



<p><b>RETURN BIDS TO:</b> <b>RETOURNER LES SOUMISSIONS À:</b></p> <p><b>Bid Receiving - Environment and Climate Change Canada / Réception des soumissions – Environnement et changement climatique Canada</b></p> <p><b>Electronic Copy:</b> <a href="mailto:soumissionsbids@ec.gc.ca">soumissionsbids@ec.gc.ca</a></p> <p><b>BID SOLICITATION</b> <b>DEMANDE DE SOUMISSIONS</b></p> <p><b>PROPOSAL TO: ENVIRONMENT AND CLIMATE CHANGE CANADA</b></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><b>SOUSSION À:</b> <b>ENVIRONNEMENT ET CHANGEMENT CLIMATIQUE CANADA</b></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><b>Title – Titre</b> Analysis of Wastewater, Sludge/Biosolids, Leachate and other Complex Environmental Matrices for Pharmaceuticals and Personal Care Products</p>	
	<p><b>EC Bid Solicitation No. /SAP No. – N° de la demande de soumissions EC / N° SAP</b> 5000058939</p>	
	<p><b>Date of Bid solicitation (YYYY-MM-DD) – Date de la demande de soumissions (AAAA-MM-JJ)</b> 2021-12-22</p>	
	<p><b>Bid Solicitation Closes (YEAR-MM-DD) - La demande de soumissions prend fin (AAAA-MM-JJ)</b>  at – à 14 :00 on – le 2022-01-20</p>	<p><b>Time Zone – Fuseau horaire</b>  Eastern Standard Time (EST)</p>
	<p>F.O.B – F.A.B See herein</p>	
	<p><b>Address Enquiries to - Adresser toutes questions à</b> Megan Filliol <a href="mailto:megan.filliol@ec.gc.ca">megan.filliol@ec.gc.ca</a></p>	
	<p><b>Telephone No. – N° de téléphone</b> 902-600-6216</p>	<p><b>Fax No. – N° de Fax</b></p>
	<p><b>Delivery Required– Livraison exigée</b> Specified Herein</p>	
	<p><b>Destination of Services / Destination des services</b> Specified Herein</p>	
	<p><b>Security / Sécurité</b> Specified Herein</p>	
<p><b>Vendor/Firm Name and Address - Raison sociale et adresse du fournisseur/de l’entrepreneur</b></p>		
<p><b>Telephone No. – N° de téléphone</b></p>	<p><b>Fax No. – N° de Fax</b></p>	
<p><b>Name and title of person authorized to sign on behalf of Vendor/Firm: (type or print)</b></p> <p><b>Nom et titre de la personne autorisée à signer au nom du fournisseur/de l’entrepreneur (taper ou écrire en caractères d’imprimerie)</b></p>		
<p><b>Signature</b></p>	<p><b>Date</b></p>	

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**List of Annexes:**

Annex A Statement of Work  
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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, and the Basis of Payment.

### **1.2 Summary**

1.2.1 Environment and Climate Change Canada has a requirement to obtain high-quality chemical analysis of many pharmaceuticals and personal care products (PPCPs) 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.

### **1.3 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. 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"

## **2.2. SACC Manual Clauses**

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

## **2.3. 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.

## **2.4. 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.

## **2.5. Enquiries - Bid Solicitation**



All enquiries must be submitted in writing to the Contracting Authority no later than five (5) 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.

## **2.6. 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.

## **2.7. 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.

## **2.8. 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.

#### **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](mailto:soumissionsbids@ec.gc.ca)

**Attention:** Megan Filiol

**Solicitation Number:** 5000058939

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.

