**RETURN BIDS TO:** 

RETOURNER LES SOUMISSIONS À: Bid Receiving - PWGSC / Réception des soumissions - TPSGC

11 Laurier St. / 11, rue Laurier Place du Portage , Phase III Core 0B2 / Noyau 0B2 Gatineau, Québec K1A 0S5 Bid Fax: (819) 997-9776

REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

Proposal To: Public Works and Government Services Canada

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

Proposition aux: Travaux Publics et Services Gouvernementaux Canada

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

**Comments - Commentaires** 

Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Science Procurement Directorate/Direction de l'acquisition de travaux scientifiques 11C1, Phase III Place du Portage 11 Laurier St. / 11, rue Laurier Gatineau, Québec K1A 0S5

Title-Sujet				
Analysis of Wastewater ar	nd Sludge	₃/Biosol¹	ids fo	or Chemical
Substances				
Solicitation No Nº de l'invitat	tion	Date		
K8A45-160866/A		2 Ma	rch 2	2016
Client Reference No Nº de réfé K8A45-16-0866	rence du cl	ient		
GETS Reference No Nº de réfé				
File No Nº de dossier	CCC No./N	N° CC – F	MS NO	O. / Nº VME
075ss.K8A45-160866				
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at – à 2:00 PM				Fuseau horaire Eastern Daylight
on – le 29 March 2016				Time EDT
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F.O.B. – F.A.B		-		
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Name and title of person authorized to sign on behalf of Vendor/Firm

l'entrepreneur (taper ou écrire en caractères d'imprimerie)

Nom et titre de la personne autorisée à signer au nom du fournisseur/de

Date

Telephone No. - N° de telephone Facsimile No. - N° de télécopieur

(type or print)

Signature

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#### **PART 1 - GENERAL INFORMATION**

#### 1.1 Introduction

The bid solicitation is divided into six 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: includes the certifications to be provided; and,
- Part 6 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Statement of Work, and the Basis of Payment.

#### 1.2 Summary

Environment Canada is seeking high quality chemical analysis of a number of substances in raw influent, final effluent, raw sludge and treated biosolids from selected wastewater treatment plants across Canada as part of a monitoring program on the occurrence and fate of chemical substances in municipal wastewater.

Services will be required for a period of two years, with three optional periods of one year each. Services will be delivered to Burlington, Ontario.

The requirement is subject to a preference for Canadian goods and/or services.

This procurement consists of Quality Control, Testing, Inspection and Technical Representative Services which are excluded from the application of the North American Free Trade Agreement (NAFTA) as per Annex 1001.1b-2, Class H and is not listed under the World Trade Organization – Agreement on Government Procurement (WTO-AGP). The procurement is subject to the Agreement on Internal Trade (AIT).

There is no security associated with this requirement.

The Federal Contractors Program (FCP) for employment equity applies to this procurement; see Part 5 - Certifications, Part 7 - Resulting Contract Clauses.

#### 1.3 Debriefings

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

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#### **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 <u>Standard Acquisition Clauses and Conditions Manual</u> (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 <u>2003</u> (2015-07-03)Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

#### 2.2 Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation. Due to the nature of the bid solicitation, bids transmitted by facsimile to PWGSC will not be accepted.

#### 2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than 10 calendar days before the bid closing date. Enquiries received after that time may not be answered.

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

#### 2.4 Applicable Laws

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

#### 2.5 Improvement of Requirement During the Solicitation Period

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least 20 calendar days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

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#### **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 (2 hard copies and 3 electronic copies on 2 USB drives)

Section II: Financial Bid (1 hard copy)

Section III: Certifications (1 hard copy)

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.

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

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

#### Section I: Technical Bid

In their technical bid, Bidders should 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.

#### Section II: Financial Bid

3.1.1 Bidders should submit their financial bid in accordance with the Financial Presentation Sheet below. The total amount of Applicable Taxes and Travel & Living Expenses must be shown separately.

#### 3.1.2 **Maximum Funding**

The maximum funding available for the initial period of the Contract resulting from the bid solicitation is \$800,000.00 (Applicable Taxes extra). This disclosure does not commit Canada to pay the maximum funding available.

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**Section III: Certifications** 

Bidders must submit the certifications required under Part 5.

#### **FINANCIAL PRESENTATION SHEET**

The anticipated sample load for all substances listed in Tables/Groups 1 to 10 for this monitoring program will be 99 wastewater and 75 solids per year per substance; this includes 3 equipment blanks each for water and solids.

