Health Canada Santé Canada

A1. ELECTRONIC BID SUBMISSION

Attention: Robert Merrick
Materiel & Assets
Management Division

E-mail: Robert.Merrick@hc-sc.gc.ca

OR

Health Canada Bid Receiving Unit
Federal Records Centre Building
161 Goldenrod Driveway, Tunney's Pasture
Loading dock of building #18,
Ottawa, ON K1A 0K9 CANADA

Business hours: 7h30 to 16h30

Attention: Robert Merrick
Telephone: (613) 941-2071
Solicitation #:1000184498

Request for Standing Offer (RFSO)

for

Performance of the Work described in Annex A, Statement of Work.

A2. STANDING OFFER AUTHORITY
The Authority for this RFSO is:

Robert Merrick
Senior Contracting Officer
Ottawa, Ontario

Telephone: (613) 941-2071
E-mail: robert.merrick@hc-sc.gc.ca

THIS RFSO DOES NOT CONTAIN A SECURITY REQUIREMENT.

A3. TITLE
Chemical Analysis of Air Samples

A4. BID CLOSING DATE	**A5. SOLICITATION NUMBER**
MAY 10, 2017	**1000184498**

A6. TABLE OF CONTENTS
The RFSO is divided into seven (7) parts as follows:

1. Part 1 – General Information
2. Part 2 – Offeror Instructions
3. Part 3 – Offeror Preparation Instructions
4. Part 4 – Evaluation Procedures and Basis of Selection
5. Part 5 – Certifications and Additional Information
6. Part 6 – Financial Evaluation
7. Part 7 – Standing Offer and Resulting Contract Clauses
8. Annexes
   - Annex A – Statement of Work
   - Annex B – Basis of Payment
   - Annex C – Certifications
   - Annex D – Security Requirements

A7. BID DELIVERY
Bids must be received by no later than **14:00 (2 p.m) EDT on May 10, 2017** at the bid receiving address indicated in A1. Bids received after the closing date and time (referred to as the "Closing Date") will be considered non-responsive.

Bids and all supporting information may be submitted in either English or French.

A8. 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.

A9. BID VALIDITY
Bids will remain valid for a period of one hundred and twenty (120) calendar days following the Closing Date.

A10. ENQUIRIES
All enquiries must be submitted in writing to the designated RFSO Authority identified in A2 by no later than seven (7) calendar days prior to the Closing Date in order to allow sufficient time to provide a response.

Canada

PART 1 – GENERAL INFORMATION

1.1 Introduction

The RFSO is divided into seven parts plus attachments and annexes, as follows:

Part 1 General Information: provides a general description of the requirements;

Part 2 Offeror Instructions: provides the instructions applicable to the clauses and conditions of the RFSO;

Part 3 Offeror Preparation Instructions: provides Offerors with instructions on how to prepare their offer to address the evaluation criteria specified;

Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria which must be addressed in the offer, and the basis of selection;

Part 5 Certifications: includes the certifications to be provided;

Part 6 Security, Financial and Insurance Requirements: includes specific requirements that must be addressed by Offerors; and

Part 7 7A, Standing Offer, and 7B, Resulting contract Clauses:

7A, includes the Standing Offer containing the offer from the Offeror and the applicable clauses and conditions;

7B, includes the clauses and conditions which will apply to any contract resulting from a call-up made pursuant to the Standing Offer.

The Annexes include the Statement of Work, the Basis of Payment, Certifications, and the Security clauses, if applicable.

1.2 Summary

The objective of this RFSO is to establish competitively-awarded Standing Offers (SO) with up to two (2) Standing Offers for each of eight (8) Streams to facilitate the on-going requirement to provide chemical analysis of air samples.

The period of the SO will be for two (2) years commencing from award of the Standing Offer.

Option Period

The SO Holder hereby grants to Health Canada the irrevocable option to extend the terms of the SO for up to two (2) additional one (1) year periods, under the same terms and conditions. Health Canada may exercise this option at any time by written notice to the SO holder at least 30 calendar days prior to the SO expiry date or any extension thereof.

The eight stream are:

1) The chemical analysis of volatile organic compounds (VOC) collected using 3M Model #3500 passive sampling badges,

2) Elemental ICP-MS analysis of airborne particulate matter collected using Teflon filters,

3) The chemical analysis of nitrogen dioxide, nitrogen oxides, and ozone passive samples collected using Ogawa badges,

4) The gravimetric analysis of Teflon and polyurethane foam filters,

5) The chemical analysis of particle-phase and gas-phase polycyclic aromatic hydrocarbons (PAH) using URG personal pesticide samplers (URG-2000-25),

6) The chemical analysis of aldehydes (formaldehyde and acetaldehyde) collected using SKC UMEX 100 passive samplers,

7) XRF analysis of 33 chemical elements on airborne particulate matter collected using Teflon filters, and

8) The chemical analysis of volatile organic compounds collected using thermal desorption tubes.

Bidders must submit a proposal for each stream they wish to bid on.

The requirement described in this RFSO is subject to the provisions of all international trade agreements to which Canada is a signatory, including the North American Free Trade Agreement (NAFTA), the World Trade Organization – Agreement on Government Procurement (WTO-GPA), as well as the Agreement on Internal Trade (AIT).

1.3 Security Requirements

The vast majority of the call-ups raised under these Standing Offers **WILL NOT** have a security requirement as the contract (call-up) will deal with de-identified samples and will include no personal information.

Therefore, the Standing Offers will be awarded to suppliers whether they have security screening clearances or not.

However, it is possible that one or more call-ups in certain streams may contain a Government of Canada security requirement. The security requirements will be fully defined in any resulting call-up. It is the Standing Offer Holder's sole responsibility to have the necessary security clearances described in any resulting Call-Up in order to be awarded the Call-up.

The bidders with the winning bids will be eligible for sponsorship into the Industrial Security Program (ISP) of Public Services and Procurement Canada (PSPC) if they do not have the security clearances described in Annex "D" at the time the Standing Offers are awarded. Respondents MUST indicate if they desire this sponsorship in their cover letter, in order to initiate the sponsorship process.

See Annex D for further information about possible security requirements that may be required for a few call-ups.

1.4 Debriefings

Offerors may request a debriefing on the results of the RFSO process. Offerors should make the request to the Standing Offer Authority within fifteen (15) working days of receipt of the results of the RFSO process. The debriefing may be in writing, by telephone or in person.

PART 2 – OFFEROR INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the RFSO by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Services and Procurement Canada (PSPC), formerly known as Public Works and Government Services Canada (PWGSC).

Offerors who submit an offer agree to be bound by the instructions, clauses and conditions of the RFSO and accept the clauses and conditions of the Standing Offer and resulting contract(s).

The 2006 (2016-04-04) Standard Instructions - Request for Standing Offers - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the RFSO.

- In the *complete text content* : ***Delete*** "Public Works and Government Services Canada" and ***Insert*** **"**Health Canada". ***Delete*** "PWGSC" and ***Insert*** "Health Canada".
- At subsection 05 (2014-09-25) "Submission of Offers":
  - at 2 (d): ***Delete*** **"**(d) send the arrangement only to PWGSC Bid Receiving Unit specified on page 1 of the RFSO or to the address specified in the RFSO" ***Inse***rt "send the arrangement according to the instructions specified on page one of this RFSO"
  - At 4: ***Delete*** "60 days" ***Insert*** 120 days"

2.2 Submission of Offers

Offers must be submitted as indicated at A1 on the front page of this RFSO: via e-mail or on a USB stick or CD, or as a hard copy to Health Canada Bid Receiving Unit by the date and time indicated in Section A7 on page one of this Request for Standing Offers.

2.3 Former Public Servant

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPS, offerors must provide the information required in Annex "C", "Certifications" before the issuance of a standing offer. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of offers is completed, Canada will inform the Offeror of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the offer non-responsive.

For the purposes of this clause, "former public servant" is any former member of a department as defined in the Financial Administration Act R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

a. an individual;
b. an individual who has incorporated;
c. a partnership made of former public servants; or
d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the Public Service Superannuation Act (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the Supplementary Retirement Benefits Act, R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the Canadian Forces Superannuation Act, R.S., 1985, c. C-17, the Defence Services Pension Continuation Act, 1970, c. D-3, the Royal Canadian Mounted Police Pension Continuation Act , 1970, c. R-10, and the Royal Canadian Mounted Police Superannuation Act, R.S., 1985, c. R-11, the Members of Parliament Retiring Allowances Act, R.S. 1985, c. M-5, and that portion of pension payable to the Canada Pension Plan Act, R.S., 1985, c. C-8.

See Annex “C”, “Certifications” for more information.

2.4 Enquiries – Request for Standing Offers

All enquiries must be submitted in writing to the Standing Offer Authority no later than seven (7) calendar days before the RFSO closing date and time. Enquiries received after that time may not be answered.

Offerors should reference as accurately as possible the numbered item of the RFSO to which the enquiry relates. Care should be taken by Offerors 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 question(s) or may request that Offerors do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Offerors. Enquiries not submitted in a form that can be distributed to all Offerors may not be answered by Canada.

2.5 Applicable Laws

The Standing Offer and any contract resulting from the Standing Offer must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Offerors may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their offer, 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 Offerors.

PART 3 – OFFEROR PREPARATION INSTRUCTIONS

3.1 Offer Preparation Instructions

Bids submitted by e-mail must be structured in the following manner:

- One (1) electronic copy of a Covering Letter, signed by an authorized representative of the Bidder;
- One (1) electronic copy of the Technical Bid;
- One (1) electronic copy of the Certifications – refer to Part 5 and Annex "C",
- One (1) electronic copy of Financial Bid, contained in a separate file/attachment – refer to Part 6 – Financial Evaluation

You are invited to submit electronic copies in either official language (English or French). The RFP Reference Number and the title of the Requirement must be in the subject line of your email**. It is the responsibility of the bidder to ensure its bid arrives on time and that includes allowing sufficient time for its e-mail and attached files to pass through Health Canada's firewall.**

No price or cost information should appear in any other section of the bid. Failure to provide the Financial Bid in a separate attachment will render a bid non-responsive.

If the email including attachments is larger than 20mb, please submit your bid in separate emails so as not to exceed Health Canada's server limitation.

Alternatively, if the proposal is **greater than 20mb** then the bid submission can be delivered on a USB stick or CD to the address below and an email shall be sent to the RFP Authority (found on page 1) stating it has been sent by courier. You **must** send an email to the RFP Authority to ensure your bid will be included for this requirement. The RFP Reference Number and the name of the RFP Authority must be marked on all documents, binders and respective envelopes. If you wish to submit hard copies, then your proposal must be structured in the following manner:

- one (1) Covering Letter, signed by an authorized representative of your firm;
- three (3) copies of the Technical Bid;
- one (1) copy of Certifications (Part 5) and;
- one (1) copy of the Financial Bid (Part 6), contained in a separate sealed envelope. No price or cost information should appear in any other section of the bid. Failure to provide the Financial Bid in a separate envelope will render a bid non-responsive.

At the following address:

Health Canada Bid Receiving Unit
161 Goldenrod Driveway, Tunney's Pasture
Loading dock of building #18,
Ottawa, ON, Canada
K1A 0K9

The Bid Receiving Unit is open between 7:30 p.m. and 4:30 p.m. EDT Monday to Friday.

Canada requests that Offerors follow the format instructions described below in the preparation of their offer.

(a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
(b) use a numbering system that corresponds to that of the Request for Standing Offers.

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, Offerors should:

1) use 8.5 x 11 inch (216 mm x 279 mm) 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.

Section I: Technical Offer
In their technical offer, Offerors should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Financial Offer
Offerors must submit their financial offer in accordance with the Basis of Payment detailed below in Part 6 – Financial Evaluation. The total amount of Applicable Taxes must be shown separately.

Section III: Certifications
Offerors must submit the certifications required under Annex “C”, Certifications

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

a) Offers will be assessed in accordance with the entire requirement of the RFSO including the technical and financial evaluation criteria.
b) An evaluation team composed of representatives of Canada will evaluate the offers.

As indicated in the Statement of Work: **EACH STREAM MUST HAVE ITS OWN PROPOSAL.**

Streams:

1) The chemical analysis of volatile organic compounds (VOC) collected using 3M Model #3500 passive sampling badges,

2) Elemental ICP-MS analysis of airborne particulate matter collected using Teflon filters,

3) The chemical analysis of nitrogen dioxide, nitrogen oxides, and ozone passive samples collected using Ogawa badges,

4) The gravimetric analysis of Teflon and polyurethane foam filters,

5) The chemical analysis of particle-phase and gas-phase polycyclic aromatic hydrocarbons (PAH) using URG personal pesticide samplers (URG-2000-25),

6) The chemical analysis of aldehydes (formaldehyde and acetaldehyde) collected using SKC UMEX 100 passive samplers,

7) XRF analysis of 33 chemical elements on airborne particulate matter collected using Teflon filters, and

8) The chemical analysis of volatile organic compounds collected using thermal desorption tubes.

4.2 Technical Evaluation

The Technical Proposal shall first be evaluated on the basis of the Mandatory Requirements (see Section 4.4) If the Bid meets all the Mandatory Requirements, the Technical Proposal shall be evaluated on the basis of the Point-Rated Requirements (see Section 4.5).

The Technical Proposals must achieve an overall minimum of 70% on the Points-Rated Requirements to be considered responsive. Bids not meeting the minimum required points shall be deemed non-responsive and given no further consideration.

Only those Technical Proposals which are compliant with all Mandatory Requirements and then achieve or exceed an overall minimum of 70% shall be further evaluated on the basis of the Bidder's Financial Proposal.

Evaluation in response to these criteria is based on a "rules of evidence" approach. That is, the Health Canada Evaluation Committee may only evaluate a Bidder on the basis of the contents of the Bidder's submitted Technical and Financial Proposals, and NOT on any prior knowledge or experience with the Bidder or the Bidder's work. It is therefore the Bidder's responsibility

to ensure his/her proposal is complete, clear, and provides sufficient detail to allow Health Canada to evaluate it on the basis of the evaluation criteria.

4.3 Basis on which the Winning Bids will be Selected

Highest Compliant Combined Rating of Technical Merit and Price.

There will be four phases to the evaluation process.

Phase I: Bidders must meet all Mandatory Requirements to advance to Phase II.

Phase II: Those bidders that meet the Mandatory Requirements will be evaluated against a set of Point-Rated Requirements, for which they must achieve a minimum score of 70% to advance to Phase III.

Phase III: Those bidders that pass the Point-Rated evaluation will have their Financial Proposals evaluated. The bid with the lowest cost will receive the maximum amount of points available, while the other qualified bidders' cost proposals will receive pro-rated points based on the following formula:

$$\frac{\text{Lowest priced bid}}{\text{Bidder's total evaluated price}} \times 20\%$$

Then the Technical and Financial bid scores of each qualified bidder will be combined, using a weighting whereby the Technical bid score will account for 80% of the final score and the Financial bid score will account for 20%.

The bidders will then be ranked for each stream based on their combined Technical and Financial scores, from highest to lowest score.

Phase IV:

The top two ranked bidders for each stream will be invited to undergo a **proficiency test (See Section 4.7 for additional details)**. If both bidders pass the proficiency test, the results of their test will be added to their Technical-Financial combined score and the bidder with the highest combined score will be ranked first and the other second. Scoring for the proficiency test will count for 5% of the final score.

Because:

- there is a significant cost to participating in the proficiency test, and
- the participating bidders will have to do so at their own expense, and
- it is Health Canada's intent to award a maximum of two Standing Offers per stream,

bidders ranked below the top two bidders after the first three phases of the evaluation process will not be invited to undergo the proficiency test, unless one or both of the top two bidders fail the test.

Should one or both of the bidders invited to undergo the proficiency test fail to receive a passing mark, Health Canada reserves the right to invite the next ranked bidder (i.e. 3rd place) to undergo the proficiency test, with the understanding that should they pass the test, they will be awarded a Standing Offer Agreement.

The top ranked bidder for each Stream, after the proficiency test, will have the "Right of first refusal" on all Call-ups made against their Standing Offer Agreement for their Stream.

During the period covered by the Standing Offers Agreements, Health Canada reserves the right to compel Standing Offer Holders to submit to a further proficiency test should the quality of the deliverables being received by Health Canada fail to meet the standard precision requirements defined in Section 4.7 of this RFP and Section 2.12, "Possible Proficiency Re-Test" of the Statement of Work. Health Canada reserves the right, upon failure to meet these precision requirements, to remove the firm from the list of qualified bidders, as well as to offer another bidder who passed the proficiency test the "Right of first refusal." In the event Health Canada terminates a Standing Offer, it reserves the right to invite the next ranked supplier of this RFSO competition (i.e. 3rd, 4th place, etc.) to undergo the proficiency test with the understanding that should the supplier be successful, it will be awarded a Standing Offer.

4.4 Mandatory Technical Criteria (Phase I of the Evaluation Process)

As indicated in the Statement of Work: **EACH STREAM MUST HAVE ITS OWN PROPOSAL.**
Refer to 4.1 for a list of the eight streams.

Mandatory requirements for each stream are evaluated on a simple pass or fail basis. Failure by bidders to meet any of the Mandatory Requirements will render the bidder's proposal **non-responsive** for that stream. The treatment of Mandatory Requirements in any procurement process is absolute.

Proposers must meet **all** the Mandatory Requirements for their stream, as described below, and will be evaluated as either Yes or No. Proposals not receiving a **Yes** for any mandatory requirement will ***not*** be considered further.

It is the responsibility of the Bidder to ensure that their Technical Proposal meets ALL of the Mandatory Requirements as outlined in the table below, providing references to page(s) in their Technical Proposal that confirms their compliance.

STREAM 1 – Chemical analysis of VOCs collected using 3M Model #3500 passive badges

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.			
Criteria	**Page #**	**Yes**	**No**
M1. Instrumentation Resources: The Bidder must have a GC-MS that is operated in SIM mode (selected ion monitoring), using accompanying software dedicated to this work under the duration of the Standing Offer Agreement. This must be evidenced by the inclusion of the make and model details in the proposal. Health Canada reserves the right to verify the suitability and operational function of equipment dedicated to this project.			
M2. Accreditation: The Bidder must be accredited with Canadian Association for Laboratory Accreditation (CALA), or equivalent specifically for volatile organic compounds (VOCs). The technical proposal must include a copy of the certification.			
M3. Personnel: The Bidder must provide the following within their proposal: a) The Bidder must provide resumes/CVs for all key resources (including backups) being proposed. b) A Project Manager, Technical Analyst(s) (resource operating the instruments) and Quality Assurance Officer, along with each of their backup resources (up to two (2) backups for each position). c) Project Manager (including backup resource) must have at least five (5) years' experience in the last ten (10) years with VOC analysis of passive monitors. d) The Quality Assurance Officer, Technical Analyst(s) and each backup team member must have three (3) years of experience within the last ten (10) years in completing VOC analysis by GC-MS. The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined.			

M4. Quality Assurance/Quality Control: (QA/QC) The Bidder must demonstrate that they have a Quality Assurance Program, by providing **two (2)** examples of previous projects (**each project must have a minimum of 100 samples**) within the last five (5) years that show results of the following to illustrate that their laboratory is capable of ensuring that: a) Laboratory standardizations are within 10% of certified standard limits. b) Two (2) deuterated internal standard agents are included in each extract, to serve as markers of instrument performance (internal standards within 20% relative standard deviation). c) Multipoint calibrations are performed with standard solutions with each batch of samples. Calibration requires at least five (5) points above blank levels for valid statistical linear regression. d) One (1) in twenty (20) samples is analyzed in duplicate to estimate precision. e) Meet the method detection limit listed in Table 2 (Statement of Work, Section 2.1)			
M5. Bidder/Laboratory: a) Because there must be no risk of the samples being opened for inspection during shipping and transportation, they cannot cross international borders. Therefore, the contractor must have the testing facility in Canada. b) The Bidder must have five (5) years of experience within the last ten (10) years analysing 3M Model #3500 for indoor and outdoor residential air samples collected for the purpose of municipal, provincial and/or federal health studies. Evidence of this by sending two (2) examples of previous projects (**each project must have a minimum of 100 samples**). The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined. c) The Bidder/Laboratory must be capable of an analysis turn-around time of 30 days from time samples are received from Health Canada. The proposal must indicate that this turn-around time can be met by providing two (2) examples of previous work (**each project must have a minimum of 100 samples**), showing date of samples received, samples analysed, and results reported. d) The location of the laboratory providing the service as outlined within this Stream, must be within distance to be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The proposal must demonstrate that this delivery time can be met by either providing **two (2)** examples of previous work evidencing this or courier service documentation demonstrating that this is feasible e) The Bidder/laboratory must explain how they plan to store samples, prior to analysis, in a manner that does not allow them to be exposed to volatile organic compounds.			

STREAM 2 – Elemental ICP-MS analysis of airborne particulate matter collected using Teflon filters

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.