PPCP	Bidder Group
1,7-Dimethylxanthine (paraxanthine)	
10-hydroxy-amitriptyline	
17- $\alpha$ -Ethinyl estradiol	
17- $\beta$ -Estradiol	
2-Hydroxy-ibuprofen	
4-Epitetracycline	
Acetaminophen	
Albuterol	
Amitriptyline	
Amlodipine	
Atenolol	
Atorvastatin	
Azithromycin	
Bupropion	
Caffeine	
Carbamazepine	
Cimetidine	
Ciprofloxacin	
Citalopram	
Clarithromycin	
Clopidogrel	
Clopidogrel carboxylic acid	
Clotrimazole	
Codeine	
Cotinine	
DEET (N,N-diethyl-m-toluamide)	
Dehydronifedipine	
Desmethyldiltiazem	
Diatrizoic acid	
Diclofenac	
Diltiazem	
Diphenhydramine	
Doxycycline	
Enalapril	

Eprosartan	
Erythromycin-H2O	
Estrone	
Fenofibric acid	
Fluoxetine	
Furosemide	
Gabapentin	
Gemfibrozil	
Hydrochlorothiazide	
Ibuprofen	
Iopamidol	
Irbesartan	
Lamotrigine	
Lamotrigine 2-N-glucuronide	
Lincomycin	
m-Chlorophenylpiperazine	
Metformin	
Metoprolol	
Metronidazole	
Miconazole	
Moxifloxacin	
Mycophenolic acid	
Naproxen	
Norfluoxetine	
Norquetiapine	
Norverapamil	
Ofloxacin	
Oxazepam	
Oxycodone	
Paroxetine	
Progesterone	
Propranolol	
Quetiapine	
Ramipril	
Ramiprilat	
Ranitidine	
Rosuvastatin	
Sertraline	
Sucralose	
Sulfamethoxazole	
Telmisartan	
Testosterone	
Tetracycline	
Theophylline	
Thiabendazole	
Topiramate	
Trazadone	
Triamterene	

Triclocarban	
Triclosan	
Trimethoprim	
Valsartan	
Venlafaxine	
Verapamil	

<b>Year 1</b>				
<b>Group</b>	<b>Matrix</b>	<b>Firm Price per Sample</b>	<b>Estimated Number of Samples</b>	<b>Total Firm Price per Sample X Estimated Number of Samples</b>
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Deconjugation treatment		42	\$
<b>Year 1</b>				\$
<b>Option Year 1</b>				
<b>Group</b>	<b>Matrix</b>	<b>Firm Price per Sample</b>	<b>Estimated Number of Samples</b>	<b>Total</b>





	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Deconjugation treatment		42	\$
			<b><i>Option Year 2</i></b>	<b><i>\$</i></b>

### Total Evaluated Price

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

### Total Evaluated Price

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

Year 1 \$ \_\_\_\_\_  
Option Year 1 \$ \_\_\_\_\_  
Option Year 2 \$ \_\_\_\_\_  
  
Total Evaluated Price \$ \_\_\_\_\_

## **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.

<b>Mandatory Financial Criteria</b>		<b>Met / Not Met</b>
<b>MF1</b>	The total cost proposed by the Bidder must not exceed \$200,000.00 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 874 points overall for the technical evaluation criteria which are subject to point rating. The rating is performed on a scale of 1456 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.
8. In the event that two or more responsive bids have the same combined rating of technical merit and price, the responsive bid which obtained the highest number of points overall for the point rated technical evaluation criteria 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	
<b>Overall Technical Score</b>	115/135	89/135	92/135	
<b>Bid Evaluated Price</b>	\$55,000.00	\$50,000.00	\$45,000.00	
<b>Calculations</b>	<b>Technical Merit Score</b>	$115/135 \times 70 = 59.63$	$89/135 \times 70 = 46.15$	$92/135 \times 70 = 47.70$
	<b>Pricing Score</b>	$45/55 \times 30 = 24.55$	$45/50 \times 30 = 27.00$	$45/45 \times 30 = 30.00$
<b>Combined Rating</b>	84.18	73.15	77.70	
<b>Overall Rating</b>	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 Table 1 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 Table 1 for both the aqueous and solids matrices, including:</p> <ul style="list-style-type: none"> <li>• sample container types and volumes, preservation, holding times and storage conditions</li> <li>• preparation, extraction and cleanup procedures</li> <li>• instrumentation (e.g. LC/ESI-MS/MS)</li> <li>• quantification references</li> <li>• procedure for analyte quantification</li> <li>• description of the reporting limit employed</li> <li>• description of the QA/QC system</li> <li>• QA/QC criteria (blank levels and acceptable recovery ranges)</li> </ul> <p>The Bidder should complete Attachment 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 Table 1 of the Statement of Work, including both aqueous and solid matrices (140 out of 176 compounds).</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 Table 1, 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% (874 of a possible 1456 points) or higher

