



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Bid Receiving - PWGSC / Réception des
soumissions - TPSGC

11 Laurier St./ 11 rue, Laurier

Place du Portage, Phase III

Core 0B2 / Noyau 0B2

Gatineau, Québec K1A 0S5

Bid Fax: (819) 997-9776

LETTER OF INTEREST

LETTRE D'INTÉRÊT

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du

fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Scientific, Medical and Photographic Division / Division
de l'équipement scientifique, des produits photographiques
et pharmaceutiques

L'Esplanade Laurier

140 O'Connor Street,

East Tower, 7th Floor

Ottawa

Ontario

K1A 0S5

Title - Sujet DUCTED FUME HOOD FOR CHEMICAL	
Solicitation No. - N° de l'invitation E60PV-18DUCT/B	Date 2019-04-02
Client Reference No. - N° de référence du client E60PV-18DUCT	GETS Ref. No. - N° de réf. de SEAG PW-\$\$PV-873-76813
File No. - N° de dossier pv873.E60PV-18DUCT	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2019-04-18	
Time Zone Fuseau horaire Eastern Daylight Saving Time EDT	
F.O.B. - F.A.B. Specified Herein - Précisé dans les présentes Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input checked="" type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Shannahan, Cassandra	Buyer Id - Id de l'acheteur pv873
Telephone No. - N° de téléphone (819) 775-1562 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA PORTAGE III 6A2 11 LAURIER ST GATINEAU Quebec K1A0S5 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

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

REQUEST FOR INFORMATION (RFI)

DUCTED FUME HOOD FOR CHEMICAL SAMPLING

1. Background for this Request for Information (RFI)

Canada intends to put in place a National Master Standing Offer (NMSO) for the supply of ducted fume hoods, which will be used to sample products of unknown composition. It is expected that the main user of this procurement instrument will be the Canada Border Services Agency (CBSA); however, it may be used by any government department, agency or Crown Corporation listed in Schedules I, I.1, II, III, of the Financial Administration Act, R.S.C., 1985, c. F-11.

2. Purpose of this Request for Information

The purpose of this RFI is to allow instrument manufacturers an opportunity to provide feedback on the proposed statement of work and evaluation criteria for ducted fume hoods.

2.1 The objectives of the RFI are:

- A) To request feedback and recommendations from industry on the draft Request for Standing Offer including the statement of work and evaluation criteria;
- B) to identify which current technology complies with the RFI specifications described in Annex A, Statement of Work; and
- C) to identify the advantages, limitations and technology gaps of the fume hood.

3. Nature of the RFI

A Request for Information (RFI) is used when detailed information and feedback is required from suppliers. Such requests might outline a potential requirement and request suppliers to describe their ability to satisfy the requirement. This RFI contains background and technical information.

4. Note to Potential Respondents

This is not an offer or bid solicitation. This RFI will not result in the award of any standing offer or contract or lead to any development funding initiative. Potential suppliers of any goods described in this RFI should not reserve stock as a result of any information contained in the RFI. This RFI will not result in the creation of any source list. Therefore, whether or not any potential supplier responds to this RFI will not preclude that supplier from participating in any future procurement. The procurement of any of the goods described in this RFI will not necessarily follow this RFI. This RFI is simply intended to solicit feedback from industry with respect to the matters described in this RFI.

4.1 Response Costs

Canada will not reimburse any respondent for expenses incurred in responding to this RFI.

5. Nature and Responses Requested

Use of Responses: Responses will not be formally evaluated. However, the responses received may be used by Canada to develop or modify procurement strategies or any draft documents contained in this RFI. Canada will review all responses received by the RFI closing date. Canada may, in its discretion, review responses received after the RFI closing date.

Review Team: A review team composed of representatives of Canada will review the responses. Canada reserves the right to hire any independent consultant, or use any Government resources that it considers necessary to review any response.

Confidentiality: Respondents should mark any portions of their response that they consider proprietary or confidential. Canada will handle the responses in accordance with the *Access to Information Act*.

Follow-up Activity: Canada may, at its discretion, meet with respondents who indicate in their responses that they wish to participate in a follow-up meeting. Such follow-up activity, if conducted, may include, but is not limited to, individual meetings and/or conferences. Canada may, in its discretion, contact any respondents to follow up with additional questions, for clarification of any aspect of a response or to arrange an instrument demonstration.

6. Format of Responses Requested

Cover Page: If the response includes multiple volumes, respondents are requested to indicate on the front cover page of each volume the title of the response, the solicitation number, the volume number and the full legal name and address of the respondent.

Title Page: The first page of each volume of the response, after the cover page, should be the title page, which should contain:

- the title of the respondent's response and the volume number;
- the name and address of the respondent;
- the name, address and telephone number of the respondent's contact;
- the date; and
- the RFI number.

Numbering System: Respondents are requested to prepare their response using a numbering system corresponding to the one in this RFI. All references to descriptive material, technical manuals and brochures included as part of the response should be referenced accordingly. Respondents are asked to complete Annex A (Minimum product specifications).

Number of Copies: Respondents are requested to submit one soft copy of their response, in PDF format.

7. Enquiries

Respondents with questions regarding this Request for Information should direct their enquiries, preferably via email, to:

Cassandra Shannahan
Public Services and Procurement Canada

140 O'Connor St., 7th Floor East Tower
L'Esplanade Laurier, Ottawa, ON, K1A 0R5

Telephone: (819) 775-1562

Email address: cassandra.shannahan@pwgsc-tpsgc.gc.ca

8. Submission of Responses

Time and Place for Submission of Responses: Respondents should send responses electronically via e-mail to the Contracting Authority's address identified herein by the date specified on the front page of the RFI.

Responsibility for Timely Delivery: Each respondent is solely responsible for ensuring its response is delivered on time to the correct location.

9. Closing Date

Responses to this Letter of Interest will be accepted any time until 14:00 EST, April 18, 2019.

10. Contents of this RFI

This RFI contains specifications for a customized ducted fume hood for which Canada is seeking feedback from industry.

To enable this assessment, interested manufacturers are asked to provide answers to the following questions:

1. Do you currently have a fume hood model that meets all of the requirements in the Appendix? If not, what does not meet?
2. Do you currently have a fume hood model that exceeds some or all of the requirements in the Appendix? Please provide additional information.
3. Are you able to manufacture a customized fume hood that meets the requirements in the Annex?
4. How long would it take for your facility to manufacture a customized fume hood of these requirements?
5. Are there any basic requirements that are missing from the fume hood requirements?
6. Are there any features that should be added to the fume hood requirements?
7. Are there additional comments you wish to make on the statement of work?
8. Does your fume hood use any filters?
9. Does your company do fume hood installation and ducting?
10. Are you a current member of Scientific Equipment and Furniture Association (SEFA)?
11. Would you be willing to discuss your responses and information that you provided with the Review Team. If so, please provide contact information.