Criteria	Page #	Yes	No
M1. Instrumentation Resources: The Bidder must provide two (2) suitable ICP-MS instrument resources dedicated to this work under the duration of the Standing Offer Agreement; one for analysis, and one for backup. These resources must be clearly defined and evidenced by inclusion of the make and model details within the proposal. The Bidder must have a *dedicated laboratory with suitable equipment in the proposal for the undertaking of analysis of air samples only collected for the purpose of municipal, provincial and/or federal health studies. Health Canada reserves the right to inspect the facility, and to verify the suitability and operational function of equipment dedicated to this project. ** A dedicated facility is defined as laboratory which is capable of analyzing a minimum of a combined total of 100 air filter samples per month from indoor / outdoor / personal air filter samples for the purpose of health studies using HF/NO3 mixture extraction procedure. This must be clearly demonstrated within the proposal.*			
M2. Accreditation: The Bidder must be accredited with Canadian Association for Laboratory Accreditation (CALA) or equivalent for a minimum of six (6) elements in particulate matter on air filters. Those six elements must be on the list provided in Table 3 of the Statement of Work. The technical proposal must include a copy of the certification.			
M3. Personnel: The Bidder must provide the following within their proposal: a) The Bidder must provide resumes/CVs for all key resources (including backups) being proposed. b) A Project Manager, Technical Analyst(s) (resource operating the instruments) and Quality Assurance Officer along with their backup resources (up to two (2) backups for each position). c) Project Manager (including backup resource) must have at least five (5) years' experience within the last ten (10) years dealing with elemental ICP-MS analysis of airborne particulate matter collected using Teflon filters.			

d) The Quality Assurance Officer, Technical Analyst(s) and each backup team member must each have at least three (3) years' experience within the last ten (10) years dealing with the digestion of Teflon filters from air samples using a nitric and hydrofluoric acid mixture. The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined.			
M4. Quality Assurance/Quality Control (QA/QC) The Bidder must provide two (2) examples of previous projects (each project must have a minimum of 150 samples) which demonstrate quality assurance for the last 24 months. a) The detection limits for each element must be at least as low as those provided in Table 3 in Section 2.2 of the Statement of Work. b) Monthly average of percent recoveries of standard reference materials (SRMs), which must include data for both NIST 1633c and NIST 1648a, must be within the certified range provided on the Certificates of Analysis. c) Replicate sampling of digestate (one (1) in twenty (20) samples) yields a difference of less than 5%. d) Multipoint calibrations are performed with standard solutions with each analytical batch. Calibration requires at least five (5) points above blank levels for valid statistical linear regression. Bidder to provide data demonstrating this.			
M5. Bidder/Laboratory: a) Because there must be no risk of the samples being opened for inspection during shipping and transportation, they cannot cross international borders. Therefore, the contractor must have the testing facility in Canada b) The Bidder must have five (5) years of experience within the last ten (10) years with elemental ICP-MS analysis of airborne particulate matter collected using Teflon filters for the purpose of municipal, provincial and/or federal health studies. Evidence of this by sending two (2) examples of previous projects (each project must have a minimum of 150 samples). The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined. c) The Bidder/Laboratory must be capable of an analysis turn-around time of 30 days from time samples are received from Health Canada. The proposal must indicate that this turn-around time can be met by providing examples of previous work (each project must have a minimum of 150 samples), showing date of samples received, samples			

analysed, and results reported. d) The location of the laboratory providing the services as outlined within this Stream, must be within distance to be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The proposal must demonstrate that this delivery time can be met by either providing two (2) examples of previous work or courier service documentation demonstrating that this is feasible.			

STREAM 3 – Chemical analysis of NO2, NOx, and O3 samples collected using Ogawa badges

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.			
Criteria	**Page #**	**Yes**	**No**
M1. Instrumentation Resources: The Bidder must have an Ion Chromatograph capable of evaluating O3, NO2 and NOx. Note: The Bidder may use an Automated Colorimeter to analyse NO2 and NOx. For all instrumentation resources, accompanying software dedicated to this work under the duration of the Standing Offer Agreement must be indicated. This must be evidenced by inclusion of the make and model details in the proposal. Health Canada reserves the right to verify the suitability and operational function of equipment dedicated to this project.			
M2. Personnel: The Bidder must provide the following within their proposal: a) The Bidder must provide resumes/CVs for all key resources (including backups) being proposed. b) A Project Manager, Technical Analyst(s) (resource operating the instruments) and Quality Assurance Officer, along with each of their backup resources (up to two (2) backups for each position). c) Project Manager (including backup resource) must have at least five (5) years' experience in the last ten (10) years with *Ogawa passive monitoring, Ogawa analysis, and exposure assessment (see link). d) The Quality Assurance Officer, Technical Analyst(s), and each backup team member must have three (3) years experience within the last ten (10) years in conducting analyses of a minimum of 50 samples per month using Ion Chromatography or Automated Colorimetric analyses and should follow current best practices for the analyses of Ogawa filters based on the recommendations of *Ogawa & Company (see link). * (http://ogawausa.com/) The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined.			

M3. Quality Assurance/Quality Control (QA/QC): The Bidder must demonstrate that they have a Quality Assurance Program, by providing two (2) examples of previous projects (each project must have a minimum of 400 samples) within the last five (5) years that show results of the following, to illustrate that their laboratory is capable of ensuring that: a) Lab standardizations are within 10% of certified standard limits. b) One (1) in twenty (20) samples must be analysed in duplicate to estimate the precision of the analysis. c) Three (3) passive sampling devices that have not been sent to the field or exposed (laboratory blanks) must be analyzed to assess background levels of each selected analyte. d) Calibration curve details and sample calculation for O3, NOx, and NO2 are performed. e) For 24hr samples and 7 day samples the contractor must be able to achieve the following detection limits: NO2 & NOx = 2.0ppb (24-h) and 0.3ppb (7 d), and for O3 = 2.7ppb (24-h) and 0.39ppb (7 d).			
M4. Bidder/Laboratory: a) The laboratory must have five (5) years of experience within the last ten (10) years with Ogawa passive monitoring, Ogawa analysis, and exposure assessment for the purpose of municipal, provincial and/or federal health studies. Evidence of this by sending two (2) examples of previous projects (each project must have a minimum of 400 samples). The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined. b) The laboratory must be capable of an analysis turn-around time of 30 days from time samples are received from Health Canada. The proposal must indicate that this turn-around time can be met by providing two (2) examples of previous work (each project must have a minimum of 400 samples), showing date of samples received, samples analysed, and results reported. c) The location of the laboratory providing the services as outlined within this Stream, must be within distance to be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The proposal must demonstrate that this delivery time can be met by either providing two (2) examples of previous work or courier service documentation demonstrating that this is feasible.			

STREAM 4 – Gravimetric Analysis of Particulate collected on a Teflon filter or PUF impactor

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.

Criteria	Page #	Yes	No
M1. Instrumentation Resources: The Bidder must provide two (2) micro balances dedicated to this work under the duration of the Standing Offer Agreement; one for analysis, and one for backup. The micro-balances must have a minimum readability of 0.001 mg and a method detection limit of 0.004 mg. This must be evidenced by the inclusion of the make and model details in the proposal. Health Canada reserves the right to verify the suitability and operational function of equipment dedicated to this project.			
M2. Accreditation: The Bidder must be accredited with Canadian Association for Laboratory Accreditation (CALA), or equivalent specifically for gravimetric analysis. The technical proposal must include a copy of the certification.			
M3. Personnel: The Bidder must provide the following within their proposal: a) The Bidder must provide resumes/CVs for all key resources (including backups) being proposed. b) A Project Manager, Technical Analyst(s) (resource operating the instruments) and Quality Assurance Officer, along with each of their backup resources (up to two (2) backups for each position). c) The Bidder must propose a Project Manager (including backup resource) with at least five (5) years' experience within the last ten (10) years with gravimetric analysis. d) The Quality Assurance Officer, Technical Analyst(s) and each backup team member must have three (3) years within the last ten (10) years in completing gravimetric analysis. The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined.			
M4. Quality Assurance/Quality Control (QA/QC): The Bidder must demonstrate that they have a Quality Assurance Program, by providing two (2) examples of previous projects (each project must have a minimum of 500 samples) within the last five (5) years, to illustrate that their			

laboratory is capable of performing the analysis according to the EPA document "Quality Assurance Guidance Document 2.12: Monitoring PM2.5 in Ambient Air Using Designated Reference or Class I Equivalent Methods, Section 10.0, Filter Preparation and Analysis, https://www3.epa.gov/ttn/amtic/files/ambient/pm25/qa/m212.pdf			
M5. Bidder/Laboratory: a) Because there must be no risk of the samples being opened for inspection during shipping and transportation, they cannot cross international borders. Therefore, the contractor must have the testing facility in Canada. b) The Bidder must have five (5) years of experience within the last ten (10) years with gravimetric analysis for indoor and outdoor residential air samples collected for the purpose of municipal, provincial and/or federal health studies. Evidence of this by sending two (2) examples of previous projects (each project must have a minimum of 500 samples). The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined. c) The laboratory must be capable of an analysis turn-around time (including reporting) of 30 days from the time of receiving the sample from Health Canada. The proposal must indicate that this turn-around time can be met by providing two (2) examples of previous work (each project must have a minimum of 500 samples), showing date of samples received, samples analysed, and results reported. d) The location of the laboratory providing the service, as outlined within this Stream, must be within distance to be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The proposal must demonstrate that this delivery time can be met by either providing two (2) examples of previous work or courier service documentation demonstrating that this is feasible .			

STREAM 5 - Chemical analysis of particle-phase and gas-phase polycyclic aromatic hydrocarbons (PAH) using URG pesticide samplers (URG-2000-25)

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.

Criteria	Page #	Yes	No
M1. Instrumentation Resources: The Bidder must have a suitable GC-MS, using accompanying software dedicated to this work under the duration of the Standing Offer Agreement. This must be evidenced by the inclusion of the make and model details in the proposal. Health Canada reserves the right to verify the suitability and operational function of equipment dedicated to this project.			
M2. Accreditation: The Bidder must be accredited with Canadian Association for Laboratory Accreditation (CALA), or equivalentspecifically for PAH. The technical proposal must include a copy of the certification.			
M3. Personnel: The Bidder must provide the following within their proposal: a) The Bidder must provide resumes/CVs for all key personnel (including backups) being proposed. b) A Project Manager, Technical Analyst(s) (resource operating the instruments) and Quality Assurance Officer, along with each of their backup resources (up to two (2) backups for each position). c) The Bidder must propose a Project Manager (including backup resource) with at least five (5) year experience within the last ten (10) years with PAH active sampling and analysis and exposure assessment. d) The Quality Assurance Officer, Technical Analyst(s) and each remaining team member in this Stream must have three (3) years within the past ten (10) years in completing PAH analysis by GC-MS. The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined.			

M4. Quality Assurance/Quality Control QA/QC: The proposal must demonstrate, by including two (2) examples of previous projects (each project must have a minimum of 150 samples) within the last five (5) years, that the laboratory is capable of ensuring that: a) For each batch at least one lab matrix blank should be included and extracted to test for laboratory contamination. b) Two (2) internal standard agents are included in each extract, to serve as markers of instrument performance. c) Multipoint calibrations are performed with standard solutions with each batch of samples. Calibration requires at least five (5) points above blank levels for valid statistical linear regression. d) Include at least one lab control sample which should be spiked with all target analytes for each batch of air samples. The control sample should be extracted and analysed to test for laboratory accuracy. e) Meet the required detection limits listed in Table 5, Section 2.5 of Statement of Work f) Provide an evaluation of the data quality.			
M5. Bidder/Laboratory: a) Because there must be no risk of the samples being opened for inspection during shipping and transportation, they cannot cross international borders. Therefore, the contractor must have the testing facility in Canada. b) The contract laboratory must have five (5) years' experience within the last ten (10) years with TO-13A method to analyze and detect very low concentrations of PAHs as the URG personal samplers collect a tenth of the volume of air than the US EPA method TO-13A (which is ~ 300 m3), by providing two (2) examples of previous projects (each project must have a minimum of 150 samples). The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined. c) The laboratory must be capable of a turn-around time of 90 days from time samples are received from Health Canada. The proposal must indicate that this turn-around time can be met by providing two (2) examples of previous work (each project must have a minimum of 150 samples) demonstrating this using TO-13A method, showing date of samples received, samples analysed, and results reported. d) The location of the laboratory providing the service as outlined within this Stream, must be within distance to be able to receive samples cold, by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The proposal must demonstrate that this delivery time can be met by providing two (2) examples of previous work evidencing this or courier service documentation demonstrating that this is feasible.			

STREAM 6 - Chemical analysis of aldehydes (formaldehyde, and acetaldehyde) collected using SKC UMEX 100 passive samplers

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.			
Criteria	**Page #**	**Yes**	**No**
M1. Instrumentation Resources: The bidder must be equipped with a High Performance Liquid Chromatography (HPLC). This must be evidenced by the inclusion of the make and model details in the proposal. Health Canada reserves the right to verify the suitability and operational function of equipment dedicated to this project.			
M2. Accreditation: The Bidder must be accredited by the Canadian Association for Laboratory Accreditation (CALA), or the American Industrial Hygiene Association (AIHA) under the Industrial Hygiene Laboratory Accreditation Program (IHLAP), or equivalent. The Bidder's facility must comply with the ISO/IEC 17025 Standard, General Requirements for Competence of Testing and Calibration Laboratories. Copies of all accreditations must be included in the Bidder's proposal.			
M3. Personnel: The Bidder must provide the following within their proposal: a) The Bidder must provide resumes/CVs for all key personnel (including backups) being proposed. b) A Project Manager, Technical Analyst(s) (resource operating the instruments) and Quality Assurance Officer, along with each of their backup resources (up to two (2) backups for each position) c) The Project manager (including backup resource) must have at least five (5) years' experience within the last ten (10) years with the extraction and analysis of Umex 100 devices used for collecting formaldehyde and acetaldehyde. d) The Quality Assurance Officer, Technical Analyst(s) and each remaining team member in this Stream must have three (3) years within the last ten (10) years in analyzing formaldehyde air samples collected using dinitrophenylhydrazine (DNPH) samplers. The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined.			

M4. Quality Assurance/Quality Control: (QA/QC) The proposal must demonstrate, by including up to two (2) examples of previous projects (each project must have a minimum of 200 samples) within the last five (5) years in analysing formaldehyde and acetaldehydeusing dinitrophenylhydrazine (DNPH) sampling devices, that the laboratory is capable of ensuring that: a) Achieving detection limits for 24-hour samples: - formaldehyde <40 ng/sample; - acetaldehyde <40 ng/sample; - b) Lab standardizations are within 10% of certified standard limits. c) Two (2) internal standard agents are included in each extract, to serve as markers of instrument performance (internal standards within 20% relative standard deviation). d) Multipoint calibrations are performed with standard solutions with each batch of samples. Calibration requires at least five (5) points above blank levels for valid statistical linear regression. e) Report the desorption efficiency (%), uncertainty (%) and minimum reporting limit.			
M5. Bidder/Laboratory: a) Because there must be no risk of the samples being opened for inspection during shipping and transportation, they cannot cross international borders. Therefore, the contractor must have the testing facility in Canada. b) The Bidder must have five (5) years of experience within the last ten (10) years with the extraction and analysis of Umex 100 devices used for collecting formaldehyde and acetaldehydefor indoor and outdoor residential air samples collected for the purpose of municipal, provincial and/or federal health studies. Evidence of this by sending up to two (2) examples of previous projects (each project must have a minimum of 200 samples). The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined. c) The laboratory must be capable of a turn-around time of 30 days from time the samples are received from Health Canada (reporting within 90 days). The proposal must indicate that this turn-around time can be met by providing up to two (2) examples of previous work (each project must have a minimum of 200 samples), showing date of samples received, samples analysed, and results reported d) The location of the laboratory providing the service as outlined within this Stream, must be within distance to be able to receive samples cold, by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The proposal must demonstrate that this delivery time can be met by providing up to two (2) examples of previous work evidencing this or courier service documentation demonstrating that this			

is feasible.			

STREAM 7 - XRF analysis of 33 chemical elements on airborne particulate matter collected using Teflon filters.

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.

Criteria	Page #	Yes	No
M1. Instrumentation Resources The bidder must have two (2) functioning XRF spectrometers available to this work under the duration of the Standing Offer Agreement; one for analyses, one for backup. These resources must be clearly defined and evidenced by inclusion of the make and model details within the proposal. Health Canada reserves the right to verify the suitability and operational function of equipment dedicated to this project.			
M2. Accreditation The Bidder must be CALA accredited, or equivalent for the determination of trace metals in ambient air. The technical proposal must include a copy of the certification.			
M3. Personnel The Bidder must provide the following within their proposal: a) The Bidder must provide resumes/CVs for all key resources (including backups) being proposed. b) A Project Manager, Technical Analyst(s) (resource operating the instruments) and Quality Assurance Officer, along with each of their backup resources (up to two (2) backups for each position) c) The Project Manager (including backup resource) must have at least five (5) years' experience within the last ten (10) years with XRF analysis of low mass (down to 10 micrograms) air samples. d) The Quality Assurance Officer, Technical Analyst(s) and each remaining team member in this Stream must have at least three (3) year experience within the past ten (10) years in carrying out XRF analyses of air samples. The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined.			
M4. Quality Assurance/Quality Control (QA/QC):			

a) The Bidder must have participated in round robin programs for XRF analysis of air samples and provide evidence that their performance has been comparable to other laboratories. b) The Bidder must demonstrate that the XRF results from multiple instruments are comparable. c) The Bidder must demonstrate, by including two (2) examples of previous projects (each project must have a minimum of 100 samples) within the last five (5) years, that they are able to carry out the XRF analysis on 37mm Teflon filters with detection limits for each element at least as low as those provided in Table 6, Section 2.7.2 of the Statement of Work.			
M5. Bidder/laboratory: a) The Bidder must have a dedicated facility for XRF analyses of indoor and outdoor particulate matter air samples (Teflon filters). A dedicated facility is defined as a laboratory which analyzes a minimum of 100 air filter samples per month by XRF. b) The Bidder must have five (5) years of experience within the last ten (10) years with XRF analysis of low mass (down to 10 micrograms) air samples. Evidence of this by sending two (2) examples of previous projects (each project must have a minimum of 100 samples). The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined. c) The laboratory must be capable of a turn-around time of 30 days (including reporting) from time the samples are received from Health Canada. The proposal must indicate that this turn-around time can be met by providing two (2) examples of previous work (each project must have a minimum of 100 samples), showing date of samples received, samples analysed, and results reported. d) The location of the laboratory providing the service as outlined within this Stream, must be within distance to be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The proposal must demonstrate that this delivery time can be met by providing two (2) examples of previous work evidencing this or courier service documentation demonstrating that this is feasible.			

STREAM 8 – Chemical analysis of VOCs collected using thermal desorption tubes

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.			
Criteria	**Page #**	**Yes**	**No**
M1. Instrumentation Resources: The Bidder must have two (2) thermal desorbers coupled with gas chromatography/mass spectrometers (TD/GC/MS) suitable for analyzing Perkin-Elmer Carbopack B tubes, dedicated to this work under the duration of the Standing Offer Agreement; one for analysis, and one for backup. This must be evidenced by the inclusion of the make and model details in the proposal. Health Canada reserves the right to verify the suitability and operational function of equipment dedicated to this project.			
M2. Accreditation: The Bidder must be accredited by with Canadian Association for Laboratory Accreditation (CALA), or the American Industrial Hygiene Association (AIHA) under the Industrial Hygiene Laboratory Accreditation Program (IHLAP) or equivalent. The Bidder's facility must comply with the ISO/IEC 17025 Standard, General Requirements for Competence of Testing and Calibration Laboratories. Copies of all accreditations must be included in the Bidder's proposal.			
M3. Personnel: The Bidder must provide the following within their proposal: a) The Bidder must provide resumes/CVs for all key resources (including backups) being proposed. b) A Project Manager, Technical Analyst(s) (resource operating the instruments) and Quality Assurance Officer along with each of their backup resources (up to two (2) backups for each position). c) Project Manager (including backup resource) must have at least five (5) years' experience in the last ten (10) years with method development of residential indoor VOCs analysis and thermal desorption GC/MS analysis. d) The Quality Assurance Officer, Technical Analyst(s) and each remaining team member must have three (3) years of experience within the last ten (10) years in completing thermal desorption GC/MS analysis. The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined.			

M4. Quality Assurance/Quality Control (QA/QC) : 1) The Bidder must have participated in at least one on-going national or international proficiency program for the thermal desorption analysis of airborne VOCs. The technical proposal must include a copy of the certification. 2) The Bidder must demonstrate that they have a Quality Assurance Program, by providing up to two (2) examples of previous projects (each project must have a minimum of 75 samples). Those projects must be conducted within the last five (5) years, and each sample must be analysed for a minimum of 40 VOCs listed in Tables 7, 8 or 9 in Section 2.8 of the Statement of Work. The examples must show results of the following to illustrate that their laboratory is capable of ensuring that: a) Have traceable standards all analysed VOCs, and carried out daily multi-calibrations for quantitative measurement results. b) Maintain the expected detection limits listed in Tables 7, 8 or 9 in Section 2.8 of the Statement of Work.			
M5. Bidder/Laboratory: a) Because there must be no risk of the samples being opened for inspection during shipping and transportation, they cannot cross international borders. Therefore, the contractor must have the testing facility in Canada. b) Since many of the target analytes have not been reported in residential indoor air, some of the difficulties or modifications to the currently available thermal desorption GC/MS methods are expected. Therefore, the bidder must have extensive research experience in the method development or modification to the currently available methods for indoor air VOCs, demonstrated by providing at least one (1) research paper published in an international peer reviewed journal and one (1) research oriented project that are relevant to the thermal desorption GC/MS analysis of VOCs in indoor air in the last (5) years. c) The Bidder must have five (5) years of experience within the last ten (10) years with method development of residential indoor VOCs analysis and thermal desorption GC/MS analysis. Evidence of this by sending up to two (2) examples of previous projects (each project must have a minimum of 75 samples, and each sample must be analysed for a minimum of 40 VOCs listed in Tables 7, 8 or 9 in Section 2.8 of the Statement of Work). The Bidder must ensure that the dates (including months and years) demonstrating their years of experience are clearly defined. d) The Bidder must be able to undertake sampling analysis within 72 hours of receipt of samples, and provide reports of analysis within seven (7) days of receipt of sample. The proposal must indicate that this turn-around time can be met by providing up to two (2) examples of previous projects (each project must have a minimum of 75 samples,			

and each sample must be analysed for a minimum of 40 VOCs listed in Tables 7, 8 or 9 in Section 2.8 of the Statement of Work). e) The location of the laboratory providing the service as outlined within this Stream, must be within distance to be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The proposal must demonstrate that this delivery time can be met by providing up to two (2) examples of previous projects evidencing this or courier service documentation demonstrating that this is feasible. f) The Bidder/laboratory must have a suitable tube cleaning system that can thoroughly clean the tubes prior to sending them to Health Canada. The bidder/laboratory must follow an equivalent or more stringent provision to the EPA Method 325B for the tube conditioning apparatus. The Bidder must provide a detailed thermal desorption GC/MS method for indoor air VOCs in the form of standard operating procedure (SOP) describing how TD tubes are to be cleaned, shipped, received, stored, and analyzed.			
M6. Price for the four (4) types of analysis: The Bidder must propose the unit price ($/sample) for each type of the analysis that is specified in Section 2.8.1 of the Statement of Work.			

4.5 Point-Rated Evaluation Criteria (Phase II of the Evaluation Process)

4.5.1 Method of Evaluation

As indicated in the Statement of Work: **EACH STREAM MUST HAVE ITS OWN PROPOSAL.** Refer to 4.1 for a list of the eight streams.

