

## 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 0A1 / Noyau 0A1  
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**

<b>Title - Sujet</b> AEROSOL MONITORS	
<b>Solicitation No. - N° de l'invitation</b> W3931-130097/B	<b>Date</b> 2012-11-22
<b>Client Reference No. - N° de référence du client</b> W3931-130097	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$PV-927-61592	
<b>File No. - N° de dossier</b> pv927.W3931-130097	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2013-01-02</b>	
<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Standard Time EST	
<b>F.O.B. - F.A.B.</b> Specified Herein - Précisé dans les présentes <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input checked="" type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Walkowiak, Peter	<b>Buyer Id - Id de l'acheteur</b> pv927
<b>Telephone No. - N° de téléphone</b> (819) 956-7534 ( )	<b>FAX No. - N° de FAX</b> (819) 956-3814
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> DEPARTMENT OF NATIONAL DEFENCE 1745 ALTA VISTA DR., RM 369-A ATTN: MR. JAMES CAMPBELL OTTAWA Ontario K1A0K6 Canada	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

**Vendor/Firm Name and Address**

**Raison sociale et adresse du  
fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**

Scientific, Medical and Photographic Division / Division de  
l'équipement scientifique, des produits photographiques et  
pharmaceutiques  
11 Laurier St./ 11 rue, Laurier  
6B1, Place du Portage  
Gatineau, Québec K1A 0S5

<b>Delivery Required - Livraison exigée</b> See Herein	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

**This bid solicitation cancels and supersedes previous bid solicitation number W3931-130097/A dated 2012-09-24 with a closing of 2012-11-05 at 02:00 pm.**

## **TABLE OF CONTENTS**

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

1. Security Requirement
2. Requirement
3. Debriefings

### **PART 2 - BIDDER INSTRUCTIONS**

1. Standard Instructions, Clauses and Conditions
2. Submission of Bids
3. Enquiries - Bid Solicitation
4. Applicable Laws

### **PART 3 - BID PREPARATION INSTRUCTIONS**

1. Bid Preparation Instructions

### **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

1. Evaluation Procedures
2. Basis of Selection
3. Security Requirement

### **PART 5 - CERTIFICATIONS**

1. Mandatory Certifications Required Precedent to Contract Award
2. Certifications Required with the Bid

### **PART 6 - RESULTING CONTRACT CLAUSES**

1. Security Requirement
2. Requirement
3. Standard Clauses and Conditions
4. Term of Contract
5. Authorities
6. Payment
7. Invoicing Instructions
8. Certifications
9. Applicable Laws
10. Priority of Documents
11. SACC Manual Clauses
12. Shipping Instructions - Delivery at Destination

### **List of Annexes:**

Annex A          Mandatory Specifications

## **PART 1 - GENERAL INFORMATION**

### **1. Security Requirement**

There is no security requirement associated with the requirement.

### **2. Statement of Work**

The Contractor must perform the Work in accordance with the Statement of Work at Annex "A".

#### **2.1 Optional Requirement**

The Contractor grants to Canada the irrevocable option to purchase up to an additional six (6) aerosol dust monitors plus accessories within thirty-six (36) months from date of award, under the same terms and conditions and at the prices stated in the contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

### **3. Debriefings**

After contract award, bidders may request a debriefing on the results of the bid solicitation. Bidders should make the request to the Contracting Authority within 15 working days of receipt of notification that their bid was unsuccessful. The debriefing may be provided in writing, by telephone or in person.

## **PART 2 - BIDDER INSTRUCTIONS**

### **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 Standard Acquisition Clauses and Conditions Manual (<http://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 2003 (2012-11-19) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

### **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.

### **3. Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority no later than ten (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 questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

### **4. Applicable Laws**

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

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.

## **PART 3 - BID PREPARATION INSTRUCTIONS**

### **1. Bid Preparation Instructions**

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I:      Technical Bid (two (2) copies)  
Section II:     Financial Bid (one (1) copy)  
Section III:    Certifications (one (1) copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

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 Policy on Green Procurement.

(<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 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.