Draft Request for Standing Offer (attached hereto)

PART 1 - GENERAL INFORMATION

1.1 Introduction

The Request for Standing Offers (RFSO) is divided into seven parts plus attachments and annexes, as follows:

- | | |
|--------|---|
| Part 1 | General Information: provides a general description of the requirement; |
| Part 2 | Offeror Instructions: provides the instructions applicable to the clauses and conditions of the RFSO; |
| Part 3 | Offer 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 and Additional Information: includes the certifications and additional information 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, List of Products, Standing Offer Reporting, Call-Up Document and any other annexes.

1.2 Summary

- 1.2.1 Canada has a requirement to establish a National Master Standing Offer (NMSO) for the supply and deliveries of constant air volume (CAV) bypass fume hoods, hereafter referred to as “ducted fume hoods”, to Federal Identified Users, on an as and when requested basis. The fume hoods must be provided in accordance with the description provided in Annex “A”. The NMSO will be in place for a period of three years from date of issuance with the option to extend for two additional one-year periods under the same terms and conditions.
- 1.2.2 The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP), the North American Free Trade Agreement (NAFTA), the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), and the Canadian Free Trade Agreement (CFTA).

- 1.2.3 The Request for Standing Offer (RFSO) is to establish a National Master Standing Offer for the requirement detailed in the RFSO, to the Identified Users across Canada, excluding locations within Yukon, Northwest Territories, Nunavut, Quebec, and Labrador that are subject to Comprehensive Land Claims Agreements (CLCAs). Any requirement for deliveries to locations within CLCAs areas within Yukon, Northwest Territories, Nunavut, Quebec, or Labrador will have to be treated as a separate procurement, outside of the resulting standing offer.
- 1.2.4 This RFSO allows offerors to use the epost Connect service provided by Canada Post Corporation to transmit their offers electronically. Offerors must refer to Part 2 of the RFSO entitled Offeror Instructions and Part 3 of the RFSO entitled Offer Preparation Instructions, for further information on using this method.

1.3 Debriefings

Offerors may request a debriefing on the results of the request for standing offers process. Offerors should make the request to the Standing Offer Authority within 15 working days of receipt of the results of the request for standing offer process. The debriefing may be in writing, by telephone or in person.

1.4 Anticipated migration to an e-Procurement Solution (EPS)

Canada is currently developing an online EPS for faster and more convenient ordering of goods and services. In support of the anticipated transition to this system and how it may impact any resulting Standing Offer that is issued under this solicitation, refer to 7.14 Transition to an e-Procurement Solution (EPS).

The Government of Canada's [press release](#) provides additional information.

PART 2 - OFFEROR INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the Request for Standing Offers (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) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

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](#) (2018-05-22) Standard Instructions - Request for Standing Offers - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the RFSO.

Subsection 5.4 of [2006](#), Standard Instructions - Request for Standing Offers - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days

Insert: 120 days

2.2 SACC Manual Clauses

[M1004T](#) (2016-01-28), Condition of Material

2.3 Submission of Offers

Offers must be submitted only to the Public Works and Government Services Canada (PWGSC) Bid Receiving Unit specified below by the date and time indicated on page 1 of the RFSO:

Bid Receiving - PWGSC
Place du Portage, Phase III
Core 0B2
11 Laurier St
Gatineau, Quebec
For couriers: J8X 4A6
For regular mail: K1A 0S5

E-mail (for submission by ePost Connect):
tpsgc.dgareceptiondessoumissions-abbidReceiving.pwgsc@tpsgc-pwgsc.gc.ca

Telephone: (819) 420-7201
Fax No.: (819) 997-9776

2.4 Enquiries - Request for Standing Offer

All enquiries must be submitted in writing to the Standing Offer Authority no later than ten (10) calendar days before the Request for Standing Offer (RFSO) closing date. 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 - OFFER PREPARATION INSTRUCTIONS

3.1 Offer Preparation Instructions

- If the Offeror chooses to submit its offer electronically, Canada requests that the Offeror submits its offer in accordance with section 08 of the 2006 standard instructions. Offerors are required to provide their offer in a single transmission. The epost Connect service has the capacity to receive multiple documents, up to 1GB per individual attachment. The offer must be gathered per section and separated as follows:

Section I: Technical Offer
Section II: Financial Offer
Section III: Certifications

- If the Offeror chooses to submit its offer in hard copies, Canada requests that the Offeror provides its offer in separately bound sections as follows:

Section I: Technical Offer (2 hard copies)
Section II: Financial Offer (2 hard copies)
Section III: Certifications (2 hard copies)

If there is a discrepancy between the wording of the soft copy on electronic media and the hard copy, the wording of the hard copy will have priority over the wording of the soft copy.

- If the Offeror is simultaneously providing copies of its offer using multiple acceptable delivery methods, and if there is a discrepancy between the wording of any of these copies and the electronic copy provided through epost Connect service, the wording of the electronic copy provided through epost Connect service will have priority over the wording of the other copies.

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

Canada requests that offerors follow the format instructions described below in the preparation of hard copy of their offer:

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

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](https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573) (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>). 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 demonstrate their understanding of the requirements contained in the request for standing offer and explain how they will meet these requirements. Offerors should demonstrate their capability in a thorough, concise and clear manner for carrying out the work.

The technical offer should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the request for standing offer is not sufficient. In order to facilitate the evaluation of the offer, Canada requests that Offerors address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Offerors may refer to different sections of their offer by identifying the specific paragraph and page number where the subject topic has already been addressed.

The technical offer consists of the following:

- (a) **Supporting Technical documentation:** Technical brochures or technical data to demonstrate compliancy to the requirement as described in Annex A.
- (b) **List of Products:** Offerors must include a complete product list identifying: the product name; the name of manufacturer; the model and part number of each component which make up the system. Offerors must also state the point of manufacture and shipping of goods or where service is to be performed: The Offerors are requested to use the form provided in Annex "C".
- (c) **Contacts:** Offerors are requested to provide the following: Information pertaining to Article 7.5.3 Contractor Representatives under Part 7, Resulting Contract Clauses.

Section II: Financial Offer

- (a) **Pricing:** Offerors must submit their financial offer in accordance with Attachment 1 to Part 4 of Bid Solicitation – Pricing Schedule. The total amount of applicable taxes must be shown separately.
- (b) **All Costs to be Included:** The financial offer must include all costs for the requirement described in the standing offer for the entire Standing Offer Period, including any option years. The identification of all necessary equipment, software, peripherals, cabling and components required to meet the requirements of the standing offer and the associated costs of these items is the sole responsibility of the Offeror.
- (c) **Blank Prices:** Offerors are requested to insert "\$0.00" for any item for which it does not intend to charge or for items that are already included in other prices set out in the tables. If the Offeror leaves any price blank, Canada will treat the price as "\$0.00" for evaluation purposes and may request that the Offeror confirm that the price is, in fact, \$0.00. No Offeror will be permitted to add or change a price as part of this confirmation. Any Offeror who does not confirm that the price for a blank item is \$0.00 will be declared non-responsive.

