



<p>RETURN BIDS TO: RETOURNER LES SOUMISSIONS À:</p> <p>Bid Receiving - Environment and Climate Change Canada / Réception des soumissions – Environnement et changement climatique Canada</p> <p>Electronic Copy: soumissionsbids@ec.gc.ca</p> <p>BID SOLICITATION DEMANDE DE SOUMISSIONS</p> <p>PROPOSAL TO: ENVIRONMENT AND CLIMATE CHANGE CANADA</p> <p>We offer to perform or provide to Canada the services detailed in the document including any attachments and annexes, in accordance with the terms and conditions set out or referred to in the document, at the price(s) provided.</p> <p>SOUSSION À: ENVIRONNEMENT ET CHANGEMENT CLIMATIQUE CANADA</p> <p>Nous offrons d'effectuer ou de fournir au Canada, aux conditions énoncées ou incluses par référence dans le document incluant toutes pièces jointes et annexes, les services détaillés dans le document, au(x) prix indiqué(s).</p>	<p>Title – Titre Analysis of Wastewater, Sludge/Biosolids, Leachate and other Complex Environmental Matrices for Chemical Substances</p>	
	<p>EC Bid Solicitation No. /SAP No. – N° de la demande de soumissions EC / N° SAP 5000055473-1</p>	
	<p>Date of Bid solicitation (YYYY-MM-DD) – Date de la demande de soumissions (AAAA-MM-JJ) 2022.01.26</p>	
	<p>Bid Solicitation Closes (YEAR-MM-DD) - La demande de soumissions prend fin (AAAA-MM-JJ)</p> <p>at – à 15 :00 on – le 2022.02.22</p>	<p>Time Zone – Fuseau horaire</p> <p>Eastern Standard Time (EST)</p>
	<p>F.O.B – F.A.B See herein</p>	
	<p>Address Enquiries to - Adresser toutes questions à Alyssa Festeryga</p>	
	<p>Telephone No. – N° de téléphone 1-902-201-4251</p>	<p>Fax No. – N° de Fax Not Applicable</p>
	<p>Delivery Required– Livraison exigée Specified Herein</p>	
	<p>Destination of Services / Destination des services Specified Herein</p>	
	<p>Security / Sécurité Specified Herein</p>	
<p>Vendor/Firm Name and Address - Raison sociale et adresse du fournisseur/de l'entrepreneur</p>		
<p>Telephone No. – N° de téléphone</p>	<p>Fax No. – N° de Fax</p>	
<p>Name and title of person authorized to sign on behalf of Vendor/Firm: (type or print)</p> <p>Nom et titre de la personne autorisée à signer au nom du fournisseur/de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</p>		
<p>Signature</p>	<p>Date</p>	



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PART 1 - GENERAL INFORMATION

1.1 Introduction

The bid solicitation is divided into seven parts plus attachments and annexes, as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Bid Preparation Instructions: provides bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications and Additional Information: includes the certifications and additional information to be provided;
- Part 6 Security, Financial and Other Requirements: includes specific requirements that must be addressed by Bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Attachments include Financial Bid Presentation Sheet, Mandatory Technical Criteria And Point Rated Technical Criteria, and Point Rated Evaluation Template.

The Annexes include the Statement of Work, the Basis of Payment, the Federal Contractors Program for Employment Equity - Certification, and any other annexes.

1.2 Summary

- 1.2.1 Environment and Climate Change Canada has a requirement to obtain high-quality chemical analysis of many substances in raw influent, treated effluent, raw sludge, treated biosolids, landfill leachate, and environmental waters and sediments impacted by these discharges as part of a monitoring program on the occurrence and fate of chemical substances in municipal wastewater as detailed in the Statement of Work, Annex A to the bid solicitation. The period of the contract is for one calendar year from the Contract Award Date. Any resulting contract will include an irrevocable option to extend the resulting contract term by up to two (2) additional one (1) year periods under the same conditions.
- 1.2.2 Bidders must provide a list of names, or other related information as needed, pursuant to section 01 Integrity Provisions of Standard Instructions 2003 (2020-05-28).
- 1.2.3 For services requirements, bidders in receipt of a pension or a lump sum payment must provide the required information as detailed in article 3 of Part 2 of the bid solicitation.

- 1.2.4 The requirement is subject to the provisions of the Canadian Free Trade Agreement (CFTA), the Canada–Chile Free Trade Agreement, the Canada–Colombia Free Trade Agreement, the Canada–Honduras Free Trade Agreement, the Canada–Korea Free Trade Agreement, the Canada–Panama Free Trade Agreement, Canada-Peru Free Trade Agreement, the Comprehensive Economic Free Trade Agreement [CETA], the World Trade Organization – Agreement on Government Procurement [WTO-AGP], the Comprehensive and Progressive Agreement for Trans-Pacific Partnership [CPTPP] and the Canada-Ukraine Free Trade Agreement.
- 1.2.5 There is a Federal Contractors Program (FCP) for employment equity requirement associated with this procurement; see Part 5 - Certifications, Part 7 - Resulting Contract Clauses and the annex named Federal Contractors Program for Employment Equity - Certification.

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 of 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. Reissue of Bid Solicitation

This bid solicitation cancels and supersedes previous bid solicitation number 5000055473 dated September 10, 2021 with a closing of November 3, 2021 at 15:00 EDT. A debriefing or feedback session will be provided upon request to bidders/offerors/suppliers who bid on the previous solicitation.

2.2. 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 PSPC/PWGSC *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.

The standard instructions 2003 are modified as follows:

Under “Text” at 02:

Delete: “Procurement Business Number”

Insert: “Deleted”

At Section 02 Procurement Business Number

Delete: In its entirety

Insert: “Deleted”

At Section 05 Submission of Bids, Subsection 05 (2d):

Delete: In its entirety

Insert: “send its bid only to Environment and Climate Change Canada as specified on page 1 of the bid solicitation or to the address specified in the bid solicitation;”

At Section 06 Late Bids:

Delete: “PWGSC”

Insert: “Environment and Climate Change Canada”

At Section 07 Delayed Bids:

Delete: “PWGSC”

Insert: “Environment and Climate Change Canada”

At Section 08 Transmission by Facsimile, Subsection 08 (1):

Delete: In its entirety

At Section 12 Rejection of Bid, Subsection 12 (1) a. and b.:

Delete: In their entirety

Insert: “Deleted”

At Section 17 Joint Venture, Subsection 17 (1) b.:

Delete: “the Procurement Business Number of each member of the joint venture,”

Insert: “Deleted”

At Section 20 Further Information, Subsection 20 (2):

Delete: In its entirety

Insert: “Deleted”

At Section 05 Submission of Bids, Subsection 05 (4):

Delete: “sixty (60) days”

Insert: “one hundred and twenty (120) days”

2.3. SACC Manual Clauses

A7035T (2007-05-25), List of Proposed Subcontractors

2.4. Submission of Bids

Bids must be submitted to Environment and Climate Change Canada at the address and by the date, time and place indicated on page 1 of the bid solicitation.