A proposal with a score less than 70 % for Technical compliance as a whole will be considered non-responsive for that stream, and eliminated from the competition.

It is the responsibility of the Bidder to ensure the completeness, clarity, and provision of sufficiently detailed evidence to enable the Health Canada Evaluation Committee to evaluate the Bidder's proposal.

STREAM 1 – Chemical analysis of VOCs collected using 3M Model #3500 passive sampling badges

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.				
Criteria	**Page #**	**Points allocated for the criteria**	**Minimum points required**	**Score**
R1. Company Experience: The bidder's experience will be measured as described below: a) The Bidder has demonstrated within their submitted projects (as per Mandatory criteria M4 QA/QC), the experience in GC-MS analytical methods and will be assessed by providing details of the experience level (5 points), as well as the scope (2.5 points) and complexity (2.5 points) to this requirement. (10 points per project, up to a maximum of 20 points). Details should include the methods used inclusive of sample receipt, preparation and analysis with QA/QC techniques.		20		
b) The Bidder has demonstrated their previous experience (as per Mandatory Criteria M5) analyzing VOCs from 3M Model #3500 passive sampling badges over five (5) years within the last ten (10) years. (2 points will be awarded for each year of experience over the mandatory five (5) years up to a maximum of 10 points)		10		

R2. Experience of personnel: a) The Project Manager (including up to two backups) has the mandatory five (5) years of experience required as per Mandatory criteria M3. Personnel with VOC passive sampling, VOC analysis and exposure assessment. For each proposed Project Manager and backup(s): 1 point will be awarded for each year of experience over and above the mandatory five (5) years required in M3, up to 5 points for each resource. Up to a maximum of 15 points in total for Project Manager and two backups.		15		
b) The Quality Assurance Officer, Technical Analyst, and their backups, have the mandatory minimum of three (3) years experience within the last ten (10) years in VOC analysis. For each proposed Quality Assurance Officer and backup(s): 1 point per year over and above the mandatory three (3) years (as required by Mandatory criteria M3 Personnel), up to 3 points per resource. Up to a maximum of 9 points in total for QA Officer and two backups. For each proposed Technical Analyst and backup(s): 1 point per year over the mandatory three (3) years (as per Mandatory criteria M3 Personnel) up to 3 points per resource. Up to a maximum of 9 points in total for TA and two backups.		18		
R3. Work Plan: The Bidder must provide a proposal that outlines a work plan to complete the work such as that outlined in this RFP, and will be assessed based on the level of detail provided as follows: • Scheduling of work and provision of realistic and complete time estimates • Assignment of personnel • Definition of detailed task list • Addresses all deliverables and presents appropriate milestones.		20		

Allocation of points for the Work Plan submitted: 1) Provides an excellent work plan including all elements as outlined in the SOW in a comprehensive and realistic manner, specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule. An excellent identification of resources, including backup. The Bidders response is in depth, indicates timeliness of the procedure and the requirement is exceeded. 20 pts. 2) Provides a good work plan missing a few key elements as outlined in the SOW. A good assignment of project's team members along with their depth of involvement missing a few key elements in attaining each deliverable's sub-element within the proposed schedule. A good identification of human resources and an identification of back-up resources. The Bidder's response to this criterion addresses the requirement well. The knowledge, experience, timeliness or approach demonstrated should ensure more than adequate performance on this aspect of the work. 10-19 pts. 3) Fails to provide a realistic and achievable deliverables framework, which specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule. 0-9 pts.				
Total points – Passing marks 70% of 83 = 58 pts.		**83**	**58**	

STREAM 2 – Elemental ICP-MS analysis of airborne particulate matter collected using Teflon filters

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.				
Criteria	**Page #**	**Points allocated for the criteria**	**Minimum points required**	**Score**
R1. Company Experience The bidder's experience will be measured as described below: a) The Bidder has demonstrated within their submitted projects (as per Mandatory criteria M4 QA/QC), their experience in the digestion of Teflon filter samples and their subsequent analysis using ICP-MS, and will be assessed by providing details of the experience level (5 points), as well as the scope (2.5 points) and complexity (2.5 points) to this requirement. (10 points per project, up to a maximum of 20 points). Details should include the methods used inclusive of sample receipt, preparation and analysis with QA/QC techniques.		20		
b) The Bidder has demonstrated their previous experience (as per Mandatory Criteria M5) in the digestion of Teflon filter samples and their subsequent analysis using ICP-MS over five (5) years within the last ten (10) years. (2 points will be awarded for each year of experience over the mandatory five (5) years up to a maximum of 10 points)		10		
R2. Experience of personnel: a) The Project Manager (including up to two backups) has experience with the elemental analysis of samples collected in air using Teflon filters and ICP-MS. For each proposed Project Manager and backup(s): 1 point will be awarded for each year of experience over and above the mandatory five (5) years required by M3 Personnel, up to 5 points per		15		

resource. Up to a maximum of 15 points in total for Project Manager and two backps .				
b) The Quality Assurance Officer, Technical Analyst(s), and their backup(s), have the mandatory three (3) years experience within the last ten (10) years (as per Mandatory Criteria M3 Personnel) in the elemental analysis of samples collected in air using Teflon filters and ICP-MS. For each proposed Quality Assurance Officer and backup(s): 1 point per year over and above the mandatory three (3) years (as required by Mandatory Criteria M3 Personnel), up to 3 points per resource. Up to a maximum of 9 points in total for QA Officer and two backups. For each proposed Technical Analyst and backup(s): 1 point per year over and above the mandatory three (3) years (as required by Mandatory Criteria M3 Personnel), up to 3 points per resource. Up to a maximum of 9 points in total for TA and two backups. .		18		
R3. Work Plan: The Bidder must provide a proposal that outlines a work plan to complete the work such as that outlined in this RFP, and will be assessed based on the level of detail provided as follows: • Scheduling of work and provision of realistic and complete time estimates • Assignment of personnel • Definition of detailed task list • Addresses all deliverables and presents appropriate milestones. Allocation of points for the Work Plan submitted: 1) Provides an excellent work plan including all elements as outlined in the SOW in a comprehensive and realistic manner, specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule. An excellent identification		20		

of resources, including backup. The Bidders response is in depth, indicates timeliness of the procedure and the requirement is exceeded - 20 points. 2) Provides a good work plan missing a few key elements as outlined in the SOW. A good assignment of project's team members along with their depth of involvement missing a few key elements in attaining each deliverable's sub-element within the proposed schedule. A good identification of human resources and an identification of back-up resources. The Bidder's response to this criterion addresses the requirement well. The knowledge, experience, timeliness or approach demonstrated should ensure more than adequate performance on this aspect of the work. 10-19 points. 3) Fails to provide a realistic and achievable deliverables framework, which specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule 0-9points.				
Total – Passing marks 70% of 83 = 58 pts.		**83**	**58**	

STREAM 3 – Chemical analysis of NO2, NOx, and O3 samples collected using Ogawa badges

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.				
Criteria	**Page #**	**Points allocated for the criteria**	**Minimum points required**	**Score**
R1. Company Experience: The bidder's experience will be measured as described below: a) The Bidder has demonstrated within their submitted projects (as per Mandatory Criteria M3 QA/QC), the experience with IC methods (Note: Automated Colorimetric analytical methods are acceptable for NO2 and NOx) and will be assessed by providing details of the experience level (5 points), as well as the scope (2.5 points) and complexity (2.5 points) to this requirement. (10 points per project, up to a maximum of 20 points). Details should include the methods used inclusive of sample receipt, preparation and analysis with QA/QC techniques.		20		
b) The Bidder has demonstrated their previous experience (as per Mandatory Criteria M4 Bidder/Laboratory) with the extraction and analysis of Ogawa filters for NO2 NOx, and O3 over five (5) years within the last ten (10) years. (2 points will be awarded for each year of experience over and above the mandatory five (5) years required by M4, up to a maximum of 10 points)		10		
R2. Experience of Personnel: a) The Project Manager (including up to two backups) has experience with the extraction and analysis of Ogawa filters for NO2 NOx, and O3. For each proposed Project Manager and backup(s): 1 point will be awarded for each year of experience over and above the mandatory five (5) years required by M2 Personnel, up to 5 points per resource.		15		

Up to a maximum of 15 points in total for Project Manager and two backups.				
b) The Quality Assurance Officer, Technical Analyst and their backup(s) proposed for this Stream have the mandatory three (3) years required in M2 Personnel, within the last ten (10) years in completing IC analyses. NOTE: If Automatic Colorimetry analysis is indicated in the application, experience must be demonstrated as well. The points will be awarded as follows: For each proposed Quality Assurance Officer and backup(s): 1 point per year over and above the mandatory three (3) years (as required by Mandatory Criteria M2 Personnel), up to 3 points per resource. Up to a maximum of 9 points in total for QA Officer and two backups. For each proposed Technical Analyst and backup(s): 1 point per year over and above the mandatory three (3) years (as required by Mandatory Criteria M2 Personnel), up to 3 points per resource. Up to a maximum of 9 points in total for TA and two backups.		18		
R3. Work Plan: The Bidder must provide a proposal that outlines a work plan to complete the work such as that outlined in this RFP, and will be assessed based on the level of detail provided as follows: • Scheduling of work and provision of realistic and complete time estimates • Assignment of personnel • Definition of detailed task list • Addresses all deliverables and presents appropriate milestones.		20		
Allocation of points for the Work Plan submitted: 1) Provides an excellent work plan including all elements as outlined in the SOW in a comprehensive and realistic manner, specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-				

element within the proposed schedule. An excellent identification of resources, including backup. The Bidders response is in depth, indicates timeliness of the procedure and the requirement is exceeded - 20 points. 2) Provides a good work plan missing a few key elements as outlined in the SOW. A good assignment of project's team members along with their depth of involvement missing a few key elements in attaining each deliverable's sub-element within the proposed schedule. A good identification of human resources and an identification of back-up resources. The Bidder's response to this criterion addresses the requirement well. The knowledge, experience, timeliness or approach demonstrated should ensure more than adequate performance on this aspect of the work. 10-19 points. 3) Fails to provide a realistic and achievable deliverables framework, which specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule 0-9points.				
R4. Accreditation: (5 points) Five (5) points if the Bidder has demonstrated that they have CALA general lab accreditation, or equivalent, specifically for nitrite and nitrate in aqueous solution. The technical proposal must include a copy of the certification.		5		
Total – Passing marks 70% of 88 = 61 pts		**88**	**61**	

STREAM 4 – Gravimetric Analysis of Particulate collected on a Teflon filter or PUF impactor

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.				
Criteria	**Page #**	**Points allocated for the criteria**	**Minimum points required**	**Score**
R1. Company Experience: The bidder's experience will be measured as described below: a) The Bidder has demonstrated within their submitted projects (as per Mandatory Criteria M4 QA/QC), their experience in gravimetric analysis methods and will be assessed by providing details of the experience level (5 points), as well as the scope (2.5 points) and complexity (2.5 points) to this requirement. (10 points per project, up to a maximum of 20 points). Details should include the methods used inclusive of sample receipt, preparation and analysis with QA/QC techniques.		20		
b) The Bidder has demonstrated their previous experience (as per Mandatory Criteria M5) with gravimetric analysis of ambient air PM samples over five (5) years within the last ten (10) years. (2 points will be awarded for each year of experience over and above the mandatory five (5) years required by M5 Bidder/Laboratory, up to a maximum of 10 points)		10		
R2. Experience of personnel: a) The Project Manager (including up to two backups) has the mandatory five (5) years of experience as per Mandatory Criteria M3 Personnel with gravimetric analysis of ambient air PM samples. For each proposed Project Manager and backup(s): 1 point will be awarded for each year of experience over and above the mandatory five (5) years required by Mandatory Criteria M3 Personnel, up to 5 points per resource.		15		

Up to a maximum of 15 points in total for Project Manager and two backups.				
b) The Quality Assurance Officer, Technical Analyst and their backup(s), have the mandatory minimum of three (3) years experience within the last ten (10) years in gravimetric analysis as required by M3 Personnel. For each proposed Quality Assurance Officer and backup(s): 1 point per year over and above the mandatory three (3) years (as required by Mandatory Criteria M3 Personnel), up to 3 points per resource. Up to a maximum of 9 points in total for QA Officer and two backups. For each proposed Technical Analyst and backup(s): 1 point per year over and above the mandatory three (3) years (as required by Mandatory Criteria M3 Personnel), up to 3 points. Up to a maximum of 9 points for TA and two backups in total.		18		
R3. Work Plan: The Bidder must provide a proposal that outlines a work plan to complete the work such as that outlined in this RFP, and will be assessed based on the level of detail provided as follows: • Scheduling of work and provision of realistic and complete time estimates • Assignment of personnel • Definition of detailed task list • Addresses all deliverables and presents appropriate milestones. Allocation of points for the Work Plan submitted: 1) Provides an excellent work plan including all elements as outlined in the SOW in a comprehensive and realistic manner, specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule. An excellent identification of resources, including backup. The Bidders response is in depth, indicates timeliness of the procedure and the requirement is exceeded - 20		20		

points. 2) Provides a good work plan missing a few key elements as outlined in the SOW. A good assignment of project's team members along with their depth of involvement missing a few key elements in attaining each deliverable's sub-element within the proposed schedule. A good identification of human resources and an identification of back-up resources. The Bidder's response to this criterion addresses the requirement well. The knowledge, experience, timeliness or approach demonstrated should ensure more than adequate performance on this aspect of the work. 10-19 points. 3) Fails to provide a realistic and achievable deliverables framework, which specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule 0-9points.				
Total points – Passing marks 70% of 83 = 58 pts.		**83**	**58**	

STREAM 5 – Chemical analysis of particle-phase and gas-phase polycyclic aromatic hydrocarbons (PAH) using URG pesticide samplers

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.				
Criteria	**Page #**	**Points allocated for the criteria**	**Minimum points required**	**Score**
R1. Company Experience: The bidder's experience will be measured as described below: a) The Bidder has demonstrated within their submitted projects (as per Mandatory Criteria M4 QA/QC), their experience in GC-MS analytical methods using US EPA method TO-13A, and will be assessed by providing details of the experience level (5 points), as well as the scope (2.5 points) and complexity (2.5 points) to this requirement. (10 points per project, up to a maximum of 20 points). Details should include the methods used inclusive of sample receipt, preparation and analysis with QA/QC techniques.		20		
b) The Bidder has demonstrated their previous experience (as per Mandatory Criteria M5 Bidder/Laboratory) with URG personal pesticide samplers, PAH analysis and exposure assessment over five (5) years within the last ten (10) years. (2 points will be awarded for each year of experience over and above the mandatory five (5) years required by M5, up to a maximum of 10 points)		10		
R2. Experience of personnel: The following criteria will be measured based on experience: a) The Project Manager (including up to two backups) has the mandatory five (5) years experience within the last ten (10) years as required by Mandatory Criteria M3 Personnel with URG personal pesticide samplers, PAH		15		

analysis and exposure assessment. For each proposed Project Manager and backup(s): 1 point will be awarded for each year of experience over and above the mandatory five (5) years required by M3 Personnel, up to 5 points. Up to a maximum of 15 points in total for Project Manager and two backups.				
b) The Quality Assurance Officer, Technical Analyst and their backups, have the mandatory minimum of three (3) years experience within the last ten (10) years in gravimetric analysis, required in Mandatory Criteria M3 Personnel. For each proposed Quality Assurance Officer and backup(s): 1 point per year over and above the mandatory three (3) years (as required by Mandatory Criteria M3 Personnel), up to 3 points per resource. Up to a maximum of 9 points in total for QA Officer and two backups. For each proposed Technical Analyst and backup(s): 1 point per year over and above the mandatory three (3) years (as required by Mandatory criteria M3 Personnel), up to 3 points per resource. Up to a maximum of 9 points in total for TA and two backups.		18		
R3. Work Plan: The Bidder must provide a proposal that outlines a work plan to complete the work such as that outlined in this RFP, and will be assessed based on the level of detail provided as follows: • Scheduling of work and provision of realistic and complete time estimates • Assignment of personnel • Definition of detailed task list • Addresses all deliverables and presents appropriate milestones. Allocation of points for the Work Plan submitted: 1) Provides an excellent work plan including all elements as outlined in the SOW in a comprehensive and realistic manner, specifies assignments of project's team members, along		20		

with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule. An excellent identification of resources, including backup. The Bidders response is in depth, indicates timeliness of the procedure and the requirement is exceeded - 20 points. 2) Provides a good work plan missing a few key elements as outlined in the SOW. A good assignment of project's team members along with their depth of involvement missing a few key elements in attaining each deliverable's sub-element within the proposed schedule. A good identification of human resources and an identification of back-up resources. The Bidder's response to this criterion addresses the requirement well. The knowledge, experience, timeliness or approach demonstrated should ensure more than adequate performance on this aspect of the work. 10-19 points. 3) Fails to provide a realistic and achievable deliverables framework, which specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule. 0-9points.				
Total points – Passing marks 70% of 83= 58 pts.		**83**	**58**	

STREAM 6 - The chemical analysis of aldehydes (formaldehyde and acetaldehyde) collected using SKC UMEX 100 passive samplers

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.				
Criteria	**Page #**	**Points allocated for the criteria**	**Minimum points required**	**Score**
R1. Company Experience: The bidder's experience will be measured as described below: a) The Bidder has demonstrated within their submitted projects (as per Mandatory criteria M4 QA/QC), their experience in analysing formaldehyde and acetaldehydein air samples collected using Umex 100 devices, and will be assessed by providing details of the experience level (5 points), as well as the scope (2.5 points) and complexity (2.5 points) to this requirement. (10 points per project, up to a maximum of 20 points). Details should include the methods used inclusive of sample receipt, preparation and analysis with QA/QC techniques.		20		
b) The Bidder has demonstrated their previous experience (as per Mandatory Criteria M5 Bidder/Laborartory) with the extraction and analysis of Umex 100 devices used for collecting formaldehyde and acetaldehyde, over five (5) years within the last ten (10) years. (2 points will be awarded for each year of experience over and above the mandatory five (5) years required by M5, up to a maximum of 10 points)		10		
R2. Experience of personnel: The following criteria will be measured based on experience: a) The Project Manager (including up to two backups) has a minimum of five (5) year experience within the last ten (10) years with the extraction and analysis of Umex 100 devices used for collecting formaldehyde and acetaldehyde.		15		

For each proposed Project Manager and backup(s): 1 point will be awarded for each year of experience over and above the mandatory five (5) years required by Mandatory Criteria M3, up to 5 points per resource. Up to a maximum of 15 points in total for a Project Manager and two backups.				
b) The Quality Assurance Officer, Technical Analyst and their backups, have the mandatory minimum of three (3) year experience within the last ten (10) years in completing HPLC analyses. For each proposed Quality Assurance Officer and backup(s): 1 point per year over and above the mandatory three (3) years (as required by Mandatory criteria M3 Personnel), up to 3 points per resource. Up to a maximum of 9 points in total for a Quality Assurance Officer and two back ups. For each proposed Technical Analyst (TA) and backup(s): 1 point per year over and above the mandatory three (3) years (as required by Mandatory criteria M3 Personnel), up to 3 points per resource. Up to a maximum of 9 points in total for a TA and two backups.		18		

R3. Work Plan: The Bidder must provide a proposal that outlines a work plan to complete the work such as that outlined in this RFP, and will be assessed based on the level of detail provided as follows: • Scheduling of work and provision of realistic and complete time estimates • Assignment of personnel • Definition of detailed task list • Addresses all deliverables and presents appropriate milestones. Allocation of points for the Work Plan submitted: 1) Provides an excellent work plan including all elements as outlined in the SOW in a comprehensive and realistic manner, specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule. An excellent identification of resources, including backup. The Bidders response is in depth, indicates timeliness of the procedure and the requirement is exceeded - 20 points. 2) Provides a good work plan missing a few key elements as outlined in the SOW. A good assignment of project's team members along with their depth of involvement missing a few key elements in attaining each deliverable's sub-element within the proposed schedule. A good identification of human resources and an identification of back-up resources. The Bidder's response to this criterion addresses the requirement well. The knowledge, experience, timeliness or approach demonstrated should ensure more than adequate performance on this aspect of the work. 10-19 points. 3) Fails to provide a realistic and achievable deliverables framework, which specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule. 0-9points.		20		
Total points – Passing marks 70% of 83= 58 pts.		**83**	**58**	

STREAM 7 - XRF analysis of 33 chemical elements on airborne particulate matter collected using Teflon filters.