3.1.1 Electronic Payment of Invoices - Offer

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Attachment 1 to Part 3 of Bid Solicitation - Electronic Payment Instruments, to identify which ones are accepted.

If Attachment 1 to Part 3 of Bid Solicitation - Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

3.1.2 Exchange Rate Fluctuation

C3011T (2013-11-06), Exchange Rate Fluctuation

Section III: Certifications Offerors must submit the certifications and additional information required under Part 5.

ATTACHMENT 1 to PART 3 OF THE BID SOLICITATION

ELECTRONIC PAYMENT INSTRUMENTS

The Offeror accepts any of the following Electronic Payment Instrument(s):

- () VISA Acquisition Card;
- () MasterCard Acquisition Card;
- () Direct Deposit (Domestic and International);
- () Electronic Data Interchange (EDI);
- () Wire Transfer (International Only);
- () Large Value Transfer System (LVTS) (Over \$25M)

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 Request for Standing Offers including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the offers.

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

The mandatory criteria are listed in Annex B.

4.1.2 Financial Evaluation

The financial evaluation will be conducted by calculating the Total Aggregated Bid Price in accordance with the pricing tables provided in Attachment 1 to Part 4.

The price of the offer will be evaluated in Canadian dollars, Applicable Taxes excluded, DDP (location listed in individual call-up) Incoterms® 2010, Canadian customs duties and excise taxes included.

Unless the Standing Offer specifically requires offers to be submitted in Canadian currency, offers submitted in foreign currency will be converted to Canadian currency for evaluation purposes. The rate given by the Bank of Canada in effect on the request for standing offer closing date, or on another date specified in the Standing Offer, will be applied as a conversion factor to the offers submitted in foreign currency.

4.2 Basis of Selection

- | | | | |
|--------------|-------------------------------|---|------------|
| 4.2.1 | <u>M0031T</u> | Basis of Selection -
Mandatory Technical Criteria Only | 2007-05-25 |
|--------------|-------------------------------|---|------------|

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Offerors must provide the required certifications and additional information to be issued a standing offer.

The certifications provided by offerors to Canada are subject to verification by Canada at all times. Unless specified otherwise, 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.

5.1 Certifications Required with the Offer

Offerors must submit the following duly completed certifications as part of their offer.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all offerors must provide with their offer, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.2 Certifications Precedent to the Issuance of a Standing Offer and Additional Information

The certifications and additional information listed below should be submitted with the offer, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Standing Offer Authority will inform the Offeror of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the offer non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real procurement agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Offeror must provide the required documentation, as applicable, to be given further consideration in the procurement process.

5.2.2 Federal Contractors Program for Employment Equity - Standing Offer Certification

By submitting an offer, the Offeror certifies that the Offeror, and any of the Offeror's members if the Offeror is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list) available at the bottom of the page of the [Employment and Social Development Canada-Labour's](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#s4) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#s4>).

Canada will have the right to declare an offer non-responsive, or to set-aside a Standing Offer, if the Offeror, or any member of the Offeror if the Offeror is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of issuing of a Standing Offer or during the period of the Standing Offer.

5.2.3 OEM Certification

- (i) Any Offeror that is not the Original Equipment Manufacturer (OEM) for every item of equipment proposed as part of its offer is required to submit the OEM's certification regarding the Offeror's authority to provide and maintain the OEM's equipment, which must be signed by the OEM (not the Offeror). No Standing Offer will be issued to an Offeror who is not the OEM of the equipment it proposes to supply to Canada, unless the OEM certification has been provided to Canada. Offerors are requested to use the OEM Certification Form included in Attachment 2 to Part 5. Although all the contents of the OEM Certification Form are required, using the form itself to provide this information is not mandatory. For Offerors/OEMs who use an alternate form, it is in Canada's sole discretion to determine whether all the required information has been provided. Alterations to the statements in the form may result in the offer being declared non-responsive.
- (ii) If the equipment proposed by the Offeror originates with multiple OEMs, a separate OEM certification is required from each OEM.
- (iii) For the purposes of this offer solicitation, OEM means the manufacturer of the equipment, as evidenced by the name appearing on the equipment on all accompanying documentation, and on mandatory certification reports.

ATTACHMENT 1 TO PART 5 OF THE REQUEST FOR STANDING OFFER

COMPLETE LIST OF DIRECTORS

Name	Position
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

DRAFT

ATTACHMENT 2 TO PART 5 OF THE REQUEST FOR STANDING OFFER

OEM CERTIFICATION

OEM Certification Form	
This confirms that the original equipment manufacturer (OEM) identified below has authorized the Offeror named below to provide and maintain its products under any standing offer resulting from the offer solicitation identified below.	
Name of OEM	_____
Signature of authorized signatory of OEM	_____
Print Name of authorized signatory of OEM	_____
Print Title of authorized signatory of OEM	_____
Address for authorized signatory of OEM	_____
Telephone no. for authorized signatory of OEM	_____
Fax no. for authorized signatory of OEM	_____
Date signed	_____
Solicitation Number	E60PV-18DUCT/A
Name of Offeror	_____

PART 6 - SECURITY, FINANCIAL AND INSURANCE REQUIREMENTS

6.1 Financial Capability

SACC Manual clause [M9033T](#) (2011-05-16) Financial Capability

PART 7 - STANDING OFFER AND RESULTING CONTRACT CLAUSES

A. STANDING OFFER

7.1 Offer

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

7.2 Security Requirements

7.2.1 There is no security requirement applicable to the Standing Offer.

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](#) (<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](#) (2017-06-21) General Conditions - Standing Offers - Goods or Services, apply to and form part of the Standing Offer.

7.3.2 Standing Offer Reporting

The Offeror must compile and maintain records on its provision of goods, services or both to the federal government under contracts resulting from the Standing Offer. This data must include all purchases, including those paid for by a Government of Canada Acquisition Card.

The Offeror must provide this data in accordance with the reporting requirements detailed in Annex "D ". If some data is not available, the reason must be indicated. If no goods or services are provided during a given period, the Offeror must still provide a "nil" report.

The data must be submitted on a quarterly basis to the Standing Offer Authority.

The data must be submitted to the Standing Offer Authority no later than 15 calendar days after the end of the reporting period.

Quarterly periods are defined as follows:

- 1st quarter: April 1 to June 30;
- 2nd quarter: July 1 to September 30;
- 3rd quarter: October 1 to December 31;
- 4th quarter: January 1 to March 31.

7.4 Term of Standing Offer

7.4.1 Period of the Standing Offer

The period for making call-ups against the Standing Offer is from date of issue for three years (*exact dates TBD*); and

the period during which the Standing Offer is extended, if Canada chooses to exercise the options set out in the Standing Offer.

