump (section 6.1, Annex A)	1	\$ _____
B) Auto Sampler (section 6.2, Annexe A)	1	\$ _____
TOTAL \$ (A+B)		\$ _____

ANNEX « C »

MANDATORY TECHNICAL CRITERIA TO BE DEMONSTRATED

No.	Mandatory technical Specifications (See Annex A)	Reference: Please specify where can be found these criteria within your technical/ descriptive documents and/or technical literature/notes.
2.1	The fractionation unit must be able to be coupled to an ICP-MS, ICAP-RQ model from Thermo operated with Qtegra software.	
2.2	The continuous field flow fractionation unit must be able to be used with AF4 and hollow fiber type channels.	
2.3	The hollow fiber channel must be able to have a volume smaller than or equal to 100 µl.	
2.4	The unit must come with the supports to maintain the channels and all the parts necessary to assemble the channels (AF4 and hollow fiber).	
2.5	The connectors for the channels, AF4 and "hollow fiber", must be able to maintain a minimum pressure greater than or equal to 30 bars.	
2.7	The spacers must include at least one 350-µm spacer or smaller.	
2.8	The fractionation unit must be able to operate with a Dionex brand pump (ICS-3000) and a Dionex brand sampler (ICS-3000).	

2.10	The porosity of the membranes must have a minimum cut-off of molecular weight of 10 kDa.	
2.11	The fractionation unit must come with the metal free option.	
2.13	The unit must be capable of injection of samples ranging from 10 to 1000 µL inclusively.	
2.15	The fractionation unit must permit flow control of both outflow and crossflow rates, with channel and crossflow rates each of at least 1 mL/min, and with a maximum total flow rate of >10 mL/min.	
2.16	The fractionation unit must be supplied by a single pump and this for all flow rates.	

Solicitation No. - N° de l'invitation
K8D10-210111/A
Client Ref. No. - N° de réf. du client
K8D10-210111

Amd. No. - N° de la modif.
File No. - N° du dossier
MTA-0-43088

Buyer ID - Id de l'acheteur
MTA070
CCC No./N° CCC - FMS No./N° VME

ANNEX « D »

ELECTRONIC PAYMENT INSTRUMENTS

The Bidder accepts any of the following Electronic Payment Instrument(s):

- ☐ () VISA Acquisition Card;
- ☐ () MasterCard Acquisition Card;
- ☐ () Direct Deposit (Domestic and International);
- ☐ () Electronic Data Interchange (EDI);

Solicitation No. - N° de l'invitation
K8D10-210111/A
Client Ref. No. - N° de réf. du client
K8D10-210111

Amd. No. - N° de la modif.
File No. - N° du dossier
MTA-0-43088

Buyer ID - Id de l'acheteur
MTA070
CCC No./N° CCC - FMS No./N° VME

ANNEX « E »

COMPLETE LIST OF COMPANY BOARD OF DIRECTORS

NOTE TO BIDDERS

WRITE ALL DIRECTOR'S SURNAMES AND GIVEN NAMES IN BLOCK LETTERS

PROCUREMENT - BUSINESS NUMBER (PBN) : _____