Bidders must submit firm, all inclusive unit prices for each element defined below and referenced in Part 4 – Evaluation Procedures and Basis of Selection:

Group		Description	Reference to the Statement of Work
PBDEs	=	polybrominated diphenyl ethers	Table 1
PFCs	=	perfluorinated compounds	Table 2
NPs	=	nonylphenols	Table 3
BPA	=	Bisphenol A	Table 4
TCS	=	Triclosan	Table 4
CAs	=	chlorinated alkanes	Table 5
HFRs	=	halogenated flame retardants	Table 6
OPFRs	=	organophosphorus flame retardants	Table 7
HBCD	=	hexachlorocyclododecane	Table 8
PAHs	=	polycyclic aromatic hydrocarbons	Table 9

<sup>&</sup>quot;All inclusive unit price" must include quality assurance/quality control measures, sample bottles and coolers, and shipping costs to the Canada Centre for Inland Waters in Burlington, Ontario, as applicable.

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The following firm, all inclusive unit prices for the initial period and each option period of the contract:

Description / Group	Initial Period Contract Award - 31 March 2018	Option Period 1 1 April 2018 - 31 March 2019	Option Period 2 1 April 2019 - 31 March 2020	Option Period 3 1 April 2020 - 31 March 2021
Wastewater samples – PBDEs	\$	\$	\$	\$
Wastewater samples – PFCs	\$	\$	\$	\$
Wastewater samples – NPs	\$	\$	\$	\$
Wastewater samples – BPA	\$	\$	\$	\$
Wastewater samples – TCS	\$	\$	\$	\$
Wastewater samples – CAs	\$	\$	\$	\$
Wastewater samples – HFRs	\$	\$	\$	\$
Wastewater samples – OPFRs	\$	\$	\$	\$
Wastewater samples - HBCD	\$	\$	\$	\$
Wastewater samples – Quinoline+PAHs	\$	\$	\$	\$
Sludge/Biosolids samples – PBDEs	\$	\$	\$	\$
Sludge/Biosolids samples – PFCs	\$	\$	\$	\$
Sludge/Biosolids samples – NPs	\$	\$	\$	\$
Sludge/Biosolids samples – BPA	\$	\$	\$	\$
Sludge/Biosolids samples – TCS	\$	\$	\$	\$
Sludge/Biosolids samples - CAs	\$	\$	\$	\$
Sludge/Biosolids samples – HFRs	\$	\$	\$	\$
Sludge/Biosolids samples – OPFRs	\$	\$	\$	\$
Sludge/Biosolids samples – HBCD	\$	\$	\$	\$
Sludge/Biosolids samples – Quinoline+PAHs	\$	\$	\$	\$
Sub-Totals	\$	\$	\$	\$
Sub-Totals	\$ Initial Period and E			\$

## Travel & Living

For budgeting purposes only, the Bidder is requested to submit the estimated cost to Travel to the Canada Centre for Inland Waters, Burlington, Ontario.

Estimated	Cost:	\$			

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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.
- (c) The evaluation team will determine first if there are two or more bids with a valid Canadian Content certification. In that event, the evaluation process will be limited to the bids with the certification; otherwise, all bids will be evaluated. If some of the bids with a valid certification are declared non-responsive, or are withdrawn, and less than two responsive bids with a valid certification remain, the evaluation will continue among those bids with a valid certification. If all bids with a valid certification are subsequently declared non-responsive, or are withdrawn, then all the other bids received will be evaluated.
- (d) In the event that the Bidder fails to submit any supporting documentation pursuant to the mandatory evaluation criteria, the Contracting Authority may request it thereafter in writing, including after the closing date of the bid solicitation. It is mandatory that the Bidder provide the supporting information within three (3) business days of the written request or within such period as specified or agreed to by the Contracting Authority in the written notice to the Bidder.

#### 4.1.1 Technical Evaluation

The following Tables (1 to 10) represent the Groups and desired detection limits against which the Bidder will be evaluated.

Table 1: Polybrominated diphenyl ether (PBDE) flame retardants

Homologue Group	PBDE Congener	Desired detection limit in water (ng/L)	Desired detection limit in solids (ng/g)
Tri-BDE	17 / 25	0.20	0.10
TII-BDE	28 / 33	0.20	0.10
	47	0.20	0.10
Tetra-BDE	49	0.20	0.10
	66	0.20	0.10
	85	0.20	0.10
Penta-BDE	99	0.20	0.10
	100	0.20	0.10
	138	0.20	0.10
Hexa-BDE	153	0.20	0.10
nexa-bDE	154	0.20	0.10
	155	0.20	0.10
Hepta-BDE	183	0.20	0.10
Octa-BDe	203	0.20	0.10
	206	0.20	0.10
Nona-BDE	207	0.20	0.10
	208	0.20	0.10
Deca-BDE	209	2.0	1.0

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Table 2: Perfluorinated compounds (PFCs)