2.5. Former Public Servant – Competitive Bid

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPS, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada’s request and meet the requirement within the prescribed time frame will render the bid non-responsive.

Definitions

For the purposes of this clause, “former public servant” is any former member of a department as defined in the *Financial Administration Act*, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump



sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the *Public Service Superannuation Act* (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the *Supplementary Retirement Benefits Act*, R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the *Canadian Forces Superannuation Act*, R.S., 1985, c.C-17, the *Defence Services Pension Continuation Act*, 1970, c.D-3, the *Royal Canadian Mounted Police Pension Continuation Act*, 1970, c.R-10, and the *Royal Canadian Mounted Police Superannuation Act*, R.S., 1985, c.R-11, the *Members of Parliament Retiring Allowances Act*, R.S., 1985, c.M-5, and that portion of pension payable to the *Canada Pension Plan Act*, R.S., 1985, c.C-8.

Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes () No ()**

If so, the Bidder must provide the following information, for all FPS in receipt of a pension, as applicable:

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **Yes () No ()**

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

2.6. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than three (3) 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.

2.7. Applicable Laws

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

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.

2.8. Basis for Canada's Ownership of Intellectual Property

Environment and Climate Change Canada has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada, for the following reasons, as set out in the [Policy on Title to Intellectual Property Arising Under Crown Procurement Contracts](#):

The main purpose of the contract, or of the deliverables contracted for, is to generate knowledge and information for public dissemination.

2.9. Bid Challenge and Recourse Mechanisms

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

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

Section I: Technical Bid [1 soft copy in .pdf format];
Section II: Financial Bid [1 soft copy in .pdf format];
Section III: Certifications [1 soft copy in .pdf format].

If there is a discrepancy between the wording of the soft copy and the hard copy, the wording of the hard copy will have priority over the wording of the soft 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; and
- (3) print on both sides of the paper.

Note for electronic submission of bids:

In order to be considered, bids must be received by the date and time indicated on the cover page to herein as the "Closing Date." Bids received after the Closing Date will be considered non-responsive and will not be considered for contract award. Bids submitted by email must be submitted ONLY to the following email address:

Email Address: soumissionsbids@ec.gc.ca
Attention: Alyssa Festeryga
Solicitation Number: 5000055473-1



Bidders should ensure that their name, address, Closing Date of the solicitation and Solicitation Number are clearly indicated in the body of their email. Bids and supporting information may be submitted in either English or French.

The total size of the email, including all attachments, must be less than 15 megabytes (MB). It is each Bidder's responsibility to ensure that the total size of the email does not exceed this limit.

Bids sent by fax will not be accepted.

It is important to note that emails systems can experience systematic delays and, at times, large attachments may cause systems to hold or delay transmission of emails. It is solely the Bidder's responsibility to ensure that the Contracting Authority receives a bid on time, in the mailbox that has been identified for bid receipt purposes. Date stamps for this form of transmission are not acceptable.

Section I: Technical Bid

In their technical bid, bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

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.

Part 4, Evaluation Procedures, contains additional instructions that bidders should consider when preparing their technical bid.

Section II: Financial Bid

- 1.1** Bidders must submit their financial bid in accordance with the Financial Bid Presentation Sheet in Attachment 1 to Part 3. The total amount of Applicable Taxes must be shown separately.
- 1.2** Bidders must submit their financial bid in Canadian funds and in accordance with the Financial Bid Presentation Sheet in Attachment 1 to Part 3. The total amount of Applicable Taxes must be shown separately.
- 1.3** Bidders must submit their prices FOB destination; Canadian customs duties and excise taxes included, as applicable; and Applicable Taxes excluded.
- 1.4** Bidders should include the following information in their financial bid:
 - (a) Their legal name; and
 - (b) The name of the contact person (including this person's mailing address, phone and facsimile numbers and email address) authorized by the Bidder to enter into

communications with Canada with regards to their bid; and any contract that may result from their bid.

Section III: Certifications

Bidders must submit the certifications required under Part 5.



ATTACHMENT 1 TO PART 3 - FINANCIAL BID PRESENTATION SHEET

The Bidder must complete this pricing schedule and include it in its financial bid.

1. The Bidder must assign a Group (A, B, C, etc.) to each Abbreviation.
2. The Bidder must provide a unit price for each Group.
3. The Bidder should extend the unit price for each Group based on either twenty-four (24) aqueous samples or eighteen (18) solid samples.

The inclusion of volumetric data in this document does not represent a commitment by Canada that Canada's future usage of the services described in the bid solicitation will be consistent with this data

Chemical Group	ECCC Table #	Abbreviation	Bidder Group
PBDE	1	BDE 100	
PBDE	1	BDE 138	
PBDE	1	BDE 153	
PBDE	1	BDE 154	
PBDE	1	BDE 155	
PBDE	1	BDE 17 / 25	
PBDE	1	BDE 183	
PBDE	1	BDE 203	
PBDE	1	BDE 206	
PBDE	1	BDE 207	
PBDE	1	BDE 208	
PBDE	1	BDE 209	
PBDE	1	BDE 28 / 33	
PBDE	1	BDE 47	
PBDE	1	BDE 49	
PBDE	1	BDE 66	
PBDE	1	BDE 85	
PBDE	1	BDE 99	
PFAS	2	PFBA	
PFAS	2	PFDA	
PFAS	2	PFHPA	
PFAS	2	PFHXA	
PFAS	2	PFHxS	
PFAS	2	PFNA	
PFAS	2	PFOA	
PFAS	2	PFOS	
PFAS	2	PFPEA	
NPE	3	NP	
NPE	3	NP1EO	
NPE	3	NP2EO	
NPE	3	OP	
BP	4	BPA	
BP	4	BPAF	
BP	4	BPB	
BP	4	BPE	