## 1.1 Section I: Technical Bid

The following applies to the Requirement and bidders must provide the following information in the bid where applicable:

### 1.1.1 Product(s) Offered

The Bidder must indicate the make and model number of the products offered (identify specific components which make up the system):

Name of Manufacturer: \_\_\_\_\_

Model/Part Number: \_\_\_\_\_

Literature attached: Yes (\_\_\_\_\_) No (\_\_\_\_\_)

### 1.1.2 Point of Manufacture/Shipping

The Bidder must state the point of manufacture/shipping of goods or where service is to be performed:

Location: \_\_\_\_\_

Postal Code: \_\_\_\_\_

### 1.1.3 Delivery

While delivery must be no later than March 30, 2013, the best delivery that could be offered by the Bidder is \_\_\_\_\_.

### 1.1.4 Contacts

Bidders are requested to provide the following: Information pertaining to Article 5.4 Contractor Representatives under Part 6, Resulting Contract Clauses.

## 1.2 Section II: Financial Bid

The bidder must quote a firm unit price, all inclusive of supply and manuals, DDP (Ottawa, Ontario), the Goods and Services Tax (GST) and/or the Harmonized Sales Tax (HST) extra, as applicable. Freight charges to destination and all applicable Customs duties and taxes must be included.

A firm unit price must be filled in within the spaces provided at Part 6, Article 6.1 "Basis of Payment" including prices for the option period. If the bidder fails to quote a firm unit price for the option period, the bidder will be considered non-compliant and no further consideration will be given.

### 1.2.1 SACC Manual Clauses

C3011T Exchange Rate Fluctuation

2010-01-11

## 1.3 Section III: Certifications

Bidders must submit the certifications required under Part 5.

## PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

### 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.

#### 1.1 Technical Evaluation

All proposals submitted must be completed in full and provide all of the information requested in the Request for Proposal (RFP) package to enable a full and complete evaluation. If the requirement is not addressed in the bidder's proposal, the proposal will be considered incomplete or non-responsive and will be rejected. The onus is on the bidder to provide all the information necessary to ensure a complete and accurate assessment.

Factors for Evaluation

- 1. PRICING BASIS (MANDATORY): Prices must be firm, DDP Delivered Duty Paid.
- 2. ABILITY TO MEET THE TECHNICAL REQUIREMENT (MANDATORY):
  - a) For Items Defined by Specifications:

The bidder is requested to cross reference the mandatory technical criteria contained herein to their supporting technical documentation.

b) Provision of Supporting Technical Documentation:

Supporting technical documentation for the stores offered must be provided with the bid at time of bid closing.

Technical brochures or technical data **MUST** be provided to verify compliancy to the technical mandatory specifications.

3. COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS REQUEST FOR PROPOSAL (MANDATORY)

4. FOR CANADIAN SUPPLIERS ONLY: Please note that the requirements of the Federal Contractors Program for Employment Equity may apply - see herein. (MANDATORY if applicable)

1.1.1 Mandatory Technical Criteria

See Annex "A"

**1.2 Financial Evaluation**

The lowest evaluated price will be established using the following criteria:

- a) prices will be evaluated in Canadian Funds including any applicable Taxes and Canadian Customs Duty (if applicable) and excluding the Goods and Services Tax (GST) or Harmonized Sales Tax (HST). For evaluation purposes, bids received in a foreign currency will be converted to Canadian funds using the appropriate rate of exchange using the rate quoted by the Bank of Canada as being in effect on date of bid closing.
- b) prices will be evaluated on a DDP Ottawa, Ontario.
- c) for bid evaluation purposes only, the total bid price will be determined by adding the cost for the firm quantity total of the aerosol dust monitors plus accessories with the cost for the optional estimated quantities for the aerosol dust monitors plus accessories. The estimated quantities identified will be used for each option year.

**2. Basis of Selection**

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest aggregate evaluated price (including the option quantities) will be recommended for award of a contract.

**PART 5 - CERTIFICATIONS**

Bidders must provide the required certifications and related documentation to be awarded a contract. Canada will declare a bid non-responsive if the required certifications and related documentation are not completed and submitted as requested.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after award of a contract. The Contracting Authority will have the right to ask for additional information to verify bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications, to provide the related documentation or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