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.				
Criteria	**Page #**	**Points allocated for the criteria**	**Minimum points required**	**Score**
R1. Company Experience: The bidder's experience will be measured as described below: a) The Bidder has demonstrated within their submitted projects (as per Mandatory criteria M4 QA/QC), their experience in the analysis of low mass (down to 10 micrograms) indoor and outdoor air samples on Teflon filters using XRF, and will be assessed by providing details of the experience level (5 points), as well as the scope (2.5 points) and complexity (2.5 points) to this requirement. (10 points per project, up to a maximum of 20 points). Details should include the methods used inclusive of sample receipt, preparation and analysis with QA/QC techniques.		20		
b) The Bidder has demonstrated their previous experience (as per Mandatory criteria M5 Bidder/Laboratory) with analysis of low mass (down to 10 micrograms) indoor and outdoor air samples on Teflon filters by XRF over five (5) years within the last ten (10) years. (2 points will be awarded for each year of experience over and above the mandatory five (5) years required by M5, up to a maximum of 10 points)		10		

R2. Experience of personnel: The following criteria will be measured based on experience: a) The Project Manager (including up to two backups) has a minimum of five (5) year experience within the last ten (10) years with analysis of low mass (down to 10 micrograms) indoor and outdoor air samples on Teflon filters by XRF. For each proposed Project Manager and backup(s): 1 point will be awarded for each year of experience over and above the mandatory five (5) years required by Mandatory Criteria M3 Personnel, up to 5 points per resource. Up to a maximum of 15 points in total for a Project Manager and two backups.		15		
b) The Quality Assurance Officer, Technical Analyst and their backups, have the mandatory minimum of three (3) year experience within the last ten (10) years in the elemental analysis of samples collected in air using Teflon filters and XRF. For each proposed Quality Assurance Officer and backup(s): 1 point per year over and above the mandatory three (3) years (as required by Mandatory criteria M3 Personnel), up to 3 points per resource. Up to a maximum of 9 points in total for a QA Officer and two backups. For each proposed Technical Analyst and backup(s): 1 point per year over and above the mandatory three (3) years (as required by Mandatory criteria M3 Personnel), up to 3 points per resource. Up to a maximum of 9 points in total for a TA and two backups.		18		
R3. Work Plan: The Bidder must provide a proposal that outlines a work plan to complete the work such as that outlined in this RFP, and will be assessed based on the level of detail provided as follows:		20		

• Scheduling of work and provision of realistic and complete time estimates • Assignment of personnel • Definition of detailed task list • Addresses all deliverables and presents appropriate milestones. Allocation of points for the Work Plan submitted: 1) Provides an excellent work plan including all elements as outlined in the SOW in a comprehensive and realistic manner, specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule. An excellent identification of resources, including backup. The Bidders response is in depth, indicates timeliness of the procedure and the requirement is exceeded - 20 points. 2) Provides a good work plan missing a few key elements as outlined in the SOW. A good assignment of project's team members along with their depth of involvement missing a few key elements in attaining each deliverable's sub-element within the proposed schedule. A good identification of human resources and an identification of back-up resources. The Bidder's response to this criterion addresses the requirement well. The knowledge, experience, timeliness or approach demonstrated should ensure more than adequate performance on this aspect of the work. 10-19 points. 3) Fails to provide a realistic and achievable deliverables framework, which specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule. 0-9points.				
Total points – Passing marks 70% of 83= 58 pts.		**83**	**58**	

STREAM 8 – Chemical analysis of VOCs collected using thermal desorption tubes

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.				
Criteria	**Page #**	**Points allocated for the criteria**	**Minimum points required**	**Score**
R1. Company Experience: The bidder's experience will be measured as described below: a) The Bidder has demonstrated within their submitted projects (as per Mandatory criteria M4 QA/QC), their experience of chemical analysis of thermal desorption GC/MS , and will be assessed by providing details of the experience level (5 points), as well as the scope (2.5 points) and complexity (2.5 points) to this requirement. (10 points per project, up to a maximum of 20 points). Details should include the methods used inclusive of sample receipt, preparation and analysis with QA/QC techniques.		20		
b) The Bidder has demonstrated their previous experience (as per Mandatory Criteria M5) with method development of residential indoor VOCs analysis and thermal desorption GC/MS analysis over five (5) years within the last ten (10) years. (2 points will be awarded for each year of experience over the mandatory five (5) years up to a maximum of 10 points)		10		

c) The Bidder has demonstrated their extensive research experience in the method development or modification to the currently available methods for indoor air VOCs, by providing at least one (1) research paper published in an international peer reviewed journal and one (1) research oriented project that are relevant to the thermal desorption GC/MS analysis of VOCs in indoor air in the last (5) years. (1 point will be rewarded for each published paper or research oriented project, up to a maximum of 10 points)		10		
R2. Experience of personnel: a) The Project Manager (including up to two backups) has the mandatory five (5) years of experience required as per Mandatory criteria M3 Personnel with method development of residential indoor VOCs analysis and thermal desorption GC/MS analysis. For each proposed Project Manager and backup(s): 1 point will be awarded for each year of experience over and above the mandatory five (5) years required by M3, up to 5 points per resource. Up to a maximum of 15 points in total for a Project Manager and two backups.		15		
b) The Quality Assurance Officer, Technical Analyst, and their backup(s), have the mandatory minimum of three (3) year experience within the last ten (10) years in thermal desorption GC/MS analysis. For each proposed Quality Assurance Officer and backup(s): 1 point per year over and above the mandatory three (3) years (as per Mandatory criteria M3 Personnel), up to 3 points per resource. Up to a maximum of 9 points in total for a QA Officer and two backups. For each proposed Technical Analyst and backup(s): 1 point per year over the mandatory three (3) years (as required by Mandatory criteria M3 Personnel), up to 3 points per resource.		18		

Up to a maximum of 9 points in total for a TA and two backups.				
R3. Work Plan: The Bidder must provide a proposal that outlines a work plan to complete the work such as that outlined in this RFP, and will be assessed based on the level of detail provided as follows: • Scheduling of work and provision of realistic and complete time estimates • Assignment of personnel • Definition of detailed task list • Addresses all deliverables and presents appropriate milestones. Allocation of points for the Work Plan submitted: 1) Provides an excellent work plan including all elements as outlined in the SOW in a comprehensive and realistic manner, specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule. An excellent identification of resources, including backup. The Bidders response is in depth, indicates timeliness of the procedure and the requirement is exceeded. 20 pts. 2) Provides a good work plan missing a few key elements as outlined in the SOW. A good assignment of project's team members along with their depth of involvement missing a few key elements in attaining each deliverable's sub-element within the proposed schedule. A good identification of human resources and an identification of back-up resources. The Bidder's response to this criterion addresses the requirement well. The knowledge, experience, timeliness or approach demonstrated should ensure more than adequate performance on this aspect of the work. 10-19 pts. 3) Fails to provide a realistic and achievable deliverables framework, which specifies assignments of project's team members, along with their depth of involvement, in attaining each deliverable's sub-element within the proposed schedule. 0-9 pts.		20		

Total points – Passing marks 70% of 93 = 65 pts.		**93**	**65**	

4.6 Financial Evaluation (Phase III of the Evaluation Process)

The price of the offer will be evaluated, based on the grid included as Part 6, Financial Evaluation, in Canadian dollars, FOB destination, Canadian customs duties and excise taxes included. There must be a separate line for GST/ HST, if applicable.

The bid with the lowest cost will receive the maximum amount of points available, while the other qualified bidders' cost proposals will receive pro-rated points based on the following formula:

$$\frac{\text{Lowest priced bid} \times 20\%}{\text{Bidder's total evaluated price}}$$

4.7 Proficiency Test (Phase IV of the Evaluation Process)

As indicated in Section 4.3, the top two ranked bidders for each stream will be invited to undergo a proficiency test. Acceptable performance on this proficiency test is required for issuance of a standing offer. If both bidders pass the proficiency test, the results of their test will be added to their Technical-Financial combined score and the bidder with the highest combined score will be ranked first and the other second. Scoring for the proficiency test will count for 5% of the final score.

Because:

- there is a significant cost to participating in the proficiency test, and
- the participating bidders will have to do so at their own expense, and
- it is Health Canada's intent to award up to two Standing Offers per stream,

bidders ranked below the top two bidders after the first three phases of the evaluation process will not be invited to undergo the proficiency test, unless one or both of the top two bidders fail the test.

Should one or both of the bidders invited to undergo the proficiency test fail to receive a passing mark, Health Canada reserves the right to invite the next ranked bidder (i.e. 3rd place, etc.) to undergo the proficiency test, with the understanding that should they pass the test, they will be awarded a Standing Offer Agreement.

The top ranked bidder for each Stream, after the proficiency test, will have the "Right of first refusal" on all Call-ups made against their Standing Offer Agreement for their Stream.

The Proficiency Test Process:

The proficiency test will consist of analysing 30 samples for streams 1-7, and 24 for stream 8. The samples will be collected by Health Canada (side-by-side sampling) and shipped at Health Canada's cost to the bidder. The bidder will be informed that the samples will be arriving at least one (1) week in advance. The bidder will have one (1) week to analyse the samples and provide a certified lab report in Excel by e-mail to Health Canada in the format specified in the Statement of Work for each Stream. Health Canada will use the bidder-provided report to calculate the precision. The sample numbers will be randomly generated so that no information can be determined about the samples. The samples will be representative of typical Canadian households for the parameters in Streams 1 to 8. The specified minimum detection limits, as set

out in the Mandatory Requirements (Section 4.4) for each Stream must be achieved to proceed to the precision calculations for the side-by-side samples.

The precision requirements for each stream are based on Health Canada's needs and on what has been achieved by laboratories who have carried out laboratory sampling for these parameters over the past 15 years for Health Canada. As such they are considered fair and achievable.

Each lab will be assessed for the precision of their analytical method by providing analyses for a set of replicate samples. Replicates will be blinded. Scoring for the proficiency test, which will count for **5% of the final bid evaluation**, will be awarded on a scale of 1-5 points based on the proportion of replicates which surpass the standard precision for the analytical method. For all streams excluding Stream 7, the required precision is defined as measurements of replicate samples that are within 10% of each other; for Stream 7, the required precision is 15%. A score of 3 (using the marking key in the Table 1 below) is required to be considered successful (pass) against this criteria.

TABLE 1:

Proficiency – evaluated against standard precision given above	**Score**
80-100% of replicates meet the standard precision	5
60-80% of replicates meet the standard precision	4
50-60% of replicates meet the standard precision	3
< 50% of replicates meet the standard precision	fail

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Offerors must provide the required certifications attached as Annex “C” .

The certifications provided by Offerors to Canada are subject to verification by Canada at all times. Canada will declare an offer non-responsive, will have the right to set-aside a standing offer, or will declare a contractor in default if any certification made by the Offeror is found to be untrue whether made knowingly or unknowingly during the offer evaluation period, during the Standing Offer period, or during the contract period.

The Standing Offer Authority will have the right to ask for additional information to verify the Offeror’s certifications. Failure to comply and to cooperate with any request or requirement imposed by the Standing Offer Authority will render the offer non-responsive, result in the setting aside of the Standing Offer or constitute a default under the Contract.

PART 6 - FINANCIAL EVALUATION

Up to two (2) Standing Offer Agreements will be awarded under this RFSO.

The data included in this pricing schedule is provided for bid evaluated price determination purposes only. They are not to be considered as a contractual guarantee. Their inclusion in this pricing schedule does not represent a commitment by Canada that Canada's future usage of the services described in the bid solicitation will be consistent with this data.

PROFESSSIONAL FEES

Stream 1: Chemical Analysis of VOCs collected using #M Model #3500 passive badges

From contract award to Option Year 2

Stream 1	Estimated Number of Samples Per year	Cost per sample (Canadian Dollars, $)	Total Cost (Canadian Dollars, $)
Year 1	400		
Year 2	400		
Option Year 1	400		
Option Year 2	400		
		Stream 1 Total Bid	

Stream 2: Elemental ICP-MS analysis of $PM_{2.5}$ samples collected using Teflon filters

From contract award to Option Year 2

Stream 2	Estimated Number of Samples Per year	Cost per sample (Canadian Dollars, $)	Total Cost (Canadian Dollars, $)
Year 1	400		
Year 2	400		
Option Year 1	400		
Option Year 2	400		
		Stream 2 Total Bid	

Stream 3: Chemical analysis of NO_2, NO_x and O3 samples collected using Ogawa badges

From contract award to Option Year 2

Stream 3	Estimated Number of Samples Per year	Cost per sample (Canadian Dollars, $)	Total Cost (Canadian Dollars, $)
Year 1	1000		
Year 2	1000		
Option Year 1	1000		
Option Year 2	1000		
		Stream 3 Total Bid	

Stream 4: Gravimetric analyses of Teflon and PolyUrethane Foam filters

From contract award to Option Year 2

Stream 4	Estimated Number of Samples Per year	Cost per sample (Canadian Dollars, $)	Total Cost (Canadian Dollars, $)
Year 1	2200		
Year 2	2200		
Option Year 1	1750		
Option Year 2	1750		
		Stream 4 Total Bid	

Stream 5: Chemical analysis of particle and gas phase Polycyclic Aromatic Hydrocarbons collected using URG pesticide samplers

From contract award to Option Year 2

Stream 5	Estimated Number of Samples Per year	Cost per sample (Canadian Dollars, $)	Total Cost (Canadian Dollars, $)
Year 1	400		
Year 2	400		
Option Year 1	400		
Option Year 2	400		
		Stream 5 Total Bid	

Stream 6: Chemical analysis of aldehydes (formaldehyde and acetaldehyde) collected using SKC UMEX-100 passive samplers

From contract award to Option Year 2

Stream 6	Estimated Number of Samples Per year	Cost per sample (Canadian Dollars, $)	Total Cost (Canadian Dollars, $)
Year 1	400		
Year 2	400		
Option Year 1	300		
Option Year 2	400		
		Stream 6 Total Bid	

Stream 7: XRF analysis of 33 chemical elements on airborne particulate matter collected using Teflon filters

From contract award to Option Year 2

Stream 7	Estimated Number of Samples Per year	Cost per sample (Canadian Dollars, $)	Total Cost (Canadian Dollars, $)
Year 1	800		
Year 2	500		
Option Year 1	500		
Option Year 2	500		
		Stream 7 Total Bid	

Stream 8: Chemical analysis of VOCs collected using thermal desorption tubes

See Table 7 of Statement of Work (Section 2.8.1, pages 95-97) List of Compounds:

Stream 8- Table 7 List in SOW	Estimated Number of Samples Per year	Cost per sample (Canadian Dollars, $)	Total Cost (Canadian Dollars, $)
Year 1	300		
Year 2	300		
Option Year 1	300		
Option Year 2	300		

See Table 8 of SOW (Section 2.8.1, pages 98-100) List of compounds:

Stream 8 – Table 8 List in SOW	Estimated Number of Samples Per year	Cost per sample (Canadian Dollars, $)	Total Cost (Canadian Dollars, $)
Year 1	100		
Year 2	100		
Option Year 1	100		
Option Year 2	100		

See Table 9 of SOW (Section 2.8.1, page 101) List of Compounds:

Stream 8 – Table 9 List in SOW	Estimated Number of Samples Per year	Cost per sample (Canadian Dollars, $)	Total Cost (Canadian Dollars, $)
Year 1	100		
Year 2	100		
Option Year 1	100		
Option Year 2	100		

Price for TVOC analysis (assumes TD GC/MS analysis already carried out or to be carried out on sample)

Stream 8 - TVOC	Estimated Number of Samples Per year	Cost per sample (Canadian Dollars, $)	Total Cost (Canadian Dollars, $)
Year 1	500		
Year 2	500		
Option Year 1	500		
Option Year 2	500		

Price for method development work:

Stream 8 – VOC method development to add 1 new highly reactive polar compound to the List in either Table 7 or Table 8	Estimated Number of Method development new compound projects per year	Cost per new compound (Canadian Dollars, $)	Total Cost (Canadian Dollars, $)
Year 1	2		
Year 2	2		
Option Year 1	2		
Option Year 2	2		

PART 7 – STANDING OFFER AND RESULTING CONTRACT CLAUSES

7.0 Standing Offer

7.1 Offer

7.1.1 The Offeror offers to fulfill the requirement in accordance with the Statement of Work attached at Annex "A"

7.2 Security Requirements

The vast majority of the call-ups raised under these Standing Offers WILL NOT have a security requirement as the contract will deal with de-identified samples and will include no personal information.

Therefore, the Standing Offers will be awarded to suppliers whether they have security screening clearances or not.

However, it is possible that one or more call-ups may contain a Government of Canada security requirement. The security requirements will be fully defined in any resulting call-up. It is the Standing Offer holder's sole responsibility to have the necessary security clearances described in any resulting Call-Up in order to be awarded the Call-up.

The bidders with the winning bids will be eligible for sponsorship into the Industrial Security Program (ISP) of Public Services and Procurement Canada (PSPC) if they do not have the security clearances described in Annex "D" at the time the Standing Offers are awarded. Respondents MUST indicate if they desire this sponsorship in their cover letter, in order to initiate the sponsorship process.

See Annex D for further information about possible security requirements that may be required for a few call-ups.

7.3 Standard Clauses and Conditions

All clauses and conditions identified in the Standing Offer and resulting contract(s) by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (SACC Manual) (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

7.3.1 General Conditions

2005 (2015-07-03) General Conditions - Standing Offers - Goods or Services, apply to and form part of the Standing Offer.

7.3.2 Term of Standing Offer Period of the Standing Offer

The objective of this RFSO is to establish competitively-awarded Standing Offers (SO) with up to two (2) Standing Offers for each of eight (8) Streams to facilitate the on-going requirement to provide chemical analysis of air samples.

The period of the SO will be for two (2) years commencing from award of the Standing Offer.

Option Period

The SO Holder hereby grants to Health Canada the irrevocable option to extend the terms of the SO for up to two (2) additional one (1) year periods, under the same terms and conditions. Health Canada may exercise this option at any time by written notice to the SO holder at least 30 calendar days prior to the SO expiry date or any extension thereof.

7.4 Authorities

7.4.1 Standing Offer Authority

The Standing Offer Authority is:

Robert Merrick
Senior Contracting and Procurement Officer
Health Canada - Santé Canada
E-mail: Robert.Merrick@hc-sc.gc.ca
Tel : 613-941-2071

The Standing Offer Authority is responsible for the establishment of the Standing Offer, its administration and its revision, if applicable. Upon the making of a call-up, as Contracting Authority, he is responsible for any contractual issues relating to individual call-ups made against the Standing Offer by any Identified User.

7.4.2 Project/Technical Authority

To be determined at Standing Offer award.

7.4.3 Offeror's Representative

To be determined at Standing Offer award.

7.5 Proactive Disclosure of Contract with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a Public Service Superannuation Act (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2012-2 of the Treasury Board Secretariat of Canada.

7.6 Identified Users

The Identified User authorized to make call-ups against the Standing Offer is: Health Canada.

7.7 Allocation of Work

Health Canada intends to issue up to a maximum of sixteen (16) Standing Offer Agreements – one (1) or more Standing Offer Agreement to be awarded under each Stream of service described in this RFSO.

The top ranked supplier of each Stream shall have the "Right of first refusal" of all work.

Call-ups issued under the Standing Offer Agreement will be subject to the terms and conditions of this RFSO and the Health Canada SOA documents.

It is understood and agreed to that the Standing Offer Holder shall not commence any work until authorized in writing by a Call-up issued by the Health Canada Project Authority.

7.8 Call- up Procedures

7.8.1 The Health Canada Project Authority will provide the Standing Offer (SO) Holder having the "Right of First Refusal" with a Statement of Work (SOW). The SO Holder must communicate in writing (i.e. e-mail) within 48 hours whether it is available to do the work within the prescribed timelines. Should the SO Holder having "Right of First Refusal" indicate that it is not able to do the work within the prescribed timelines, then the Health Canada Project Authority will make the request of the other SO Holder.

Failure to provide written notification of availability within forty-eight **(48)** hours of being contacted shall be interpreted as being unable to perform the service(s).

7.8.2 After confirming its availability to do the work, the SO Holder must provide a quote to perform the service described in the SOW, using the Fixed Unit Rates specified in the SOH's bid, which is now part of the Standing Offer Agreement (SOA). The rate charged by the SO Holder must not exceed the Fixed Unit Rate specified in the SOA, except in agreed-upon circumstances related to changes to or addition of analytes.

7.8.3 When an agreement on the level of effort and cost is reached between the Standing Offer Holder and the Health Canada Project Authority, the Health Canada Project Authority will issue a formal written Health Canada Call-up Against the Standing Offer Agreement (form 942), authorizing the work to begin. The Call-up will provide a description of the Work activities to be performed, deliverables to be submitted within the scope of this Agreement and required completion date(s). The SO Holder will acknowledge receipt of the Call-up within two (2) days of receiving it.

7.8.4 It is understood and agreed that the Standing Offer Holder shall not commence any Work until authorized in writing by a formal Call-up issued by the Health Canada Project Authority or his/her delegate.

7.9 Limitation of Call-ups

Individual Call-Ups against each Standing Offer of each Stream shall not exceed $50,000.00.

7.10 Financial Limitation

The total value of all Standing Offer Agreements for Streams resulting from this Request for Standing Offer shall not exceed **$2,500,000.00** including all applicable taxes, over a four (4) year period from date of signing of the Standing Offer Agreement.

The duration of the Standing Offer Agreements will be for a two (2) year period with two (2) additional one (1) year option periods to be exercised at Health Canada's discretion.

The maxium value of each Standing Offer for each Stream is listed in Section 2.0 of the Statement of Work, in Table 1, entitled "Estimated number of samples and maximum value for each Stream."

7.11 Priority of Documents

If there is a discrepancy between the wording 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 call up against the Standing Offer, including any annexes;
b) the articles of the Standing Offer;
c) SACC Manual clause 2005 (2016-04-04), General Conditions - Standing Offers - Goods or Services
d) SACC Manual clause 2010C (2016-04-04), General Conditions - Services (Medium Complexity) apply to and form part of each Call-up
e) SACC Manual clause C6000C (2011-05-16) Limitation of Price apply to and form part of each Call-up
f) Annex "A", Statement of Work;
g) Annex "B", Basis of Payment
h) Annex "C", Certifications
i) Annex "D", Security Requirements
j) Annex "E", the Offeror's offer dated _____ (insert date of offer), (if the offer was clarified or amended, insert at the time of issuance of the offer: "as clarified on_____" or "as amended on _____" and insert date(s) of clarification(s) or amendment(s) if applicable).

7.12 Applicable Laws

The Standing Offer and any contract resulting from the Standing Offer must be interpreted and governed, and the relation between the parties determined, by the laws in force in Ontario.

7.13 Resulting Contract Clauses applicable to each Call-up

The following clauses and conditions apply to and form part of any contract resulting from a Call-up against the standing offer.

7.14 Statement of Work

The contractor must provide the necessary items and perform the Work described in the Call-Up against the Standing Offer.

7.15 General Conditions

a) SACC Manual clause 2010C (2016-04-04), General Conditions - Services (Medium Complexity) apply to and form part of each Call-up.
b) SACC Manual clause C6000C (2011-05-16) Limitation of Price apply to and form part of each Call-up

7.16 Term of the Contract

7.16.1 Period of the Contract

The work must be completed in accordance with the Call-Up against the standing offer.

7.17 Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a Public Service Superannuation Act (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2012-2 of the Treasury Board Secretariat of Canada.

7.18 Payment

7.18.1 Basis of Payment

Canada will pay the Standing Offer holder for all work performed pursuant to the Call-up and subject for acceptance by the Project Authority.

7.18.2 Ceiling Price

The Contractor will be paid its costs reasonably and properly incurred in the performance of the Work under the call-up, to the ceiling price specified in the call-up, which will be established in accordance with Annex “B”, Basis of Payment. Customs duties are included, and Applicable Taxes are extra.

The ceiling price is subject to downward adjustment so as not to exceed the actual charges and costs reasonably incurred in the performance of the Work and computed in accordance with the Basis of Payment specified in the call-up.