Name	CAS#	Abbreviation	Desired detection limit in water (ng/L)	Desired detection limit in solids (ng/g)
Perfluorobutanoate	375-22-4	PFBA	1.0	0.10
Perfluoropentanoate	2706-90-3	PFPEA	1.0	0.10
Perfluorohexanoate	307-24-4	PFHXA	1.0	0.10
Perfluoroheptanoate	375-85-9	PFHPA	1.0	0.10
Perfluorooctanoate	335-67-1	PFOA	1.0	0.10
Perfluorononanoate	375-95-1	PFNA	1.0	0.10
Perfluorodecanoate	335-76-2	PFDA	1.0	0.10
Perfluorohexanesulfonate	355-46-4	PFHXS	2.0	0.20
Perfluorooctanesulfonate	1763-23-1	PFOS	2.0	0.20

Table 3: Nonylphenol and its ethoxylates

Name	CAS#	Abbreviation	Desired detection limit in water (ng/L)	Desired detection limit in solids (ng/g)
4-nonylphenol	25154-52-3	NP	10	10
4-nonylphenol monoethoxylate		NP1EO	50	50
4-nonylphenol diethoxylate		NP2EO	50	50
Octylphenol		OP	50	50

Table 4: Bisphenol A

Name	CAS#	Abbreviation	Desired detection limit in water (ng/L)	Desired detection limit in solids (ng/g)
Bisphenol A	80-05-7	BPA	2.0	2.0

#### Table 5: Triclosan

Name	CAS#	Abbreviation	Desired detection limit in water (ng/L)	Desired detection limit in solids (ng/g)
Triclosan	3380-34-5	TCS	10	200

Table 6: Chlorinated Alkanes (Paraffins) (CAs or CPs)

Name	Carbon chain	Abbreviation	Desired detection limit in water (ng/L)	Desired detection limit in solids (ng/g)
Short-chain	C <sub>10</sub> to C <sub>13</sub>	SCCPs	1000	1000
Medium-chain	C <sub>14</sub> to C <sub>17</sub>	MCCPs	1000	1000
Long-chain	C <sub>18</sub> to C <sub>20</sub>	LCCPs	500	1000
Total*			500*	1000*

<sup>\*</sup> total must be determined using a separate chromatographic integration rather than a sum of short, medium, and long.

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Table 7: Halogenated Flame Retardants (HFRs)

Name	CAS#	Abbreviation	Desired detection limit in water (ng/L)	Desired detection limit in solids
1,1'-(1,2- ethanediyl)bis(pentabromobenzene)	84852-53-9	DBDPE	10	5.0
2,4,6-Tribromophenylallyl ether	3278-89-5	ATE (TBPAE)	5.0	5.0
Dechlorane plus, anti	135821-74-8	DP anti	2.0	2.0
Dechlorane plus, syn	135821-03-3	DP syn	1.0	2.0
2-ethylhexyl 2,3,4,5- tetrabromobenzoate	183658-27-7	TBB / EHTBB	20	20
bis (2-ethylhexyl) 3,4,5,6- tetrabromophthalate	26040-51-7	TBPH (BEHTBP)	50	20
	3322-93-8	TBECH	100	50

Table 8: Organophosphorus Flame Retardants (OPFRs)

Name	CAS#	Abbreviation	Desired detection limit in water (ng/L)	Desired detection limit in solids (ng/g)
Tris(2-butoxyethyl) phosphate	78-51-3	TBEP	0.50	0.010
Tris(2-chloroisopropyl) phosphate*	13674-84-5	TCPP*	1.0	0.050
Tricresyl phosphate*	1330-78-5	TCrP*	0.50	0.050
Tris(1,3-dichloro-2-propyl) phosphate	13674-87-8	TDCPP	5.0	0.50
Tris(2-ethylhexyl) phosphate	78-42-2	TEHP	0.50	0.050
Triethyl phosphate	78-40-0	TEP	0.50	0.010
Triphenyl phosphate	115-86-6	TPP	1.0	0.050

Table 9: Hexachlorocyclododecane (HBCD)

Name	CAS#	Abbreviation	Desired detection limit in water (ng/L)	Desired detection limit in solids (ng/g)
hexabromocyclododecane	134237-50-6	HBCD alpha	5.0	0.50
hexabromocyclododecane	134237-51-7	HBCD beta	5.0	0.50
hexabromocyclododecane	134237-52-8	HBCD gamma	5.0	0.50

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Table 10: Quinoline and other Polycyclic Aromatic Hydrocarbons (PAHs)

Substance	CAS Number	Desired detection limit in water (ng/L)	Desired detection limit in solids (ng/g)
Acenaphthene	83-32-9	100	5.0
Anthracene	120-12-7	10	5.0
Benzo(a)anthracene	56-66-3	10	5.0
	205-99-2	10	5.0
Benzo(b&j)fluoranthene	205-82-3		
Benzo(k)fluoranthene	207-08-9	10	5.0
Benzo(a)pyrene	50-32-8	10	5.0
Fluoranthene	206-44-0	50	5.0
Fluorene	86-73-7	50	5.0
Indeno(1,2,3-cd)pyrene	193-39-5	10	5.0
Naphthalene	91-20-3	100	5.0
Phenanthrene	85-01-8	50	5.0
Pyrene	129-00-0	20	5.0
Quinoline	91-22-5	200	10