7.4.2 Extension of Standing Offer

If the Standing Offer is authorized for use beyond the initial period, the Offeror offers to extend its offer for two additional one-year periods, under the same conditions and at the rates or prices specified in the Standing Offer.

The Offeror will be advised of the decision to authorize the use of the Standing Offer for an extended period by the Standing Offer Authority 30 days before the expiry date of the Standing Offer. A revision to the Standing Offer will be issued by the Standing Offer Authority.

7.4.4 Delivery Points

Delivery of the requirement will be made to delivery point(s) specified in the call-up.

7.5 Authorities

7.5.1 Standing Offer Authority

The Standing Offer Authority is:

Name: Cassandra Shannahan
Title: Supply Specialist
Public Works and Government Services Canada
Acquisitions Branch
140 O'Connor St, 7th Floor
L'Esplanade Laurier (LEL), East Tower
Ottawa, ON K1S 0R5

Telephone: (819) 775-1562

E-mail address: cassandra.shannahan@pwgsc-tpsgc.gc.ca

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.

7.5.2 Technical Authority

The Technical Authority for the Standing Offer is identified in the call-up against the Standing Offer.

The Technical Authority is the representative of the department or agency for whom the Work will be carried out pursuant to a call-up against the Standing Offer and is responsible for all the technical content of the Work under the resulting Contract.

7.5.3 Offeror's Representative (*Offeror to fill in*)

The telephone number of the person responsible for:

General enquiries

Name: _____
Telephone No. _____
Facsimile No. _____
E-mail address: _____

Delivery Follow-up

Name: _____
Telephone No. _____
Facsimile No. _____
E-mail address: _____

7.6 Identified Users

The Identified Users authorized to make call-ups against the Standing Offer include any government department, agency or Crown Corporation listed in Schedules I, I.1, II, III, of the [Financial Administration Act](#), R.S.C., 1985, c. F-11.

7.7 Call-up Procedures

- 7.7.1 Authorized Call-ups against this Standing Offer must be made using a duly completed 942 call-up form by methods such as facsimile, electronic mail or any other method deemed acceptable by both the Identified User and the Offeror.
- 7.7.2 No costs incurred before the receipt of a signed Call-up or equivalent document can be charged to this Standing Offer.
- 7.7.3 If by error or omission the Identified User fails to apply the correct price to an item, it is the responsibility of the Offeror to notify the Identified User of the error prior to delivery.
- 7.7.4 Any modifications to the original call-up must be supported by the issuance of a subsequent form in accordance with the Standing Offer terms and conditions in effect at the time of call-up.
- 7.7.5 For urgent requirement only Identified Users may request goods/services by telephone/facsimile/ e-mail which must be followed up by issuing a call-up or equivalent document no later than the next working day, to confirm the request for goods.

Call-ups paid for by Acquisition Cards as an alternative to other payment methods identified in the Standing Offer must be made as specified above.

7.8 Call-up Instrument

The Work will be authorized or confirmed by the Identified User(s) using the duly completed forms or their equivalents as identified in paragraphs 2 and 3 below, or by using Canada acquisition cards (Visa or MasterCard) for low dollar value requirements.

1. Call-ups must be made by Identified Users' authorized representatives under the Standing Offer and must be for goods or services or combination of goods and services included in the Standing Offer at the prices and in accordance with the terms and conditions specified in the Standing Offer.
2. Any of the following forms could be used which are available through [PWGSC Forms Catalogue](#) website:
 - PWGSC-TPSGC 942 Call-up Against a Standing Offer
 - PWGSC-TPGSC 942-2 Call-up Against a Standing Offer - Multiple Delivery
 - PWGSC-TPSGC 944 Call-up Against Multiple Standing Offers (English version)
 - PWGSC-TPSGC 945 Commande subséquente à plusieurs offres à commandes (French version)

or

3. An equivalent form or electronic call-up document which contains at a minimum the following information:
- standing offer number;
 - statement that incorporates the terms and conditions of the Standing Offer;
 - description and unit price for each line item;
 - total value of the call-up;
 - point of delivery;
 - confirmation that funds are available under section 32 of the Financial Administration Act;
 - confirmation that the user is an Identified User under the Standing Offer with authority to enter into a contract.

7.9 Client Limitation of Call-ups

Individual call-ups against the Standing Offer must not exceed \$400,000.00 (Applicable Taxes included) for the client.

Individual requirements exceeding these amounts must be submitted to PSPC in the form of a funded requisition (9200) for processing.

The Standing Offer Authority (or their delegated representatives) may issue call-ups in excess of \$400,000.00.

7.10 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) the general conditions 2005 2017-06-21, General Conditions - Standing Offers - Goods or Services;
- d) the supplemental general conditions:
 - i. 4001 2015-04-01 Hardware Purchase, Lease and Maintenance;
- e) 2010A 2018-06-21 General Conditions - Goods (Medium Complexity);
- f) Annex A, Statement of Work;
- g) Annex B, Basis of Payment; and
- h) the Offeror's offer dated _____ (*insert date of offer*).

7.11 Certifications and Additional Information

7.11.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Offeror with its offer or precedent to issuance of the Standing Offer (SO), and the ongoing cooperation in providing additional information are conditions of issuance of the SO and failure to comply will constitute the Offeror in default. Certifications are subject to verification by Canada during the entire period of the SO and of any resulting contract that would continue beyond the period of the SO.

7.12 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.

7.13 Price Lists

Following issuance of a Standing Offer, it is the Offeror's responsibility to supply and update price lists and/or catalogues as Canada may require. The Offeror must provide one (1) copy of its catalogue and price list and updates to each Identified User requesting a copy. The Offeror must further send one (1) copy to the Standing Offer Authority at the address stated in the Standing Offer.

7.14 Transition to an e-Procurement Solution (EPS)

During the period of the Standing Offer, Canada may transition to an EPS for more efficient processing and management of individual call-ups for any or all of the SO's applicable goods and services. Canada reserves the right, at its sole discretion, to make the use of the new e-procurement solution mandatory. Canada agrees to provide the Offeror with at least a three-month notice to allow for any measures necessary for the integration of the Offer into the EPS. The notice will include a detailed information package indicating the requirements, as well as any applicable guidance and support. If the Offeror chooses not to offer their goods or services through the e-procurement solution, the Standing Offer may be set aside by Canada.

B. RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from a call-up against the Standing Offer.

7.1 Statement of Work

The Contractor must perform the Work described in the call-up against the Standing Offer.

7.2 Standard Clauses and Conditions

7.2.1 General Conditions

2010A (2018-06-21), General Conditions - Goods (Medium Complexity) apply to and form part of the Contract.

Section 16 Interest on Overdue Accounts, of 2010A (2018-06-21), General Conditions - Goods (Medium Complexity) will not apply to payments made by credit cards.

