



ADVANCE CONTRACT AWARD NOTICE (ACAN)

Title: National and Targeted Biomonitoring of Perfluoroalkyl Substances (PFAS) in Biobanked Blood Samples

Solicitation Number: 1000238781

1. The Purpose and Explanation of an ACAN

An Advance Contract Award Notice (ACAN) allows Health Canada to post a notice for no less than fifteen (15) calendar days, indicating to the supplier community that a goods, services or construction contract will be awarded to a pre-identified contractor. If no other supplier submits, on or before the closing date, a Statement of Capabilities that meets the minimum requirements identified in the ACAN, the Contracting Authority may then proceed to award a contract to the pre-identified contractor.

2. Rights of Suppliers

Suppliers who consider themselves fully qualified and available to provide the services or goods described in this ACAN may submit a Statement of Capabilities demonstrating how they meet the advertised requirement. This Statement of Capabilities must be provided via e-mail only to the contact person identified in Section 12 of the Notice on or before the closing date and time of the Notice. If the Bidder can clearly demonstrate they possess the required capabilities, the requirement will be opened to electronic or traditional bidding processes.

3. Proposed Contractor

SGS AXYS Analytical Services Ltd
2045 Mills Road West Sidney BC V8L 5X2

4. Definition of Requirements or Expected Results

Biomonitoring, the direct measure of all sources of exposure, is the gold standard of monitoring and is a core element of chemicals management. Human biomonitoring data informs all phases of chemicals management, from risk assessment to risk management, program performance indicators, and public health decision making.

Perfluoroalkyl substances (PFAS) are a class of approximately 5000 chemicals with heat, oil and repellant properties. They are found in a wide range of consumer products including cookware, food packaging, and stain and water repellant fabrics. Data are limited on exposure levels and health effects in Canadians, especially vulnerable populations. These chemicals do not break down easily, and are widely found in the environment and in humans. Studies have shown that exposure to certain PFAS cause health effects, including effects on the immune and endocrine systems.

Identifying exposure levels to multiple PFAS of interest and their potential associations with endocrine effects or immune function would address an important gap in scientific understanding and contribute to policy guidelines for these chemicals.

The work described in the requirement will provide necessary data to address this data gap by measuring 40 PFAS of interest (Table 1) in plasma/serum biospecimens from two Canadian biobanks. Biomonitoring of this important chemical class in these stored samples is cost effective, timely and forward-looking strategy. Data will support Health Canada's risk assessment and risk management activities under the chemicals management plan, as well as Health Canada's obligation to undertake research into endocrine disrupting substances under the Canadian Environmental Protection Act, 1999.

Table 1: Selected PFAS of interest

<i>Abbreviation</i>	<i>Name - Acid Form</i>	<i>Limit of Detection (µg/L)</i>
Perfluoroalkyl carboxylates		
PFBA	Perfluorobutanoic acid	1.6
PFPeA	Perfluoropentanoic acid	0.4
PFHxA	Perfluorohexanoic acid	0.4
PFHpA	Perfluoroheptanoic acid	0.4
PFOA	Perfluorooctanoic acid	0.4
PFNA	Perfluorononanoic acid	0.4
PFDA	Perfluorodecanoic acid	0.4
PFUnA	Perfluoroundecanoic acid	0.4
PFDoA	Perfluorododecanoic acid	0.4
PFTTrDA	Perfluorotridecanoic acid	0.4
PFTeDA	Perfluorotetradecanoic acid	0.4
Perfluoroalkyl sulfonates		
PFBS	Perfluorobutanesulfonic acid	0.4
PFPeS	Perfluoropentanesulfonic acid	0.4
PFHxS	Perfluorohexanesulfonic acid	0.4
PFHpS	Perfluoroheptanesulfonic acid	0.4
PFOS	Perfluorooctanesulfonic acid	0.4
PFNS	Perfluorononanesulfonic acid	0.4
PFDS	Perfluorodecanesulfonic acid	0.4
PFDoS	Perfluorododecanesulfonic acid	0.4
Fluorotelomer sulfonates		
4:2 FTS	4:2 fluorotelomersulfonic acid	1.6
6:2 FTS	6:2 fluorotelomersulfonic acid	1.6
8:2 FTS	8:2 fluorotelomersulfonic acid	1.6
Fluorotelomer carboxylates		
3:3 FTCA	3:3 perfluorohexanoic acid	1.6
5:3 FTCA	5:3 perfluorooctanoic acid	10
7:3 FTCA	7:3 perfluorodecanoic acid	10
Perfluorooctane sulfonamides		
PFOSA	Perfluorooctanesulfonamide	0.4
N-MeFOSA	N-Methylperfluorooctanesulfonamide	0.4
N-EtFOSA	N-Ethylperfluorooctanesulfonamide	0.4
Perfluorooctane sulfonamidoacetic acids		
N-MeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid	0.4
N-EtFOSAA	N-Ethylperfluorooctanesulfonamidoacetic acid	0.4

