

## 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

Environment Canada has a requirement for a laboratory testing contract to analyze collected filter samples for anions, cations, organics, and metals to a high degree of accuracy and precision and providing support for the analysis of the results of the Atlantic PM<sub>1</sub> study.

Outlined below are the necessary requirements for the filter analyses.

### **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:

All equipment used in analyses must be in good repair with service and preventative maintenance up to date. NIST traceable anion and cation standards must be used for generating calibration curves and for recovery tests. Turn-around time for results must be 1-2 months from receiving filter samples. The required levels of detection are stated below and the supplier must specify in their statement of capabilities and procedures how they will meet these criteria for each constituent.

#### *Total Particulate mass:*

Filters (47 mm Teflon) must be pre-weighed in accordance with the USEPA protocol for the determination of ambient PM<sub>2.5</sub> mass concentration using filter based sampling systems. As we are conducting studies in rural environments the analyses must be capable of measuring low mass concentrations, detection limits of 0.05 µg m<sup>-3</sup> are necessary. Contract is to include analysis for 36 Teflon filters (including 15 blanks).

#### *Particulate Organics (OC/EC):*

Organic Carbon (OC) and Elemental Carbon (EC) analysis to be conducted on 47-mm quartz filter samples. Detection limits of  $0.2 \mu\text{g m}^{-3}$  are necessary. Contract is to include analysis for 36 quartz filters (including 15 blanks).

*Anions and Cations:*

Anions and cations need to be extracted from Teflon filter samples. The extraction must use as little water as possible in order to obtain valuable data, without diluting the sample. The PM filter extraction solutions must be analyzed to give the separation of six anion species (with the necessary level of detection in  $\mu\text{g}$  given for each):  $\text{F}^-$  (0.0001),  $\text{SO}_4^{2-}$  (0.001),  $\text{Cl}^-$  (0.01),  $\text{HPO}_4^{2-}$  (0.01),  $\text{BR}^-$  (0.05),  $\text{NO}_3^-$  (0.05) and five cation species:  $\text{K}^+$  (0.001),  $\text{NH}_4^+$  (0.001),  $\text{Mg}^{2+}$  (0.01),  $\text{Na}^+$  (0.02), and  $\text{Ca}^{2+}$  (0.2). Contract is to include analysis for 200 filters (including 32 blanks).

*Metals:*

Particulate matter elements should be extracted from the Teflon filters in the same way as done for anions and cations. The solution would then need to undergo acid digestion for total elements. The elements we are looking for (with the necessary level of detection in  $\text{pg m}^{-3}$  for each) are:  $^{27}\text{Al}$  (26.25),  $^{47}\text{Ti}$  (3.75),  $^{50}\text{Sn}$  (3.75),  $^{51}\text{V}$  (2.5),  $^{52}\text{Cr}$  (2.5),  $^{55}\text{Mn}$  (2.5),  $^{56}\text{Fe}$  (45),  $^{59}\text{Co}$  (2.5),  $^{60}\text{Ni}$  (2.5),  $^{65}\text{Cu}$  (5),  $^{66}\text{Zn}$  (3.75),  $^{75}\text{As}$  (2.5),  $^{82}\text{Se}$  (6.25),  $^{107}\text{Ag}$  (2.5),  $^{111}\text{Cd}$  (2.5),  $^{121}\text{Sb}$  (12.5),  $^{137}\text{Ba}$  (3.75),  $^{140}\text{Ce}$  (2.5),  $^{208}\text{Pb}$  (2.5) and  $^{238}\text{U}$  (2.5). Contract is to include analysis for 36 Teflon filters (including 15 blanks).

### **3. Justification for the Pre-Identified Supplier**

The identified supplier has proven that they can meet our specifications and deliver quality data to be used in our study. Also, all filter extracts must be stored at  $4^\circ\text{C}$  until ready for analyses. This may limit the analyzing laboratory's location as they are to be picked up from the Air Quality Development – Atlantic laboratory in Dartmouth, NS. The pre-identified supplier is within a travel distance that makes the filter storage temperature possible during entire transit time.

### **4. Government Contracts Regulations Exception(s)**

The following exception to the *Government Contracts Regulations* is invoked for this procurement under subsection 6 (d): Only one Contractor is capable of performing the contract.

## **5. Liability**

Without restricting the terms and conditions of the Contract, it is hereby understood and agreed that, except to the extent caused by or due to Canada, Canada shall not be liable for any losses, claims, damages, or expenses relating to any injury, disease, illness, disability or death of the Contractor or any employee, agent or representative of the Contractor caused or alleged to be caused as a result of performing the Contract. The Contractor agrees to fully protect and indemnify Canada and not to make any claims or demands against Canada in respect of any of the foregoing contingencies.

## **6. Period of the proposed contract**

The proposed contract is for a period of contract award date to March 31, 2016, with two additional one year option periods.

## **7. Cost estimate of the proposed contract**

The estimated value of the contract is \$25,000.00 for the period ending March 31, 2016, and \$25,000.00 for each option period, if exercised by Environment Canada. (GST/HST extra).

## **8. Name and address of the pre-identified supplier**

Dalhousie University  
6299 South Street  
Halifax, Nova Scotia  
B3H 4R2

## **9. 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.

Environment Canada  
Advance Contract Award Notice (ACAN)  
Air Charter Services from Halifax, NS to Sable Island, NS

**10. Inquiries and submission of statements of capabilities**

Inquiries and statements of capabilities are to be directed to:

Carole Daigle – Contracting Officer  
45 Alderney Drive  
Dartmouth, NS  
B2Y 2N6

Telephone: 902-426-0935  
Email: [carole.daigle@canada.ca](mailto:carole.daigle@canada.ca)

**11. Closing date and time:**

February 9, 2016 at 14:00 AST