7.18.3 All prices and amounts of money in the Contract are exclusive of the Goods and Services Tax (GST) or Harmonized Sales Tax (HST), whichever is applicable, unless otherwise indicated. GST or HST, to the extent applicable, will be incorporated into all invoices and progress claims for goods supplied or work performed and will be paid by Canada. The Contractor agrees to remit to Canada Revenue Agency any GST or HST paid or due.

7.18.4 No increase in the total liability of Canada or in the price of Work resulting from any design changes, modifications or interpretations of specifications made by the Contractor will be authorized or paid to the Contractor unless such changes, modifications or interpretations have been approved in writing by the Standing Offer Authority prior to their incorporation into the Work. The Contractor is not obliged to perform any Work or provide any service that would cause the total liability of Canada to be exceeded without the prior written approval of the Standing Offer Authority. The Contractor will notify the Project Authority in writing as to the adequacy of this sum:

a. when it is seventy five percent (75%) committed, or
b. four (4) months prior to the Contract expiry date, or
c. if the Contractor considers the funds provided to be inadequate for the completion of the Work, whichever comes first.

In the event that the notification refers to inadequate funds, the Contractor will provide to the Project Authority, in writing, an estimate for the additional funds required. Provision of such notification and estimate for the additional fund does not increase the liability of Canada.

7.18.5 **Limitation of Price**

SACC Manual clause C6000C 2011-05-16 Limitation of Price

7.19 Invoicing Instructions

7.19.1 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.

Each invoice must include the following:

a) the Contract title, number and financial code;
b) the date;
c) a description of the Work performed;
d) timesheets (if payment is based on hourly/firm per diem rates);
e) evidences of actual Cost (Cost Reimbursable Elements);
f) the amount of the progress payment being claimed; and
g) the amount for any tax (including GST/HST).

7.19.2 Invoices must be distributed as follows:

a. One (1) copy must be forwarded to the address shown on page 1 of the Call-Up for certification and payment.

7.20 Insurance Requirements

It shall be the sole responsibility of the Standing Offer Holder to decide whether or not any insurance coverage is necessary for its own protection or to fulfil its obligations under the SOA and to ensure compliance with required federal, provincial or municipal law. Any such insurance shall be provided and maintained by the Standing Offer Holder at its own expense.

ANNEX "A"

STATEMENT OF WORK

1. Scope

1.1. Title

Chemical Analysis of Air Samples.

1.2. Introduction

Health Canada has a requirement to establish multiple Standing Offer Agreements (SOA's) with one or more suppliers capable of providing Chemical Analysis of Air Samples for the following Streams:

1) The chemical analysis of volatile organic compounds (VOC) collected using 3M Model #3500 passive sampling badges,
2) Elemental ICP-MS analysis of airborne particulate matter collected using Teflon filters,
3) The chemical analysis of nitrogen dioxide, nitrogen oxides, and ozone passive samples collected using Ogawa badges,
4) The gravimetric analysis of Teflon and polyurethane foam filters,
5) The chemical analysis of particle-phase and gas-phase polycyclic aromatic hydrocarbons (PAH) using URG personal pesticide samplers (URG-2000-25),
6) The chemical analysis of aldehydes (formaldehyde and acetaldehyde) collected using SKC UMEX 100 passive samplers,
7) XRF analysis of 33 chemical elements on airborne particulate matter collected using Teflon filters, and
8) The chemical analysis of volatile organic compounds collected using thermal desorption tubes.

1.3. Objectives of the Requirement

Health Canada is the federal government department responsible for helping Canadians to maintain and improve their health. Health Canada strives to improve the health of all Canadians, while respecting individual choices and circumstances, and therefore seeks to put Canada among the countries with the healthiest people in the world.

Health Canada scientists in the Air Health Science Division have played a leading role in understanding the effects of indoor and outdoor air pollution on human health in Canada. Studies completed to date include: the relationship between personal, indoor and outdoor air pollution and lung function and cardiovascular health; spatial variability of air pollutants within an urban area; intervention study to improve indoor air quality in homes with an attached garage; the health effects of ozone and particles on the cardiovascular-respiratory system; and a personal exposure study in different urban transportation microenvironments. Studies are being developed to better understand the association between PM2.5 oxidative potential and cause-specific mortality; the effects of indoor air quality on childrens' respiratory health in First Nation communities; and to investigate and quantify recent marine vessel emission regulations on population exposures for criteria air pollutants and quantify contributions of marine sector emissions to PM2.5 and PM2.5-associated air toxics; and to investigate VOC species data, including new and emerging chemicals in newly constructed homes.

Health Canada's objective is to meet its analytical requirement through the establishment of up to two (2) Standing Offers for each Stream offered to facilitate the on-going analyses of chemical samples collected through our research.

1.3.1 Right of first refusal basis:

Refer to Section 7.11 of PART 7 – STANDING OFFER AND RESULTING CONTRACT CLAUSES

Health Canada will accept proposals from Suppliers capable of undertaking one or more of the streams requested. Please note: **each Stream requires a *separate* Proposal**.

The objective of this Request for Standing Offer (RFSO) is to establish competitively-awarded Standing Offer Agreements (SOAs) with up to two suppliers for each of eight (8) streams, capable of providing Health Canada with various as-and-when-required chemical analysis services. The Supplier will be required to provide separate proposals for each of the services being tendered under this RFSO as each stream will be reviewed by different Health Canada personnel. These include the following Streams:

1) The chemical analysis of volatile organic compounds (VOC) collected using 3M Model #3500 passive sampling badges,
2) Elemental ICP-MS analysis of airborne particulate matter collected using Teflon filters,
3) The chemical analysis of nitrogen dioxide, nitrogen oxides, and ozone passive samples collected using Ogawa badges,
4) The gravimetric analysis of Teflon and polyurethane foam filters,
5) The chemical analysis of particle-phase and gas-phase polycyclic aromatic hydrocarbons (PAH) using URG personal pesticide samplers (URG-2000-25),
6) The chemical analysis of aldehydes (formaldehyde and acetaldehyde) collected using SKC UMEX 100 passive samplers,
7) XRF analysis of 33 chemical elements on airborne particulate matter collected using Teflon filters, and
8) The chemical analysis of volatile organic compounds collected using thermal desorption tubes.

1.4. Estimated Value of Standing Offer and Call-up Limitation

1.4.1. The total value of all Standing Offer Agreements resulting from this Request for Standing Offer shall not exceed **$2,500,000.00** including all applicable taxes, over a four (4) year period from date of signing of the Standing Offer Agreement. Travel and living expenses are not allowed under this contract.

1.4.2. This duration of the Standing Offer Agreements will be for a two (2) year period with two (2) additional one (1) year option years to be exercised at Health Canada's discretion.

1.4.3. The overall total of each individual Call-up will not exceed $50,000.00 (including applicable taxes and all amendments).

1.4.4. The maxium value for each Stream is listed in Section 2.0 Table 1.

1.5. Definition of a Standing Offer

A SOA is not a contract. It is an offer from a supplier to provide services on a prearranged pricing basis and under set terms and conditions for a specified period of time on an as-and-when required basis. A separate contract will be entered in to each time a request is made against a SOA. These separate contracts are known as Call-ups. Health Canada's liability shall be limited to the actual value of the Call-up(s) made within the specified period of the SOAs.

1.6. Background and Specific Scope of the Requirement

The Contractor shall, on an as-and-when required basis, and as described in the Call-up document signed by the Departmental Representative, provide laboratory (chemical) analysis services to Health Canada. The Departmental Representative will identify the number of samples in each Call-up, and this, in association with the Contractor's accepted fixed unit rates, will be the basis for establishing the cost of each Call-up undertaken in accordance with this Standing Offer Agreement. The timing for each Call-up will be subject to the specific requirements of the project, as determined exclusively by Health Canada.

In support of the above, the Contractor will (on an as-and-when-requested basis) provide laboratory (chemical) analysis services in relation to any or all of the following services as described below. The Contractor will provide evidence of validating each analytical method in their laboratory along with the reported results.

<u>Proposed Resources (Personnel):</u>

The Bidder must provide Health Canada with the names, resumes/CVs and credentials of all proposed personnel resources, as well as their back up resources who will be assigned to the services provided under the Streams of the SOA. The Bidder must include within their proposed resources a Project Manager, a Quality Assurance Officer and a Technical Analyst.

2. Requirements

2.0. Deliverables

TABLE 1
Estimated number of samples and maximum value for each Stream

STREAMS	Estimated number of samples per year allocated to each type of service Stream, resulting in a Standing Offer for two (2) firm years, plus two (2) optional one (1) year periods. Amounts shall not exceed:	Total estimated value per stream (CAD)
STREAM 1. Chemical analysis of VOCs collected using 3M Model #3500 passive badges	Year 1 - n = 400 Year 2 - n = 400 Year 3 - n = 400 Year 4 - n = 400	$180,000.00
STREAM 2. Elemental ICP-MS analysis of $PM_{2.5}$ samples collected using Teflon filters	Year 1 - n = 400 Year 2 - n = 400 Year 3 - n = 400 Year 4 - n = 400	$250,000.00
STREAM 3. Chemical analysis of NO_2, NO_x, and O_3 samples collected using Ogawa badges	Year 1 - n = 1000 Year 2 - n = 1000 Year 3 - n = 1000 Year 4 - n = 1000	$170,000.00
STREAM 4. Gravimetric analyses of Teflon and PolyUrethane Foam filters	Year 1 - n = 2200 Year 2 - n = 2200 Year 3 - n = 1750 Year 4 - n = 1750	$350,000.00
STREAM 5. Chemical analysis of particle and gas phase Polycyclic Aromatic Hydrocarbons collected using URG pesticide samplers.	Year 1 - n = 400 Year 2 - n = 400 Year 3 - n = 400 Year 4 - n = 400	$300,000.00
STREAM 6. The chemical analysis of aldehydes (formaldehyde and acetaldehyde) collected using SKC UMEX-100 passive samplers.	Year 1 - n = 400 Year 2 - n = 400 Year 3 - n = 300 Year 4 - n = 400	$300,000.00

STREAM 7. XRF analysis of 33 chemical elements on airborne particulate matter collected using Teflon filters.	Year 1 - n = 800 Year 2 - n = 500 Year 3 - n = 500 Year 4 - n = 500	$250,000.00
STREAM 8. Chemical analysis of VOCs collected using thermal desorption tubes, including potential TVOCs and method development work	Year 1 - n = 500 Year 2 - n = 500 Year 3 - n = 500 Year 4 - n = 500	$700,000.00

2.1. **STREAM 1 - Chemical analysis of VOCs collected using 3M Model #3500 passive badges**

The Contractor must have experience analysing 3M Model #3500 for indoor and outdoor residential air samples collected for the purpose of municipal, provincial and/or federal health studies. The Contractor must have the capability to analyse a minimum of 100 air samples for volatile organic chemicals (VOCs) per month, using the method outlined below:

2.1.1. Tasks, Activities, Deliverables and Milestones

The Contractor must store samples, prior to analysis, in a manner that does not allow them to be exposed to VOCs.

For each run of testing the Contractor will:

A. Calibrate the GC-MS with at least five analytical standard solutions and one solvent blank.

B. Perform appropriate Quality Assurance and Quality Control measures.

C. Test recoveries using passive sampling devices.

D. Manually review results to ensure integration parameters accurately assess baseline levels.

For each sample the Contractor will:

A. Extract samples, using proofed carbon disulphides, as specified in an approved analytical method of the 3M Model #3500 passive sampling badges.

B. Spike resulting solutions with at least two different deuterated compounds.

C. Analyse each sample via GC-MS in SIM (selected ion monitoring) mode, for the analytes listed in the Table 2.

D. Convert analytical results into µg/m3, based on exposure times and specific sampling rates.

Table 2 *

The list of target chemicals of (26 analytes) GC-MS in SIM mode for Stream 1

Chemical	CAS	Method Detect Limit (µg/Sample)
(m+p)-Xylene	108-38-3 / 106-42-3	0.005
1,1,2,2-Tetrachloroethane	79-34-5	0.002
1,2,4-Trichlorobenzene	120-82-1	0.003
1,2,4-Trimethylbenzene	95-63-6	0.003
1,2-Dichloroethane	107-06-2	0.006
1,3,5-Trimethylbenzene	108-67-8	0.002
1,3-Dichlorobenzene	541-73-1	0.001
1,4-Dichlorobenzene	106-46-7	0.005
a-Pinene	80-56-8	0.004
Benzene	71-43-2	0.014
Chloroform	67-66-3	0.008
Cumene	98-82-8	0.002
Dichloromethane	75-09-2	0.015
d-Limonene	5989-27-5	0.005
Ethylbenzene	100-41-4	0.006
Hexachloroethane	67-72-1	0.006
Hexane (C6)	110-54-3	0.007
Naphthalene	91-20-3	0.009
Decane (C10)	124-18-5	0.006
o-Xylene	95-47-6	0.005
p-Cymene	99-87-6	0.001
Pentachloroethane	76-01-7	0.003
Styrene	100-42-5	0.006
Tetrachloroethylene	127-18-4	0.004
Toluene	108-88-3	0.008
Trichloroethylene	79-01-6	0.004

*Note: **Health Canada may change the analytes in the list. The total number of the analytes of this type analysis will remain twenty six(26) or less, and VOC analytes can be analysed by GC/MS in SIM mode. If more than 26 analytes are required, the cost will increase proportionally (e.g., 1 extra analyte = increase in cost by 1/26 the existing cost under the existing list).**

Results of analyses will be made available to Health Canada in both electronic (Microsoft Excel) and hard copy formats in a timely manner, typically within 90 days of receipt of the samples. Data entry and results will be reviewed by the contractor prior to being made available to ensure accuracy.

Health Canada will ensure that each sample will have a unique sample identification.

Health Canada will ship samples in the appropriate manner based on the protocol for this method and sample i.e. shipped cold via overnight courier from the location of the sampling to the laboratory's address.

2.1.2. Specifications and Standards

The Contractor is responsible for the following:

Quality Assurance/ Quality Control (QA/QC) measures must be used. For each batch of samples the contractor must ensure:

A. Lab standardizations are within 10% of certified standard limits.

B. Two (2) deuterated internal standard agents are included in each extract, to serve as markers of instrument performance (internal standards within 20% relative standard deviation).

C. Multipoint calibrations are performed with standard solutions with each batch of samples. Calibration requires at least five (5) points above blank levels for valid statistical linear regression.

D. One (1) in ten (10) samples will be analysed in duplicate to estimate precision; acceptable precision is 10% deviation between results.

E. Meet the method detection limit listed in Table 2.

2.1.3. Technical, Operational and Organizational Environment

2.1.3.1. Turnaround Time

Because there must be no risk of the samples being opened for inspection during shipping and transportation, they cannot cross international borders. Therefore, the contractor must have the testing facility in Canada.

The Contractor must be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The Contractor must be able to undertake sampling analysis within 30 days of sample collection, and provide reports of analysis within 90 days of receipt of sample.

Data entry and results will be reviewed by the contractor prior to being made available to ensure accuracy.

2.1.3.2. Licensing and Accreditation

The Contractor must be accredited by Canadian Association for Laboratory Accreditation (CALA), or US equivalent such as National Environmental Laboratory Accreditation Program (NELAP), specifically for VOCs. Copies of all accreditations must be included in the Bidder’s proposal.

2.1.3.3. Personnel

The analytical staff must have experience in conducting analyses using GC/MS in SIM mode. The Contractor must have a comprehensive quality assurance program and designated Quality Assurance Officer.

2.2. STREAM 2- Elemental ICP-MS analysis of PM2.5 samples collected using Teflon filter

The Contractor's laboratory must be a dedicated facility for the determination of total metals on indoor and outdoor residential air samples (Teflon filters) collected for the purpose of municipal, provincial and/or federal health studies. A dedicated facility is defined as a laboratory which analyses a minimum of 100 air filter samples per month, using a total metal extraction procedure (HF/HNO3 mixture).

The Teflon filter samples will be provided by Health Canada post sampling in petri dishes and will contain particle masses of not less than 60 µg (micrograms). Field blanks will also be included. Health Canada will ensure that each sample will have a unique sample identification, and in some studies field blank filters may be indistinguishable from sample filters.

2.2.1. Tasks and Deliverables

The digestate for each sample must be analysed for 36 elements by ICP-MS. Service 2 - Table 3 below, lists the elements which must be included and the required minimum detection limits for these elements. Procedural blanks and two Certified Reference Materials (NIST 1633c and NIST 1648a) must each be included in triplicate (3) during the digestion process for every analytical batch at no additional cost. Detection limits for each element (calculated as three times the standard deviation of the procedural blank values) and the analytical results for the NIST materials will be used as the criteria for acceptability of results from the laboratory. If powdered samples are submitted they will be digested according to the same method as the NIST Certified Reference Materials.

Results of analyses will be made available to Health Canada in both electronic (Microsoft Excel) and hard copy formats in a timely manner, typically within 90 days of receipt of the samples from Health Canada. Data entry and results will be reviewed by the contractor prior to being made available to ensure accuracy.

Results for the samples, quality control blanks, duplicates (precision), and standard reference materials (SRMs) must be reported to Health Canada. All raw data must be included. Where an element has more than one isotope, the isotope must be specified in the report. The unique sample identification must be associated with each reported result.

TABLE 3
Required detection limits for 36 elements for Stream 2

Element	Element	Detection Limit	Units
Silver	Ag	0.01	ng/filter
Aluminum	Al	2	ng/filter
Arsenic	As	0.1	ng/filter
Boron	B	4	ng/filter
Barium	Ba	0.1	ng/filter
Beryllium	Be	0.03	ng/filter
Bismuth	Bi	0.01	ng/filter
Calcium	Ca	0.1	µg/filter
Cadmium	Cd	0.08	ng/filter
Chlorine	Cl	0.5	µg/filter
Cobalt	Co	0.05	ng/filter
Chromium	Cr	0.50	ng/filter
Copper	Cu	0.50	ng/filter
Iron	Fe	20	ng/filter
Mercury	Hg	0.1	ng/filter
Potassium	K	30	ng/filter
Lithium	Li	0.08	ng/filter
Magnesium	Mg	0.002	µg/filter
Manganese	Mn	0.08	ng/filter
Molybdenum	Mo	0.08	ng/filter
Sodium	Na	8	ng/filter
Nickel	Ni	0.40	ng/filter
Phosphorus	P	10	ng/filter
Lead	Pb	0.1	ng/filter
Sulphur	S	3	µg/filter
Antimony	Sb	0.03	ng/filter
Selenium	Se	2	ng/filter
Silicon	Si	1	µg/filter
Tin	Sn	0.80	ng/filter
Strontium	Sr	1	ng/filter
Thorium	Th	0.01	ng/filter
Titanium	Ti	4	ng/filter
Thallium	Tl	0.002	ng/filter
Uranium	U	0.004	ng/filter
Vanadium	V	0.05	ng/filter
Zinc	Zn	0.80	ng/filter

2.2.2. Specifics and Standards

The Contractor is responsible for ensuring the following Standards are maintained:

A. Digestion of Teflon filter samples using a nitric and hydrofluoric acid mixture, followed by ICP-MS determination of 36 elements (listed in Table 3).

B. Quality control must also include SRMs run with each filter digestion and analytical batch.

C. The observed values must be within the certified range provided on the certificates of analysis.

D. The detection limit for each element, as analysed using ICP-MS, must be equal to or less than those values listed in Table 3. The detection limit is defined as three (3) times the standard deviation of six (6) to eight (8) procedural blanks.

E. Procedural blanks represent the entire process to which the samples are subjected, including reagents, handling, and digestion, after they are submitted to the Contractor.

F. Results for the samples, quality control blanks, duplicates and SRMs must be reported to Health Canada. All raw data must be included. Where an element has more than one isotope, the isotope must be specified in the report. The report must be provided both electronically, as an Excel spreadsheet, and in paper hard copy. The unique sample identification must be associated with each reported result.

G. Quality control (QC) must include lab filter blanks, procedural reagent blanks run with each filter digestion and analytical batch, standard blanks, and duplicates of digestates.

Quality Assurance/Control (QA/QC) measures must be used for each batch of samples:

A. The detection limits for each element must be at least as low as those provided in Table 3.

B. Percent recoveries SRMs, which must include data for both NIST 1633c and NIST 1648a, are within the certified range provided on the Certificates of Analysis.

C. Replicate sampling of digestate (one (1) in ten (10) samples) yields a difference of less than five percent (5%).

D. Multipoint calibrations are performed with standard solutions with each analytical batch. Calibration requires at least five (5) points above blank levels for valid statistical linear regression.

2.2.3. Technical, Operational and Organizational Environment

2.2.3.1. Turnaround Time

Because there must be no risk of the samples being opened for inspection during shipping and transportation, they cannot cross international borders. Therefore, the contractor must have the testing facility in Canada.

The Contractor must be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The Contractor must be able to provide sampling analysis within 30 days of sample collection, and provide reports of analysis within 90 days of receipt of sample.

Data entry and results will be reviewed by the contractor prior to being made available to ensure accuracy.

2.2.3.2. Licensing and Accreditation

The Contractor must be CALA accredited, or US equivalent such as NELAP, for a minimum of six (6) elements in particulate matter on air filters. Those six elements must be on the list provided in Table 3.Copies of all accreditations must be included in the Bidder's proposal.

2.2.3.3. Personnel

The Contractor's laboratory must be a dedicated facility for the determination of total metals on indoor and outdoor residential air samples (Teflon filters) collected for the purpose of municipal, provincial and/or federal health studies. A dedicated facility is defined as a laboratory which analyses a minimum of 100 indoor, outdoor and personal air filter samples per month for the purpose of health studies, using a total metal extraction procedure (HF/HNO3 mixture). The laboratory must have experience in these types of studies.

The laboratory must have a comprehensive quality assurance program and designated Quality Assurance Officer, a Project Manager and a Technical Analyst.

2.3. STREAM 3 – Chemical analysis of NO2, NOx, and O3 samples collected using Ogawa badges

The Contractor must have experience of analysing Ogawa samples. At least, the Contractor must be able to demonstrate analysis of a minimum of 50 samples per month. The Contractor must have an Ion Chromatograph.

Health Canada will ship samples in the appropriate manner based on the protocol for this method and sample (i.e. shipped cold via overnight courier from the location of the sampling to the laboratory's address).

2.3.1. Tasks and Deliverables

The Contractor will be responsible for/perform the following:

A. Store samples properly according to the recommendations of Ogawa & Company.

B. Analysis of nitrogen dioxide (NO2) and nitorgen oxides (NOx): Refrigerate samples upon receipt.

C. Analysis of ozone (O3): Keep in a cool dark place until preparation for Ion Chromatography (IC) analyses, when the samples must then be refrigerated.

