



A.1 ELECTRONIC BID SUBMISSION

Attention: [Robert Merrick](#)
[Materiel & Assets](#)
[Management Division](#)
 E-mail: Robert.Merrick@hc-sc.gc.ca

Request for Proposals (RFP)

for

The Performance of the Work described in Appendix 1, Annex A – Statement of Work

A2. RFP AUTHORITY

The Authority for this RFP is:

Robert Merrick
 Contracting Officer
 Materiel & Assets Management Division
 Health Canada, Ottawa, Ontario

Telephone: 613-941-2071
 E-mail: Robert.Merrick@hc-sc.gc.ca

THIS CONTRACT DOES NOT CONTAIN A SECURITY REQUIREMENT

A3. TITLE Particulate Matter Component Risk Analysis and Concentration	
A4. BID CLOSING DATE October 06, 2016	
A5. SOLICITATION NUMBER 1000184225	A6. ISSUE DATE September 21, 2016
A7. ENQUIRIES All enquiries must be submitted in writing to the designated RFP 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.	
A8. APPLICABLE LAWS In accordance with GI13, 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 SOLICITATION DOCUMENTS The RFP is divided into six (6) parts as follows: <ol style="list-style-type: none"> 1. Section I – Bid Submission Requirements 2. Section II – Bid Evaluation Procedures and Evaluation Criteria 3. Section III – Financial Bid 4. Section IV – General Instructions 5. Section V – Certifications 6. Appendix 1 – Resulting Contract Clauses <ul style="list-style-type: none"> Annex A – Statement of Work Annex B – Basis of Payment Annex C – Security Requirements 	
A10. BID DELIVERY Bids must be received by no later than 14:00 (2 p.m) on October 6, 2016 (Eastern Daylight Savings time) 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.	
A11. BID VALIDITY Bids will remain valid for a period of ninety (90) calendar days following the Closing Date.	
A12. BID CONTENT Bids must be structured in the following manner: <ul style="list-style-type: none"> • 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 – Section V and, • One (1) electronic copy of Financial Bid – Section III contained in separate attachment <p>Please refer to Section 1 – Bid Submission Requirement, point 1.2 for further instructions.</p>	
A13. INTELLECTUAL PROPERTY The Contractor Will Own Copyright as per Appendix 1.	

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SECTION I – BID SUBMISSION REQUIREMENTS

1.1 REQUIRED INFORMATION

This section outlines the information Bidders are required to submit. To be declared responsive, a bid must:

- a. comply with all the requirements of the RFP;
- b. meet all the mandatory technical evaluation criteria;
- c. obtain the required minimum points for each point-rated criterion with a pass mark;

Bids not meeting (a) or (b) or (c) will be declared non-responsive. An evaluation team comprised of representatives of Canada will evaluate the bids.

1.2 SUBMISSION OF THE BID

BID SENT BY EMAIL

You are invited to submit electronic copies in either official language (English or French) of both the Technical and Cost Proposals. The RFP Reference Number and the title of the Requirement must be in the subject line of your email and your proposal must be structured in accordance to section A12 – Bid Content on the cover page.

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 to not 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 (Section V) and;
- one (1) copy of the Financial Bid (Section III), 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:

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.

- 1.2.1 Bidders who submit a bid in response to this RFP agree to be bound by the instructions, clauses and conditions of the RFP and accept the terms and conditions of the resulting contract (see Appendix 1).
- 1.2.2 It is the Bidder's responsibility to obtain, if necessary, clarification of the requirements contained in the RFP and to prepare its bid in accordance with the instructions contained in the RFP. Enquiries must be submitted in writing to the Authority identified in A2 (RFP Authority) and in accordance with section A7 (Enquiries).
- 1.2.3 The RFP documents contain all the requirements relating to the bid solicitation. Any other information or documentation provided to or obtained by a Bidder from any other source is not relevant and not part of this RFP. Bidders should not assume that practices used under previous RFPs or contracts will continue, unless they are identified in the RFP. Bidders should also not assume that their existing capabilities meet the requirements of the RFP simply because they have met previous requirements.

1.3 GREENING GOVERNMENT OPERATIONS

The Government of Canada has directed federal departments and agencies to take the necessary steps to acquire products and services that have a lower impact on the environment than those traditionally acquired. The environmental impact assessment of a product and/or service considers the whole life cycle of the product and/or service. Health Canada and the Public Health Agency of Canada procurements will be including more demanding environmental criteria to encourage product/service suppliers to improve their operations to reduce any possible negative impact on the environment.