BP	4	BPF	
BP	4	BPS	
HFR	6	ATE (TBPAE)	
HFR	6	DBDPE	
HFR	6	DP anti	
HFR	6	DP syn	
HFR	6	TBB / EHTBB	
HFR	6	TBECH	
HFR	6	TBPH (BEHTBP)	
OPFR	7	TBEP	
OPFR	7	TCPP	
OPFR	7	TCrP	
OPFR	7	TDCPP	
OPFR	7	TEHP	
OPFR	7	TEP	
OPFR	7	TPP	
HBCD	8	HBCD alpha	
HBCD	8	HBCD beta	
HBCD	8	HBCD gamma	
PAH	9	Acenaphthene	
PAH	9	Acenaphthylene	
PAH	9	Anthracene	
PAH	9	Benz(a)anthracene	
PAH	9	Benzo(a)pyrene	
PAH	9	Benzo(b)fluoranthene	
PAH	9	Benzo(g,h,i)perylene	
PAH	9	Benzo(k)fluoranthene	
PAH	9	Chrysene	
PAH	9	Dibenz[a,h]anthracene	
PAH	9	Fluoranthene	
PAH	9	Fluorene	
PAH	9	Indeno(1,2,3-cd) pyrene	
PAH	9	Naphthalene	
PAH	9	Phenanthrene	
PAH	9	Pyrene	
PCB	10	PCB 105	
PCB	10	PCB 114	
PCB	10	PCB 118	
PCB	10	PCB 123	
PCB	10	PCB 126	
PCB	10	PCB 156/157	
PCB	10	PCB 167	
PCB	10	PCB 169	
PCB	10	PCB 170	
PCB	10	PCB 180/193	
PCB	10	PCB 189	
PCB	10	PCB 77	
PCB	10	PCB 81	



pesticide	11	2,4' DDT	
pesticide	11	4,4' DDT	
pesticide	11	Atrazine	
pesticide	11	Chlorpyrifos	
pesticide	11	Diazinon	
pesticide	11	Dieldrin	
pesticide	11	Endosulfan alpha	
pesticide	11	Endosulfan beta	
pesticide	11	Glyphosate	
pesticide	11	Lindane (gamma-HCH)	
pesticide	11	Malathion	
pesticide	11	Permethrin (total)	
pesticide	11	Simazine	
D/F	12	1,2,3,4,6,7,8-HPCDD	
D/F	12	1,2,3,4,6,7,8-HPCDF	
D/F	12	1,2,3,4,7,8,9-HPCDF	
D/F	12	1,2,3,4,7,8-HXCDD	
D/F	12	1,2,3,4,7,8-HXCDF	
D/F	12	1,2,3,6,7,8-HXCDD	
D/F	12	1,2,3,6,7,8-HXCDF	
D/F	12	1,2,3,7,8,9-HXCDD	
D/F	12	1,2,3,7,8,9-HXCDF	
D/F	12	1,2,3,7,8-PECDD	
D/F	12	1,2,3,7,8-PECDF	
D/F	12	2,3,4,6,7,8-HXCDF	
D/F	12	2,3,4,7,8-PECDF	
D/F	12	2,3,7,8-TCDD	
D/F	12	2,3,7,8-TCDF	
D/F	12	OCDD	
D/F	12	OCDF	
CA	13	Long chain C18-C20	
CA	13	Medium chain C14-C17	
CA	13	Short chain C10-C13	

	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
Option Year 2				\$

Total Evaluated Price

Total Evaluated Price = Year 1 + Option Year 1 + Option Year 2

Year 1	\$ _____
Option Period 1	\$ _____
Option Period 2	\$ _____
Subtotal	\$ _____

Total Evaluated Price	\$ _____
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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.

4.2. Technical Evaluation

Except where expressly provided otherwise, the experience described in the bid must be the experience of the Bidder itself (which includes the experience of any companies that formed the Bidder by way of a merger but does not include any experience acquired through a purchase of assets or an assignment of contract). The experience of the Bidder's affiliates (i.e. parent, subsidiary or sister corporations), subcontractors, or suppliers will not be considered.

4.2.1 Technical Evaluation

Mandatory and point rated technical evaluation criteria are included in Attachment 1 to Part 4 and in Attachment 2 to Part 4.

4.3. Financial Evaluation

4.3.1 Mandatory Financial Criteria

Bids must meet the mandatory financial criteria specified in the table inserted below.

Bids which fail to meet the mandatory financial criteria will be declared non-responsive. Each criterion should be addressed separately.

Mandatory Financial Criteria		Met / Not Met
MF1	The total cost proposed by the Bidder must not exceed \$400,000.00 per year, excluding applicable taxes.	

4.3.2 Evaluation of Price

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

For evaluation purposes only, the price of the bid will be determined in accordance with Attachment 1 to Part 3 Financial Bid Presentation Sheet

4.3.2.1.The volumetric data included in the Financial Bid Presentation Sheet detailed in Attachment 1 to Part 3 are provided for bid evaluated price determination purposes only. They are not to be considered as a contract guarantee.

4.3.2.2.For bid evaluation and contractor(s) selection purposes only, the evaluated price of a bid will be determined in accordance with the Financial Bid Presentation Sheet detailed in Attachment 1 to Part 3.

4.4 Basis of Selection

4.4.1 Basis of Selection – Highest Combined Rating of Technical Merit 70% and Price 30%

1. To be declared responsive, a bid must:
 - a. comply with all the requirements of the bid solicitation; and
 - b. meet all mandatory criteria; and
 - c. obtain the required minimum of 1000 points overall for the technical evaluation criteria which are subject to point rating. The rating is performed on a scale of 1666 points.
2. Bids not meeting (a) or (b) or (c) will be declared non-responsive.
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.
4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 70%
5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 30%
6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
7. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

The table below 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. The total available points equals 135 and the lowest evaluated price is \$45,000 (45).

Basis of Selection - Highest Combined Rating Technical Merit (70%) and Price (30%)				
		Bidder 1	Bidder 2	Bidder 3
Overall Technical Score		115/135	89/135	92/135
Bid Evaluated Price		\$55,000.00	\$50,000.00	\$45,000.00
Calculations	Technical Merit Score	$115/135 \times 70 = 59.63$	$89/135 \times 70 = 46.15$	$92/135 \times 70 = 47.70$
	Pricing Score	$45/55 \times 30 = 24.55$	$45/50 \times 30 = 27.00$	$45/45 \times 30 = 30.00$
Combined Rating		84.18	73.15	77.70
Overall Rating		1st	3rd	2nd



ATTACHMENT 1 TO PART 4 – MANDATORY TECHNICAL CRITERIA AND POINT RATED TECHNICAL CRITERIA

Mandatory and Rated Criteria

The Contractor must demonstrate that they have a thorough understanding and extensive experience with wastewater matrices and are able to generate technically valid results.

Only information contained in the proposal will be evaluated. Bidders must include all relevant information in their proposals. Evaluators will not consult other information sources (e.g. websites) unless they are specifically referenced in the proposal.

For all evaluation criteria, the “Tables” identified refer to Tables 1 through 13 in the Statement of Work.

Mandatory Technical Criteria

The bid must meet the mandatory technical criteria specified below. The Bidder must provide the necessary documentation to support compliance with this requirement.

Bids that fail to meet the mandatory technical criteria will be declared non-responsive. Each mandatory technical criterion should be addressed separately.