Perfluorooctane sulfonamide ethanols		
N-MeFOSE	N-Methylperfluorooctanesulfonamidoethanol	4
N-EtFOSE	N-Ethylperfluorooctanesulfonamidoethanol	4
Per- and polyfluoroether carboxylates		
HFPO-DA (GenX)	2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)propanoic acid	1.6
ADONA	Dodecafluoro-3H-4,8-dioxanonanoic acid	1.6
NFDHA	Perfluoro-3,6-dioxaheptanoic acid	0.8
PFMPA	Perfluoro-3-methoxypropanoic acid	0.4
PFMBA	Perfluoro-4-methoxybutanoic acid	0.4
Ether sulfonates		
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	1.6
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	1.6
PFEESA	Perfluoro(2-ethoxyethane)sulfonic acid	0.4

5. Minimum Requirements

Any interested supplier must demonstrate by way of a Statement of Capabilities that it meets the following minimum requirements:

- a) The supplier must demonstrate they have the necessary experienced staff, equipment and laboratory methods to measure the 40 PFAS compounds specified in table 1.
- b) The supplier must have the capacity to deliver laboratory results for analysis of the 40 listed PFAS in at least 291 human serum samples by March 31, 2022.
- c) The supplier must have the capacity to deliver laboratory results for analysis of the 40 listed PFAS in at least 3000 human plasma samples by March 31, 2023.
- d) The supplier must have accreditation from an internationally recognized accreditation body (e.g. ISO, CALA) which includes in its scope the analysis of all 40 listed (Table 1) PFAS in human plasma/serum.
- e) The supplier must be able to measure the 40 PFAS at (or below) the stated limits of detection in human plasma in sample volumes <500 µL.
- f) The supplier must be able to perform this work in Canada (as per the policies of the biobank providing the samples).
- g) The supplier must demonstrate experience analyzing these compounds in large-scale (1000 participants or more) human biomonitoring projects
- h) The supplier must demonstrate the capacity to meet the proposed work requirements by March 31st, 2022.

6. Reason for Non-Competitive Award

6(d): only one person or firm is capable of performing the contract

7. Applicable trade Agreements and Justification for Limited Tendering or the Procurement Strategy for Aboriginal Business

- World Trade Organization–Agreement on Government Procurement (WTO-GPA)
- Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)
- Canada-European Union Comprehensive Economic and Trade Agreement (CETA)
- Canada-United States-Mexico Agreement (CUSMA)
- Canadian Free Trade Agreement (CFTA)
- Canada–Ukraine Free Trade Agreement
- Canada-Chile FTA
- Canada-Colombia FTA
- Canada–Honduras FTA
- Canada-Panama FTA
- Canada-Korea FTA
- Canada–Peru Free Trade Agreement

8. Ownership of Intellectual Property

There will be no intellectual property in the resulting contract

9. Period of the Proposed Contract

The contract period shall be from date of contract award until July 15, 2022 with one (1) one-year option period

10. Estimated Value of the Proposed Contract

The total estimated value of the proposed contract should not exceed \$1,327,622.31, including travel and living expenses (if applicable), and all applicable taxes."

11. Closing Date and Time

The Closing Date and Time for accepting Statements of Capabilities is January 10, 2022 at 2:00pm (EST)

12. Contact Person

All enquiries must be addressed by e-mail to:

Name: Sami Nouh

E-Mail: sami.nouh@hc-sc.gc.ca