## **1 Mandatory Certifications Required Precedent to Contract Award**

### **1.1 Code of Conduct and Certifications - Related documentation**

- 1.1.1** By submitting a bid, the Bidder certifies, for himself and his affiliates, to be in compliance with the Code of Conduct and Certifications clause of the Standard instructions. The related documentation hereinafter mentioned will help Canada in confirming that the certifications are true. By submitting a bid, the Bidder certifies that it is aware, and that its affiliates are aware, that Canada may request additional information, certifications, consent forms and other evidentiary elements proving identity or eligibility. Canada may also verify the information provided by the Bidder, including the information relating to the acts or convictions specified herein, through independent research, use of any government resources or by contacting third parties. Canada will declare non-responsive any bid in respect of which the information requested is missing or inaccurate, or in respect of which the information contained in the certifications is found to be untrue, in any respect, by Canada. The Bidder and any of the Bidder's affiliates, will also be required to remain free and clear of any acts or convictions specified herein during the period of any contract arising from this bid solicitation. Bidders who are incorporated, including those bidding as a joint venture, must provide with their bid or promptly thereafter a complete list of names of all individuals who are currently directors of the Bidder. Bidders bidding as sole proprietorship, including those bidding as a joint venture, must provide the name of the owner with their bid or promptly thereafter. Bidders bidding as societies, firms, partnerships or associations of persons do not need to provide lists of names. If the required names 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 will render the bid non-responsive. Providing the required names is a mandatory requirement for contract award.

Canada may, at any time, request that a Bidder provide properly completed and Signed Consent Forms (Consent to a Criminal Record Verification form- PWGSC-TPSGC 229) (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>) for any or all individuals aforementioned within the time specified. Failure to provide such Consent Forms within the time period provided will result in the bid being declared non-responsive.

## **2. Additional Certifications Required with the Bid**



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

## **2.1 Federal Contractors Program for Employment Equity - Certification**

### **2.1.1 Federal Contractors Program - over \$25,000 and below \$200,000**

Suppliers who are subject to the Federal Contractors Program (FCP) and have been declared ineligible contractors by Human Resources and Skills Development Canada (HRSDC) are no longer eligible to receive federal government contracts over the threshold for solicitation of bids as set out in the Government Contracts Regulations. Suppliers may be declared ineligible contractors either as a result of a finding of non-compliance by HRSDC, or following their voluntary withdrawal from the FCP for a reason other than the reduction of their workforce to less than 100 employees. Any bids from ineligible contractors, including a bid from a joint venture that has a member who is an ineligible contractor, will be declared non-responsive.

The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

- (a) ( ) is not subject to the FCP, having a workforce of less than 100 full-time or part-time permanent employees, or temporary employees having worked 12 weeks or more in Canada;
- (b) ( ) is not subject to the FCP, being a regulated employer under the Employment Equity Act, S.C. 1995, c. 44;
- (c) ( ) is subject to the requirements of the FCP, having a workforce of 100 or more full-time or part-time permanent employees, or temporary employees having worked 12 weeks or more in Canada, but has not previously obtained a certificate number from HRSDC, having not bid on requirements of \$200,000 or more;
- (d) ( ) has not been declared an ineligible contractor by HRSDC, and has a valid certificate number as follows: \_\_\_\_\_.

Further information on the FCP is available on the HRSDC Web site:

[Http://www.hrsdc.gc.ca/eng/labour/equality/fcp/index.shtml](http://www.hrsdc.gc.ca/eng/labour/equality/fcp/index.shtml)

## **PART 6 - RESULTING CONTRACT CLAUSES**

### **1. Security Requirement**

There is no security requirement associated with the requirement.

### **2. Statement of Work**

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The Contractor must perform the Work in accordance with the Statement of Work at Annex "A".

## 2.2 Optional Requirement

The Contractor grants to Canada the irrevocable option to purchase up to an additional six (6) monitors plus accessories under the same terms and conditions and at the prices stated in the contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option within thirty-six (36) months after contract award by sending a written notice to the Contractor.

## 2.3 Manuals

Each monitor must come with an English user's manual, and an additional French user's manual if available, as well as an English service/maintenance manual with a list of replaceable or upgradeable parts.

## 3. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (<http://sacc.pwgsc.gc.ca/sacc/index-e.jsp>) issued by Public Works and Government Services Canada.

### 3.1 General Conditions

2010A (2012-11-19) General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

## 4. Term of Contract

### 4.1 Delivery Date

All the deliverables must be received on or before \_\_\_\_\_(to be filled in at contract award.).