Criterion #	Mandatory Criteria	Met/ Not Met
M1	<p>The Bidder must provide documentation that demonstrate they hold a valid, accreditation to ISO 17025, at time of bid closing.</p> <p>This standard contains the requirements that testing and calibration laboratories must demonstrate that they operate a management system, are technically competent, and are able to generate technically valid results that are fit for purpose. This standard does not specify chemical parameters.</p>	
M2	<p>The Bidder must provide the fully validated analytical methods for all compounds listed in Tables 1 to 13 for both the aqueous and solids matrices, including:</p> <ul style="list-style-type: none"> • sample container types and volumes, preservation, holding times and storage conditions • preparation, extraction and cleanup procedures • instrumentation (e.g. LC/ESI-MS/MS) • quantification references • procedure for analyte quantification • description of the reporting limit employed • description of the QA/QC system • QA/QC criteria (blank levels and acceptable recovery ranges) <p>The Bidder should complete Attachement 2 to Part 4 – Point Rated Evaluation Template order to demonstrate they meet this criteria.</p>	

M3	<p>The Bidder must achieve the required reporting limits for at least 80% of the compounds listed in Tables 1 to 13 (185 out of 231 compounds including both matrices).</p> <p>To demonstrate this criteria the Bidder must provide documents confirming their reporting limits with their bid submission.</p> <p>The Bidder should complete Attachment 2 to Part 4 – Point Rated Evaluation Template order to demonstrate they meet this criteria.</p>	
M4	<p>The Bidder's analytical methods must use the labeled surrogates listed in Tables 1 to 13, or equivalent labeled compounds, for isotope dilution quantification. The use of additional surrogates would increase the quality of the method but will not be considered for evaluation.</p> <p>To demonstrate this criteria the Bidder must provide documents listing their methods, including this information, with their bid submission.</p> <p>The Bidder should complete Attachment 2 to Part 4 – Point Rated Evaluation Template order to demonstrate they meet this criteria.</p>	

Point-Rated Technical Criteria

Bids that meet all the mandatory technical criteria will be evaluated and scored as specified in the table below.

Bidders must obtain the following:

- a. A minimum overall point rated technical criteria score of 60% (1000 of a possible 1666 points) or higher

	<i>Point Rated Evaluation Criteria</i>	<i>Cross Reference to Proposal (Supplier to insert)</i>	<i>Maximum Available Points & Minimum Score Required</i>	<i>Points Received</i>
R1	<p>The Bidder should demonstrate experience conducting ultra-trace analysis (parts per billion, parts per trillion) of all compounds listed in Tables 1 to 13 in municipal wastewater raw influent and treated effluent samples within the past forty-eight (48) months from date of bid closing.</p> <p>Analysis undertaken prior to method validation will not be considered as demonstrated experience.</p>		<p>Maximum: 232</p>	



	<p>The Bidder must demonstrate this experience by providing a summary of the number of wastewater samples analyzed for each compound.</p> <p>The Bidder should complete Attachment 2 to Part 4 – Point Rated Evaluation Template order to demonstrate they meet this criteria.</p> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> • 1 point for each compound that has been analyzed for clients in a minimum of 50 samples, but less than 100 samples • 2 points for each compound that has been analyzed for clients in 100 or more samples 			
R2	<p>The Bidder should demonstrate experience conducting ultra-trace analysis (parts per billion, parts per trillion) of all compounds listed in Tables 1 to 13 in municipal raw sludge and treated biosolids samples within the past forty-eight (48) months from date of bid closing.</p> <p>Analysis undertaken prior to method validation will not be considered as demonstrated experience.</p> <p>The Bidder must demonstrate this experience by providing a summary of the number of sludge / biosolids samples analyzed for each compound.</p> <p>The Bidder should complete Attachment 2 to Part 4 – Point Rated Evaluation Template order to demonstrate they meet this criteria.</p> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> • 1 point for each compound that has been analyzed for clients in a minimum of 50 samples, but less than 100 samples • 2 points for each compound that has been analyzed for clients in 100 or more samples 		<p>Maximum: 230</p>	

<p>R3</p>	<p>For each analyte in Tables 1 to 13, the Bidder should provide a detailed description of how suspended solids in wastewater will be either included in the analysis or removed from the sample prior to extraction.</p> <p>The Bidder should complete Attachment 2 to Part 4 – Point Rated Evaluation Template order to demonstrate they meet this criteria.</p> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> • 1 point when solids are removed from the sample prior to analysis (e.g. filtration) • 2 points when solids are included in the analysis (e.g. liquid/liquid extraction) 		<p>Maximum: 232</p>	
<p>R4</p>	<p>For each analyte in Tables 1 to 13, the Bidder should provide a detailed description of how sludge and biosolids samples containing 2% to 30% solids will be prepared for extraction.</p> <p>The Bidder should complete Attachment 2 to Part 4 – Point Rated Evaluation Template order to demonstrate they meet this criteria.</p> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> • 1 point when the solid and liquid phase are separated e.g. centrifugation or decantation • 2 points when the method avoids the need for phase separation e.g. Soxhlet extraction, sonication 		<p>Maximum: 230</p>	
<p>R5</p>	<p>For each analyte in Tables 1 to 13, the Bidder should specify how the reporting limit is determined in aqueous samples.</p> <p>The Bidder should complete Attachment 2 to Part 4 – Point Rated Evaluation Template order to demonstrate they meet this criteria.</p> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> • 1 point when the RL is determined according to the EPA MDL procedure • 2 points when the RL is determined as a sample-specific detection limit 		<p>Maximum 232</p>	



	based on signal/noise ratio in the sample matrix			
R6	<p>For each analyte in Tables 1 to 13, the Bidder should specify how the reporting limit is determined in sludge/biosolids samples.</p> <p>The Bidder should complete Attachment 2 to Part 4 – Point Rated Evaluation Template order to demonstrate they meet this criteria.</p> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> • 1 point when the RL is determined according to the EPA MDL procedure • 2 points when the RL is determined as a sample-specific detection limit based on signal/noise ratio in the sample matrix 		Maximum 230	
R7	<p>The Bidder should demonstrate their leadership in the field of trace contaminant analysis in environmental matrices through participation in relevant Performance Evaluation (PE) or Proficiency Testing (PT) studies (round-robin studies and/or accreditation programs) within the past thirty-six (36) months from date of bid closing.</p> <p>The Bidder must demonstrate this leadership by providing the PE or PT results for any of the compound groups listed in Tables 1 to 13 from relevant matrices (water, sediment, tissue).</p> <p>The Bidder should complete Attachment 2 to Part 4 – Point Rated Evaluation Template order to demonstrate they meet this criteria.</p> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> • 40 points per study completed for a maximum of 280 points 		Maximum: 280	
	Total		1666 points	

ATTACHMENT 2 TO PART 4 – POINT RATED EVALUATION TEMPLATE

Refer to the Microsoft Excel Document entitled
“Attachment 2 to Part 4 - Point Rated Evaluation Template”



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 Required Precedent to Contract Award

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 2003. The associated 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

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

PART 6 - RESULTING CONTRACT *(at contract award, delete this line)*

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation. *(at contract award, delete this sentence and add the title of the requirement)*

Title: *(insert only at contract award)*

6.1. Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex A and the Contractor's technical bid entitled _____, dated _____.