## 4.1.1.1 Mandatory Technical Criteria

Description	Met	Not Met		
The Bidder must provide evidentiary documentation as proof of valid accreditation to ISO 17025, at time of bid closing for the laboratory that will perform the work.				
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. This standard does not specify chemical parameters.				
The Bidder must provide the analytical methods for all compounds listed in Tables 1 to 10 above for both the water and solids matrices, including:  • sample holding times and storage conditions;				
<ul> <li>preparation, extraction and cleanup procedures;</li> </ul>				
•				
<ul> <li>quantification references;</li> </ul>				
criteria for peak identification;				
procedure for analyte quantification;				
·				
·				
	The Bidder must provide evidentiary documentation as proof of valid accreditation to ISO 17025, at time of bid closing for the laboratory that will perform the work.  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. This standard does not specify chemical parameters.  The Bidder must provide the analytical methods for all compounds listed in Tables 1 to 10 above for both the water and solids matrices, including:  sample holding times and storage conditions; preparation, extraction and cleanup procedures; instrument specifications; ions used for identification; quantification references; criteria for peak identification;	The Bidder must provide evidentiary documentation as proof of valid accreditation to ISO 17025, at time of bid closing for the laboratory that will perform the work.  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. This standard does not specify chemical parameters.  The Bidder must provide the analytical methods for all compounds listed in Tables 1 to 10 above for both the water and solids matrices, including:  • sample holding times and storage conditions; • preparation, extraction and cleanup procedures; • instrument specifications; • ions used for identification; • quantification references; • criteria for peak identification; • procedure for analyte quantification; • description of the detection limit employed; • description of the QA/QC system; and,		

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## 4.1.2 Point Rated Technical Criteria

Item	Description	Scoring Methodology	Available Points
R-1	The Bidder should demonstrate experience conducting ultra-trace analysis of all compounds listed in Tables 1 to 10 above in municipal wastewater influent and effluent samples.	The Bidder should provide a summary of the number of wastewater samples analyzed for each compound over the last 24 months.  The Bidder will score 1 point for each compound that has been analyzed in 50 or more samples in that period.	66
R-2	The Bidder should demonstrate experience conducting ultra-trace analysis of all compounds listed in Tables 1 to 10 above in municipal sludge / biosolids samples.	The Bidder should provide a summary of the number of sludge / biosolids samples analyzed for each compound over the last 24 months. The Bidder will score 1 point for each compound that has been analyzed in 50 or more samples in that period.	66
R-3	For each analyte group as denoted by Tables 1 to 10 above, the Bidder should provide a detailed description of how suspended solids in wastewater will be either incorporated into the analysis or removed from the sample prior to extraction.	2 points for each method that removes solids from the sample prior to analysis 3 points for each method that incorporates the solids into the analysis	30
R-4	For each analyte group as denoted by Tables 1 to 10 above, The Bidder should provide a detailed description of how biosolids samples containing 1% to 4% solids will be prepared for extraction.	2 points for each method that separates the solid and liquid phase e.g. centrifuge or decantation  3 points for each method that avoids the need for phase separation e.g. sonication	30
R-5	The Bidder should demonstrate how the analytical methods achieve the detection limits specified in Tables 1 to 10 above and how detection limits were determined.	14 points - Detection limits achieved for ≥70% of substances; detection limit determination described 20 points - Detection limits achieved for all substances; detection limit determination clearly described.	20
R-6	The Bidder should demonstrate the extent of the use of surrogate spikes.	14 points – at least one deuterated or C13 surrogate used per analytical group (each Table is a group)	20
		20 points – all available C13 or deuterated surrogates used per analytical group.	

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Item	Description	Scoring Methodology	Available Points	
R-7	The Bidder should demonstrate the effectiveness of their quality control program as illustrated by control charts for surrogate recoveries in spiked blanks and spiked samples in relevant matrices.	14 points – control charts provided; some analyses not in control 20 points – control charts provided for spiked blanks and spiked samples; all analyses in control	20	
R-8	The Bidder should demonstrate the effectiveness of their quality control program as demonstrated by the results of relevant Performance Evaluation (PE) studies (round-robin studies and/or accreditation programs)	7 points – results of PE studies provided, some failures 10 – results of PE studies provided, all passes	10	
	TOTAL AVAILABLE POINTS			
MINIMUM REQUIRED SCORE (70%)				

#### 4.2 Basis of Selection - Lowest Price

- 4.2.1 To be declared responsive, a bid must:
  - a. comply with all the requirements of the bid solicitation;
  - b. meet all mandatory technical evaluation criteria; and
  - c. obtain the required minimum of 184 points overall for the technical evaluation criteria which are subject to point rating. The rating is performed on a scale of 262 points.
- 4.2.2 A bid must comply with all requirements of the bid solicitation to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

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#### PART 5 - CERTIFICATIONS AND ADDITIONAL INFORMATION

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

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a Contractor in default if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

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

#### 5.1 Certifications Required with the Bid

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

#### 5.1.1 Declaration of Convicted Offences

As applicable, pursuant to subsection Declaration of Convicted Offences of section 01 of the Standard Instructions, the Bidder must provide with its bid, a completed <u>Declaration Form</u> (http://www.tpsgc-pwgsc.gc.ca/ci-if/formulaire-form-eng.html), to be given further consideration in the procurement process.