D. Disassemble the samplers and extract them using recommended procedures by Ogawa & Company (http://ogawausa.com/).

Filter Analysis:

A. The analysis of filters for NO2, NOx, and O3 will be carried out by Ion Chromatograph (IC) on the reaction products of the extraction, Nitrite (for NO2 and NOx) and Nitrate (for O3), according to the recommendations of Ogawa & Company.

B. Alternatively the NO2 and NOx filters can also be carried out by Automated Colorimetric analysis, according to the recommendations of Ogawa & Company.

C. The contractor will provide Health Canada with their SOPs regarding IC and Automated Colorimetric analysis methods.

Quality Assurance / Quality Control Measures:

A. The analytical procedure will incorporate determination of blank and quality control solutions. Lab standardizations must be within 10% of certified standard limits.

B. One (1) in ten (10) samples will be analysed in duplicate to estimate the precision of the analyses; acceptable precision is 10% deviation between results.

C. The calibration data, blank analyses and control charts constructed from analysis of quality control solutions of selected analytes will be made available to Health Canada for each batch of samples.

D. For 24hr samples and 7 day samples the contractor must be able to achieve the lowest detectable ranges of NO2 & NOx = 2.0ppb (24-h) and 0.3ppb (7 d), and for O3 = 2.7ppb (24-h) and 0.39ppb (7 d).

Data will be electronically captured.

Sample calculations for NO2, NOx, and O3 will be made available to Health Canada for each batch of samples.

The results of analysis will be made available to Health Canada in both electronic (Microsoft Excel) and hard copy formats in a timely manner, typically within 1 month of receipt of the samples. Data entry and results will be reviewed by the supplier using a professional chemist prior to being made available to ensure accuracy.

Health Canada will ensure that each sample will have a unique sample identification.

2.3.2. Specifications and Standards

Quality Assurance/Quality Control (QA/QC) measures must be used. For each batch of samples:

A. One (1) in ten (10) samples must be analysed in duplicate to ensure the precision of the analysis within 10%.

B. Three (3) passive sampling devices that have not been sent to the field or exposed (laboratory blanks) must be analysed to assess background levels of each selected analyte.

C. Calibration curve details and sample calculation of NO2, NOx, and O3 in Microsoft Excel format must be included in the deliverables.

D. The results of these quality assurance/control analyses must be included with the deliverables.

2.3.3. Technical, Operational and Organizational Environment

2.3.3.1. Turnaround Time

The Contractor must be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The Contractor must be able to undertake sampling analysis, and provide reports within 30 days of sample collection.

Data entry and results will be reviewed by the contractor prior to being made available to ensure accuracy.

2.3.3.2. Licensing and Accreditation

Expertise at analytical chemistry methods, including Ion Chromatography and Automated Colorimetric analyses, Canadian Association for Laboratory Accreditation (CALA) general lab accreditation and specific accreditation for nitrite and nitrate in aqueous solution, or US equivalent such as National Environmental Laboratory Accreditation Program (NELAP) is preferred. Copies of all accreditations must be included in the Bidder's proposal.

2.3.3.3. Personnel

The Contractor's analytical personnel must have training and experience in conducting analyses using IC or Automated Colorimetric analyses and must follow current best practices for the analyses of Ogawa filters based on the recommendations of Ogawa & Company. The Contractor must have a comprehensive quality assurance program and designated Quality Assurance Officer.

2.4. STREAM 4 – Gravimetric analysis of Teflon and PolyUrethane Foam (PUF) filters using EPA method

2.4.1. Tasks and Deliverables

The Contractor will be responsible for:

Preparing filters/PUFs:

A. Prior to field sampling, the Contractor shall condition and pre-weigh the filters/PUFs as outlined in the EPA document “Quality Assurance Guidance Document 2.12 Monitoring PM2.5 in Ambient Air Using Designated Reference or Class I Equivalent Methods.” (https://www3.epa.gov/ttn/amtic/files/ambient/pm25/qa/m212.pdf)

B. Ship filters/PUFs. Upon request from Health Canada the lab shall ship the prepared and labelled filters to the sampling location.

Sample analysis:

A. Condition and post-weigh samples according to the EPA document “Quality Assurance Guidance Document 2.12 Monitoring PM2.5 in Ambient Air Using Designated Reference or Class I Equivalent Methods” (https://www3.epa.gov/ttn/amtic/files/ambient/pm25/qa/m212.pdf) , Section 10.0 Filter Preparation and Analysis, and report results in hard copy and electronic (Microsoft Excel) formats.

B. For each run of testing the Contractor will observe the procedures for filter preparation and analysis as outlined in the EPA document “Quality Assurance Guidance Document 2.12 Monitoring PM2.5 Ambient Air Using Designated Reference or Class I Equivalent Methods”.

C. Results of analyses will be made available to Health Canada in both electronic (Microsoft Excel) and hard copy formats in a timely manner, typically within 30 days of receipt of the samples. Data entry and results will be reviewed by the contractor prior to being made available to ensure accuracy.

D. All filters and PUFs are the property of Health Canada. The Contractor shall return all filters and PUFs to Health Canada after post-weighing.

Health Canada will ensure that each sample will have a unique sample identification.

2.4.2

TABLE 4
Specifications and Standards for Stream 4

Standards/ Measures Activity	Method and frequency	Requirements
Microbalance		Resolution of 1 µg, repeatability of 1 µg.
Microbalance environment		Climate-controlled, draft free room or chamber or equivalent; clean area around microbalance.
Mass reference standard	Working standards verified every 3 to 6 months against National Institute of Standards and Technology (NIST)-traceable laboratory primary standards.	Standards bracket weight of filter; individual standard's tolerance less than 25 µg; handle with smooth, non-metallic, clean forceps.
Filter handling	Observe handling procedure.	Use powder-free gloves and smooth, clean forceps. Replace polonium-210 (210Po) antistatic strips every 6 months.
Filter integrity check	Visually inspect each filter.	No pinholes, separation, chaff, loose material, discoloration, or filter nonuniformity.
Filter identification	Write filter number on filter handling container and on laboratory data form in permanent ink.	Make sure the numbers are written legibly.
Pre-sampling filter conditioning	Determine the correct conditioning period (at least 24 hours) for each new lot of filters. Observe and record the conditioning chamber's RH and temperature; enter laboratory data form.	Check for stability of lot blank filter weights. Weight changes should be <15 µg per week before and after equilibration. Mean RH between 30% and 40%, with a variability of not more than 5% over 24 hours. Mean temperature should be held between 20 and 23 °C, with a variability of not more than 2 °C over 24 hours.
Pre- and post-sampling filter weighing	Observe all weighing procedures. Perform all quality control (QC) checks.	Neutralize the electrostatic charge on filters. Wait until balance indicates a stable reading to record value.
Internal QC	After approximately every 10th filter, re-zero the microbalance and reweigh at least one working standard. Weigh approx.10% laboratory blanks/weighing session. Reweigh one replicate filter at the end of the weighing session. Weigh approx. 10% field blanks.	The working standard measurements should agree within 3 µg of the verified values. Laboratory blank and replicate measurements should agree within 15 µg. Field blank measurements should agree within 30 µg.
Post-sampling filter storage	Monitor the time between sampling and weighing.	Weighing should be completed within 240 hours (10 days) after the end of sampling, unless the filter is maintained at 4 °C or below during the entire time between retrieval from the sampler and start of the conditioning, in which case the period shall not exceed 30 days.
Post-sampling	Examine the filter and field data sheet for	No damage to filter. Field data sheet complete. Sampler worked OK.

inspection, documentation, and verification	correct and complete entries. If sample was shipped in a cooled container, verify that low temperature was maintained.	
Post-sampling filter equilibration	Equilibrate filters for at least 24 hours. Observe and record the equilibration chamber's RH and temperature; enter on laboratory data sheet.	Mean RH between 30% and 40 %, with a variability of not more than 5% over 24 hours. Mean temperature should be held between 20 and 23 °C, with a variability of not more than 2 °C over 24 hours.

2.4.3. Technical, Operational and Organizational Environment

2.4.3.1. Turnaround Time

Because there must be no risk of the samples being opened for inspection during shipping and transportation, they cannot cross international borders. Therefore, the contractor must have the testing facility in Canada.

The laboratory must be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The laboratory must be able to undertake sampling analysis, and provide reports within 30 days of sample collection.

Data entry and results will be reviewed by the contractor prior to being made available to ensure accuracy.

2.4.3.2. Licensing and Accreditation

The Contractor must be CALA accredited, or US equivalent such as NELAP, specifically for gravimetric analysis. Copies of all accreditations must be included in the Bidder's proposal.

2.4.3.3. Personnel

The Contractor's analytical personnel must have training and experience in conducting gravimetric analysis. The laboratory must have a comprehensive quality assurance program and designated Quality Assurance Officer.

2.5. STREAM 5 – Chemical analysis of particle and gas phase Polycyclic aromatic Hydrocarbons (PAHs) collected using URG pesticide samplers (URG-2000-25)

The laboratory must be familiar with the analysis of PAHs, specifically by utilizing quartz fibre filters and polyurethane foam (PUF) as the sorbent, followed by GC-MS.

Health Canada has purchased a sufficient number of URG pesticide samplers to undertake sampling of vapour and particle phase (PM2.5) PAH with 2 litre per minute (L/min) and 4 L/min flow rates. These will be supplied in sufficient time to the contractor to allow for the cleaning, preparation with new PUF and filters, and the shipment of samplers to the field. Health Canada will return the samplers post-sampling to the laboratory for analysis.

The contract laboratory must have previous experience in using US EPA method TO-13A, and the ability to analyze and detect, very low concentrations of PAHs as the URG personal samplers collect a tenth of the volume of air than the US EPA method TO-13A (which is ~ 300 m3). In previous air quality studies, we collected about 36m^3 of air over a period of two weeks using the URG personal samplers URG-2000-25 (300 hrs x 60 min/hr x 2 L/min). Shorter term samples of 24 hour collections will utilise higher flow rates of 4L/min.

2.5.1. Tasks and Deliverables

The Contractor will be responsible for:

A. Building URG personal air samplers. At least one quartz filter and one PUF must be tested per batch prior to the assembly of the units for contamination, and found free of contamination, before the batch is considered acceptable for field use.

B. Shipping URG personal air samplers. Ship samples cold on ice via overnight courier to the location of the sampling from the laboratory's address.

C. Receiving and properly storing samples. Health Canada will ship samples cold with icepack via overnight courier from the location of the sampling to the laboratory's address. Prior to analysis, the samples will be stored by the Contractor in a manner that does not allow them to degrade with light or temperature.

For each sample the Contractor will be responsible for:

A. Extract samples - based on the US EPA TO-13a protocol.

B. Analyse via GC/MS, and meet the requreid detection limits listed in Table 5.

C. Provide results in nanograms (ng) per sample to Health Canada in both electronic (Microsoft Excel) and hard copy formats.

For each batch the Contractor will be responsible for:

Performing appropriate Quality Assurance and Quality Control (QA/QC) measures.

Analysis must follow PAHs Method TO-13A January 1999 Compendium of Methods for Toxic Organic Air Pollutants Page 13A-3 (http://www.epa.gov/ttnamti1/files/ambient/airtox/to-13arr.pdf)

The Contractor shall submit to the Departmental Representative all deliverables as specified in each project/assignment Call-up. The deliverables may include, but are not necessarily limited to, status reports, project reports, and documented working papers for each of the services being undertaken.

Deliverables shall be provided in electronic format directly in Microsoft Excel as specified within the Call-up.

Results of analyses will be made available to Health Canada in both electronic (Microsoft Excel) and hard copy formats in a timely manner, typically within 90 days of receipt of the samples from Health Canada. Data entry and results will be reviewed by the contractor prior to being made available to ensure accuracy.

Health Canada will ensure all samples have a unique identifier.

TABLE 5
Required detection limits for the analysis of PAHs and Pesticides – STREAM 5

PAH & Pesticide Analytes	Detection Limiting/sample (ng)
Benz(a)anthracene	1
Benzo(b)fluoranthene	1
Benzo(k)fluoranthene	1
Benzo(ghi)perylene	1
Benzo(a)pyrene	1
Chrysene / iso-Chrysene	1
Dibenz(a,h)anthracene	1
Indeno(1,2,3-cd)pyrene	1
Pyrene	1
Chlorpyrifos	2
Diazinon	2
cis-Permethrin	4
trans-Permethrin	8
ortho-Phenylphenol	4
Piperonyl butoxide	2
Propoxur	2

2.5.2. Specifications and Standards

Quality Assurance/Control (QA/QC) measures must be used. For each batch of samples:

A. For each batch at least one lab matrix blank must be included and extracted to test for any laboratory contamination.

B. Two (2) internal standard agents are included in each extract, to serve as markers of instrument performance.

C. Multipoint calibrations are performed with standard solutions with each batch of samples. Calibration requires at least five (5) points above blank levels for valid statistical linear regression.

D. Include at least one lab control sample which must be spiked with all target analytes for each batch of air samples. The control sample must be extracted and analysed to test for laboratory accuracy.

E. Meet the required detection limits listed in Table 5.

F. Provide an evaluation of the data quality.

2.5.3. Technical, Operational and Organizational Environment

2.5.3.1. Turnaround Time

Because there must be no risk of the samples being opened for inspection during shipping and transportation, they cannot cross international borders. Therefore, the contractor must have the testing facility in Canada.

The Contractor's laboratory must be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The laboratory must be able to provide sampling analysis within 90 days of receipt of the last sample to be included in each Call-up.

2.5.3.2. Licensing and Accreditation

The Contractor must be CALA accredited, or US equivalent such as NELAP, specifically for PAH. Copies of all accreditations must be included in the Bidder's proposal.

2.5.3.3. Personnel

The project manager and analytical staff shall have training and experience in conducting PAH analyses using GC/MS. The laboratory shall have a comprehensive quality assurance program and designated Quality Assurance Officer.

2.6. STREAM 6 – The chemical analysis of aldehydes (formaldehyde and acetaldehyde) collected using SKC UMEX 100 passive samplers

The Contractor will analyse passively collected air samples (SKC UMEX 100) and report the levels of acetaldehyde and formaldehyde. Analysis of the sasmples will be done using high performance liquid chromatography (HPLC) according to US EPA Compendium method TO 11A, or an equivalent method.

2.6.1. Tasks and Deliverables

Tasks for the Contractor include:

A. Receive sample shipments. Health Canada will ship samples in the appropriate manner via overnight courier from the location of the sampling to the laboratory's address.

B. Store samples, prior to analysis, in a manner that does not allow them to be exposed to volatile organic compounds (VOCs).

C. US EPA Compendium method TO 11A (https://www3.epa.gov/ttnamti1/files/ambient/airtox/to-11ar.pdf), or an equivalent method must be followed.

D. Achieve minimum detection limits for 24-hour samples as follows:

- Formaldehyde: 40 ng/sample;
- Acetaldehyde: 40 ng/sample

For each sample the Contractor will:

A. Extract samples in acetonitrile.

B. Analyse via high performance liquid chromatography (HPLC).

C. Manually review results to ensure integration parameters accurately assess baseline levels.

D. Convert analytical results into units of micrograms per cubic metre (µg/m3) terms based on exposure times and specific sampling rates.

Quality assurance/Quality control (QA/QC) measures must be used as specified in Section 2.6.2.

Results of analyses will be made available to Health Canada in both electronic (Microsoft Excel) and hard copy formats in a timely manner, typically within 90 days of receipt of the samples being shipped by Health Canada. Results will be reviewed by the contractor prior to being made available to ensure accuracy.

Health Canada will ensure all samples have a unique identifier.

2.6.2. Specifications and Standards

Quality Assurance/Control (QA/QC) measures must be used. For each batch of samples:

A. Lab standardizations are within 10% of certified standard limits.

B. Two internal standard agents are included in each extract, to serve as markers of instrument performance (internal standards within 20% relative standard deviation).

C. Multipoint calibrations are performed with standard solutions with each batch of samples. Calibration requires at least five (5) points above blank levels for valid statistical linear regression.

D. Report the desorption efficiency (%), uncertainty (%) and minimum reporting limit.

2.6.3. Technical, Operational and Organizational Environment

2.6.3.1. Turnaround Time

Because there must be no risk of the samples being opened for inspection during shipping and transportation, they cannot cross international borders. Therefore, the contractor must have the testing facility in Canada.

The Contractor's laboratory must be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The Contractor must be able to undertake sampling analysis within 30 days of sample collection, and provide reports of analysis within 90 days of receipt of sample.

Data entry and results will be reviewed by the contractor prior to being made available to ensure accuracy.

2.6.3.2. Licensing and Accreditation

The Contractor must be accredited by the American Industrial Hygiene Association (AIHA) under the Industrial Hygiene Laboratory Accreditation Program (IHLAP). The Contractor's facility must comply with the ISO/IEC 17025 Standard, General Requirements for Competence of Testing and Calibration Laboratories. Copies of all accreditations must be included in the Bidder's proposal.

2.6.3.3. Personnel

The analytical staff shall have training and experience in analysing formaldehyde air samples collected using dinitrophenylhydrazine (DNPH) samplers. The laboratory shall have a comprehensive quality assurance program and designated Quality Assurance Officer.

2.7. STREAM 7 – XRF analysis of 33 chemical elements on airborne particulate matter collected using Teflon filters

The contractor shall provide a detailed written laboratory protocol that will outline the procedures undertaken for filter analysis and quality assurance and quality control. The laboratory analysis methods must followhe EPA Method IO-3.3 in Compendium of Methods for the Determination of Metals in Ambient Particulate Matter (EPA 625/R-96/010a, https://www3.epa.gov/ttnamti1/files/ambient/inorganic/mthd-3-3.pdf). The protocol will include details of chain of custody and sample tracking, sample preparation, sample analysis as well as all quality control measures and criteria for acceptability of results. Quality control measures will include such measures as a chain of custody protocol, data review, instrument calibration using certified Standard Reference Materials (SRMs), procedural blanks, calibration verification and sample replicate precision. This protocol is to be approved by Health Canada prior to any sample filter analyses.

2.7.1. Tasks and Deliverables

Low mass Telfon filter particulate matter samples will be provided by Health Canada in petri dishes and will contain particle masses of not less than 10 µg (micrograms). Field blanks will also be included. Health Canada will ensure that each sample will have a unique sample identification; field blank filters may be indistinguishable from sample filters.

The contractor will analyse the low mass particulate matter filters for 33 elements using XRF analysis following EPA Method IO-3.3 in Compendium of Methods for the Determination of Metals in Ambient Particulate Matter (EPA 625/R-96/010a) and the agreed-upon protocol approved by Health Canada. The 33 elements and the minimum required method detection limits for these elements are provided in Table 6. Quality control samples including procedural blanks, reference materials and, duplicate analyses will be analysed at no additional cost.

The XRF results and Quality Assurance/Quality Control (QA/QC) information for each filter/batch will be reviewed by the contractor prior to being made available to ensure accuracy. Results of analyses will be made available to Health Canada in electronic format (Microsoft Excel) within 30 days of receipt of the samples from Health Canada. This will include results for the samples, quality control blanks, duplicates and SRMs. All raw data must be included. The unique sample identification numbers must be associated with each reported result.

All filters are the property of Health Canada. The Contractor shall return all filters to Health Canada after XRF analysis.

2.7.2. Specifications and Standards

The contractor will analyse the low mass particulate matter filters for 33 elements (Table 6) using XRF analysis following EPA Method IO-3.3 in Compendium of Methods for the Determination of Metals in Ambient Particulate Matter (EPA 625/R-96/010a). The detection limit for each element, as analyzed using XRF, must be equal to or less than those values listed in Table 6. The detection limit is defined as three (3) times the standard deviation of 10 procedural (laboratory) blanks. Procedural blanks represent the entire process to which the samples are subjected, including reagents, handling, and digestion, after they are submitted to the lab.

The analytical results will be screened by the contractor for any problems relating to the laboratory chain of custody, the filter, or any other problems occurring during the filter analysis and to ensure that the analytical protocol was followed. The dataset will be reviewed by the contractor for completeness, reasonableness and to ensure that the quality control sample results (eg. duplicate precision, accuracy/recovery based on standard reference materials) are within acceptable limits as outlined in the quality control protocol.

The contractor will work with Health Canada personnel to investigate quality control results that are outside the acceptable limits. The reevaluation shall include examination of analytical spectra, review of laboratory QC data, and, if necessary, reanalysis of the filter at no additional charge to Health Canada.

Before and after XRF analyses, filters will be stored in cold storage.

Table 6
Elements for analyses and minimum method detection limits (µg/cm2) for Stream 7

Aluminum	Al	0.024
Antimony	Sb	0.044
Arsenic	As	0.002
Barium	Ba	0.009
Bromine	Br	0.002
Cadmium	Cd	0.027
Calcium	Ca	0.006
Cerium	Ce	0.008
Cesium	Cs	0.010
Chlorine	Cl	0.007
Chromium	Cr	0.002
Cobalt	Co	0.001
Copper	Cu	0.004
Indium	In	0.028
Iron	Fe	0.001
Lead	Pb	0.005
Magnesium	Mg	0.010
Manganese	Mn	0.002
Nickel	Ni	0.001
Phosphorus	P	0.014
Potassium	K	0.006
Rubidium	Rb	0.002
Selenium	Se	0.002
Silicon	Si	0.012
Silver	Ag	0.019
Sodium	Na	0.033
Strontium	Sr	0.002
Sulfur	S	0.008
Tin	Sn	0.031
Titanium	Ti	0.005
Vanadium	V	0.003
Zinc	Zn	0.002

Zirconium	Zr	0.029

2.7.3. Technical, Operational and Organizational Environment

2.7.3.1. Turnaround Time

The laboratory must be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The laboratory must provide sample results within 30 days of receipt of the sample.

2.7.3.2. Licensing and Accreditation

The Bidder must have participated in round robin programs for XRF analysis of air samples and provide evidence that their performance has been comparable to other laboratories.

The Contractor must be CALA accredited, or US equivalent such as NELAP for the determination of trace metals in ambient air. Copies of all accreditations must be included in the Bidder's proposal.

2.7.3.3. Personnel

The analytical staff shall have training and experience in carrying out analyses of air samples. The laboratory shall have a comprehensive quality assurance program and designated Quality Assurance Officer.