	<b><i>Point Rated Evaluation Criteria</i></b>	<b><i>Cross Reference to Proposal (Supplier to insert)</i></b>	<b><i>Maximum Available Points &amp; Minimum Score Required</i></b>	<b><i>Points Received</i></b>
<b>R1</b>	<p>The Bidder should demonstrate experience conducting ultra-trace analysis (parts per billion, parts per trillion) of all compounds listed in Table 1 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>		<b>Maximum: 176</b>	

	<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"> <li>• 1 point for each compound that has been analyzed for clients in a minimum of 50 samples, but less than 100 samples</li> <li>• 2 points for each compound that has been analyzed for clients in 100 or more samples</li> </ul>			
R2	<p>The Bidder should demonstrate experience conducting ultra-trace analysis (parts per billion, parts per trillion) of all compounds listed in Table 1 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"> <li>• 1 point for each compound that has been analyzed for clients in a minimum of 50 samples, but less than 100 samples</li> <li>• 2 points for each compound that has been analyzed for clients in 100 or more samples</li> </ul>		<p><b>Maximum: 176</b></p>	
R3	<p>For each analyte group as denoted by Table 1, the Bidder should provide a detailed</p>			

	<p>description of how suspended solids in wastewater will be either incorporated into 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"> <li>• 1 point when solids are removed from the sample prior to analysis (e.g. filtration)</li> <li>• 2 points when solids are included in the analysis (e.g. liquid/liquid extraction)</li> </ul>		<p><b>Maximum: 176</b></p>	
R4	<p>For each analyte group as denoted by Table 1, 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"> <li>• 1 point when the solid and liquid phase are separated e.g. centrifugation or decantation</li> <li>• 2 points when the method avoids the need for phase separation e.g. Soxhlet extraction, sonication</li> </ul>		<p><b>Maximum: 176</b></p>	
R5	<p>For each analyte in Table 1, the Bidder should specify how the <b>reporting limit</b> 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"> <li>• 1 point when the RL is determined according to the EPA MDL procedure</li> <li>• 2 points when the RL is determined as a sample-specific detection limit</li> </ul>		<p><b>Maximum 176</b></p>	

	based on signal/noise ratio in the sample matrix			
<b>R6</b>	<p>For each analyte in Table 1, the Bidder should specify how the <b>reporting limit</b> 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"> <li>• 1 point when the RL is determined according to the EPA MDL procedure</li> <li>• 2 points when the RL is determined as a sample-specific detection limit based on signal/noise ratio in the sample matrix</li> </ul>		<b>Maximum 176</b>	
<b>R7</b>	<p>The Bidder should describe their experience with deconjugation treatment of wastewater and/or sludge/biosolids samples.</p> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> <li>• 100 points for a validated method for deconjugation treatment of wastewater</li> <li>• 100 points for a validated method for deconjugation treatment of sludge/biosolids</li> <li>• 50 points for deconjugation treatment applied to 50 client samples of either matrix</li> </ul>		<b>Maximum: 250</b>	
<b>R8</b>	<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 forty-eight (48) 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 Table 1 from relevant matrices (water, sediment, tissue).</p>		<b>Maximum: 150</b>	



	Points will be awarded as follows: <ul style="list-style-type: none"> <li>• 25 points per study completed for a maximum of 150 points</li> </ul>			
	<b>Total</b>		<b>1456</b>	

**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.

## **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 (2021-12-02), 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: Megan Filliol  
Title: Procurement Officer  
Environment and Climate Change Canada  
Procurement and Contracting Division  
Address: 45 Alderney Drive, Dartmouth NS B2Y 2N6

Telephone: 1-902-600-6216  
E-mail address: [megan.filliol@ec.gc.ca](mailto:megan.filliol@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.