#### 5.1.2 Additional Certifications Required with the Bid

#### 5.1.2.1 Canadian Content Certification

This procurement is conditionally limited to Canadian goods.

Subject to the evaluation procedures contained in the bid solicitation, bidders acknowledge that only bids with a certification that the good(s) offered are Canadian goods, as defined in clause <u>A3050T</u>, may be considered.

Failure to provide this certification completed with the bid will result in the good(s) offered being treated as non-Canadian goods.

The Bidder certifies that:

() the good(s) offered are Canadian goods as defined in paragraph 1 of clause A3050T.

#### 5.2 Certifications Precedent to Contract Award and Additional Information

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

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#### 5.2.1 Integrity Provisions – List of Names

Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.

Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

#### 5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

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

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

#### 5.2.3 Former Public Servant

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

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#### 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 FPSs 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 <a href="Contracting Policy Notice">Contracting Policy Notice</a>: 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.

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#### PART 6 - RESULTING CONTRACT CLAUSES

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

#### 6.1 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 <u>Standard Acquisition Clauses and Conditions Manual</u> (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 (2015-07-03), General Conditions - Higher Complexity - Services, apply to and form part of the Contract.

#### 6.3 Security Requirements

This contract contains no security requirements.

#### 6.4 Term of Contract

#### 6.4.1 Period of the Contract

The period of the Contract is from 1 April 2016 to 31 March 2018 inclusive

#### 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 three additional one year period(s) under the same conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions as set out in the Basis of Payment.

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

#### 6.5 Authorities

#### 6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

April Campbell
Public Works and Government Services Canada
Acquisitions Branch
Science Procurement Directorate
Place du Portage, Phase III, 11C1
11 rue Laurier
Gatineau, Quebec K1A 0S5

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0,000110110 100000,11

Telephone: 819-956-1111

E-mail: april.campbell@tpsgc-pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

#### 6.5.2 Technical Authority

The Technical Authority for the Contract is: to be determined at contract award.

The Technical Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the 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

To be determined at contract award.

#### 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 <u>Public Service Superannuation Act</u> (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 - Ceiling

For the Work described in Annex A:

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work, as determined in accordance with the Basis of Payment in Annex B, to a ceiling price of \$800,000.00. Customs duties are included and Applicable Taxes are extra.

For the work described at article 9 of the Statement of Work in Annex A:

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work to a limitation of expenditure of \$\_\_\_\_\_. Customs duties are included and Applicable Taxes are extra.

#### 6.7.2 Method of Payment - Multiple Payments

Canada will pay the Contractor upon completion and delivery of services 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. receipts for Travel & Living expenses have been provided and are within the National Joint Council Travel Directive for travelers, as detailed in the Basis of Payment;

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- c. all such documents have been verified by Canada;
- d. the Work delivered has been accepted by Canada.

#### 6.7.3 SACC Manual Clauses

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

#### 6.8 Invoicing Instructions

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

Each invoice must be supported by:

- b. a copy of the release document and any other documents as specified in the Contract;
- c. a copy of the invoices, receipts, vouchers for all direct expenses, and all travel and living expenses.
- 6.8.2 Invoices must be distributed as follows:
  - a. The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.
  - b. One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

The Contractor may submit electronic copies, as applicable.

#### 6.9 Certifications

#### 6.9.1 Compliance

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

#### 6.9.2 Canadian Content

The Contractor warrants that the certification of Canadian Content submitted by the Contractor is accurate and complete, and that the goods, services or both to be provided under the Contract are in accordance with the definition contained in the Canadian Content Definition (clause A3050T).

The Contractor must keep proper records and documentation relating to the origin of the goods, services or both provided to Canada. The Contractor must not, without obtaining before the written consent of the Contracting Authority, dispose of any such records or documentation until the expiration of six (6) years after final payment under the Contract, or until settlement of all outstanding claims and disputes under the Contract, whichever is later. All such records and documentation must at all times during the retention period be open to audit, inspection and examination by the representatives of Canada, who may make copies and take extracts. The Contractor must provide all facilities for such audits, inspections and

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examinations, and must furnish all such information as the representatives of Canada may from time to time require with respect to such records and documentation.

Nothing in this clause must be interpreted as limiting the rights and remedies which Canada may otherwise have pursuant to 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 \_\_\_\_\_\_. (Insert the name of the province or territory as specified by the Bidder in its bid, if applicable.)