2.8. STREAM 8 Chemical analysis of VOCs collected using thermal desorption tubes

The Contractor must have experience in thermal desorption GC/MS analysis of volatile organic compoundss (VOCs) for residential indoor air samples collected using Perkin-Elmer Carbopack B thermal desorption (TD) tubes for the purpose of municipal, provincial and/or federal health studies.

The Contractor must have two (2) thermal desorbers coupled with gas chromatography/mass spectrometers (TD/GC/MS) suitable for analyzing Perkin-Elmer Carbopack B tubes, dedicated to this work under the duration of the Standing Offer Agreement; one for analysis, and one for backup.

The Contractor must have the capability to analyse a minimum of 100 TD tubes for VOCs per month, using the method outlined below:

2.8.1. Tasks, Activities, Deliverables and Milestones

- The Contractor must follow EPA Method TO-17 - Determination of Volatile organic Compounds in Ambient Air Using Active Sampling Onto Sorbent Tubes (https://www3.epa.gov/ttnamti1/files/ambient/airtox/to-17r.pdf), or an equivalent method.
- The Contractor shall thoroughly clean the TD tubes and check the residual background prior to sending them to Health Canada. The TD tubes are to be sealed by easily removable brass or Teflon caps and stored in individual metal canisters.
- The contractor shall inspect the integrity of the samples received and inform Health Canada of any deficiency issues.
- The Contractor must store samples, prior to analysis, in a manner that does not allow them to be exposed to VOCs.
- The contractor must complete the sample analysis within 72 hours after receiving the samples from Health Canada.
- The contractor shall be able to perform the following four (4) types of analysis upon Health Canda's request, **and the contractor shall propose the unit price ($/sample) for each type of the analysis:**

    1) Samples shall be analysed using thermal desorption GC/MS for indoor air VOCs specified in Table 7
    2) Samples shall be analysed using thermal desorption GC/MS for indoor air VOCs specified in Table 8
    3) Samples shall be analysed using thermal desorption GC/MS for indoor air VOCs specified in Table 9
    4) Upon request, samples shall be analysed using thermal desorption GC/MS for open characterization of major (35) VOCs ranking in descending order. Semi-quantitative concentrations of the identified compounds shall be reported using referenced compounds.
    5) The TVOC content of each sample using the following methodology:

1) Starting with the GC/MS file, integrate all the peaks detected and determine the chromatographic area of each peak

2) Remove common contaminants such as compounds from the background

3) Subtract the results from the corresponding lab blank sample

4) Use three different standards to quantify the low, medium and high boiling point compounds

5) Substitute the real concentrations of target compounds determined quantitatively (for the list of compounds in Tables 7-9)

6) Sum all the VOCs detected to give ng/sample and ug/m^3

Health Canada shall provide the sampling volume and all pertinent information so that semi-quantitative concentration can be calculated.

Health Canada will ensure that each sample will have a unique sample identification; field blanks will also be included, and may be indistinguishable from sample.

Results of analyses and Quality Assurance/Quality Control (QA/QC) information for each sample/batch shall be reviewed by the contractor prior to being made available to ensure accuracy. Results of analyses will be made available to Health Canada in both electronic (Microsoft Excel) and hard copy formats in a timely manner, within 7 days of receipt of the samples.

Table 7
The list of target chemicals of Type 1 analysis (92 analytes) with expected performance criteria in Stream 8*

CAS	Chemical Name	Detection Limit (ug/m^3, based on 5 L air volume)	Thermal desorption recovery (at 50 ng/tube)	Precision (%RSD, n= 5, at 50 ng/tube)	Storage stability over 14 days (spiked at 100 ng/tube)
75-27-4	Bromodichloromethane	0.2	>70%	<30%	>70%
124-48-1	Chlorodibromomethane	0.2	>70%	<30%	>70%
75-25-2	Methane, tribromo- (bromoform)	0.2	>70%	<30%	>70%
67-66-3	Methane, trichloro- (chloroform)	0.2	>70%	<30%	>70%
71-43-2	Benzene	0.2	>70%	<30%	>70%
108-88-3	Toluene	0.2	>70%	<30%	>70%
100-41-4	Benzene, ethyl-	0.2	>70%	<30%	>70%
108-38-3/106-42-3	m/p-xylene	0.2	>70%	<30%	>70%
95-47-6	o-xylene	0.2	>70%	<30%	>70%
	Chlorinated Hydrocarbons				
126-99-8	1,3-Butadiene, 2-chloro- [(Chloroprene)]	0.2	>70%	<30%	>70%
106-94-5	Propane, 1-bromo-	0.2	>70%	<30%	>70%
78-88-6	1-Propene, 2,3-dichloro-	0.2	>70%	<30%	>70%
79-00-5	Ethane, 1,1,2-trichloro-	0.2	>70%	<30%	>70%
630-20-6	Ethane, 1,1,1,2-tetrachloro-	0.2	>70%	<30%	>70%

106-93-4	Ethane, 1,2-dibromo-	0.2	>70%	<30%	>70%
76-01-7	Ethane, pentachloro-	0.2	>70%	<30%	>70%
67-72-1	Ethane, hexachloro-	0.2	>70%	<30%	>70%
75-34-3	1,1-Dichloroethane	0.2	>70%	<30%	>70%
107-06-2	1,2-Dichloroethane	0.2	>70%	<30%	>70%
75-35-4	1,1-Dichloroethene	0.2	>70%	<30%	>70%
96-18-4	Propane, 1,2,3-trichloro-	0.2	>70%	<30%	>70%
96-23-1	2-Propanol, 1,3-dichloro-	0.2	>70%	<30%	>70%
111-83-1	Octane, 1-bromo-	0.2	>70%	<30%	>70%
87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	0.2	>70%	<30%	>70%
112-29-8	Decane, 1-bromo-	0.2	>70%	<30%	>70%
77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	0.2	>70%	<30%	>70%
112-52-7	Dodecane, 1-chloro-	0.2	>70%	<30%	>70%
127-18-4	Perchloroethylene	0.2	>70%	<30%	>70%
	Chlorobenzene derivatives				
25168-05-2	Benzene, chloromethyl-	0.2	>70%	<30%	>70%
108-90-7	Benzene, chloro-	0.2	>70%	<30%	>70%
95-50-1	Benzene, 1,2-dichloro-	0.2	>70%	<30%	>70%
106-46-7	Benzene, 1,4-dichloro-	0.2	>70%	<30%	>70%
95-73-8	Benzene, 2,4-dichloro-1-methyl-	0.2	>70%	<30%	>70%
87-61-6	Benzene, 1,2,3-trichloro-	0.2	>70%	<30%	>70%
120-82-1	Benzene, 1,2,4-trichloro-	0.2	>70%	<30%	>70%
108-70-3	Benzene, 1,3,5-trichloro-	0.2	>70%	<30%	>70%
19398-61-9	Benzene, 1,4-dichloro-2-methyl-	0.2	>70%	<30%	>70%
	Aromatic compounds				
100-42-5	Styrene	0.2	>70%	<30%	>70%
95-63-6	Benzene__1_2_4_trimethyl_	0.2	>70%	<30%	>70%
526-73-8	Benzene__1_2_3_trimethyl_	0.2	>70%	<30%	>70%
108-67-8	1,3,5-Trimethylbenzene	0.2	>70%	<30%	>70%
98-82-8	Benzene, (1-methylethyl)-	0.2	>70%	<30%	>70%
91-20-3	Naphthalene	0.2	>70%	<30%	>70%
	Aliphatic hydrocarbons				
109-66-0	Pentane	0.2	>70%	<30%	>70%
110-54-3	Hexane	0.2	>70%	<30%	>70%
142-82-5	Heptane	0.2	>70%	<30%	>70%
111-65-9	Octane	0.2	>70%	<30%	>70%
111-84-2	Nonane	0.2	>70%	<30%	>70%
124-18-5	Decane	0.2	>70%	<30%	>70%
1120-21-4	Undecane	0.2	>70%	<30%	>70%
112-40-3	Dodecane	0.2	>70%	<30%	>70%
	Aldehydes				
66-25-1	Hexanal	0.2	>70%	<30%	>70%
111-71-7	Heptanal	0.2	>70%	<30%	>70%
124-13-0	Octanal	0.2	>70%	<30%	>70%
124-19-6	Nonanal	0.2	>70%	<30%	>70%
112-31-2	Decanal	0.2	>70%	<30%	>70%
100-52-7	Benzaldehyde	0.2	>70%	<30%	>70%

1998-01-01	2_Furancarboxaldehyde	0.2	>70%	<30%	>70%
	Aliphatic alchols				
67-63-0	2-Propanol	0.2	>70%	<30%	>70%
75-65-0	2-Propanol, 2-methyl-	0.2	>70%	<30%	>70%
71-36-3	1_Butanol	0.2	>70%	<30%	>70%
71-41-0	1_Pentanol	0.2	>70%	<30%	>70%
108-93-0	Cyclohexanol	0.2	>70%	<30%	>70%
		0.2	>70%	<30%	>70%
111-76-2	Ethanol__2_butoxy_	0.2	>70%	<30%	>70%
104-76-7	1-Hexanol, 2-ethyl-	0.2	>70%	<30%	>70%
	Aliphatic ketones				
67-64-1	2-Propanone (acetone)	0.2	>70%	<30%	>70%
78-93-3	2-Butanone	0.2	>70%	<30%	>70%
107-87-9	2-Pentanone	0.2	>70%	<30%	>70%
591-78-6	2-Hexanone	0.2	>70%	<30%	>70%
108-94-1	Cyclohexanone	0.2	>70%	<30%	>70%
108-10-1	2-Pentanone, 4-methyl-	0.2	>70%	<30%	>70%
110-12-3	2-Hexanone, 5-methyl-	0.2	>70%	<30%	>70%
	ethers				
109-99-9	Furan, tetrahydro-	0.2	>70%	<30%	>70%
123-91-1	1,4-Dioxane	0.2	>70%	<30%	>70%
110-71-4	Ethane, 1,2-dimethoxy-	0.2	>70%	<30%	>70%
625-86-5	2,5-Dimethylfuran	0.2	>70%	<30%	>70%
271-89-6	Benzofuran	0.2	>70%	<30%	>70%
	Siloxanes				
107-46-0	Disiloxane, hexamethyl-	0.2	>70%	<30%	>70%
107-51-7	Trisiloxane, octamethyl-	0.2	>70%	<30%	>70%
141-62-8	Tetrasiloxane, decamethyl-	0.2	>70%	<30%	>70%
141-63-9	Pentasiloxane, dodecamethyl-	0.2	>70%	<30%	>70%
556-67-2	Cyclotetrasiloxane__octamethyl	0.2	>70%	<30%	>70%
541-02-6	Cyclopentasiloxane__decamethyl	0.2	>70%	<30%	>70%
	Terpenes				
80-56-8	a-pinene	0.2	>70%	<30%	>70%
5989-27-5	Limonene	0.2	>70%	<30%	>70%
79-92-5	Camphene	0.2	>70%	<30%	>70%
98-82-8	Cumene	0.2	>70%	<30%	>70%
	Others				
91-22-5	Quinoline	0.2	>70%	<30%	>70%
108-95-2	Phenol	0.2	>70%	<30%	>70%
110-82-7	Cyclohexane	0.2	>70%	<30%	>70%
78-79-5	1_3_Butadiene__2_methyl_	0.2	>70%	<30%	>70%
1119-40-0	Pentanedioic acid, dimethyl ester	0.2	>70%	<30%	>70%

*** Note: Health Canada may change the analytes in the list. The total number of the analytes of this type analysis will remain ninety two (92) or less, and VOCs can be analysed by thermal desorption GC/MS. Additional analytes can be added, at a cost negotiated with Health Canada**.

Table 8
The list of target chemicals of Type 2 analysis (67 analytes)*

CAS	Chemical Name	Minimum Detection Limits (ng)
5989-27-5	(R) - (+) – Limonene	0.5
71-55-6	1,1,1-Trichloroethane	0.5
102-76-1	1,2,3-Propanetriol, triacetate	10
526-73-8	1,2,3-Trimethylbenzene	0.5
95-63-6	1,2,4-Trimethylbenzene	0.5
107-06-2	1,2-Dichloroethane	1
78-87-5	1,2-Dichloropropane	1
108-67-8	1,3,5-Trimethylbenzene (Mesitylene)	0.5
106-46-7	1,4-Dichlorobenzene	1
123-91-1	1,4-Dioxane	0.5
71-36-3	1-Butanol	1
111-27-3	1-Hexanol	3
3391-86-4	1-Octen-3-ol	5
78-83-1	1-propanol, 2-methyl-	3
107-05-1	1-Propene, 3-chloro (Allyl chloride)	2
600-14-6	2,3-Pentanedione	5
78-93-3	2-Butanone (Methyl ethyl ketone)	0.5
96-29-7	2-Butanone, oxime	40
111-76-2	2-Butoxyethanol	10
98-01-1	2-Furaldehyde (Furfural)	1
108-10-1	4-Methyl-2-Pentanone (MIBK)	1
110-19-0	Acetic acid, 2-methylpropyl ester	1
67-64-1	Acetone	0.5
98-83-9	alpha-Methylstyrene	1
80-56-8	alpha-Pinene	0.5
104-87-0	Benzaldehyde	1
100-52-7	Benzaldehyde, 4-methyl-	1
71-43-2	Benzene	0.5
98-56-6	Benzene, 1-chloro-4-(trifluoromethyl)-	0.5

100-47-0	Benzonitrile	1
95-16-9	Benzothiazole	1
128-37-0	Butylhydroxytoluene	10
105-60-2	Caprolactam	5
56-23-5	Carbon Tetrachloride	0.5
108-90-7	Chlorobenzene	0.5
67-66-3	Chloroform	1
110-82-7	Cyclohexane	0.5
108-94-1	Cyclohexanone	1
431-03-8	Diacetyl	1
132-64-9	Dibenzofuran	1
75-09-2	Dichloromethane (Methylene Chloride)	1
624-92-0	Dimethyl Disulfide	2
68-12-2	Dimethylformamide (N,N-)	3
106-89-8	Epichlorohydrin	3
100-41-4	Ethylbenzene	0.5
110-80-5	Ethylene glycol monoethylether (2-Ethoxyethanol)	30
110-00-9	Furan	1
78-59-1	Isophorone	1
98-82-8	Isopropyl benzene (Cumene)	0.5
100-97-0	Methenamine	10
74-93-1	Methyl Mercaptan	6
80-62-6	Methyl Methacrylate	1
78-94-4	Methyl vinyl ketone	1
91-20-3	Naphthalene	1
124-13-0	Octanal	1
95-47-6	o-Xylene	0.5
108-95-2	Phenol	1
123-38-6	Propanal	1
106-42-3	p-Xylene	0.5
110-86-1	Pyridine	1
108-46-3	Resorcinol	30

100-42-5	Styrene	0.5
127-18-4	Tetrachloroethylene	0.5
109-99-9	Tetrahydrofuran	0.5
108-88-3	Toluene	0.5
79-01-6	Trichloroethylene	0.5
108-05-4	Vinyl acetate	1

*** Note: Health Canada may change the analytes in the list. The total number of the analytes of this type analysis will remain sixty-seven (67) or less, and VOCs can be analysed by thermal desorption GC/MS. Additional analytes can be added, at a cost negotiated with Health Canada.**

Table 9
The list of target chemicals of Type 3 analysis (21 analytes) *

CAS	Chemical Name
107-02-8	Acrolein
107-13-1	Acrylonitrile
71-43-2	Benzene
106-99-0	1,3-Butadiene
106-44-5	p-Cresol
108-39-4	m-Cresol
123-32-0	2,5-Dimethyl Pyrazine
100-97-0	Methenamine
109-08-0	Methyl Pyrazine
108-99-6	3-Methyl Pyridine
96-54-8	1-Methyl-1H-Pyrrole
636-41-9	2-Methyl-1H-Pyrrole
54-11-5	Nicotine
487-19-4	Nicotyrine
62-75-9	N-Nitrosodimethylamine
95-48-7	o-Cresol
108-95-2	Phenol
290-37-9	Pyrazine
110-86-1	Pyridine
109-97-7	Pyrrole
1121-55-7	3-Vinylpyridine

***Note: Health Canada may change the analytes in the list. The total number of the analytes of this type analysis will remain twenty one (21) or less, and VOCs can be analysed by thermal desorption GC/MS. Additional analytes can be added, at a cost negotiated with Health Canada.**

2.8.2. Specifications and Standards

- The contractor must have traceable standards for all VOCs, and carry out daily multi-calibrations for quantitative measurement results.
- Analysed results, reported in the units of both nanograms per tube (ng/tube) and micrograms per cubic metre (µg/m3) in indoor air, provided in hard copy and electronic Excel spreadsheet format.

2.8.3. Technical, Operational and Organizational Environment

2.8.3.1. Turnaround Time

Because there must be no risk of the samples being opened for inspection during shipping and transportation, they cannot cross international borders. Therefore, the contractor must have the testing facility in Canada.

The Contractor must be able to receive samples by courier delivery within 24 hours of Health Canada shipping them from Ottawa, Ontario. The Contractor must be able to undertake sampling analysis within 72 hours of sample

collection, and provide reports of analysis within seven (7) days of receipt of sample.

Data entry and results will be reviewed by the contractor prior to being made available to ensure accuracy.

2.8.3.2. Licensing and Accreditation

The contractor must have participated in at least one on-going national or international proficiency program for the thermal desorption analysis of airborne VOCs.

The Contractor must be accredited by the American Industrial Hygiene Association (AIHA) under the Industrial Hygiene Laboratory Accreditation Program (IHLAP). The Contractor's facility must comply with the ISO/IEC 17025 Standard, General Requirements for Competence of Testing and Calibration Laboratories. Copies of all accreditations must be included in the Bidder's proposal.

2.8.3.3. Personnel

The project manager and analytical staff shall have training and experience in conducting thermal desorption GC/MS analysis for VOCs using TD tubes. The laboratory shall have a comprehensive quality assurance program and designated Quality Assurance Officer.

Since many of the target analytes have not been reported in residential indoor air, some of difficulties or modifications to the currently available thermal desorption GC/MS methods are expected. Therefore, the contractor must have extensive research experience in the method development or modification to the currently available methods for indoor air VOCs.

2.9. Method and Source of Acceptance

All reports, deliverables, documentation and all services rendered under a Call-up under this Standing Offer are subject to inspection by the Departmental Representative or a designated representative that has been identified in the Call-up. Should any report, document or service not be to the satisfaction of the Departmental Representative, or a designated representative, as submitted, the Departmental Representative shall have the right to reject it or require correction at no cost to Health Canada before payment will be authorized.

Where specifically required to do so by Health Canada, the Contractor must provide the services of the personnel named in the Contractor's proposal to perform the work, unless the Contractor is unable to do so for reasons beyond his/her control.

2.10. Reporting Requirements

Efficient time management is of utmost importance to Health Canada. The Contractor shall deliver the services by the deadlines established within the Call-up document. Every effort will be made by Health Canada to provide the Contractor with reasonable deadlines

2.11. Project Management Control Procedures

The individual identified in the subsequent contract as the Health Canada Project Coordinator shall review all written material submitted as deliverables as specified in each project/assignment Call-up.

The Health Canada Project Authority will provide comments within five (5) days to the Standing Offer Holder indicating any changes required to the deliverables, services, written reports or processes.

Meetings to review the deliverables may be held from time to time at the Health Canada Project Authority's location, or take place via conference call. Required documents for discussion will be provided by the Standing Offer Holder to the Health Canada Project Authority 48 hours prior to the meeting.

2.12. Possible Proficiency Re-Testing

If, at any time, the services provided under a Standing Offer are not satisfactory to Health Canada, and the situation cannot be resolved to the satisfaction of Health Canada, the Standing Offer for Laboratory (chemical) Analysis will be terminated with no penalty to Health Canada.

Health Canada reserves the right to administer a proficiency test to assess the analytical precision of the laboratory, at its sole discretion. Specifically, Health Canada reserves the right to send up to 30 blinded samples to the laboratory for analysis at the laboratory's expense, following the process outlined in Section 4.7 of the Request for Proposal. The results of analysis will be evaluated by Health Canada staff for acceptable precision as given in Section 4.7, Table 1 of the Request for Proposal.

2.13. Change Management Procedures

The Standing Offer Holder shall not perform work in excess of or outside of the scope or deliverables of the Standing Offer Agreement or Call-Up document. Any changes to the Call-Up document must be done in writing by the Departmental Representative by means of a written amendment.

3. Additional Information

3.1. Authorities

Project Authority: (*To be completed at contract award*)

The Project Authority is responsible for all matters concerning the technical content of the work under any resulting Call-up against the SOA. Any proposed changes to the scope of the Call-up are to be discussed with the Project Authority and confirmed by a Call-up Amendment issued by the Departmental Representative.

Departmental Representative: (*To be completed at contract award*)

This will be identified in the Articles of Agreement between the Crown and the Standing Offer Holder. The Departmental Representative is the officer or employee of the Crown who is authorized by the Minister to perform any of the Departmental Representative's functions under the SOA.

Contracting Officer:

This will be identified on the front cover of this RFSO. Any changes to the Articles of Agreement must be authorized in writing by the Contracting Officer. The Standing Offer Holder is not to perform work in excess of or outside the scope of the SOA based on written requests from any government personnel other than the Contracting Officer.

3.2. Health Canada's Obligations

The Departmental Representative will provide the following to the Standing Offer Holder:

- Negotiate the number of days required for a given project/task. The timing for each project/task will be subject to the specific requirement for that project, as identified by Health Canada.
- Ensure that appropriate subject matter experts from within Health Canada are available to the Standing Offer Holder to discuss and provide content material and other inputs, as well as to facilitate cooperation with other Health Canada representatives as required.
- Provide the Standing Offer Holder with both physical and electronic Health Canada delivery addresses, to which deliverables are to be submitted.

3.3. Contractor's Obligations

The management by the Contractor for service delivery to Health Canada in relation to the SOA shall be undertaken in accordance with all applicable Acts, Codes, Departmental and/or Federal Government regulations, policies and procedures as well as the codes and guidelines provided by Canadian Translators and Interpreters Council (CTIC**)**

The Contractor must provide the services of the personnel resource(s) named in the SOA to perform the work, unless the Standing Offer Holder is unable to do so for reasons beyond his/her control in which case, additional resources will be subject to the pre-approval of Health Canada.