6.2. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the PSPC/PWGSC *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.

6.2.1 General Conditions

2035 (2020-05-28), General Conditions - Professional Services (High Complexity), as modified below, apply to and form part of the Contract.

6.3. Security Requirement

6.3.1 There is no security requirement applicable to this Contract.

6.4. Term of Contract

6.4.1 Period of the Contract

The period of the Contract duration is for one (1) year starting from date of Contract.

6.4.2 Option to Extend the Contract

The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to two (2) additional one (1) 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 ten (10) 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:



Name: Alyssa Festeryga
Title: Procurement Officer
Environment and Climate Change Canada
Procurement and Contracting Division
Address: 45 Alderney Drive, Dartmouth NS B2Y 2N6

Telephone: 1-902-201-4251
E-mail address: alyssa.festeryga@ec.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.

6.5.2 Technical Authority

The Technical Authority for the Contract is:

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

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

The Technical Authority named above 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 Technical Authority, however the Technical 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: _____
Title: _____
Address: _____

Telephone: ____ - ____ - _____
E-mail address: _____

6.6. Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a *Public Service Superannuation Act* (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2012-2 of the Treasury Board Secretariat of Canada.

6.7. Payment

6.7.1 Basis of Payment

The Contractor will be paid firm rates per sample as determined in accordance with the basis of payment in Annex B, for work performed in accordance with the Contract. Customs duties are included and Applicable Taxes are extra.

Total Estimated Cost: \$ _____

6.7.2 Limitation of Expenditure

- (a) Canada's total liability to the Contractor under the Contract must not exceed \$ _____. Customs duties are included and the Applicable Taxes are extra.
- (b) No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
 - (i) when it is 75 percent committed, or
 - (ii) four (4) months before the contract expiry date, or
 - (iii) as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,whichever comes first.
- (c) If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

6.8. Invoicing Instructions

6.8.1 Monthly Payment

Canada will pay the Contractor on a monthly basis for work performed during the month covered by the invoice in accordance with the payment provisions of the Contract 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;
- c) the Work performed has been accepted by Canada.

6.8.2 SACC Manual Clauses

A9117C (2007-11-30) T1204 - Direct Request by Customer Department



6.9. Certifications and Additional Information

6.9.1 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.

6.9.2 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.

6.10. Applicable Laws

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

6.11. 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) the general conditions 2035 (2020-05-28), General Conditions - Professional Services (High Complexity);
- (c) Annex B, Basis of Payment;
- (d) Annex C, Federal Contractors Program For Employment Equity - Certification
- (h) 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)*).

6.12. Insurance

SACC Manual clause G1005C (2016-01-28) Insurance – No Specific Requirement

6.13. 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 STATEMENT OF WORK

1. Introduction

1.1. The Canadian Environmental Protection Act (CEPA 1999) has the purpose of protecting the environment and the health and well-being of Canadians. A major part of the Act is to prevent pollution and address the exposure and potential effects of chemical substances (www.canada.ca). Scientific research and environmental monitoring provide the foundation for decision-making under CEPA.

2. Background

2.1. Effluent discharges and land application of biosolids from Canadian wastewater treatment plants (WWTPs), and leachates from landfill sites, have been identified as important pathways of chemical substances to the aquatic and terrestrial environments. Environnement and Climate Change Canada (ECCC) developed a wastewater monitoring program to determine the occurrence and fate of these substances during treatment processes. This monitoring program supports the renewed Chemicals Management Plan, the Whales Initiative, and other collaborations with federal, provincial, municipal, Indigenous, and academic partners to address any issues related to chemical substances and wastewater. This program requires high-quality chemical analysis of many chemical substances that may be present at trace levels in aqueous and solid environmental samples such as but not limited to wastewater raw influent, treated effluent, environmental water, leachate, raw sludge, sediment, and treated biosolids. The results of this program contribute to science-based decisions on the assessment and management of chemical substances in Canada.

3. Objective

3.1. The objective of this work is to obtain high-quality chemical analysis of many substances in raw influent, treated effluent, raw sludge, treated biosolids, landfill leachate, and environmental waters and sediments impacted by these discharges as part of a monitoring program on the occurrence and fate of chemical substances in municipal wastewater.

4. Definitions

CAS #	Chemical Abstract Service number (www.cas.org)
Method Detection Limit (MDL)	A statistically determined decision point determined according to the procedure described in "United States Environmental Protection Agency definition and procedure for the determination of the method detection limit, revision 1.11. 40 CFR Part 136, Appendix B". https://www.law.cornell.edu/cfr/text/40/part-136/appendix-B
Sample-specific Detection Limit (SDL)	3 times the signal to noise ratio in the target channel converted to an equivalent sample concentration, or the concentration equivalent to the lowest calibration standard, whichever is greater.
Quarterly	Canada defines the quarterly periods as follows: 1 st Quarter 1 April to 30 June 2 nd Quarter 1 July to 30 September 3 rd Quarter 1 October to 31 December 4 th Quarter 1 January to 31 March

5. Acronyms and List of Tables

Table #	Acronym	Substance Group
1	PBDEs	Polybrominated diphenyl ether flame retardants
2	PFAS	Poly and perfluorinated alkyl substances
3	NPs	Nonylphenol and its ethoxylates
4	BPs	Bisphenols
5	TCS	Triclosan – DELETED
6	HFRs	Halogenated flame retardants
7	OPFRs	Organophosphorus flame retardants
8	HBCD	Hexabromocyclododecane
9	PAHs	Polycyclic aromatic hydrocarbons
10	PCBs	Polychlorinated biphenyls
11	Pesticides	Pesticides
12	D/F	Dioxins and Furans
13	CAs	Chlorinated alkanes (Paraffins)

6. Scope of Work

6.1. Sampling Plan

6.1.1. The Technical Authority will provide a quarterly sampling plan to the Contractor within two (2) weeks of Contract Award; this plan will be update on a quarterly basis. The Contractor will use that sampling plan to determine the quantity and type of sample container and shipping container they will provide.

6.1.2. The wastewater monitoring program includes all of the categories of substances on a rotating basis. Not every category will be measured every year.