#### 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 (2015-07-03) General Conditions Higher Complexity Services;
- (c) Annex A, Statement of Work;
- (d) Annex B, Basis of Payment;
- (e) the Contractor's bid dated \_\_\_\_\_, (insert date of bid).

#### 6.12 Insurance

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

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#### ANNEX A STATEMENT OF WORK Analysis of Wastewater and Sludge/Biosolids for Chemical Substances

#### 1. INTRODUCTION

First established by the *Department of the Environment Act* in 1971, Environment Canada's role is to assess, monitor and protect the environment, and to provide weather and meteorological information to keep Canadians informed and safe.

Environment Canada's acts outline the Department's obligations and authorities to conduct and publish research, monitor and publish environmental indicators, make rules to protect the environment, and consult with partners. Environment Canada administers or shares responsibility for over two dozen Acts addressing issues as diverse as pollution prevention, weather modification, wildlife protection and emergency management.

Water quality is defined in terms of the chemical, physical, and biological content of water. We pay close attention to water quality by monitoring and testing. Water quality is primarily the responsibility of provinces and territories in Canada, but the federal government plays a leading role in scientific research, monitoring and leadership on the development of guidelines for water quality. The Chemicals Management Plan (CMP, www.chemicalsubstances.gc.ca) provides a transparent, systematic, scientifically-based program to assess and manage the risks posed by chemical substances to the health of Canadians and their environment.

#### 2. **BACKGROUND**

Many chemical substances enter the environment via effluent discharges and land application of biosolids from Canadian wastewater treatment plants (WWTPs). Environment Canada (EC) developed a monitoring program to determine the occurrence and fate of these substances during the wastewater treatment process. This program requires high-quality chemical analysis of many chemical substances that may be present at trace levels in wastewater influent, effluent, sludge, and biosolids. The results of this program contribute to sound decisions on the assessment and management of chemical substances in Canada.

#### 3. **OBJECTIVE**

The objective of this work is to obtain high-quality chemical analysis of many substances in raw influent, final effluent, raw sludge and treated biosolids from selected WWTPs in Canada as part of a monitoring program on the occurrence and fate of chemical substances in municipal wastewater.

#### **DEFINITIONS / ACRONYMS** 4.

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". <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>
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

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	3 <sup>rd</sup> Quarter 1 October to 31 December 4 <sup>th</sup> Quarter 1 January to 31 March
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.

#### 5. SCOPE OF WORK

#### 5.1 Summary

The Technical Authority will provide a quarterly sampling plan to the Contractor within one week of contract award and updated on a quarterly basis. The sampling plan will be utilized to determine the quantity and type of sample container and shipping container to be provided by the Contractor, as detailed below.

The Contractor will receive 24-hour equal volume refrigerated composite samples of wastewater and grab samples of solids for 3 consecutive days from approximately 16 Waste Water Treatment Plants (WWTPs) per year in Canada.

Generally, two WWTPs will be sampled per sampling trip, which will take place between April and November of each year. Samples will be shipped (postage paid) by the Technical Authority to the Contractor on Tuesday, Wednesday, and Thursday afternoons for overnight delivery. The maximum number of samples to be shipped per sampling trip will be 12 wastewater and 12 solids samples per substance.

The wastewater monitoring program includes all of the categories of substances on a rotating basis; i.e. not every category will be measured every year.

#### 5.2 Sampling Protocol

The Contractor must provide a sampling protocol for collection of wastewater and solids samples. The sampling protocol must specify the type of container to use for collection of samples for each analytical category, and the required sample volume to achieve the detection limits stipulated in Tables 1 through 10, and any preservation requirements to maintain sample integrity during transit.

#### 5.3 Submission Forms

The Contractor must provide submission forms for collection of wastewater 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

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 Compounds

The Work includes the analysis and reporting of concentrations of trace concentrations of several categories of chemical substances in raw influent, final effluent, raw sludge, and treated biosolids samples. The selected compounds are listed in Tables 1 to 10. The Contractor's analytical methods must achieve Detection Limits (DLs) equal to or lower than those listed in each table for each listed compound in the

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water and solids matrices; or, must achieve the Detection Limits equal to or lower than those identified in the Contractors' proposal.