- 1.3.1 Canada requests that Bidders follow the format instructions described below in the **preparation of their bid:**
 - a. use 8.5 x 11 inch (216 mm x 279 mm) paper for hardcopy submissions;
 - b. use a numbering system that corresponds to the RFP.

In order to promote environmental considerations, bidders are further encouraged to:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and/or containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

1.4 SET-ASIDE FOR COMPREHENSIVE LAND CLAIMS AGREEMENT(S) BENEFICIARIES

This RFP is not being set aside to Comprehensive Land Claims Agreement(s) Beneficiaries.

1.5 SET-ASIDE UNDER THE FEDERAL GOVERNMENT'S PROCUREMENT STRATEGY FOR ABORIGINAL BUSINESS (PSAB)

This RFP is not being set aside under the federal government's Procurement Strategy for Aboriginal Business (PSAB)

1.6 DIRECT DEPOSIT PAYMENTS

Health Canada has adopted electronic direct deposit as the method for paying invoices. Suppliers are asked to register for electronic direct deposit and to provide their account information upon request. For help with online registration, send an email to: DD@hc-sc.gc.ca.

1.7 SECURITY REQUIREMENTS

This RFP does not contain a Security Requirement.

SECTION II – BID EVALUATION PROCEDURES AND EVALUATION CRITERIA

2.1 BID EVALUATION PROCEDURES

2.1.1 The Technical Bid will first be evaluated against the mandatory technical criteria of the RFP. If the bid meets all the mandatory criteria, and the RFP contains point-rated criteria, the evaluation committee will then evaluate the point-rated technical criteria. If the mandatory technical criteria are not met, the point-rated technical criteria will not be evaluated and the bid will be given no further consideration.

2.1.2 Only technical bids that meet the mandatory technical criteria [and the minimum score required in the point-rated technical criteria](#) will be further evaluated on the basis of the Bidder's Financial Bid.

2.1.3 Deleted.

2.1.4 Supplier Selection Method

Highest Technical Score within Budget:

It is understood by the parties submitting proposals that, to qualify, bidders must meet all mandatory requirements as well as the minimum score identified for the point-rated criteria. The contract will be awarded to the bidder with the highest technical score within the budget of \$60,000 for each fiscal year (one year contract with two option years, taxes not included).

2.2 EVALUATION CRITERIA

The evaluation of the following criteria is based on a “rules of evidence” approach in that the evaluation committee can only conduct its evaluation based on the contents of the Bidder's bid. The onus is on the Bidder to ensure that its bid is complete, clear, and provides sufficient detail for the evaluation committee to evaluate the bid. Simply repeating or copying a statement contained in the RFP is not sufficient.

To facilitate the evaluation of the bid, Canada also requests that Bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Bidders may refer to different sections of their bids by identifying the specific paragraphs and page numbers where the subject topic has already been addressed.

For the purpose of the technical criteria specified below, the experience of the Bidder includes the experience of the parent, subsidiaries or other affiliates of the Bidder, or its subcontractors.

All Bidders are advised that only listing experience without providing any supporting data to describe where, when and how such experience was obtained will not be considered to be “demonstrated” for the purpose of the evaluation. All professional experience must be fully documented and substantiated in the proposal.

For evaluation purposes,

- where means the name of the employer as well as the position/title held by the individual;
- when means the start date and end date (e.g. from January 2008 to March 2010) of the period during which the individual acquired the qualification/experience; and
- how means a clear description of the activities performed and the responsibilities assigned to the individual under this position and during this period.

For the purpose of personnel qualifications, experience gained during formal education shall not be considered work experience. All requirements for work experience shall be obtained in a legitimate work environment as opposed to an educational setting. Co-op terms are considered work experience provided that they are related to the required services.

For each resume submitted, the Bidder must ensure that:

- i. the proposed resource title and the individual's name are clearly indicated; and
- ii. the resume clearly demonstrates where, when and how the stated qualifications/experience of the individual were acquired.

Furthermore, Bidders are also advised that the month(s) of experience listed for a project whose timeframe overlaps that of another referenced project, will only be counted once. For example: Project 1 timeframe is July 2011 to December 2011; Project 2 timeframe is October 2011 to January 2012; the total months of experience for these two project references is seven (7) months.

2.2.1 Mandatory Criteria

The bid must meet the mandatory criteria set out below. The Bidder must provide the necessary documentation to support compliance. Bids which fail to meet the mandatory criteria will be declared non-responsive. Mandatory criteria are evaluated on a simple pass or fail basis. This will be evaluated as either a “Yes” or a “No.”