## 5. Authorities

### 5.1 Contracting Authority

The Contracting Authority for the Contract is:  
Peter Walkowiak  
Public Works and Government Services Canada  
Acquisitions Branch  
Commercial Consumer Products Directorate  
11 Laurier Street, 6A2, Phase III

Place du Portage, Gatineau, Quebec, K1A 0S5

Telephone: (819) 956-7534

Facsimile: (819) 956-3814

E-mail address: peter.walkowiak@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.

5.2 Technical Authority (to be filled in only at contract award)

The Technical Authority for the Contract is:

Name: \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_\_

Facsimile: (\_\_\_\_) \_\_\_\_\_

E-mail address: \_\_\_\_\_

The Technical Authority named above 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.

5.3 DND Procurement Authority (to be filled in only at contract award)

The DND Procurement Authority for the Contract is:

Name: \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_\_

Facsimile: (\_\_\_\_) \_\_\_\_\_

E-mail address: \_\_\_\_\_

The DND Procurement Authority is responsible for the DND contract management and for the authorization of all work against this contract.

5.4 Contractor's Representative (fill in)

The telephone number of the person responsible for:

**General enquiries**

Name: \_\_\_\_\_

Telephone No. \_\_\_\_\_

Facsimile No. \_\_\_\_\_

E-mail address: \_\_\_\_\_

**Delivery Follow-up**

Name: \_\_\_\_\_

Telephone No. \_\_\_\_\_

Facsimile No. \_\_\_\_\_

E-mail address: \_\_\_\_\_

## 6. Payment

### 6.1 Basis of Payment - Firm Price

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid the firm prices, as specified Below. Customs duties and tax are included, and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

Description	Quantity	Firm Unit Price
Aerolsol Dust Monitor plus accessories	Firm quantity of 6 units	
Aerolsol Dust Monitor plus accessories	Optional, up to 6 units	

### 6.2 SACC Manual Clauses

H1001C

Multiple Payment

2008-05-12

## 7. Invoicing Instructions

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.
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.

## 8. Certifications

### 8.1 Compliance

Compliance with the certifications and related documentation provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification, provide the related documentation 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.

## 9. **Applicable Laws**

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in the province of Ontario, Canada.

## 10. **Priority of Documents**

If there is a discrepancy between the wordings 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) 2010A (2012-11-19) General Conditions - Goods (Medium Complexity);
- (c) Annex A, Mandatory Specifications;
- (d) the Contractor's bid dated \_\_\_\_\_ (insert date of bid).

## 11. **SACC Manual clause**

B7500C	Excess Goods	2006-06-16
B4061C	North Atlantic Treaty Organization - Data Requirements	2008-05-12

## 12. **Shipping Instructions - Delivery at Destination**

1. Goods must be consigned to the destination specified in the Contract and delivered:  
  
Delivered Duty Paid (DDP) Ottawa, Ontario Incoterms 2000 for shipments from a commercial contractor.
2. The Contractor will be responsible for all delivery charges, administration, costs and risk of transport and customs clearance, including the payment of customs duties and taxes.

## ANNEX A MANDATORY SPECIFICATIONS

### SCOPE

The Field Portable Direct-Reading Area Sampling Aerosol Monitor must be a compact, ruggedized, lightweight, transportable, battery operated, programmable, direct-reading and data-logging photometric monitor. It must be able to quantify, display and record concentrations of aerosolized dusts and other particulate matter of variable size in the indoor and outdoor environment.

The Field Portable Direct-Reading Area Sampling Aerosol Monitor must meet the following:

### SELECTIVITY

- 1.0 Must have the ability to simultaneously measure aerosols such as particulate matter, of PM1, PM2.5, PM10, Respirable Fraction sizes and provide total concentrations;

**Reference in Contractors Proposal:** \_\_\_\_\_

- 2.0 The monitor must be able to measure size fractions and mass based measurements from the sampled aerosol employed by health exposure evaluation;

**Reference in Contractors Proposal:** \_\_\_\_\_

### SENSITIVITY

- 3.0 Must accurately measure changes in concentration with a resolution of  $\pm 0.1\%$  or  $0.001 \text{ mg/m}^3$ , which ever is greater;

**Reference in Contractors Proposal:** \_\_\_\_\_

### ACCURACY

- 4.0 Analytical accuracy must be within 25% of true value 95% of the time (criteria IAW NIOSH recommendations for portable direct reading instruments);