Table 1: Polybrominated diphenyl ether (PBDE) flame retardants

		Required detection	Required detection
Homologue Group	PBDE Congener	limit in water (ng/L)	limit in solids (ng/g)
Tri-BDE	17 / 25		
HI-BDE	28 / 33		
	47		
Tetra-BDE	49		
	66		
	85		
Penta-BDE	99		
	100		
	138		
Have BDE	153		
Hexa-BDE	154		
	155		
Hepta-BDE	183		
Octa-BDe	203		
	206		
Nona-BDE	207		
	208		
Deca-BDE	209		

Table 2: Perfluorinated compounds (PFCs)

Name	CAS#	Abbreviation	Required detection limit in water (ng/L)	Required detection limit in solids (ng/g)
Perfluorobutanoate	375-22-4	PFBA		
Perfluoropentanoate	2706-90-3	PFPEA		
Perfluorohexanoate	307-24-4	PFHXA		
Perfluoroheptanoate	375-85-9	PFHPA		
Perfluorooctanoate	335-67-1	PFOA		
Perfluorononanoate	375-95-1	PFNA		
Perfluorodecanoate	335-76-2	PFDA		
Perfluorohexanesulfonate	355-46-4	PFHXS		
Perfluorooctanesulfonate	1763-23-1	PFOS		

Table 3: Nonylphenol and its ethoxylates

Name	CAS#	Abbreviation	Required detection limit in water (ng/L)	Required detection limit in solids (ng/g)
4-nonylphenol	25154-52-3	NP		
4-nonylphenol monoethoxylate		NP1EO		
4-nonylphenol diethoxylate		NP2EO		
Octylphenol		OP		

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Table 4: Bisphenol A

Name	CAS#	Abbreviation	Required detection limit in water (ng/L)	Required detection limit in solids (ng/g)
Bisphenol A	80-05-7	BPA		

#### Table 5: Triclosan

Name	CAS#	Abbreviation	Required detection limit in water (ng/L)	Required detection limit in solids (ng/g)
Triclosan	3380-34-5	TCS	, J. ,	( 3-3)

Table 6: Chlorinated Alkanes (Paraffins) (CAs or CPs)

Name	Carbon chain	Abbreviation	Required detection limit in water (ng/L)	Required detection limit in solids (ng/g)
Short-chain	C <sub>10</sub> to C <sub>13</sub>	SCCPs		
Medium-chain	C <sub>14</sub> to C <sub>17</sub>	MCCPs		
Long-chain	C <sub>18</sub> to C <sub>20</sub>	LCCPs		
Total#				

<sup>#</sup> total must be determined using a separate chromatographic integration rather than a sum of short, medium, and long

Table 7: Halogenated Flame Retardants (HFRs)

Name	CAS#	Abbreviation	Required detection limit in water (ng/L)	Required detection limit in solids
1,1'-(1,2- ethanediyl)bis(pentabromobenzene)	84852-53-9	DBDPE		
2,4,6-Tribromophenylallyl ether	3278-89-5	ATE (TBPAE)		
Dechlorane plus, anti	135821-74-8	DP anti		
Dechlorane plus, syn	135821-03-3	DP syn		
2-ethylhexyl 2,3,4,5- tetrabromobenzoate	183658-27-7	TBB / EHTBB		
bis (2-ethylhexyl) 3,4,5,6- tetrabromophthalate	26040-51-7	TBPH (BEHTBP)		
	3322-93-8	TBECH		

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Table 8: Organophosphorus Flame Retardants (OPFRs)

Name	CAS#	Abbreviation	Required detection limit in water (ng/L)	Required detection limit in solids (ng/g)
Tris(2-butoxyethyl) phosphate	78-51-3	TBEP		
Tris(2-chloroisopropyl) phosphate	13674-84-5	TCPP		
Tricresyl phosphate	1330-78-5	TCrP		
Tris(1,3-dichloro-2-propyl) phosphate	13674-87-8	TDCPP		
Tris(2-ethylhexyl) phosphate	78-42-2	TEHP		
Triethyl phosphate	78-40-0	TEP		
Triphenyl phosphate	115-86-6	TPP		

Table 9: Hexachlorocyclododecane (HBCD)

Name	CAS#	Abbreviation	Required detection limit in water (ng/L)	Required detection limit in solids (ng/g)
hexabromocyclododecane	134237-50-6	HBCD alpha		
hexabromocyclododecane	134237-51-7	HBCD beta		
hexabromocyclododecane	134237-52-8	HBCD gamma		

Table 10: Quinoline and other Polycyclic Aromatic Hydrocarbons (PAHs)

Substance	CAS Number	Required detection limit in water (ng/L)	Required detection limit in solids (ng/g)
Acenaphthene	83-32-9		
Anthracene	120-12-7		
Benzo(a)anthracene	56-66-3		
	205-99-2		
Benzo(b&j)fluoranthene	205-82-3		
Benzo(k)fluoranthene	207-08-9		
Benzo(a)pyrene	50-32-8		
Fluoranthene	206-44-0		
Fluorene	86-73-7		
Indeno(1,2,3-cd)pyrene	193-39-5		
Naphthalene	91-20-3		
Phenanthrene	85-01-8		
Pyrene	129-00-0		
Quinoline	91-22-5		

The Contractor must communicate any anomalous situations with respect to sample integrity or analytical challenges to the Technical Authority by email within 3 business days of discovering such situation.