Canada reserves the right to contact the named Client organization to verify the accuracy and veracity of the information contained within the submitted Contract/Project Summaries. In the event that the Client organization reference provided is unable to verify any statement contained within, the Proposal will be considered non-responsive, with the Bidder being given no further consideration.

In order to demonstrate the required experience, each Technical Proposal should provide the following information: the full name of the client, sponsor or funding organization including contact information to whom the bidder reported during the work (mailing address, telephone or e-mail coordinates), the dates/duration of the project in

months/years, the dates/duration of the data collection cycle in months/years, the dollar value (\$CAD) of the project.

ATTENTION BIDDERS:			
Write beside each of the criterion the relevant page number(s) from your bid which addresses the requirement identified in the criteria.			
#	Mandatory Technical Criteria	Met (Yes/No)	Cross-Reference to bid (indicate page #)
M1	The bidder's project leader must have a PhD from a recognized university with specialization in Statistics with experiences in Bayesian hierarchical models, Spectral analysis, and Smoother functions. Provide a description in 250 words or less.		
M2	The bidder's project leader must demonstrate that within the last 5 years, they have undertaken at least three projects on Canadian population health for environmental issues. Provide a one-page summary for the most recent project.		
M3	The bidder's project leader must have at least two peer-reviewed publications on Canadian population health in scientific journals listed in the Science Citation Index Expanded (within the last 5 years). Provide titles, journals and years.		
M4	The bidder's project leader must show that they have experience working with Canadian environmental databases on fine particular matter (PM10 & PM2.5) and climate. Provide a description in 250 words or less.		
M5	The bidder's project leader must have experience working with generalized additive model and/or generalized Poisson model. Provide a description in 250 words or less.		

M6	The bidder's project leader must show that they have experience working with statistical software such as R. Provide a description of experience in 250 words or less.		
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2.2.2 Point-rated Technical Criteria

In addition to meeting the Mandatory Criteria, the Bidder must also address the Point-Rated Criteria identified below.

Minimum pass mark per criterion

A proposal with a score less than the specified minimum for technical compliance for any one criteria will be considered **non responsive**, and eliminated from the competition. To be considered responsive, a bid must obtain the required minimum of 42 points for the criteria which are subject to point rating. The rating is performed on a scale of 100 points.

Attention Bidders: Write beside each of the criteria the relevant page number(s) from your proposal which addresses the requirement identified in the criteria.				
Point-Rated Criteria	Page Number	Points Allocated for the Criteria	Minimum Points Required	Score
R1. Indicate the number of peer-reviewed publications for which the bidder's project leader was listed as an author and which dealt with the adverse health effects of air pollution on Canadian population. This is above what was requested for mandatory criteria M3. Provide the name and date of the publication and the title of article. Two points for each, up to a maximum of 10 points.		10	6	
R2. Indicate the number of formal reports (including book chapters but excluding publications) for which the bidder's project leader was listed as an author and which dealt with the adverse health effects of air pollution on Canadian population. Provide the title and date of the report. Two points for each, up to a maximum of 10 points.		10	6	
R3. Indicate the number of years of experience the bidder's project leader has in		10	6	

estimating impact of air pollution on Canadian population. One point for each half year, up to a maximum of 10 points.				
R4. Indicate the number of years of experience the bidder's project leader has in temporal and spatial changes in public health risks. One point for each half year, up to a maximum of 10 points.		10	6	
R5. Indicate the number of projects the bidder's project leader has conducted involving Bayesian hierarchical model. Two points for each, up to a maximum of 10 points.		10	6	
R6. Indicate the number of projects the bidder's project leader has conducted involving PM, other air pollutants and/or temperature. Two points for each, up to a maximum of 10 points.		10	6	
R7. Indicate the number of projects the bidder's project leader has conducted involving generalized additive model. Two points for each, up to a maximum of 10 points.		10	6	
R8. Indicate the number of projects the bidder's project leader has conducted involving time series spectral analysis and interpolation. Two points for each, up to a maximum of 10 points.		10	6	
R9. Indicate the number of projects the bidder's project leader has conducted involving smoothers such as natural splines and/or Slepian basis matrix. Two points for each, up to a maximum of 10 points.		10	6	
R10. Indicate the number of years the bidder's project leader has conducted involving short-term adverse health risks attributable to air pollution. Two points for each, up to a maximum of 10 points.		10	6	
Total Points		100	60	

SECTION III – FINANCIAL BID

Bidders must not submit expenses which normally fall under the normal cost of doing business. **All the information required in this section must be provided in the Bidders' Financial Bid.**

Limitation of Expenditure

The Bidder must provide firm, all-inclusive per diem rates, inclusive of overhead costs and profit, and including Canadian customs duties and excise taxes. The Bidder must also identify any estimated expenses, if applicable.