7.2.2 Warranty

The installation of the Work will be performed by a third party installer. Depending on who owns the building, the installer may be hired by Canada or the owner of the building. The installation by a third party shall not affect the contractor's warranty obligations under the Contract. Section 9, paragraph 1 of the 2010A General Conditions (2018-06-21) is hereby amended to state the warranty period will be 12 months after the installation of the Work. If during the warranty period, the Work becomes defective or fails to conform to the requirements of the Contract, and this is due solely to the improper installation of the Work conducted by a third party installer not hired by the Contractor, the Contractor will not be responsible pursuant to the Warranty provisions of the Contract. The Contractor bears the burden of clearly demonstrating that the defective Work or its failure to conform to the requirements of the Contract was caused solely by the improper installation of the Work.

7.2.3 Additional General Conditions

7.2.2.1 Conduct of the Work

- 1) The Contractor represents and warrants that:
 - a. it is competent to perform the Work;
 - b. it has everything necessary to perform the Work, including the resources, facilities, labour, technology, equipment, and materials; and
 - c. it has the necessary qualifications, including knowledge, skill, know-how and experience, and the ability to use them effectively to perform the Work.
- 2) The Contractor must:
 - a. perform the Work diligently and efficiently;
 - b. except for Government Property, supply everything necessary to perform the Work;
 - c. use, as a minimum, quality assurance procedures, inspections and controls generally used and recognized by the industry to ensure the degree of quality required by the Contract;
 - d. select and employ a sufficient number of qualified people;
 - e. perform the Work in accordance with standards of quality acceptable to Canada and in full conformity with the specifications and all the requirements of the Contract;
 - f. provide effective and efficient supervision to ensure that the quality of workmanship meets the requirements of the Contract.

7.2.2.2 Subcontracts

The Contractor may subcontract the supply of goods or services that are customarily subcontracted by the Contractor. Subcontracting does not relieve the Contractor from any of its obligations under the Contract or impose any liability upon Canada to a subcontractor. In any subcontract, the Contractor agrees to bind the subcontractor by the same conditions by which the Contractor is bound under the Contract, unless the Contracting Authority agrees otherwise, with the exception of requirements under the Federal Contractors Program for employment equity which only apply to the Contractor.

7.2.2.3 Harassment in the workplace

- 1) The Contractor acknowledges the responsibility of Canada to ensure, for its employees, a healthy work environment, free of harassment. A copy of the [Policy on Harassment Prevention and Resolution](#), which is also applicable to the Contractor, is available on the Treasury Board Web site.
- 2) The Contractor must not, either as an individual, or as a corporate or unincorporated entity, through its employees or subcontractors, harass, abuse, threaten, discriminate against or intimidate any employee, contractor or other individual employed by, or under contract with Canada. The Contractor will be advised in writing of any complaint and will have the right to respond in writing. Upon receipt of the Contractor's response, the Contracting Authority will, at its entire discretion, determine if the complaint is founded and decide on any action to be taken.

7.2.2.4 Access to information

Records created by the Contractor, and under the control of Canada, are subject to the [Access to Information Act](#). The Contractor acknowledges the responsibilities of Canada under the [Access to Information Act](#) and must, to the extent possible, assist Canada in discharging these responsibilities. Furthermore, the Contractor acknowledges that section 67.1 of the [Access to Information Act](#) provides that any person, who destroys, alters, falsifies or conceals a record, or directs anyone to do so, with the intent of obstructing the right of access that is provided by the [Access to Information Act](#) is guilty of an offence and is liable to imprisonment or a fine, or both.

7.2.4 Supplemental General Conditions

4001 (2015-04-01) Hardware Purchase, Lease and Maintenance

applies to and forms part of the Contract.

7.3 Term of Contract

7.3.1 Period of the Contract

The period of the Contract is from date of Contract to _____ *(to be filled in at time of call-up)* inclusive.

7.3.2 Delivery Date

Delivery must be completed in accordance with the call-up against the Standing Offer.

7.4 Payment

7.4.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price. Delivery is DDP (Delivery Duty Paid) destination, customs duties, excise taxes are included, and Applicable Taxes and Delivery are extra.

No increase in the liability of the Authorized User or in the price of the Work specified in the Call-up resulting from any design changes, modifications or interpretations of the Work will be authorized or paid to the Contractor unless such design changes, modifications or interpretations have been authorized, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work that would result in an Authorized User's total liability under the Call-up being exceeded before obtaining the written authorization of the Contracting Authority. Absent authorization, such work is conducted at the Contractor's sole risk and expense and shall not be charged to the Authorized User unless specifically agreed to in writing by the Contracting Authority.

7.4.2 Prepaid Transportation Costs

The Contractor must prepay transportation costs. Prepaid transportation costs must be shown as a separate item on the invoice. Contractors must support the charge by providing a certified copy of the prepaid transportation Bill of Lading. No minimum shipping charges are allowed through this standing offer.

7.4.3 Shipping Instructions - Delivery at Destination

Goods must be consigned to the destination specified in the Contract and Delivered Duty Paid (DDP) to the destination specified in the contract Incoterms 2000 for shipments from a commercial contractor.

7.4.4 SACC Manual Clauses

SACC Manual clause H1001C (2008-05-12) Multiple Payments

7.5 Invoicing Instructions

The Contractor must submit invoices in accordance with the information required in section 10 of 2010A General Conditions - Goods (Medium Complexity).

Original copy to consignee with one copy to the Contracting Authority.

7.5.1 Electronic Payment of Invoices – Call-up

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);
- e. Wire Transfer (International Only);
- f. Large Value Transfer System (LVTS) (Over \$25M)

7.6 Insurance

SACC Manual clause [G1005C](#) (2016-01-28) Insurance – No Specific Requirement

7.7 SACC Manual Clauses

B1501C	Electrical Equipment	2018-06-21
A9062C	Canadian Forces Site Regulations	2011-05-16
A9068C	Government Site Regulations	2010-01-11
A2000C	Foreign Nationals (Canadian Contractor)	2006-06-16
A2001C	Foreign Nationals (Foreign Contractor)	2006-06-16
D2025C	Wood Packaging Materials	2013-11-06

7.8 Inspection and Acceptance

The Technical Authority is the Inspection Authority. All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection by the Inspection Authority or representative. Should any report, document, good or service not be in accordance with the requirements of the Statement of Work and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment.

Annex A - Statement of Work

1 GENERAL

Canada has a requirement to purchase constant air volume (CAV) bypass ducted fume hoods (hereafter referred to as “fume hood”) designed for continuous use to capture, confine and exhaust fumes, vapours and particulates generated within the fume hood cavity. The fume hoods must be completed with the mechanical and electrical fixtures described herein and meet performance criteria from PWGSC MD15128 – 2013 Guidelines and ANSI/ASHRAE 110 Standard that is described herein. This requirement is for the fume hoods only; installation of the fume hoods will be done separately by a third party.