**Reference in Contractors Proposal:** \_\_\_\_\_

### RELIABILITY

- 5.0 Must be within  $\pm 0.002 \text{ mg/m}^3$ , per 24 hours at 10 second interval readings;

**Reference in Contractors Proposal:** \_\_\_\_\_

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**PRECISION**

6.0 Must have a pump flow precision standard deviation  $\pm 5\%$  by volume;

**Reference in Contractors Proposal:** \_\_\_\_\_

**CALIBRATION**

7.0 Calibration must provide certification that calibration is to an ISO traceable calibration standard;

**Reference in Contractors Proposal:** \_\_\_\_\_

8.0 The instrument must be field calibratable by the end user. Procedure(s) to complete this task must accompany the instrument;

**Reference in Contractors Proposal:** \_\_\_\_\_

9.0 The monitor must be able to accept customized calibration factors in the determination of specific aerosols;

**Reference in Contractors Proposal:** \_\_\_\_\_

**RANGE OF DETECTION**

10.0 Monitor must have a range of detection through the various levels of selectivity that includes a zero count up to a minimum concentration of 150 mg/m<sup>3</sup>;

**Reference in Contractors Proposal:** \_\_\_\_\_

**MOBILITY**

11.0 The monitor must be portable and have no external power source;

**Reference in Contractors Proposal:** \_\_\_\_\_

12.0 The parameters for field use must be no greater than 0.03 m<sup>3</sup> in size and 5 kgs in weight;

**Reference in Contractors Proposal:** \_\_\_\_\_

**EASE OF OPERATION**

13.0 The monitor must possess push button manual controls for on/off and programming functions;

**Reference in Contractors Proposal:** \_\_\_\_\_

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14.0 Must offer optional on/off backlighting of display window.

**Reference in Contractors Proposal:** \_\_\_\_\_

15.0 The monitor must be able to accept customized calibration factors in the determination of specific aerosols;

**Reference in Contractors Proposal:** \_\_\_\_\_

16.0 Display must be in English;

**Reference in Contractors Proposal:** \_\_\_\_\_

17.0 Display must offer sampling time completed or remaining;

**Reference in Contractors Proposal:** \_\_\_\_\_

18.0 Concentration readings response time must be displayed within a maximum of 15 minutes;

**Reference in Contractors Proposal:** \_\_\_\_\_

## **OPERATIONAL SAFETY CHARACTERISTICS**

19.0 Instrument must comply with the relevant North American and or European product safety governances, i.e. CE/CSA;

**Reference in Contractors Proposal:** \_\_\_\_\_

20.0 Must possess tamper proof security option prohibiting unauthorized program/operational changes;

**Reference in Contractors Proposal:** \_\_\_\_\_

## **OPERATIONAL ENVIRONMENT AND CONDITIONS**

21.0 The monitor must be capable of operation under exposure to extreme outdoor environmental conditions that may include; temperatures between 0°- 50°C , RH between 0-95%, dusty conditions, and compensatable for or devoid of influences affected by atmospheric/barometric pressures;

**Reference in Contractors Proposal:** \_\_\_\_\_

## **POWER SUPPLY**

22.0 The monitor must be powered by rechargeable Li-Ion batteries capable of a minimum of 4 hours of continuous operation on 1 battery, with a recharge time less than 5 hours;



**Reference in Contractors Proposal:** \_\_\_\_\_

23.0 Must have AC power recognition for use with variable international power supplies, 115-240 VAC for recharging batteries;

**Reference in Contractors Proposal:** \_\_\_\_\_**SOFTWARE FEATURES**

24.0 The device must be compatible with Microsoft Windows based computer;

**Reference in Contractors Proposal:** \_\_\_\_\_

25.0 The monitor must possess computer programming abilities and function through USB link;

**Reference in Contractors Proposal:** \_\_\_\_\_

26.0 The monitor must be capable of data-logged storage and download;

**Reference in Contractors Proposal:** \_\_\_\_\_

27.0 Monitor software must be capable of providing graphic and statistical display of recorded values;

**Reference in Contractors Proposal:** \_\_\_\_\_

28.0 Must have an internal non-volatile memory, with a minimum 5MB.

**Reference in Contractors Proposal:** \_\_\_\_\_

29.0 The Monitor must include a hard carrying case to hold all parts and accessories.

Reference in Contractors Proposal: \_\_\_\_\_