The total amount of Goods and Services Tax (GST) or Harmonized Sales Tax (HST) must be shown separately, if applicable.

The bidder must also include in its financial proposal the costing for two (2) additional one-year option periods under the same terms and conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable terms set out in the Basis of Payment.

Canada may exercise this option at any time by sending a written notice to the Contractor before the end date of the Contract. The option may only be exercised by the Contracting Authority and will be evidenced for administrative purposes only, through an amendment to the Contract.

3.0.1 Bidders must provide their Financial Bid in accordance with the table referenced at 3.1 – Pricing Schedule. All payments will be made in accordance with the proposed Basis of Payment (Appendix 1, Annex B) of the Resulting Contract Clauses.

3.0.2 Exchange rate fluctuation protection is not offered.

3.0.3 The Financial Bid must contain a detailed breakdown of the **total estimated price**, by phase, or by major tasks. The Financial Bid should address each of the following, if applicable:

a. Per Diem (based on 7.5 hours/day)

For each proposed resource, including subcontractors, the Bidder must indicate the proposed all-inclusive per diem rate **and the estimated level of effort required**. Bidders within the National Capital Region (NCR) must submit an all-inclusive per diem rate that includes any displacement costs within the NCR.

NOTE: Canada will not pay the Contractor its fixed time rates for any time spent in “travel status” (e.g. time spent travelling by car or plane, or time spent travelling to and from the airport).

b. Travel (GST/HST included)

Not applicable.

c. Other Expenses (GST/HST included)

The Bidder should list any other expenses which may be applicable for this requirement, giving an estimated cost for each (e.g. shipping, equipment purchased, rentals, materials). The Bidder must submit a copy of receipt(s) for payment. Original receipts may be requested at any time by Canada.

NOTE: Bidders must not submit expenses which normally fall under the normal cost of doing business. Unless otherwise specified, overhead costs should be included in the firm per diem rates above.

d. Goods and Services Tax/Harmonized Sales Tax

Various items in the Financial Bid may be subject to GST/HST or custom duties, and this charge must be included in the cost estimates for travel and other expenses and as a separate line item for the professional services.

3.0.4 Financial Bids not meeting the above requirements will be considered non-responsive and will not be given any further consideration.

3.1 PRICING SCHEDULE

3.1.1 Professional services

The Bidder must provide firm, all inclusive per diem rates prices as indicated below.

OPTION 1 - PROFESSIONAL SERVICES

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.

Labour resources	Per diem (CAD \$)	Level of effort (number of days)	Total price (CAD \$)
Resource #1 (name, labour category)			\$_____
Resource #2 (name, labour category)			\$_____
Resource #3 (name, labour category)			\$_____
Other resources (name, labour category)			\$_____
Other expenses			\$_____

Subtotal (excluding GST/HST)	\$_____
Estimated applicable taxes	\$_____
TOTAL	\$_____

OR

OPTION 2 – MILESTONES

The schedule of milestones for which payments will be made in accordance with the Contract is as follows. These amounts do not include GST/HST.

Schedule of Milestones	Delivery date	Firm amount
#1.		\$_____
#2.		\$_____
#3.		\$_____
Subtotal (excluding GST/HST)		\$_____
Estimated applicable taxes		\$_____
TOTAL		\$_____