#### 5.6 Storage and Disposal

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

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

Samples are to be analyzed 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.

Field duplicates and equipment blanks submitted by EC will be considered as samples. Method blanks, spiked blanks, and laboratory replicate analyses will be conducted as part of the Contractor's Quality Assurance/Quality Control (QA/QC) program and are not considered as samples submitted.

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.

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

#### 5.8 Reports

Sample submittal confirmation must be provided electronically to the Technical Authority within five business days of sample receipt.

#### Sample Data Reports

Sample Data reports must be delivered to the Technical Authority within six (6) weeks following receipt of samples. Reports must include the following:

- · concentrations of each analyte in the samples;
- concentrations of each analyte in the method blank;
- per cent recoveries in spiked blanks;
- the detection limit for each analyte; and,
- percent recovery of surrogate spikes.

Any problems with samples or data, including corrective actions taken, resolutions, and explanation of flagged data must be documented with the data reports.

#### Final Reports

The final report will include 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.

#### 6. TECHNICAL ENVIRONMENT

Data reports must be delivered in spreadsheet format, Microsoft Excel or equivalent compatible format. Data reports must be separated by sampling site, i.e. WWTP. Final data reports must be delivered in PDF

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format including a cover letter signed by the analyst in Microsoft Word. Reports should be submitted electronically to the Technical Authority.

#### 7. LANGUAGE OF WORK

All written and verbal communication will be in English.

#### 8. DELIVERABLES

The deliverables from this Work will be the analytical results, including QA/QC reports.

Sampling protocol
Submission forms
Sample containers
Sample Data Reports
Within one week of contract award
within one week of contract award
as per the quarterly sampling plan
within six weeks of sample receipt

Final Report within four weeks of Sample Data Report

#### 9. WORK LOCATION / TRAVEL

The work will take place at the Contractor's facilities. The Contractor's representative may be required to travel to the Canada Centre for Inland Waters, 867 Lakeshore Road, Burlington ON annually to provide updates and present findings, including any technical issues.

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## Appendix 1 to Annex A

# QUARTERLY SAMPLING PLAN Wastewater and Sludge/Biosolids Analysis for Chemical Substances

Quarter	: <u></u>	<u>_</u> .		Contract:	

Sample Number	Anticipated Sample Retrieved Dated	Estimated Date Sample Shipped to Contractor	Matrix	Description	Required Analyses	Delivery Date for Results

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## ANNEX B BASIS OF PAYMENT

"All inclusive unit price" must include quality assurance/quality control measures, sample bottles and coolers, and shipping costs to the Canada Centre for Inland Waters in Burlington, Ontario, as applicable. It will not include Travel & Living expenses.

#### 1. Analysis

The following firm, all inclusive unit prices for the initial period and each option period of the contract:

Description	Initial Period 1 April 2016 - 31 March 2018	Option Period 1 1 April 2018 - 31 March 2019	Option Period 2 1 April 2019 - 31 March 2020	Option Period 3 1 April 2020 - 31 March 2021
Wastewater samples – PBDEs	\$	\$	\$	\$
Wastewater samples – PFCs	\$	\$	\$	\$
Wastewater samples – NPs	\$	\$	\$	\$
Wastewater samples – BPA	\$	\$	\$	\$
Wastewater samples – TCS	\$	\$	\$	\$
Wastewater samples – CAs	\$	\$	\$	\$
Wastewater samples – HFRs	\$	\$	\$	\$
Wastewater samples – OPFRs	\$	\$	\$	\$
Wastewater samples - HBCD	\$	\$	\$	\$
Wastewater samples – Quinoline+PAHs	\$	\$	\$	\$
Sludge/Biosolids samples – PBDEs	\$	\$	\$	\$
Sludge/Biosolids samples – PFCs	\$	\$	\$	\$
Sludge/Biosolids samples – NPs	\$	\$	\$	\$
Sludge/Biosolids samples – BPA	\$	\$	\$	\$
Sludge/Biosolids samples – TCS	\$	\$	\$	\$
Sludge/Biosolids samples – CAs	\$	\$	\$	\$
Sludge/Biosolids samples – HFRs	\$	\$	\$	\$
Sludge/Biosolids samples – OPFRs	\$	\$	\$	\$
Sludge/Biosolids samples – HBCD	\$	\$	\$	\$
Sludge/Biosolids samples – Quinoline+PAHs	\$	\$	\$	\$

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#### 2. Travel & Living Expenses

The Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the National Joint Council Travel Directive (http://www.njc-cnm.gc.ca/directive/travel-voyage/std-dv-a3-eng.php), and with the other provisions of the directive referring to "travellers", rather than those referring to "employees".

All travel must have prior authorization of the Technical Authority.

All payments are sub	ject to government audit.
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oayr	ments are subject to government audit.	Estimated Cost: \$
3.	TOTAL COST TO A LIMITATION OF EXPENDITURE:	\$