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

### Solicitation Number: 1000234792

## 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

Institut national de santé publique du Québec - Centre de toxicologie du Québec (INSPQ-CTQ)

LABORATOIRE DE TOXICOLOGIE, Centre de toxicologie du Québec / INSPQ 945, avenue Wolfe, 4e étage, Québec (QC), Canada, G1V 5B3

### 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.

# Canada

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 nine PFAS of interest (Table 1) in plasma biospecimens from two different 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.

PFAS	Acronym	Detection Limit (µg/L)
Perfluorooctanoic acid	PFOA	0.066
Perfluorooctane sulfonate	PFOS	0.430
Perfluorohexane sulfonate	PFHxS	0.063
Perfluorononanoic acid	PFNA	0.130
Perfluorodecanoic acid	PFDA	0.092
Perfluorobutanoic acid	PFBA	0.075
Perfluoroundecanoic acid	PFUDA	0.120
Perfluorobutane sulfonate	PFBS	0.066
Perfluorohexanoic acid	PFHxA	0.084

## Table 1: Selected PFAS of interest

# 5. Minimum Requirements

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

- 1. The supplier must demonstrate they have the necessary experienced staff, equipment and laboratory methods to measure the 9 PFAS compounds specified in table 1.
- 2. The supplier must have the capacity to deliver laboratory results for analysis of the nine (9) listed PFAS in at least 3000 human plasma samples by March 31, 2022.
- 3. The supplier must have accreditation from an internationally recognized accreditation body (e.g. ISO, CALA) which includes in its scope the analysis of all nine (9) listed (Table 1) PFAS in human plasma.
- 4. The supplier must be able to measure PFAS at (or below) the stated limits of detection in human plasma in sample volumes  $< 800 \ \mu$ L.
- 5. The supplier must be able to perform this work in Canada (as per the policies of the biobanks providing the samples).

- 6. The supplier must demonstrate capacity to deliver results comparable to those from the Canadian Health Measures Survey Cycles 5 & 6, to ensure that the biomonitoring results can be generalised and compared with nationally representative results.
- 7. The supplier must demonstrate experience acting as a reference lab for biomonitoring studies, including participation in at least one large-scale (1000 participants or more) Canadian human biomonitoring study (e.g. Canadian Health Measures Survey, Integrated Research Network in Perinatality of Quebec and Eastern Ontario 3D Study)
- 8. The supplier must have experience handling samples provided by biobanks (receiving samples, tracking samples, appropriate storage, recording number of freeze thaw cycles, and returning unused sample volumes if required)
- 9. 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

This procurement is subject to the following:

- 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

# 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 three (3) one-year option periods

# **10. Estimated Value of the Proposed Contract**

The total estimated value of the proposed contract should not exceed \$1,634,000.00, 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 November 1, 2021 at 3:00pm EDT

## 12. Contact Person

All enquiries must be addressed by e-mail to:

Name: Sami Nouh E-Mail: <u>sami.nouh@hc-sc.gc.ca</u>