SECTION IV – GENERAL INSTRUCTIONS

	INTERPRETATION		
	In this RFP:		cannot transfer this responsibility to Canada. Canada will not assume responsibility for bids that are directed to an address other than the one stipulated in A1.
0.1	“Bidder” means the person or entity (or, in the case of a joint venture, the persons or entities) submitting a bid to perform a contract for goods, services or both.	5.3	Late bids: Bids received after the closing date and Time specified in A10 will be deemed non-responsive and will not be considered for contract award.
0.2	“Her Majesty”, the “Minister” or “Canada” means Her Majesty the Queen in right of Canada, as represented by the Minister of Health, acting through Health Canada (referred to herein as the “Minister”).		
	G11 RESPONSIVENESS	G16 RIGHTS OF CANADA	
1.1	For a bid to be considered responsive, it must comply with all of the requirements of this RFP identified as mandatory. Mandatory Requirements are also expressed by using imperative verbs such as “shall”, “will” and “must”.	6.1	Canada reserves the right: during bid evaluation, to submit questions to or conduct interviews with Bidders, at Bidders’ cost, upon forty eight (48) hours’ notice, to seek clarification or to verify any or all information provided by the Bidder with respect to this RFP; to reject all bids received in response to this RFP; to accept any bid, in whole or in part, without prior negotiation;
	G12 ENQUIRIES – BID SOLICITATION STAGE	6.2	to cancel and/or re-issue this RFP at any time;
2.1	All enquiries or issues concerning this RFP must be submitted in writing to the RFP Authority identified in A2 as early as possible within the bid solicitation period. Enquiries and issues must be received within the timeframe described in A7 to allow sufficient time to provide a response. Enquiries received after that time may not be answered prior to the closing date.	6.5	to award one or more contracts, if applicable;
		6.6	to not accept any deviations from the stated terms and conditions;
2.2	To ensure consistency and quality of information provided to Bidders, the RFP Authority will give notice, in the same manner as this RFP, of any additional information in response to significant enquiries received without revealing the sources of the enquiries.	6.7	to incorporate all, or any portion of the Statement of Work, Request for Proposals and the successful bid in any resulting contract; and
		6.8	to not contract at all.
2.3	All enquiries and other communications with government officials throughout the solicitation period shall be directed ONLY to the RFP Authority named herein. Non-compliance with this condition during the bid solicitation period will (for that reason alone) result in bid disqualification.	G17 INCAPACITY TO CONTRACT WITH GOVERNMENT	
		7.1	By submitting a bid, the Bidder declares that the Bidder has not been convicted of an offence under the following provisions of the <i>Criminal Code</i> : – Section 121, Frauds upon the Government; – Section 124, Selling or Purchasing Office; or – Section 418, Selling Defective Stores to Her Majesty, other than an offence for which a pardon has been granted.
		7.2	Canada may reject a bid where the Bidder, including the Bidder’s officers, agents and employees, has been convicted of an offence referred to in clause 7.1. Where Canada intends to reject a proposal pursuant to this provision, the RFP Authority will so inform the Bidder and provide the Bidder ten (10) calendar days within which to make representations, prior to making a final decision on the bid rejection.
	G13 BIDDER’S SUGGESTED IMPROVEMENTS DURING BID SOLICITATION PERIOD	G18 INCURRING OF COSTS	
3.1	Should any Bidder consider that the specifications or Statement of Work contained in this RFP can be improved technically or technologically, the Bidder is invited to make suggestions, in writing, to the RFP Authority named herein. The Bidder must clearly outline the suggested improvements as well as the reason for the suggestion. Suggestions which do not restrict the level of competition nor favour a particular Bidder will be given consideration provided they are received by the RFP Authority within the timeframe described in article A7 to allow sufficient time to provide a response. Canada reserves the right to accept or reject any or all suggestions.	8.1	No costs incurred before receipt of a signed contract or specified written authorization from the RFP Authority can be charged to any resulting contract. In addition, the Contractor is not to perform Work in excess of or outside the scope of any resulting contract based on verbal or written requests or instructions from any government personnel other than the Contracting Authority. The Bidder’s attention is drawn to the fact that the Contracting Authority is the only authority which can commit Canada to the expenditure of the funds for this requirement.
		G19 BIDDERS ARE NOT TO PROMOTE THEIR INTEREST IN THE PROJECT	
	G14 BID PREPARATION COSTS	9.1	Bidders must not make any public comment, respond to questions in a public forum or carry out any activities to publicly promote or advertise their interest in this project.
4.1	The costs, including travel incurred by the Bidder in the preparation of its bid, or of any resulting contract, will be the sole responsibility of the Bidder and will not be reimbursed by Canada.		
		G110 PROPERTY OF CANADA	
	G15 BID DELIVERY	10.1	Bids received on or before the stipulated RFP closing date and time will become the property of Canada and may not
5.1	Bids or amendments thereto, will only be accepted by the RFP Authority if they are received at the address indicated in A1, on or before the closing date and time specified in A10.		
5.2	Responsibility for bid delivery: the Bidder has the sole responsibility for the timely receipt of a bid by Canada and		