The Contractor shall ensure that all deployed personnel are properly trained to fulfil their responsibilities. In addition, the Contractor is required to ensure that all of its assigned personnel are available during each Call-Up to perform the work in accordance with all applicable legislation, regulations, codes and policies.

The Contractor must provide annual update on the services of the personnel resource(s) named in the SOA to perform the work, and any new personnel shall be subject to Health Canada approval under the existing terms of the Statement of Work.

The management by the Contractor of service delivery to Health Canada in relation to this Agreement shall be undertaken in accordance with all federal government regulations, policies and procedures.

3.4. Location of Work, Work site and Delivery Point

The work shall be conducted at the Contractor's facilities.

The Contractor shall be responsible for providing his/her own work site. Health Canada will not be responsible for any travel or other associated costs incurred to Bidder in carrying out this work

To the extent possible, Health Canada shall use electronic forms of delivery and communication including email and teleconference calls, as applicable and feasible under the Government of Canada's Security Policy.

Due to existing workload and deadlines, all personnel assigned to any Call-up issued against the SOA must be ready to work in close and frequent contact with the Departmental Representative and other departmental personnel.

3.5. Language of Work

The Standing Offer Holder shall be capable of correspondence with Health Canada in relation to the SOA in either or both Official Languages (English/French) of Canada. However, all deliverables shall be produced and delivered in the target language of the particular project/task, as specified within the issued Call-up.

3.6. Special Requirements

3.6.1. Limitation of the Standing Offer Agreement

For the duration of the SOA, the Standing Offer Holder agrees to notify, in writing, the Departmental Representative of his/her desire to withdraw from the SOA at a minimum of thirty (30) days prior to ceasing provision of the services agreed to within the SOA.

Should the Standing Offer Holder default on any Call-up issued, Health Canada may, by notice to the Standing Offer Holder, terminate the whole or any part of the work. The Standing Offer Holder shall be liable to Her Majesty for any excess costs incurred by Health Canada relating to their default.

If, at any time, the services provided under a Standing Offer are not satisfactory to Health Canada, and the situation cannot be resolved to the satisfaction of Health Canada, the Standing Offer for Laboratory (chemical) Analysis will be terminated with no penalty to Health Canada.

3.6.2. Allocation of Work

Health Canada intends to issue up to a maximum of sixteen (16) Standing Offer Agreements – one (1) or more Standing Offer Agreement to be awarded under each Stream of service described in this RFSO.

The top ranked supplier of each Stream shall have the “Right of first refusal” of all work.

Call-ups issued under the Standing Offer Agreement will be subject to the terms and conditions of this RFSO and the Health Canada SOA documents.

It is understood and agreed to that the Standing Offer Holder shall not commence any work until authorized in writing by a Call-up issued by the Health Canada Project Authority.

3.6.3. Call- up Procedures

3.6.3.1. Call-ups issued under the Standing Offer Agreement will be subject to the terms and conditions of this RFSO and the Health Canada SOA documents.

3.6.3.2. Bidders will be tasked by way of formal Call-up(s) issued against the Standing Offer Agreement, for the work activities to be performed, deliverables to be submitted within the scope of this Agreement and required completion date(s) as described in the Statement of Work in the Call-up document

3.6.3.3. In accordance with the allocation of work for this Standing Offer Agreement (section 3.6.2 above), the Health Canada Project Authority will provide the selected Standing Offer holder with Statement of Work, detailing the Work activities to be performed and deliverables to be submitted within the scope of this Agreement as well as the required completion date(s).

3.6.3.4. The Standing Offer holder will acknowledge receipt of the Statement of Work request within two (2) days of notification and confirm that the SO Holder is available and ready to do the work.

3.6.3.5. The Standing Offer holder will then submit to the Health Canada Project Authority the a cost estimate for each service as per Fix Unit rates specified in the Standing Offer Agreement. The rate charged by the Contractor in the fee proposal must not exceed the Fixed Unit Rate specified in the Standing Offer Agreement, except in agreed-upon circumstances related to changes to or addition of analytes.

3.6.3.6. When an agreement on the level of effort and cost is reached between the Standing Offer Holder and the Health Canada Project Authority, the Health Canada Project Authority will issue a formal call-up against the Standing Offer Agreement authorizing the work to begin.

3.6.3.7. It is understood and agreed that the Standing Offer Holder shall not commence any Work until authorized in writing by a formal Call-up issued by the Health Canada Project Authority or his/her delegate.

3.6.3.8. No costs shall be incurred or accepted before receipt of a signed formal "Call-up Against a Standing Offer Agreement" from the Health Canada Project Authority. The Health Canada Project Authority will provide the Standing Offer Holder details of the Work activities to be performed, deliverables to be submitted within the scope of this Agreement and required completion date(s).

3.7. Insurance Requirements

It shall be the sole responsibility of the Contractor to decide whether or not any insurance coverage is necessary for its own protection or to fulfil its obligations under the SOA and to ensure compliance with required federal, provincial or municipal law. Any such insurance shall be provided and maintained by the Contractor at its own expense.

3.8 Travel and Living

There is no travel and living associated with this requirement

3.9 Security Requirements:

Refer to Annex "D" for more information.

The vast majority of the call-ups raised under these Standing Offers WILL NOT have a security requirement as the contract will deal with de-identified samples and will include no personal information.

Therefore, the Standing Offers will be awarded to suppliers whether they have security screening clearances or not.

However, it is possible that one or more call-ups may contain a Government of Canada security requirement. The security requirements will be fully defined in any resulting call-up. It is the Standing Offer holder's sole responsibility to have the necessary security clearances described in any resulting Call-Up in order to be awarded the Call-up.

The bidders with the winning bids will be eligible for sponsorship into the Industrial Security Program (ISP) of Public Services and Procurement Canada (PSPC) if they do not have the security clearances described in Annex "D" at the time the Standing Offers are awarded. Respondents MUST indicate if they desire this sponsorship in their cover letter, in order to initiate the sponsorship process.

Project Schedule

3.8. Expected Start and Completion Dates

The period of the Standing Offer Agreement will be for a period of two years commencing with the signing of the Articles of Agreement by the Departmental Signing Authority.

Option Period:

The Contractor hereby grants to Health Canada the irrevocable option to extend the terms of the Contract for up to two (2) additional one (1) year periods, under the same terms and conditions. Health Canada may exercise this option at any time by written notice to the Contractor at least 30 calendar days prior to the Contract expiry date, or any extension thereof.

3.9. Schedule and Estimated Level of Effort (Work Breakdown Structure)

The schedule and estimated level of effort for each assigned task in relation to the Contract will be specified by Health Canada within the Call-up document(s) issued to the Contractor.

4. Required Resources or Types of Roles to be Performed

4.1. Health Canada has determined that for the provision of Laboratory (chemical) Analysis Services, the Standing Offer Holder must be capable of providing to Health Canada, in an effective manner, all deliverables as specified in the Statement of Work of this RFSO.

The provision of Laboratory (chemical) Analysis Services may be fulfilled by one or more individuals within the Standing Offer Holder's proposed personnel/resource team. However, each individual proposed must possess the required experience and qualifications as follows:

The successful Bidder must meet the minimum technical experience and production capability as specified in Mandatory and Point-Rated Evaluation Criteria in Part 4 of this RFSO.

The exact deliverables for each Call-up will be specified in the Call-up document.

The Contractor must provide the services of the personnel named in the Call-up document to perform the work, unless the Contractor is unable to do so for reasons beyond his/her control. Any changes are subject to Health Canada approval.

Should the Contractor at any time be unable to provide the services of the personnel named in the Call-up document, the Contractor shall be responsible for providing replacement personnel at the same cost who shall be of similar or greater ability and attainment, and whom shall be deemed acceptable to the Health Canada Project Authority.

In advance of the date upon which replacement personnel/resources are to commence work, the Contractor shall notify in writing the Health Canada Project Authority of the reason for the unavailability of the resource(s) named in the Call-up. The Contractor

shall then provide to the Health Canada Project Authority the name(s) and an outline of the qualifications and experience of the proposed replacement/backup resources.

Under no circumstances shall the Contractor allow performance of the services by replacement personnel/resources that have not been authorized by the Health Canada Project Authority.

5. Applicable Documents and Glossary

5.1. Applicable Documents

5.2. Relevant Terms, Acronyms and Glossaries

RFSO:	Request for Standing Offer
SOA:	Standing Offer Agreement
HC:	Health Canada
NCR:	National Capital Region
SOW:	Statement of Work
PWGSC:	Public Works and Government Services Canada
VOC:	Volatile organic compounds
ICP-MS:	Inductively coupled plasma mass spectrometry
PAH:	Polycyclic aromatic hydrocarbons
PUF:	Polyurethane foam
CALA:	Canadian Association for Laboratory Accreditation
NELAP:	National Environmental Laboratory Accreditation Program
GC-MS:	Gas chromatography–mass spectrometry.
XRF:	X-Ray Fluorescence

ANNEX "B"

BASIS OF PAYMENT

Professional Service

For professional services, the Contractor will be paid at the following firm, all-inclusive rates. These rates include overhead and profit but do not include GST and HST.

To be included at the time of award of the Standing Offers.

Refer to Part 6 – Financial Evaluation for sample Basis of Payment tables.

ANNEX "C"

CERTIFICATIONS

The following information must be submitted along with a signed covering letter, the Technical Bid and Financial Bid (Part 6).

1.1 LEGAL NAME AND BIDDER'S INFORMATION

(print clearly)

Bidder's Legal Name

_____

Bidder's Complete Address

_____

_____

Bidder's Phone number

(_____)_____

Bidder's Authorized Representative

_____

Bidder's Authorized Representative Phone number

(_____)_____

Bidder's Authorized Representative e-mail

_____

1.2 CERTIFICATIONS

Bidders must provide the required certifications at bid submission. Canada may declare a bid non-responsive if the required certifications are not part of the bid content.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before and after awarding of a contract). The RFP 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 or to comply with the request of the RFP Authority for additional information will also render the Bid non-responsive.

1.3 CERTIFICATION OF EDUCATION, EXPERIENCE AND QUALIFICATIONS

The Bidder certifies that all statements made with respect to education and experience are true and that any person proposed by the Bidder to perform the Work or part of the Work is either an employee of the Bidder or under a written agreement to provide services to the Bidder.

Canada reserves the right to verify the above certification and to declare the bid non-responsive for any of the following reasons:

- an unverifiable or untrue statement; or
- unavailability of any person proposed whose statement of education and experience Canada has relied upon to evaluate the Bid and award the contract.

1.4 CERTIFICATION OF AVAILABILITY AND STATUS OF PERSONNEL

1.4.1 Availability of Personnel and Facility

The Offerer certifies that, should it be authorized to provide services under any Contract resulting from this RFSO, the persons and facility proposed in its offer will be available to commence performance of the Work within a reasonable time from Contract award and will remain available to perform the Work in relation to the fulfilment of this requirement.

1.4.2 Status of Personnel

If, in the fulfilment of this requirement, the Offerer has proposed any person who is not an employee of the Offerer, the Offerer hereby certifies that it has written permission from such person (or the employer of such person) to propose the services of such person in relation to the Work to be performed and to submit such person’s résumé to the RFSO Authority.

During the evaluation of its offer, the Offerer must upon the request of the RFSO Authority provide a copy of such written permission, in relation to any or all resources proposed. The Offerer agrees that failure to comply with such a request may lead to disqualification of the Offerer’s offer from further consideration.

1.5 FORMER PUBLIC SERVANT CERTIFICATION

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must be able to bear the closest public scrutiny, and reflect fairness in the spending of public funds. To comply with Treasury Board policies and directives on contracts with FPS, bidders must provide the information required below.

1.5.1 Definitions

For the purposes of this clause, "former public servant" is any former member of a department as defined in the *Financial Administration Act*, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

a. an individual;

b. an individual who has incorporated;

c. a partnership made of former public servants; or

d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the *Public Service Superannuation Act* (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the *Supplementary Retirement Benefits Act*, R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the *Canadian Forces Superannuation Act*, R.S., 1985, c.C-17, the *Defence Services Pension Continuation Act*, 1970, c.D-3, the *Royal Canadian Mounted Police Pension Continuation Act* , 1970, c.R-10, and the *Royal Canadian Mounted Police Superannuation Act*, R.S., 1985, c.R-11, the *Members of Parliament Retiring Allowances Act* , R.S., 1985, c.M-5, and that portion of pension payable to the *Canada Pension Plan Act*, R.S., 1985, c.C-8.

1.5.2 Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension?

Yes ( )

No ( )

If so, the Bidder must provide the following information, for all FPS in receipt of a pension, as applicable:

a. name of former public servant;
b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

1.5.3 Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive?

Yes ( )

No ( )

If so, the Bidder must provide the following information:

a. name of former public servant;
b. conditions of the lump sum payment incentive;
c. date of termination of employment;
d. amount of lump sum payment;
e. rate of pay on which lump sum payment is based;
f. period of lump sum payment including start date, end date and number of weeks;
g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is $5,000, including Applicable Taxes.

1.6 JOINT VENTURE/PARTNERSHIP

A joint venture is not considered a "person" for registration purposes, whereas a partnership is. Therefore, a partnership can have a Procurement Business Number (PBN); a joint venture cannot. A joint venture is limited in scope; a partnership is generally an ongoing business relationship that exists between persons carrying on common business.

A joint venture is an arrangement where two or more persons (participants) work together in a limited and defined business undertaking. Ordinarily, all participants of the joint venture contribute assets, share risks, and have mutual liability.

The Bidder certified that its bid is submitted to Canada as a: *(please choose one)*

Sole proprietorship ( )

A corporation ( )

Partnership ( )

A joint venture ( )

* In the case of a Joint Venture, the Bidder must provide the following details as part of its bid:

a. the name of each member of the joint venture;

b. the name of the representative of the joint venture, i.e. the member chosen by the other members to act on their behalf, if applicable;

c. the name of the joint venture, if applicable.

1.7 INTEGRITY PROVISIONS – LIST OF NAMES

Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.

Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

1.8 FEDERAL CONTRACTOR'S PROGRAM FOR EMPLOYMENT EQUITY CERTIFICATION

The Federal Contractors Program (FCP) ensures that contractors who do business with the Government of Canada achieve and maintain a workforce that is representative of the Canadian workforce. The Program applies to non-federally regulated contractors that**:**

- have a combined workforce in Canada of 100 or more permanent full-time, permanent part-time and/or temporary employees having worked 12 weeks or more; and
- received an initial federal government goods and services contract, a standing offer, or a supply arrangement valued at $1 million or more (including applicable taxes).

The Federal Contractors Program was established in 1986 to further the goal of achieving workplace equity for designated groups experiencing discrimination in the Canadian labour market. These groups are:

- women;
- Aboriginal peoples;
- persons with disabilities; and
- members of visible minorities.

Effective June 27, 2013 a redesigned FCP will be in effect which includes:

- an increase in the contract threshold from $200,000 to $1 million to support the Government's commitment to reduce regulatory red tape burden for small- to medium-sized employers;

- assessment that focus on achievement of results enabling contractors to determine initiatives best suited to their organization in order to achieve employment equity objectives.

1.8.1. **Agreement to Implement Employment Equity**

Contractors who bid on an initial goods and services contract, a standing offer, or a supply arrangement estimated at $1 million or more (including applicable taxes) with the Government of Canada must first certify their commitment to implement employment equity by signing the Agreement to Implement Employment Equity (LAB1168) prior to contract award.

Once the goods and services contract, the standing offer, or the supply arrangement is awarded to the contractor, the contractor is assigned a unique Agreement to Implement Employment Equity number and is informed by Labour Program that they are now subject to the FCP. Contractors are then required to implement employment equity and, if representation gaps exist, to make all reasonable efforts most appropriate within the context of their specific organizational environment and structural needs to close any identified gaps. This obligation is on-going and not only subject to the period of the contract, including future contracts.

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list (http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from Human Resources and Skills Development Canada (HRSDC) - Labour's website

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list during the period of the Contract.

By submitting the present information to the RFSO Authority, the Bidder certifies that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. The Bidder understands that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with such request by Canada will also render the bid non-responsive or will constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit HRSDC-Labour's website.

Date: _____ (YYYY/MM/DD)

Complete both A and B.

A. Check only one of the following:

( ) A1. The Bidder certifies having no work force in Canada.

( ) A2. The Bidder certifies being a public sector employer.

( ) A3. The Bidder certifies being a federally regulated employer being subject to the *Employment Equity Act*.

( ) A4. The Bidder certifies having a combined work force in Canada of less than 100 employees (combined work force includes: permanent full-time, permanent part-time and temporary employees [temporary employees only includes those who have worked 12 weeks or more during a calendar year and who are not full-time students]).

A5. The Bidder has a combined workforce in Canada of 100 or more employees; and

( ) A5.1. The Bidder certifies already having a valid and current Agreement to Implement Employment Equity (AIEE) in place with HRSDC-Labour.

OR

( ) A5.2.The Bidder certifies having submitted the Agreement to Implement Employment Equity (LAB1168) to HRSDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to HRSDC-Labour.

B. Check only one of the following:

( ) B1. The Bidder is not a Joint Venture.

OR

( ) B2. The Bidder is a Joint venture and each member of the Joint Venture must provide the Contracting Authority with a completed appendix Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)

1.9 DETERMINING THE POTENTIAL FOR COMMERCIAL EXPLOITATION OF THE INTELLECTUAL PROPERTY

Is there potential for commercial exploitation of any Intellectual Property that may be generated by the resulting contract?

( ) Yes

( ) No

1.20 SIGNATURE AND CERTIFICATION

By submitting a bid, the Bidder certifies that the information submitted by the Bidder in response to the above requirements is accurate and complete.

_____ _____

Signature *Date*

_____

Print Name and Capacity

ANNEX "D"
Security Requirements

1.0 The vast majority of the call-ups raised under these Standing Offers **WILL NOT** have a security requirement as the contract will deal with de-identified samples and will include no personal information.

Therefore, the Standing Offers will be awarded to suppliers whether they have security screening clearances or not.

However, it is possible that one or more call-ups may contain a Government of Canada security requirement. The security requirements will be fully defined in any resulting call-up. It is the Standing Offer holder's sole responsibility to have the necessary security clearances described in any resulting Call-Up in order to be awarded the Call-up.

The bidders with the winning bids will be eligible for sponsorship into the Industrial Security Program (ISP) of Public Services and Procurement Canada (PSPC) if they do not have the security clearances described in Annex "D" at the time the Standing Offers are awarded. Respondents MUST indicate if they desire this sponsorship in their cover letter, in order to initiate the sponsorship process.

For a few call-ups, the following security requirement may be required.

2.0 Possible Security Requirement for some Call-ups

2.1 The Contractor must, at all times during the performance of a specific call up under this standing offer agreement, hold a valid Designated Organization Screening (DOS) with approved Document Safeguarding at the level of PROTECTED B, issued by the Canadian Industrial Security Directorate, Public Works and Government Services Canada.

2.2 The Contractor personnel requiring access to PROTECTED information, assets or work site(s) must EACH hold a valid RELIABILITY STATUS, granted or approved by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC). Until the security screening of the Contractor personnel required by this Contract has been completed satisfactorily by the Canadian Industrial Security Directorate, Public Works and Government Services Canada, the Contractor personnel MAY **NOT HAVE ACCESS** to PROTECTED information or assets, and MAY **NOT ENTER** sites where such information or assets are kept, without an escort.

2.3 The Contractor MUST NOT utilize its Information Technology systems to electronically process, produce or store PROTECTED information until the CISD/PWGSC has issued written approval. After approval has been granted or approved, these tasks may be performed at the level of PROTECTED B.

2.4. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of CISD/PWGSC.

2.5 The Contractor must comply with the provisions of the:

(a) Security Requirements Check List and security guide (if applicable), attached to the Call-up as Annex "B";
(b) Industrial Security Manual (Latest Edition)

3.9.3 GENERIC SECURITY REQUIREMENTS FOR NON-CANADIAN SUPPLIERS

3.9.3.1 The Canadian Designated Security Authority (Canadian DSA) for industrial security matters in Canada is the Director, International Industrial Security Directorate (IISD), Public Works and Government Services Canada (PWGSC).

Sensitive information / assets refers to information and assets that have been categorized as PROTECTED or CLASSIFIED and require appropriate safeguarding in accordance with their level of sensitivity .

3.9.3.2 Further specification respecting the security requirements listed {below/ above} may be provided in order to ensure compatibility with security measures for access to sensitive information / assets, as part of this Contract.

3.9.3.3 Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of the Canadian DSA.

3.9.3.4 The Foreign recipient Contractor must identify an authorized Contract Security Officer (CSO) to be responsible for the overseeing of the security requirements, as defined in this Contract. This individual will be appointed by the proponent Foreign recipient Contractor's Chief Executive officer or Designated Key Senior Official, defined as an owner, officer, director, executive, and or partner who occupy a position which would enable them to adversely affect the organization's policies or practices in the performance of the contract.

3.9.3.5 Sensitive information/assets, as part of this Contract, shall be released only to the Foreign recipient Contractor personnel, who have a *need-to-know* for the performance of this Contract and who have the equivalent level, of the appropriate Canadian **Personnel Security Clearance** required to access the level of sensitive information/assets, granted by their respective country National Security Authority (NSA)/DSA, in accordance with the National Policies of the Foreign recipient bidder's country.

3.9.3.6 The Foreign recipient Contractor, intending or required to visit a Canadian Government restricted site, or industrial facilities, will submit a Request for Visit form to the Canadian DSA, through their respective country NSA/DSA.

3.9.3.7 The Foreign recipient Contractor shall comply with the provisions of the Bilateral Industrial Security Memorandum of Understanding between the Foreign recipient Contractor's NSA/DSA and the Government of Canada, in relation to sensitive information/ assets equivalencies.

3.9.3.8 In the event that a Foreign recipient Contractor is chosen as a supplier for this Contract, subsequent Country-specific Foreign security requirement clauses shall be generated and promulgated by the Canadian DSA, and provided to the Government of Canada Contracting Authority, to ensure compliance with the security provisions, as defined by the Canadian DSA, in relation to equivalencies.

3.10 If the successful bidder does not have the required level of security prior to performance of any obligation under any call-up resulting from this RFSO, Health Canada will sponsor the security screening for the Contractor. No work will be issued until the appropriate security clearance has been obtained.