- 1.1. The Offeror must provide a custom build constant air volume (CAV) fume hood, including, bilingual (English and French) training provided on DVD or other electronic format, a minimum one-year warranty and all required manuals for the operation and maintenance of the fume hood (in bilingual French and English format).
- 1.2. The Offeror must provide fume hoods width size options of 1200 mm, 1800 mm and 2400 mm. The fume hood must have a base cabinet with a vent pipe connection and must be a factory fabricated package, piped and wired for single connections to exhaust system and electrical power, and include all components and accessories described in the technical requirements to produce a fully functional system.

2 TECHNICAL REQUIREMENTS

2.0 GENERAL

- 2.0.1 The fume hood must be a constant air volume (CAV) bypass fume hood.
- 2.0.2 The fume hood must have an interior height of 1500 mm \pm 10 mm.
- 2.0.3 The fume hood must have an interior depth of 840 mm \pm 10 mm.
- 2.0.4 The fume hood must have an interior width of 1200 mm \pm 10 mm (Fume Hood A), 1800 mm \pm 10 mm (Fume Hood B) or 2400 mm \pm 10 mm (Fume Hood C), depending on the model ordered.
- 2.0.5 The fume hood, components and accessories must be assembled by a single manufacturer.
- 2.0.6 The fume hood must be supplied with anchor bolts (sized to withstand seismic zone acceleration and velocity requirements for location) and templates.
- 2.0.7 The fume hood must be designed to conform or exceed the requirements of all SEFA Recommended Practices.

2.1 FUME HOOD PERFORMANCE

- 2.1.1 The fume hood must have a face velocity of 0.50 m/s (in accordance with performance criteria described in PWGSC MD15128 – 2013 Sections 3.2, 4, 5 and 6) at the normal operating sash height of 450 mm.
- 2.1.2 The noise level of the fume hood must be 70 dBA or less at 500 mm with normal operating sash height of 450 mm.
- 2.1.3 The exhaust duct collar must provide exhaust flow rate of at least 7.5 m/s, integral with top panel.
- 2.1.4 The exhaust duct collar must be constructed from PVC, with bell-mouthed entry, and flanged to accept exhaust duct.

2.2 FUME HOOD SASH

- 2.2.1 The sash must consist of 6.4 mm thick minimum tempered safety glass which complies with CAN/CGSB 12.1 in corrosion resistant PVC track for sliding sash vertically.
- 2.2.2 The sash must form an integrated part of the fume hood design.
- 2.2.3 The sash's normal operating position must be labelled on front.
- 2.2.4 The sash's opening must be restricted by sash stop with manual override.
- 2.2.5 The sash's normal operating position must be 450 mm opening above airfoil.
- 2.2.6 The sash must have a counterbalance mechanism with all of the following features:
 - A single counterweight;
 - stainless steel multi-strand wires;
 - 39 mm minimum diameter nylon-tired ball-bearing pulley assembly; and
 - cable retaining device, assembled to prevent creep or tilting of sash during operation.
- 2.2.7 The sash must move with one finger operation, and remain in place where it is stopped.
- 2.2.8 The sash counterbalance mechanism must not be spring type.
- 2.2.9 The sash must open and close against rubber bumper stops. The rubber bumper stops must be installed to ensure users can readily adjust sash opening when moving sash from either end.
- 2.2.10 The sash must remain 50 mm minimum above the lowest part of the airfoil in the event of failure of the counterbalance mechanism.
- 2.2.11 The sash guides must be corrosion resistant extruded PVC tracks.
- 2.2.12 The fume hood must include a physical stop to prevent the sash from opening beyond normal operating position under regular working conditions.
- 2.2.13 The sash stop must allow the sash to open beyond normal operating position when placing apparatus in the fume hood.
- 2.2.14 The sash stop must automatically reset to normal operating limit without user intervention.

2.3 BYPASS GRILLE

- 2.3.1 The bypass grille must be located on the front face of the fume hood.
- 2.3.2 The bypass grille must be constructed of the same material as the exterior panels.
- 2.3.3 The bypass grille must permit air entry as the sash is lowered, and must close off air entry as the sash is raised.
- 2.3.4 The bypass grille must be sized to ensure that exhaust air quantity remains relatively constant with the normal operation range of the sash (as per MD 15128-2013 Section 3.2.4)

2.4 FUME HOOD BASE

- 2.4.1 The fume hood base must be the same colour and made of the same material as the fume hood.

- 2.4.2 The fume hood base cabinet must have flammable storage with adjustable shelving.
- 2.4.3 The fume hood base must have a vent pipe connection at the back of fume hood base cabinet.
- 2.4.4 The fume hood base's' furniture must be constructed in accordance with Canadian National Master Construction (NMS) Section 12 35 53.13 – Steel Laboratory Casework.

2.5 HORIZONTAL AIR-FOIL

- 2.5.1 The horizontal air-foil must be fabricated with 1.9 mm type 316 stainless steel with # 4 satin finish.
- 2.5.2 The horizontal air-foil must be 25 mm above the raised portion of the work surface and designed for eddy-free air entry.
- 2.5.3 The horizontal air-foil must project into the fume hood beyond the edge of the sash.
- 2.5.4 The horizontal air-foil must be designed to eliminate reverse flow within 75 mm of the plane of sash.

2.6 INTERIOR WORK SURFACE

- 2.6.1 The interior work surface must be recessed to contain spills; the raised edges must be between 60 mm and 75 mm in width and at least 12 mm in height and include coved corners.
- 2.6.2 The joints with interior panels must be sealed to the interior work surface.
- 2.6.3 The interior work surface must have a 50 mm minimum line of yellow PVC tape adhered to work surface 150 mm inside plane of sash for full width of the work surface.

2.7 LIGHT FIXTURE

- 2.7.1 The fume hood must have a CSA-approved, rapid start light fixture which meets all of the following requirements:
 - Must have T8 two-tube fluorescent or LED light;
 - Must have electronic sound-rated ballasts; and
 - Must be mounted on the exterior of the fume hood roof with safety lens and chemical resistant sealant to isolate fixture from fume hood interior
- 2.7.2 The light fixture must have interior illumination at the interior work surface of at least 860 lux.
- 2.7.3 The light fixture must be accessible for maintenance from the fume hood exterior.
- 2.7.4 The light fixture must include a flush-mounted switch on the side post outside of fume hood.

2.8 ELECTRICAL

- 2.8.1 All electrical devices and operating items must be CSA or ULC approved and carry the appropriate CSA or ULC label.
- 2.8.2 All factory wire electrical outlets and switches must terminate in a box on the roof of the fume hood and the entire assembly must comply with CAN/CSA C22.2 NO. 61010-1-04 Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use.
- 2.8.3 The fume hood must have 2 Duplex receptacles of 120 V, 20 amp, GFI, hospital grade which must be mounted on the exterior of the side posts with a stainless steel cover plate.