- be returned. All bids will be treated as confidential, subject to the provisions of the *Access to Information Act* (R.S. 1985, c. A-1) and the *Access to Information Act* (R.S. 1985, c. A-1) and *Privacy Act* (R.S., 1985, c. P-21).
- GI11 PRICE JUSTIFICATION**
In the event that the Bidder's bid is the sole responsive bid received, the Bidder must provide, on the RFP Authority's request, one or more of the following price justifications:
- 11.1 a current published price list indicating the percentage discount available to Canada; or
- 11.2 copies of paid invoices for like quality and quantity of the goods, services or both sold to other customers; or
- 11.3 a price breakdown showing the cost of direct labour, direct materials, purchased items, engineering and plant overheads, general and administrative overhead, transportation, profit, etc.; or
- 11.4 price or rate certification; or
- 11.5 any other supporting documentation as requested by the RFP Authority
- GI12 ANNOUNCEMENT OF SUCCESSFUL BIDDER**
- 12.1 If this RFP was advertised on the "Buyandsell.gc.ca" tendering service, the name of the successful Bidder will be announced on Buyandsell.gc.ca upon contract award and sign off.
- 12.2 If this RFP was not advertised on "Buyandsell.gc.ca," Canada will communicate to all Bidders the name and address of the successful Bidder as well as the total dollar value and award date for the contract only after contract sign-off.
- GI13 APPLICABLE LAWS**
- 13.1 Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in insert name of province or territory. The Bidder may propose a change to the applicable laws in his/her bid. If no change is made, it acknowledges that the applicable laws specified in this RFP are acceptable to the bidder.
- GI14 CONTINGENCY FEE**
- 14.1 The Bidder declares that the Bidder has not, directly or indirectly, paid or agreed to pay, and will not, directly or indirectly pay, a Contingency Fee to any individual for the solicitation, negotiation or obtaining of the contract if the payment of the fee would require the individual to file a return under section 5 of the *Lobbying Act*, R.S.C., 1985, c. 44 (4th Supp.). In this section, "Contingency Fee" means any payment or other compensation that is contingent upon or is calculated upon the basis of a degree of success in soliciting or obtaining a government contract or negotiating the whole or part of its terms.
- GI15 CONFLICT OF INTEREST – UNFAIR ADVANTAGE**
- 15.1 In order to protect the integrity of the procurement process, Bidders are advised that Canada may reject a bid in the following circumstances:
- (a) if the Bidder, any of its subcontractors, any of their respective employees or former employees was involved in any manner in the preparation of the bid solicitation or in any situation of conflict of interest or appearance of conflict of interest; or
- (b) if the Bidder, any of its subcontractors, any of their respective employees or former employees had access to information related to the bid solicitation that was not available to other Bidders and that would, in Canada's opinion, give or appear to give the Bidder an unfair advantage.
- 15.2 The experience acquired by a Bidder who is providing or has provided the goods and services described in the RFP (or similar goods or services) will not, in itself, be considered by Canada as conferring an unfair advantage or creating a conflict of interest. This Bidder remains however subject to the criteria established above.
- 15.3 Where Canada intends to reject a bid under this section, the RFP Authority will inform the Bidder and provide the Bidder an opportunity to make representations before making a final decision. Bidders who are in doubt about a particular situation should contact the Contracting Authority before the bid Closing Date.
- 15.4 By submitting a bid, the Bidder represents that it does not consider itself to be in conflict of interest nor to have an unfair advantage. The Bidder acknowledges that it is within Canada's sole discretion to determine whether a conflict of interest, unfair advantage or an appearance of conflict of interest or unfair advantage exists.
- GI16 CONDUCT OF EVALUATION**
- 16.1 In conducting its evaluation of the bids, Canada may, but will have no obligation to, do the following:
- (a) seek clarification or verification from Bidders regarding any or all information provided by them with respect to the bid solicitation;
- (b) contact any or all references supplied by Bidders to verify and validate any information submitted by them;
- (c) request, before award of any contract, specific information with respect to Bidders' legal status;
- (d) conduct a survey of Bidders' facilities and examine their technical, managerial, and financial capabilities to determine if they are adequate to meet the requirements of the bid solicitation;
- (e) correct any error in the extended pricing of bids by using unit pricing and any error in quantities in bids to reflect the quantities stated in the bid solicitation; in the case of error in the extension of prices, the unit price will govern;
- (f) verify any information provided by Bidders through independent research, use of any government resources or by contacting third parties; and
- (g) interview, at the sole costs of Bidders, any Bidder and any or all of the resources proposed by Bidders to fulfill the requirement of the bid solicitation.
- 16.2 Bidders will have the number of days specified in the request by the RFP Authority to comply with any request related to any of the above items. Failure to comply with the request may result in the bid being declared non-responsive.
- GI17 BIDDER DEBRIEFINGS**
- 17.1 Should you require additional information or a debriefing regarding your bid, please contact the RFP authority identified in A2 within 15 calendar days of notification of results. The debriefing may be in writing, by telephone or in person. Debriefings provide bidders an opportunity to understand where their bids may need to be improved in response to future solicitations. After the debriefing, and if needed, you will be provided with information on other dispute resolution options available to you such as the Office of the Procurement Ombudsman (OPO) or other appropriate recourses. For more information on the Office of the Procurement Ombudsman go to: <http://opo-boa.gc.ca>