6.2. Sampling Protocol

6.2.1. The Contractor must provide a sampling protocol for collection of aqueous and solids samples. The sampling protocol must specify the type of container to use for collection of samples for each analytical category, the required sample volume to achieve the Reporting Limits (RLs) stipulated in Tables 1 through 13, and any preservation requirements to maintain sample integrity during transit.

6.3. Submission Forms

6.3.1. The Contractor must provide submission forms for collection of aqueous and solids samples. Submission forms must include fields for Project Name; Client name, address and phone; Client Sample Identification; Matrix, Sampling Date; Container Type; Analyses Requested; Relinquished by with Date; Received by with Date.

6.4. Containers

6.4.1. The Contractor must provide sampling containers (e.g., bottles or jars) and shipping containers (e.g., coolers) as part of the contract. The number of containers and coolers will be dictated by the container type and volume requirements as described in the Contractor's sampling protocol. All sampling and shipping containers will be delivered to the Technical Authority.

6.5. Analyses

6.5.1. Wastewater influents and effluents and landfill leachates are challenging matrices because of the elevated levels of suspended solids compared to typical environmental waters. Treated wastewater effluents can contain suspended solids up to 60 mg/L depending on the treatment type. Raw wastewater influents can contain suspended solids up to 200 mg/L. These solids are an integral part of the



sample because they may contain significant levels of the compounds of interest, particularly if the compounds are hydrophobic. Therefore, sample preparation and extraction methods that are able to accommodate the solids (e.g. liquid/liquid extraction) are preferred where possible. However if the solids must be removed by filtration prior to extraction (e.g. solid phase extraction) it is unlikely that separate analysis of the solids is feasible due to the amount of material and the cost of the additional analysis. All results from wastewater influent and effluent samples and landfill leachates must be reported on a mass/volume basis (e.g. ng/L or µg/L).

- 6.5.2. Raw sludge and treated biosolids are challenging matrices because of the high moisture and organic content compared to typical sediment samples. These samples can contain anywhere from 2% to 30% solids, and 50% to 75% organic material. The solids are the important phase of these samples; therefore if phase separation is required for sample preparation and extraction the Contractor must analyze the solid phase. However sample preparation and extraction methods that avoid the need for phase separation are preferred where possible. All results from raw sludge and treated biosolids must be reported on a mass/mass and dry weight basis (e.g. ng/g dw or µg/g dw).
- 6.5.3. The Contractor must use analytical methods that reflect the current state of analytical technology, i.e. mass discrimination techniques to maximize analyte identification and quantification. The Contractor must provide a copy of their complete analytical method, including all quality assurance and quality control elements such as acceptable ranges for blank levels, laboratory spike recoveries, surrogate recoveries, and duplicate sample results.
- 6.5.4. The Work includes the analysis and reporting of concentrations of trace concentrations of several categories of chemical substances in, but not limited to, raw influent, treated effluent, raw sludge, and treated biosolids samples. The selected compounds are listed in Tables 1 to 13. The Contractor's analytical methods must achieve RLs equal to or lower than those listed in each table for each listed compound in the aqueous and solids matrices, and the methods must employ, at a minimum, the labeled surrogate standards listed in Tables 1 to 13, or equivalent, for analyte quantification. It is understood that much lower reporting limits are achievable for many of these substances in some matrices.
- 6.5.5. The Contractor must communicate any anomalous situations with respect to sample integrity or analytical challenges to the Technical Authority by email within three (3) business days of discovering such situation.
- 6.6. Storage and Disposal
 - 6.6.1. The Contractor must adhere to the maximum sample holding time and storage conditions as specified in the analytical method.
- 6.7. Quality Assurance / Quality Control (QA/QC)
 - 6.7.1. The Contractor must analyze samples in a batch system, with each batch consisting of a method blank, spiked blank, and replicate sample. These QA/QC elements must comprise 5% or more of each analytical batch, i.e. every batch of 20 samples or fewer must contain a blank, spike, and replicate. Blank corrections or blank subtractions must not be used. Results of method blanks shall be quantified and reported.
 - 6.7.2. The Contractor must consider field duplicates and equipment blanks submitted by ECCC as samples. Method blanks, spiked blanks, and laboratory replicate analyses must be conducted as part of the Contractor's Quality Assurance/Quality Control (QA/QC) program and are not considered as samples submitted.
 - 6.7.3. Laboratory raw data, chromatograms, and all relevant laboratory notes must be retained by the Contractor for a minimum period of 36 months following submission

of samples. Raw data must include chromatograms and area tables for all instrument calibrations including linearity, resolution, and sensitivity checks showing date and time of analysis, and evidence that all QA/QC specifications have been met; and aliquot masses, volumes, suspended solids content and moisture content for all samples, including original and re-analyses, dilutions, and other details of the analytical procedure.

6.7.4. The Contractor must provide consultation on sampling procedures, delivery schedules, unexpected analytical results, and other contingencies as requested by the Technical Authority.

6.8. Reports

6.8.1. The Contractor must electronically provide sample submittal confirmation to the Technical Authority within five (5) business days of sample receipt.

6.8.2. Sample Data Reports

6.8.2.1. The Contractor must deliver Sample Data Reports to the Technical Authority within six (6) weeks of receiving the samples. Sample Data Reports must include the following:

- 6.8.2.1.1. Concentrations of each analyte in the samples and replicates.
- 6.8.2.1.2. Concentrations of each analyte in the method blank.
- 6.8.2.1.3. Per cent recoveries in spiked blanks.
- 6.8.2.1.4. The reporting limit for each analyte.
- 6.8.2.1.5. Percent recovery of surrogates.
- 6.8.2.1.6. Any problems with samples or data, including corrective actions taken, resolutions, and explanation of flagged data.

6.8.2.2. Sample Data Reports are subject to the acceptance and approval of the Technical Authority.

6.8.3. Final Data Report

6.8.3.1. The Contractor must deliver a final report to the Technical Authority. Final Data Report must include the following.

- 6.8.3.1.1. The project name.
- 6.8.3.1.2. Sample site name.
- 6.8.3.1.3. Date of sample receipt.
- 6.8.3.1.4. Sample temperatures upon receipt.
- 6.8.3.1.5. Reporting conventions and laboratory qualifiers.
- 6.8.3.1.6. QA/QC notes.
- 6.8.3.1.7. Analytical discussion.
- 6.8.3.1.8. Correlation table showing client and Contractor sample identifiers, and analysis reports for each sample and substance.

Notes to Tables:

- A. It is not necessary for the Contractor’s analytical suites to match the groupings in Tables 1 to 13 below. These tables are arranged by general chemical group for information only.
- B. The Contractor is invited to offer additional analytes in any of these groups as long as the cost of the analysis does not increase because of the additions.
- C. All reference to “aqueous” implies wastewater influent, effluent, etc. All reference to “solids” implies sludge, biosolids, etc.