2.9 INTERIOR PANELS

- 2.9.1 The Interior panels must be constructed of fibreglass reinforced plastic (FRP) that is 6.4 mm thick (at minimum) and heat and chemical resistant.
- 2.9.2 The Interior panels must be finished with a white non-porous surface and fastened with stainless steel screws.
- 2.9.3 The Interior panels must have a flexural strength of at least 96.5 MPa.
- 2.9.4 The Interior panels must have a flame spread of 25 or less (in accordance with performance criteria described in UL 723 and ASTM E84).
- 2.9.5 The Interior access panels, if required, must be gasketed, removable and replaceable without use of special tools.

2.10 EXTERIOR PANELS

- 2.10.1 The exterior panels must be constructed of cold rolled steel (in accordance with ASTM A1008/A1008M) and finished with powder coating procedure.
- 2.10.2 The exterior panels must use concealed stainless steel screws and devices. External screws cannot be used on the exterior panels.
- 2.10.3 The exterior panels must be removable to allow access to services.
- 2.10.4 The fume hood must have a top closure panel that is made of the same material and finish as the exterior panels and that is designed to enclose ductwork up to the ceiling.
- 2.10.5 The exterior panels must be finished using electrostatically applied urethane powder coat of selected color (as chosen by CBSA, detailed in 2.10.7) and baked in controlled high temperature oven to assure a smooth, hard satin finish.
- 2.10.6 The surfaces of all exterior panels must have a chemical resistant, high-grade laboratory furniture quality finish with an average thickness of 0.0375 mm (thickness must be greater than 0.030 mm for exterior surfaces exposed to view and greater than 0.025 mm for backs of hood and other surfaces not exposed to view).
- 2.10.7 The colour of the exterior panels will be selected from manufacturer's standard colour pallet by a representative of Canada when placing an order. If a representative of Canada cannot select the colour, one of the following neutral colours must be used:
 - White
 - Off-white

2.11 SUPERSTRUCTURE

- 2.11.1 The superstructure must be a rigid, self-supporting unit consisting of double wall construction with outer metal shell and inner lining of corrosion-resistant material.
- 2.11.2 The superstructure's panels must be attached to full frame construction using minimum 1.9 mm galvanized members.

- 2.11.3 The panels and brackets on the superstructure must be attached to eliminate screw heads and metallic brackets from the fume hood interior.
- 2.11.4 The double wall of the superstructure must allow the housing and concealment of steel framing members, attaching brackets and remote operating service fixture mechanisms.
- 2.11.5 The superstructure must include levelling screws.

2.12 VERTICAL SIDE POSTS OF FUME HOOD FACE

- 2.12.1 The vertical side posts must be radiused airfoil shape to reduce eddies and promote smooth entry of air into hood.
- 2.12.2 The vertical side post must accept one duplex electrical receptacle on each side of opening.
- 2.12.3 The side post must include a light switch, monitor and alarm.

2.13 MONITORS AND ALARMS

- 2.13.1 The fume hood must have a monitor with alarm capability.
- 2.13.2 The monitor must provide visual display showing average face velocity and visual and audible alarms configured to alert when flow or velocity varies more than $\pm 10\%$ from design flow set point.
- 2.13.3 The monitor must have accuracy of $\pm 5\%$ of measured parameter.
- 2.13.4 The monitor must include manual silencing switch for audible alarm only, designed to automatically reset to recommence monitoring function.
- 2.13.5 The visual alarm must remain lit until the alarm condition has been rectified.
- 2.13.6 The monitor must include test circuits, relays, switches, and other controls required to permit maintenance personnel to test signal function.
- 2.13.7 The monitor must have minimum 3 point calibration field set-up.
- 2.13.8 The monitor must have 0-10 V analog output (proportional to face velocity).
- 2.13.9 The monitor must have visual display of velocity reading with a resolution of 0.01 m/s.
- 2.13.10 The monitor must have a visual display of a Green LED for safe operation.

2.14 FABRICATION

- 2.14.1 Fabrication welding must be performed by a welder certified by the Canadian Welding Bureau and must meet the requirements of CSA W48.

2.15 FASTENINGS

- 2.15.1 The fastenings inside the fume hood must be corrosion resistant and remain unaffected by repeated manipulations.

2.16 BAFFLES

- 2.16.1 The baffles must be constructed from the same material as the interior panels.
- 2.16.2 The baffles must be designed to provide multiple exhaust slots to minimize variations in face velocity across sash opening when sash is in normal operating position.
- 2.16.3 The baffles must be set at the factory, permanently marked, and fixed on the basis of prototype testing.

2.17 SERVICE ACCESS PORTS

- 2.17.1 The fume hood must have two service access ports (one on each of the sides).
- 2.17.2 The access ports must have plastic sleeve for the pass-thru of electrical cables or wires into the fume hood.
- 2.17.3 The access ports must be located at the bottom of the side panels.

2.18 QUALITY ASSURANCE

- 2.18.1 The Offeror must provide a written instruction booklet (in bilingual French and English format) that must include all of the following:
 - a) Instructions for safe and proper operation of the fume hoods;
 - b) Instructions for maintenance of the fume hoods;
 - c) Components parts list;
 - d) Contact information for the nearest local manufacturer's representative for components and emergency repairs.
- 2.18.2 The Offeror must provide an operator training guide on DVD or other electronic format, in bilingual French and English format, with training presentation highlighting proper operating practices of laboratory fume hood.

2.19 LABORATORY SERVICES

- 2.19.1 The fume hood must include five cut-outs per side post with unused openings capped with cap plugs of same material as exterior panels.
- 2.19.2 The service connections must be accessible from the fume hood exterior through removable access ports.
- 2.19.3 The fume hood exterior must have a permanent corrosion resistant label with abbreviated information relating to sash position and recommended location of apparatus and accessories when placed within the fume hood.

3 FUME HOOD PERFORMANCE AND AS MANUFACTURED ("AM") TESTING REQUIREMENTS

AM Testing must be done for each call-up.

3.0 TESTING EQUIPMENT

- 3.0.1 The Offeror's Testing Equipment must meet or exceed PWGSC MD 15128-2013 Section 6 performance criteria used in "as manufactured" testing.

3.1 DATA LOGGER

- 3.1.1 The Data logger must have a recording interval of 10 Hz or less.
- 3.1.1 The Data logger must have sufficient memory (minimum 900 data points) to allow data collection for the duration of the test, in accordance with PWGSC MD 15128-2013 Section 6.

3.2 IN-DUCT FLOW SENSOR FOR FLOW RESPONSE

- 3.2.1 During testing, an in-duct flow sensor must be used to measure flow response speed of 10 Hz, range of 95 l/s to 950 l/s.
- 3.2.2. The in-duct flow sensor must measure flow response in l/s with an accuracy of $\pm 5\%$.