SECTION V – CERTIFICATIONS

The following information must be submitted along with a signed covering letter, the Technical Bid, Financial Bid (Section III) as well as the Certifications (Section V).

5.1 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

5.2 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.

5.3 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.

5.4 CERTIFICATION OF AVAILABILITY AND STATUS OF PERSONNEL

5.4.1 Availability of Personnel and Facility

The Bidder certifies that, should it be authorized to provide services under any Contract resulting from this RFP, the persons and facility proposed in its bid 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.

5.4.2 Status of Personnel

If, in the fulfilment of this requirement, the Bidder has proposed any person who is not an employee of the Bidder, the Bidder 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 RFP Authority.

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

5.5 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.

5.5.1 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.

5.5.2 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](#).

5.5.3 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.

5.6 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.

5.7 INTEGRITY PROVISIONS

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.

5.7.1 The Ineligibility and Suspension Policy (the “Policy”) in effect on the date the bid solicitation is issued, and all related Directives in effect on that date, are incorporated by reference into, and form a binding part of the bid solicitation. The Bidder must comply with the Policy and Directives, which can be found at Ineligibility and Suspension Policy of Public Works and Government Services Canada.

<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>

5.7.2 Under the Policy, charges and convictions of certain offences against a Supplier, its affiliates or first tier subcontractors, and other circumstances, will or may result in a determination by Public Works and Government Services Canada (PWGSC) that the Supplier is ineligible to enter, or is suspended from entering into a contract with Canada. The list of ineligible and suspended Suppliers is contained in PWGSC’s Integrity Database. The Policy describes how enquiries can be made regarding the ineligibility or suspension of Suppliers.

5.7.3 In addition to all other information required in the bid solicitation, the Bidder must provide the following:

- a. by the time stated in the Policy, all information required by the Policy described under the heading “Information to be Provided when Bidding, Contracting or Entering into a Real Property Agreement”; and

- b. with its bid, a complete list of all foreign criminal charges and convictions pertaining to itself, its affiliates and its proposed first tier subcontractors that, to the best of its knowledge and belief, may be similar to one of the listed offences in the Policy. The list of foreign criminal charges and convictions must be submitted using an Integrity Declaration Form, which can be found at Declaration form for procurement.

5.7.4 Subject to subsection 5.75, by submitting a bid in response to this bid solicitation, the Bidder certifies that:

- a. it has read and understands the Ineligibility and Suspension Policy;
- b. it understands that certain domestic and foreign criminal charges and convictions, and other circumstances, as described in the Policy, will or may result in a determination of ineligibility or suspension under the Policy;
- c. it is aware that Canada may request additional information, certifications, and validations from the Bidder or a third party for purposes of making a determination of ineligibility or suspension;
- d. it has provided with its bid a complete list of all foreign criminal charges and convictions pertaining to itself, its affiliates and its proposed first tier subcontractors that, to the best of its knowledge and belief, may be similar to one of the listed offences in the Policy;
- e. none of the domestic criminal offences, and other circumstances, described in the Policy that will or may result in a determination of ineligibility or suspension, apply to it, its affiliates and its proposed first tier subcontractors; and
- f. it is not aware of a determination of ineligibility or suspension issued by PWGSC that applies to it.

5.7.5 Where a Bidder is unable to provide any of the certifications required by subsection 4, it must submit with its bid a completed Integrity Declaration Form, which can be found at Declaration form for procurement.

5.7.6 Canada will declare non-responsive any bid in respect of which the information requested is incomplete or inaccurate, or in respect of which the information contained in a certification or declaration is found by Canada to be false or misleading in any respect. If Canada establishes after award of the Contract that the Bidder provided a false or misleading certification or declaration, Canada may terminate the Contract for default. Pursuant to the Policy, Canada may also determine the Bidder to be ineligible for award of a contract for providing a false or misleading certification or declaration.