### 6.10. 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 (2021-12-02), General Conditions - Professional Services (High Complexity);
- (c) Annex A, Statement of Work
- (d) Annex B, Basis of Payment;
- (e) 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](http://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, including pharmaceuticals and personal care products (PPCPs) to the aquatic and terrestrial environments. Environment 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 PPCPs and wastewater, sludge/biosolids, leachate, and environmental matrices affected by these discharges. This program requires high-quality chemical analysis of many PPCPs 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 PPCPs in Canada.

### 3. Objective

3.1. The objective of this work is to obtain high-quality chemical analysis of many PPCPs 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 ( <a href="http://www.cas.org">www.cas.org</a> )
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". <a href="https://www.law.cornell.edu/cfr/text/40/part-136/appendix-B">https://www.law.cornell.edu/cfr/text/40/part-136/appendix-B</a>
Reporting Limit (RL)	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 <sup>st</sup> Quarter      1 April to 30 June 2 <sup>nd</sup> Quarter     1 July to 30 September 3 <sup>rd</sup> Quarter     1 October to 31 December 4 <sup>th</sup> Quarter     1 January to 31 March



## 5. Scope of Work

### 5.1. Sampling Plan

- 5.1.1. The Technical Authority will provide a quarterly sampling plan to the Contractor within two (2) weeks of Contract Award and updated 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.
- 5.1.2. The wastewater monitoring program includes all PPCPs on a rotating basis. Not every substance will be measured every year.

### 5.2. Sampling Protocol

- 5.2.1. 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 stipulated in Table 1, and any preservation requirements to maintain sample integrity during transit.

### 5.3. Submission Forms

- 5.3.1. 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.

### 5.4. Containers

- 5.4.1. 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.

### 5.5. Analyses

Wastewater influents and effluents and landfill leachate 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 must be reported on a mass/volume basis (e.g. ng/L or µg/L).

- 5.5.1. 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).
- 5.5.2. The Contractor must use analytical methods that reflect the current state of

analytical technology, i.e. serial isotope dilution/recovery correction quantification through labeled compounds added at the commencement of the extraction process, and strong positive identification criteria from multiple ion fragments or MRM transitions based on both target analytes and labeled surrogates. 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.

5.5.3. The Work includes the analysis and reporting of trace concentrations of PPCPs in, but not limited to, raw influent, treated effluent, raw sludge, treated biosolids, and landfill leachate samples. The selected compounds are listed in Table 1. The Contractor's analytical methods must achieve Reporting Limits (RLs, see definition above) equal to or lower than those listed in the 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 Table 1, or equivalent, for analyte quantification.

5.5.4. ECCC may wish to investigate the phenomenon of deconjugation of substances through the wastewater treatment process. The Contractor must provide a description of their experience with deconjugation of wastewater samples, a copy of their complete analytical method, and the cost for deconjugation treatment.

5.5.5. 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.

5.5.7 If the Contractor updates their method over the course of this contract, they shall inform ECCC of the details of the update. If the cost of the analysis does not change as a result of this update, the Contractor shall implement the updated method, provide ECCC with a copy, and provide ECCC with a written summary of the comparability of the original versus updated methods.

## 5.6. Storage and Disposal

5.6.1. The Contractor must adhere to the maximum sample holding time and storage conditions as specified in the analytical method.

## 5.7. Quality Assurance / Quality Control (QA/QC)

5.7.1. 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.

5.7.2. 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.

5.7.3. 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.

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

## 5.8. Reports

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

### 5.8.2. Sample Data Reports

- 5.8.2.1. 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:

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

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

### 5.8.3. Final Data Report

- 5.8.3.1. The Contractor must deliver a final report to the Technical Authority within four (4) weeks of acceptance of the Sample Data Reports by the Technical Authority. Final Data Report must include the following.

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

#### Note to Tables:

- A. The Contractor is invited to offer additional PPCP analytes as long as the cost of the analysis does not increase because of the additions.