3.3 THERMAL ANEMOMETER FOR VELOCITY

- 3.3.1 The thermal anemometer must be mounted on a stand with probe fixed at each traverse grid location.
- 3.3.2 The thermal anemometer must include an output recorded for 20 seconds minimum at a rate of 1 reading/second on data logger.
- 3.3.3 The thermal anemometer must have an accuracy of ± 0.025 m/s (below 0.50 m/s) and $\pm 5\%$ (0.50 m/s and above).

3.4 DETECTOR FOR TRACER GAS CONTAINMENT

- 3.4.1 The detector must be continuous reading type.
- 3.4.2 The detector must have minimum detectable level (MDL) of 0.01 ppm.
- 3.4.3 The detector must have accuracy of $\pm 25\%$ (for concentrations 0.05 to 0.1 ppm) and $\pm 10\%$ (for concentrations above 0.1 ppm).

3.5 SMOKE GENERATOR

- 3.5.1 The fume hood must use a smoke generator and diffuser compliant with PWGSC MD15128-2013.

3.6 "AM" TESTING CONDITIONS

- 3.6.1 AM testing must be completed in a manufacturer's testing facility that complies with ANSI/ASHRAE 110 and PWGSC 15128-2013 procedures before delivery.
- 3.6.2 AM tests must achieve performance criteria in accordance with PWGSC MD15128-2013.
- 3.6.3 AM testing must be completed in the following conditions:
 - 3.6.3.1 With fume hood empty;

3.6.3.2 With fume hood loaded to simulate apparatus in the hood. The simulated apparatus must consist of one 3.8 L round paint can, one 300 mm x 300 mm x 450 mm cardboard box, and four 150 mm x 150 mm x 300 mm cardboard boxes. These items must be located 150-250 mm behind the plane of the sash, according to PWGSC MD15128-2013; and

3.6.3.3 With simulated 0.25 m/s cross draft using 620 mm recirculation fan (air directed horizontally at 45 degrees to plane of sash).

3.7 WITNESSING “AM” TESTS

3.7.1 Canada or its representative must be allowed to witness the “AM” testing, if desired.

3.7.2 The Offeror must notify the Technical Authority (as identified in the resulting call-up) at least two weeks before the start of testing.

3.8 “AM” TESTING

3.8.1 The fume hood must meet or exceed performance criteria listed in PWGSC MD15128-2013 Chapter 6 and Appendix A for smoke visualization tests.

3.8.2 Face velocity and flow response testing must be performed in accordance with PWGSC MD15128-2013 and ANSI/ASHRAE 110 with 0.5 m/s ± 0.01 average face velocity (with maximum 20% variation allowed for individual readings) and 1.25 m/s maximum average face velocity for CAV bypass effectiveness at 150 mm sash opening.

3.8.3 Tracer gas testing must be in accordance with PWGSC MD15128-2013 Chapter 6.

3.8.4 Tracer gas testing must be conducted at target average face velocity with an approved tracer gas, as defined in ANSI/ASHRAE 110 standard, and performed with probe at height of 560 mm above the work surface.

3.8.5 Tracer gas testing must include leakage (average leakage of 0.025 ppm maximum and peaking reading of 0.100 ppm) with sash at normal operating position.

3.8.6 Tracer gas testing must include peripheral scan testing under the following conditions:

- record significant peak readings and their locations; and
- record 30 second rolling averages, maximum 0.25 ppm for any 30 second rolling average and include readings in test report.

3.8.7 Tracer gas testing must include Sash movement effect (SME) testing to determine potential for escape after movement of sash according to ANSI/ASHRAE 110 Standard using maximum 45 second rolling average of less than 0.05 ppm

3.9 OTHER DELIVERABLES

3.9.1 The Offeror must provide a performance verification “AM” testing report (in bilingual French and English format) in hard copy and electronic (PDF) outlining the test results to the representative of Canada designated in the call-up before delivery.

3.9.1.1 The report must indicate that the testing was completed as per ANSI/ASHRAE 110 and PWGSC 15128-2013 procedures.

3.9.2 The Offeror must submit manufacturer’s instructions in bilingual French and English, printed product literature and data sheets for fume hood components and accessories, including product characteristics, performance criteria, physical size, finish and limitations.

4.0 TRAINING

- 4.1 The Offeror must provide, upon request by Canada, in-person familiarization training. The training must include operating practices and safety feature of the fume hood. Training will take place at a facility owned by Canada (to be identified per call-up). Each training session will include up to a maximum of 20 students. Training should be delivered in both French and English.

5.0 EXTENDED WARRANTY

- 5.1 The Offeror must provide, upon request, additional years of warranty (in accordance with section 09 of General Conditions 2010A (2018-06-21) and article 7.2.1 of the Standing Offer). Pricing for each year of extended warranty will be in accordance with Annex B, Item 4.

Annex B - Mandatory Evaluation Criteria

The following requirements are the mandatory technical evaluation criteria which will be evaluated during the Offer Evaluation. In addition the Offeror will be required to meet all of the mandatory technical requirements for the duration of the Standing Offer.

Offerors are requested to cross reference the mandatory technical criteria in a concise format by using page, paragraph(s) & sub-paragraphs as applicable to their supporting technical documentation.

ITEM	CRITERIA	DOCUMENTATION TO BE PROVIDED	REFERENCE TO SUBSTANTIATION IN THE TECHNICAL OFFER (I.E. PAGE NUMBER, SECTION, ETC)
1	The Offeror must provide manufacturer contact information.	Contact information	
2	The Offeror must demonstrate that the fume hood manufacturer is a SEFA member with SEFA-1 testing	Proof of CURRENT membership	
3	The Offeror must provide an approved shop drawing for Fume Hood B that has all of the following features clearly labeled as complying with the requirements of Annex A: a) Sash b) Bypass grille c) Exhaust duct collar d) Light switch e) Air velocity monitor with alarm capability f) Interior light fixture g) Service access ports h) Two Duplex receptacles i) Base cabinet with vent pipe connection	One copy of a shop drawing from a professional engineer	
4		Certificate or test report	

	<p>The Offeror must provide a test report or certificate for a constant air volume bypass fume hood that was previously manufactured by the fume hood manufacturer. The test report can be from any of the following types of test:</p> <ul style="list-style-type: none"> - As manufactured; - As installed; or - As used <p>The test report must indicate that the fume hood is compliant with both of the following certifications:</p> <ul style="list-style-type: none"> - ANSI/ASHRAE 110 - PWGSC MD15128 or equivalent* <p>*Equivalent test is defined as a side by side data comparison that demonstrates the fume hood meets or exceeds the conditions and requirements of PWGSC MD15128-2013. If an equivalent certification is provided, the onus is on the Offeror to demonstrate equivalency.</p> <p>Test reports must be dated 2009 or later.</p>		
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