Table 1: Polybrominated diphenyl ether (PBDE) flame retardants

Homologue Group	PBDE Congener	Required reporting limit in aqueous (ng/L)	Required reporting limit in solids (ng/g)	Labeled surrogate for quantification
-----------------	---------------	--------------------------------------------	-------------------------------------------	--------------------------------------



Tri-BDE	17 / 25	1.0	1.0	
	28 / 33	1.0	1.0	28L
Tetra-BDE	47	1.0	1.0	47L
	49	1.0	1.0	
	66	1.0	1.0	
Penta-BDE	85	1.0	1.0	
	99	1.0	1.0	99L
	100	1.0	1.0	100L
Hexa-BDE	138	1.0	1.0	
	153	1.0	1.0	153L
	154	1.0	1.0	154L
	155	1.0	1.0	
Hepta-BDE	183	1.0	1.0	183L
Octa-BDe	203	1.0	1.0	
Nona-BDE	206	1.0	1.0	
	207	1.0	1.0	
	208	1.0	1.0	
Deca-BDE	209	1.0	1.0	209L

Table 2: Poly and Perfluorinated alkyl substances (PFAS)

Name	CAS #	Abbreviation	Required reporting limit in aqueous (ng/L)	Required reporting limit in solids (ng/g)	Labeled surrogate for quantification
Perfluorobutanoate	375-22-4	PFBA	5.0	5.0	13C4-PFBA
Perfluoropentanoate	2706-90-3	PFPEA	5.0	5.0	
Perfluorohexanoate	307-24-4	PFHXA	5.0	5.0	13C2-PFHXA
Perfluoroheptanoate	375-85-9	PFHPA	5.0	5.0	
Perfluorooctanoate	335-67-1	PFOA	5.0	5.0	13C8-PFOA
Perfluorononanoate	375-95-1	PFNA	5.0	5.0	13C5-PFNA
Perfluorodecanoate	335-76-2	PFDA	5.0	5.0	13C2-PFDA
Perfluorohexanesulfonate	355-46-4	PFHxS	5.0	5.0	18O2-PFHXS
Perfluorooctanesulfonate	1763-23-1	PFOS	5.0	5.0	13C8-PFOS

Table 3: Nonylphenol and its ethoxylates

Name	CAS #	Abbreviation	Required reporting limit in aqueous (ng/L)	Required reporting limit in solids (ng/g)	Labeled surrogate for quantification
4-nonylphenol	25154-52-3	NP	10	50	13C6-NP
4-nonylphenol monoethoxylate		NP1EO	50	250	

4-nonylphenol diethoxylate		NP2EO	50	250	13C6-4-NP2EO
Octylphenol		OP	50	250	

Table 4: Bisphenols

Name	CAS #	Abbreviation	Required reporting limit in aqueous (ng/L)	Required reporting limit in solids (ng/g)	Labeled surrogate for quantification
Bisphenol A	80-05-7	BPA	20	5.0	13C12-BPA
Bisphenol B		BPB	20	5.0	13C12-BPB
Bisphenol F	620-92-8	BPF	20	5.0	13C6-BPF
Bisphenol S	80-09-1	BPS	20	5.0	13C12-BPS
Bisphenol E		BPE	20	5.0	
Bisphenol AF		BPAF	20	5.0	13C12-BPAF

Table 5: DELETED

Table 6: Halogenated flame retardants (HFRs)

Name	CAS #	Abbreviation	Required reporting limit in aqueous (ng/L)	Required reporting limit in solids (ng/g)	Labeled surrogate for quantification
1,1'-(1,2-ethanediyl)bis(penta bromobenzene)	84852-53-9	DBDPE	20	100	13C14-DBDPE
2,4,6-Tribromophenylallyl ether	3278-89-5	ATE (TBPAE)	20	5.0	
Dechlorane plus, anti	135821-74-8	DP anti	20	5.0	13C10-DP
Dechlorane plus, syn	135821-03-3	DP syn	20	5.0	13C10-DP
2-ethylhexyl 2,3,4,5-tetrabromobenzoate	183658-27-7	TBB / EHTBB	20	5.0	
bis (2-ethylhexyl) 3,4,5,6-tetrabromophthalate	26040-51-7	TBPH (BEHTBP)	20	5.0	13C6-D34-BEHTBP
1,2-dibromo-4-(1,2-dibromoethyl) cyclohexane	3322-93-8	TBECH	20	5.0	

Table 7: Organophosphorus flame retardants (OPFRs)

Name	CAS #	Abbreviation	Required reporting limit in	Required reporting limit in	Labeled surrogate for quantification
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			aqueous (ng/L)	solids (ng/g)	
Tris(2-butoxyethyl) phosphate	78-51-3	TBEP	20,000	2000	
Tris(2-chloroisopropyl) phosphate	13674-84-5	TCPP	50	5.0	D18-TCPP
Tricresyl phosphate	1330-78-5	TCrP	50	5.0	
Tris(1,3-dichloro-2-propyl) phosphate	13674-87-8	TDCPP	500	50	D15-TDCPP
Tris(2-ethylhexyl) phosphate	78-42-2	TEHP	50	5.0	
Triethyl phosphate	78-40-0	TEP	50	5.0	D15-TEP
Triphenyl phosphate	115-86-6	TPP	50	5.0	13C18-TPP

Table 8: Hexabromocyclododecane (HBCD)

Name	CAS #	Abbreviation	Required reporting limit in aqueous (ng/L)	Required reporting limit in solids (ng/g)	Labeled surrogate for quantification
hexabromocyclododecane	134237-50-6	HBCD alpha	5.0	0.50	13C12-alpha
hexabromocyclododecane	134237-51-7	HBCD beta	5.0	0.50	13C12-beta
hexabromocyclododecane	134237-52-8	HBCD gamma	5.0	0.50	13C12-gamma

Table 9: Polycyclic Aromatic Hydrocarbons (PAHs)

Substance	CAS Number	Required reporting limit in aqueous (ng/L)	Required reporting limit in solids (ng/g)	Labeled surrogate for quantification
Acenaphthene	83-32-9	10	5.0	
Acenaphthylene	208-96-8	10	5.0	D8-Acenaphthylene
Anthracene	120-12-7	10	5.0	
Benz(a)anthracene	56-55-3	10	5.0	D12-Benzo[a]anthracene
Benzo(a)pyrene	50-32-8	10	5.0	D12-Benzo[a]pyrene
Benzo(b)fluoranthene	205-99-2	10	5.0	D12-Benzo[b]fluoranthene
Benzo(g,h,i)perylene	191-24-2	10	5.0	D12-Benzo[ghi]perylene
Benzo(k)fluoranthene	207-08-9	10	5.0	D12-Benzo[k]fluoranthene
Chrysene	218-01-9	10	5.0	D12-Chrysene
Dibenz[a,h]anthracene	3-70-3	10	5.0	
Fluoranthene	206-44-0	10	5.0	
Fluorene	86-73-7	10	5.0	
Indeno(1,2,3-cd) pyrene	193-39-5	10	5.0	D12-Indeno[1,2,3,cd]pyrene
Naphthalene	91-20-3	10	5.0	D8-Naphthalene
Phenanthrene	85-01-8	10	5.0	D10-Phenanthrene