**Table 1: Pharmaceuticals and Personal Care Products**

Name	CAS #	Labeled surrogate for quantification	Required reporting limit in wastewater (ng/L)	Required reporting limit in sludge/ biosolids (ng/g)
1,7-Dimethylxanthine (paraxanthine)	611-59-6		1000	500
10-hydroxy-amitriptyline			20	20
17- $\alpha$ -Ethinyl estradiol		13C2-17alpha-Ethynylestradiol	20	20
17- $\beta$ -Estradiol		D4-17- $\beta$ -Estradiol	20	20
2-Hydroxy-ibuprofen	51146-55-5	D6-2-hydroxy-Ibuprofen	500	100
4-Epitetracycline	23313-80-6		100	50
Acetaminophen	103-90-2	13C2-15N-Acetaminophen	200	100
Albuterol	18559-94-9	D3-Albuterol	20	20
Amitriptyline	50-48-6	d6-Amitriptyline	20	20
Amlodipine	88150-42-9	d4-Amlodipine	50	20
Atenolol	29122-68-7	D7-Atenolol	20	20
Atorvastatin	134523-00-5		50	20
Azithromycin	83905-01-5		50	20
Bupropion	31677-93-7	d9-Bupropion	20	20
Caffeine	58-08-2	13C3-Caffeine	500	500
Carbamazepine	298-46-4	D10-Carbamazepine	20	20
Cimetidine	51481-61-9	D3-Cimetidine	20	20
Ciprofloxacin	85721-33-1	13C3-N15-Ciprofloxacin	100	100
Citalopram	59729-33-8	D6-Citalopram	20	20
Clarithromycin	81103-11-9		20	20
Clopidogrel	113665-84-2	d3-Clopidogrel	20	20
Clopidogrel carboxylic acid	144457-28-3	d4-Clopidogrel Carboxylic Acid	20	20
Clotrimazole	23593-75-1	d5-Clotrimazole	20	20
Codeine	76-57-3	D6-Codeine	50	20
Cotinine	486-56-6	D3-Cotinine	20	20
DEET (N,N-diethyl-m-toluamide)	134-62-3	d7-DEET	20	20
Dehydronifedipine	67035-22-7		20	20
Desmethyldiltiazem		d4-Desmethyldiltiazem	20	20
Diatrizoic acid	117-96-4	D6-Diatrizoic acid	500	500
Diclofenac	15307-86-5	13C6-Diclofenac	20	20
Diltiazem	42399-41-7		20	20
Diphenhydramine	58-73-1		20	20
Doxycycline	564-25-0		100	50
Enalapril	75847-73-3	D5-Enalapril	20	20
Eprosartan	13304-01-4	d3-Eprosartan	20	20
Erythromycin-H2O	114-07-8		20	20
Estrone		13C3-Estrone	50	20
Fenofibric acid	42017-89-0	d6-Fenofibric Acid	20	20
Fluoxetine	54910-89-3	D5-Fluoxetine	20	20
Furosemide	54-31-9	D5-Furosemide	500	100
Gabapentin	60142-96-3	d4-Gabapentin	100	50
Gemfibrozil	25812-30-0	D6-Gemfibrozil	20	20
Hydrochlorothiazide	58-93-5	13C1-D2-Hydrochlorothiazide	500	500
Ibuprofen	15687-27-1	13C6-Ibuprofen	100	100
Iopamidol	60166-93-0	D8-Iopamidol	1000	1000

