



Materiel and Procurement Services | Services du matériel et des acquisitions
Fisheries and Oceans Canada | Pêches et Océans Canada
301 Bishop Drive | 301 promenade Bishop
Fredericton, NB E3C 2M6

15 November 2023

30005112

TITLE: Arctic Phytoplankton and Ice Algae Taxonomic Analysis

1. Advance Contract Award Notice (ACAN)

An ACAN is a public notice indicating to the supplier community that a department or agency intends to award a contract for goods, services or construction to a pre-identified supplier, thereby allowing other suppliers to signal their interest in bidding, by submitting a statement of capabilities. If no supplier submits a statement of capabilities that meets the requirements set out in the ACAN, on or before the closing date stated in the ACAN, the contracting officer may then proceed with the award to the pre-identified supplier.

2. Definition of the requirement

The Department of Fisheries and Oceans Canada has a requirement to analyze Arctic sea ice and water column samples for taxonomic identification of ice algae and phytoplankton species. The taxonomic analysis will include potentially harmful algal cells and will be conducted to the level of species whenever possible.

The work will involve the following:

2.1 Scope of Work

Contractor must analyze up to a maximum of 100 samples/year. The sea ice and phytoplankton samples (20-250 ml) are preserved with acidic lugol solution and stored at room temperature. Each sample will be sub-sampled, settled and analyzed according to standard taxonomic protocols using an inverted microscope (400X magnification). Original count data and final concentrations (cells per L) will be provided.

Samples will be shipped from the Marine Productivity Laboratory, Freshwater Institute Winnipeg, to the Contractor. All analyses will be completed by a phytoplankton taxonomic expert. Marine Productivity laboratory will provide a list detailing which samples are to be analyzed. Marine productivity will clearly label all samples with a sample name. The contractor will provide final data corresponding to same sample names.

2.2 Tasks and Deliverables

2.2.1 Contractor must process and analyze preserved taxonomy samples according to standard protocols for Arctic ice algal and phytoplankton analyses.

2.2.2 Contractor must provide raw and final data for:

- i. each species (vegetative, empty or cyst) identified

- ii. unidentified species grouped by genus and cell size
- iii. major cell groups (e.g. pennate and centric diatoms).

2.2.3 Contractor must provide details of subsampling and counting protocols.

2.2.4 Contractor must inform Marine Productivity Laboratory if sample counts are hindered by any confounding factors.

2.2.5 Raw and final data for each sample in electronic format. (I.e. excel file).

2.3 Contractor Responsibilities

The contractor will provide the workspace, and laboratory equipment and materials necessary for the completion of scientifically defensible Arctic marine phytoplankton and ice algae cell identification and counts. In particular, the contractor will provide:

2.3.1 Hydro-Bios settling chambers and settling columns of a variety of sizes (5, 10, 25, 50 and 100 ml) to adapt for sample conditions; Hydro-Bios bottom glass and key, and rounded glass covers for the Hydro-Bios settling chambers;

2.3.2 Pre-calibrated pipettes 100 µl - 5 ml, and high-precision volumetric measurements for samples of up to 100 ml;

2.3.3 An inverted microscope with 100X, 200X, and 400X magnification, with phase-contrast and differential interference contrast, with size measurement capability;

2.3.4 A digital camera adapted to the inverted microscope; and

2.3.5 Specialized taxonomic documentation and references for the identification of ice algae and marine phytoplankton in the Canadian Arctic.

3. Criteria for assessment of the Statement of Capabilities (Minimum Essential Requirements)

Any interested supplier must demonstrate by way of a statement of capabilities that it meets the following requirements:

3.1 The contractor must have a certification from a recognized institution in phytoplankton taxonomy.

3.2 The contractor must have a minimum of 10 years' experience in taxonomic analysis of marine phytoplankton and ice algae from the Canadian Arctic.

3.3 The contractor must have specialized training in the identification of taxa of phytoplankton and ice algae (diatoms, dinoflagellates and flagellate groups including Coccolithophorids, Prasinophytes, Cryptophytes, Euglenophytes), and experience identifying these taxa from the Arctic including the Beaufort Sea, Baffin Bay, the Canadian Archipelago and Hudson Bay.

3.4 The contractor must have extensive (> 5 years) experience identifying harmful algal species in the Atlantic and Arctic Oceans.

3.5 The contractor must be familiar with the taxonomic identification of samples preserved in acidic lugol's solution and is able to identify phytoplankton or ice algae cells preserved in this manner.

4. Applicability of the trade agreement(s) to the procurement

This procurement is subject to the following trade agreement(s):

- Canadian Free Trade Agreement (CFTA)
- Canada-Chile Free Trade Agreement (CCFTA)
- Canada-Colombia Free Trade Agreement
- Canada-Honduras Free Trade Agreement
- Canada-Korea Free Trade Agreement
- Canada-Panama Free Trade Agreement
- Canada-Peru Free Trade Agreement (CPFTA)

5. Justification for the Pre-Identified Supplier

The client advised they are not aware of any other laboratory in Canada able to fulfill these requirements. This level of excellence is necessary to ensure our results are reliable and comparable nationally and internationally with other government agencies.

6. Government Contracts Regulations Exception(s)

The following exception(s) to the Government Contracts Regulations is (are) invoked for this procurement under subsection 6(d) - only one person is capable of performing the work.

7. Period of the proposed contract or delivery date

The proposed contract is from date of contract award to March 31, 2024, with the option to extend the term of the Contract by up to four (4) additional one (1) year period(s) under the same conditions.

8. Cost estimate of the proposed contract

The estimated value of the contract, including option(s), is \$215,000.00, (GST/HST extra).

9. Name and address of the pre-identified supplier

Sylvie Lessard Enr
295 Rang 6
Ste Anne De La Rochelle, QC J0E 2B0

10. Suppliers' right to submit a statement of capabilities

Suppliers who consider themselves fully qualified and available to provide the goods, services or construction services described in the ACAN may submit a statement of capabilities in writing to the contact person identified in this notice on or before the closing date of this notice. The statement of capabilities must clearly demonstrate how the supplier meets the advertised requirements.

11. Closing date for a submission of a statement of capabilities

The closing date and time for accepting statements of capabilities is **November 30, 2023 at 2:00 p.m. AST.**

12. Inquiries and submission of statements of capabilities

Inquiries and statements of capabilities are to be directed to:

Jackie Longmire
Contracting Officer
Fisheries and Oceans Canada
Material and Procurement Services
301 Bishop Drive
Fredericton, NB, E3C 2M6
Tel: (506) 452-3676
Email: DFO.tenders-soumissions.MPO@dfo-mpo.gc.ca;
CC : Jackie.Longmire@dfo-mpo.gc.ca