Pyrene	129-00-0	10	5.0	
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Table 10: Polychlorinated Biphenyls (PCBs)

PCB Congener #	Required reporting limit in aqueous (ng/L)	Required reporting limit in solids (ng/g)	Labeled surrogate for quantification
77	0.1	0.1	77L
81	0.1	0.1	81L
105	0.1	0.1	105L
114	0.1	0.1	114L
118	0.1	0.1	118L
123	0.1	0.1	123L
126	0.1	0.1	126L
156/157	0.1	0.1	156L/157L
167	0.1	0.1	167L
169	0.1	0.1	169L
170	0.1	0.1	170L
180/193	0.1	0.1	180L
189	0.1	0.1	189L

Table 11: Pesticides

Name	CAS #	Required reporting limit in aqueous (ng/L)	Required reporting limit in solids (ng/g)	Labeled surrogate for quantification
Atrazine	1912-24-9	10	0.50	13C-Atrazine
Chlorpyrifos	2921-88-2	10	0.50	
Diazinon		10	0.50	D10-Diazinon
2,4' Dichlorodiphenyl-trichloroethane (DDT)	50-29-3	10	0.50	13C-o,p'-DDT
4,4' Dichlorodiphenyl-trichloroethane (DDT)	50-29-3	10	0.50	13C-p,p'-DDT
Dieldrin	60-57-1	10	0.50	13C-Dieldrin
Endosulfan alpha		10	0.50	13C9-alpha-Endosulfan
Endosulfan beta		10	0.50	13C9-beta-Endosulfan
Glyphosate	1071-83-6	20	Not requested	13C2-15N1-Glyphosate-FMOC
Lindane (gamma-HCH)		10	0.50	13C-gamma HCH
Malathion	121-75-5	10	0.50	
Permethrin (total)	52645-53-1	10	0.50	13C-permethrins Peak 2



Simazine	122-34-9	10	0.50	
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Table 12: Dioxins and Furans

Name	Required reporting limit in aqueous (ng/L)	Required reporting limit in solids (ng/g)	Labeled surrogate for quantification
2,3,7,8-TCDD	0.01	0.01	13C12-2,3,7,8-TCDD
1,2,3,7,8-PECDD	0.01	0.01	13C12-1,2,3,7,8-PECDD
1,2,3,4,7,8-HXCDD	0.01	0.01	
1,2,3,6,7,8-HXCDD	0.01	0.01	13C12-1,2,3,6,7,8-HXCDD
1,2,3,7,8,9-HXCDD	0.01	0.01	
1,2,3,4,6,7,8-HPCDD	0.01	0.01	13C12-1,2,3,4,6,7,8-HPCDD
OCDD	0.01	0.01	13C12-OCDD
2,3,7,8-TCDF	0.01	0.01	13C12-2,3,7,8-TCDF
1,2,3,7,8-PECDF	0.01	0.01	13C12-1,2,3,7,8-PECDF
2,3,4,7,8-PECDF	0.01	0.01	
1,2,3,4,7,8-HXCDF	0.01	0.01	13C12-1,2,3,4,7,8-HXCDF
1,2,3,6,7,8-HXCDF	0.01	0.01	
1,2,3,7,8,9-HXCDF	0.01	0.01	
2,3,4,6,7,8-HXCDF	0.01	0.01	
1,2,3,4,6,7,8-HPCDF	0.01	0.01	13C12-1,2,3,4,6,7,8-HPCDF
1,2,3,4,7,8,9-HPCDF	0.01	0.01	
OCDF	0.01	0.01	

Table 13: Chlorinated Alkanes (Paraffins)

Name	Required reporting limit in aqueous (ng/L)	Required reporting limit in solids (ng/g)
Short chain C10-C13	100	10
Medium chain C14-C17	200	20
Long chain C18-C20	1000	200

7. Deliverables

Deliverable	Due Date
7.1. Sampling Protocol	Within one week of Contract Award
7.2. Submission Forms	Within one week of Contract Award
7.3. Yearly project meeting	Within one month of commencement of sample collection (normally May)
7.4. Sample Containers	As per the quarterly Sampling Plan
7.5. Sample Data Reports	Within six (6) weeks of sample receipt
7.6. Final Data Reports	Within four (4) weeks of acceptance of the Sample Data Report by the Technical Authority

8. Format of Deliverables

8.1. Sample Data Reports

8.1.1. The Contractor must deliver the Sample Data Reports in Microsoft Excel .xlsx spreadsheet format, or equivalent compatible format electronically to the Technical Authority.

8.1.2. The Sample Data Reports must be separated by sampling site, e.g. WWTP.

8.2. Final Data Report

8.2.1. The Contractor must deliver the Final Data Report in PDF format including a cover letter signed by the analyst electronically to the Technical Authority.

9. Language of Work

9.1. All written and verbal communication must be in English.

10. Work Location

10.1. The work will take place at the Contractor's facilities.

11. Crown Input

11.1. All sampling activities, equipment, and supplies will be provided by ECCC, except for sample and shipping containers as noted above.

11.2. ECCC will generate trip blanks, field blanks, and equipment blanks as part of this Contract, which will be submitted and invoiced as samples.



**ANNEX B
BASIS OF PAYMENT**

To be inserted at Contract Award

ANNEX C
FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - CERTIFICATION

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with any request or requirement imposed by Canada may render the bid non-responsive or constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit Employment and Social Development Canada (ESDC)-Labour's website.

Date: _____(YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

- A1. The Bidder certifies having no work force in Canada.
- A2. The Bidder certifies being a public sector employer.
- A3. The Bidder certifies being a federally regulated employer being subject to the *Employment Equity Act*.
- A4. The Bidder certifies having a combined work force in Canada of less than 100 employees (combined work force includes: permanent full-time, permanent part-time and temporary employees [temporary employees only includes those who have worked 12 weeks or more during a calendar year and who are not full-time students]).

A5. The Bidder has a combined workforce in Canada of 100 or more employees; and
 A5.1. The Bidder certifies already having a valid and current Agreement to Implement Employment Equity (AIEE) in place with ESDC-Labour.

OR

A5.2. The Bidder certifies having submitted the Agreement to Implement Employment Equity (LAB1168) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

B1. The Bidder is not a Joint Venture.

OR

B2. The Bidder is a Joint venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)