Irbesartan	138402-11-6	d7-Irbesartan	20	20
Lamotrigine	84057-84-1	13C3-Lamotrigine	50	50
Lamotrigine 2-N-glucuronide	133310-19-7		20	20
Lincomycin	154-21-2		50	20
m-Chlorophenylpiperazine	13078-15-4	d8-m-Chlorophenylpiperazine	20	20
Metformin	657-24-9	D6-Metformin	50	20
Metoprolol	51384-51-1	d7-Metoprolol	50	20
Metronidazole	443-48-1	d4-Metronidazole	100	100
Miconazole	22916-47-8		50	20
Moxifloxacin	151096-09-2	13C-d3-Moxifloxacin	50	20
Mycophenolic acid	24280-93-1	d3-Mycophenolic Acid	100	100
Naproxen	22204-53-1	D3-Naproxen	100	100
Norfluoxetine	126924-38-7	d5-Norfluoxetine	50	20
Norquetiapine			20	20
Norverapamil	67018-85-3		20	20
Ofloxacin	82419-36-1		50	20
Oxazepam	604-75-1	d5-Oxazepam	200	100
Oxycodone	76-42-6	D6-Oxycodone	50	20
Paroxetine	61869-08-7	d6-Paroxetine	50	20
Progesterone		D9-Progesterone	20	20
Propranolol	525-66-6	d7-Propranolol	50	20
Quetiapine	111974-69-7	d8-Quetiapine	20	20
Ramipril	87333-19-5)	d5-Ramipril	20	20
Ramiprilat	87269-97-4	d5-Ramiprilat	20	20
Ranitidine	66357-35-5	D6-Rantidine	50	20
Rosuvastatin	287714-41-4	d6-Rosuvastatin	500	500
Sertraline	79617-96-2	d3-Sertraline	20	20
Sucralose		D6-Sucralose	100	100
Sulfamethoxazole	723-46-6	13C6-Sulfamethoxazole	50	20
Telmisartan	144701-48-4	d3-Telmisartan	20	20
Testosterone		13C3-Testosterone	20	20
Tetracycline	60-54-8		100	100
Theophylline	58-55-9	13C1-15N2-Theophylline	1000	1000
Thiabendazole	148-79-8	D6-Thiabendazole	50	20
Topiramate	97240-79-4	d12-Topiramate	20	20
Trazadone	19794-93-5	d6-Trazodone	20	20
Triamterene	396-01-0	D5-Triamterene	20	20
Triclocarban	101-20-2	13C6-Triclocarban	20	20
Triclosan	3380-34-5	13C12-Triclosan	20	50
Trimethoprim	738-70-5	13C3-Trimethoprim	50	20
Valsartan	137862-53-4	d3-Valsartan	100	50
Venlafaxine	93413-69-5	D6-Venlafaxine	50	50
Verapamil	52-53-9	d7-Verapamil	20	20

## 6. Deliverables

Deliverable	Due Date
6.1. Sampling Protocol	Within one week of Contract Award
6.2. Submission Forms	Within one week of Contract Award
6.3. Sample Containers	As per the quarterly Sampling Plan
6.4. Sample Data Reports	Within six (6) weeks of sample receipt

6.5. Final Data Reports	Within four (4) weeks of acceptance of the Sample Data Report by the Technical Authority
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**7. Format of Deliverables**

7.1. Sample Data Reports

- 7.1.1. The Contractor must deliver the Sample Data Reports in Microsoft Excel .xlsx spreadsheet format, or equivalent compatible format electronically to the Technical Authority.
- 7.1.2. The Sample Data Reports must be separated by sampling site, e.g. WWTP.

7.2. Final Data Report

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

**8. Language of Work**

- 8.1. All written and verbal communication must be in English.

**9. Work Location**

- 9.1. The work will take place at the Contractor’s facilities.

**10. Crown Input**

- 13.1. All sampling activities, equipment, and supplies will be provided by ECCC, except for sample and shipping containers as noted above.
- 13.2. 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 Completed at Contract Award**

<b>Year 1</b>				
<b>Group</b>	<b>Matrix</b>	<b>Firm Price per Sample</b>	<b>Estimated Number of Samples</b>	<b>Total Firm Price per Sample X Estimated Number of Samples</b>
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Deconjugation treatment		42	\$
<b>Year 1</b>				<b>\$</b>
<b>Taxe</b>				
<b>Totale</b>				
<b>Option Year 1</b>				
<b>Group</b>	<b>Matrix</b>	<b>Firm Price per Sample</b>	<b>Estimated Number of Samples</b>	<b>Total</b>

				<b>Firm Price per Sample X Estimated Number of Samples</b>
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
Deconjugation treatment			42	\$
<b>Option Year 1</b>				\$
<b>Taxe</b>				
<b>Totale</b>				
<b>Option Year 2</b>				
<b>Group</b>	<b>Matrix</b>	<b>Firm Price per Sample</b>	<b>Estimated Number of Samples</b>	<b>Total Firm Price per Sample X Estimated Number of Samples</b>
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$



	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Aqueous		24	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Solid		18	\$
	Deconjugation treatment		42	\$
			<b>Option Year 2</b>	\$
			<b>Taxe</b>	
			<b>Totale</b>	