5.8 FEDERAL CONTRACTOR'S PROGRAM FOR EMPLOYMENT EQUITY CERTIFICATION

5.8.1 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.

5.8.2 [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.

- 5.8.3 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](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" 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.

*NOTE: add also the following paragraph and certification for requirements estimated at \$1,000,000 **and above**, Applicable Taxes included. Delete if not applicable.*

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 RFP 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) *(If left blank, the date will be deemed to be the bid solicitation closing date).*

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)

5.9 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

5.10 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

APPENDIX 1 – RESULTING CONTRACT CLAUSES

1. GENERAL INFORMATION

1.1. Contact Information

1.1.1. Contracting Authority

The Contracting Authority is identified in section C1, page 1, of the Contract.

Any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

1.1.2. Project Authority

The Project Authority is:

Name: _____
 Title: _____
 Organization: _____
 Address: _____

Phone number: _____
 Email: _____

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract, and is responsible for the day-to-day management of the Contract.

NOTE: Invoices must not to be sent to the Project Authority directly. Invoices must be sent to the address indicated on page 1 of the Contract, section C8.

1.1.3. Contractor's Authorized Representative

The Contractor's Authorized Representative is:

Name: _____
 Title: _____
 Organization: _____
 Address: _____

Phone number: _____
 Email: _____

1.2. PERIOD OF THE CONTRACT

The initial period of the Contract is identified in section C3, on page 1 of the Contract.

The Contractor hereby grants to Canada the irrevocable option to extend the period of the Contract by up to **two (2)** additional one-year periods under the same terms and conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable terms set out in the Basis of Payment.

Canada may exercise this option at any time by sending a written notice to the Contractor before the end date of the Contract. The option may only be exercised by the Contracting Authority and will be evidenced for administrative purposes only, through an amendment to the Contract.

1.3. SECURITY REQUIREMENTS

There is no security requirement applicable to this Contract.

1.4. BASIS OF PAYMENT

Refer to Annex B

1.5. METHOD OF PAYMENT

1.5.1. OPTION 1 – MILESTONE PAYMENTS

Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the Contract and the payment provisions of the Contract if:

- i. an accurate and complete claim for payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- ii. all work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

1.5.2. OPTION 2 – MONTHLY PAYMENTS

Payment for services rendered will be made by Canada to the Contractor on monthly intervals upon receipt of an itemized invoice setting out, in detail, the Work performed, the progress towards the completion of the tasks/deliverables identified in the Contract and the number of person days expended, and the certificate of the Project Authority that the invoice is true and exact and that the Contractor has during the period covered by the invoice proceeded with the performance of the Work.

Health Canada has adopted electronic direct deposit as their method for paying invoices. Suppliers are asked to register for electronic direct deposit and to provide their account information upon request. For help with online registration, send an email to: DD@hc-sc.gc.ca.

1.6. INVOICING INSTRUCTIONS

One (1) copy of 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/per diem rates);
- e. evidences of actual Cost (Cost Reimbursable Elements);
- f. the amount of the progress payment being claimed; and the amount of any tax (including GST/HST)
- g. Reimbursable travel expenses appearing on the invoice must be itemized by category. Please refer to the example below.

Travel and Allowable Accommodation and Miscellaneous Costs:	Receipt /Voucher Attached	Amount	Total
Air			\$
Rail			\$
Motor Vehicle Rental			\$
Personal Motor Vehicle			\$
Taxi			\$
Accommodation			\$
Meals			\$
TOTAL			\$

2. GENERAL CONDITIONS

GC1. Interpretation

- 1.1. In the Contract,
 - 1.1.1. “Contracting Authority” means the officer or employee of Canada who is designated by the Articles of Agreement and includes a person authorized by the Contracting Authority to perform any of the Contracting Authority's functions under the Contract;
 - 1.1.2. “Cost” means Cost determined according to Public Works and Government Services Canada (PWGSC) Contract Cost Principles (CCP) 1031-2 as revised to the date of the bid solicitation or, if there was no bid solicitation, the date of the Contract. CCP 1031-2 are found on the PWGSC website at the following address: <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/3/1031-2>
 - 1.1.3. “Minister” includes a person acting for, or if the office is vacant, in place of the Minister and the Minister's successors in the office, and the Minister's or their lawful deputy and any of the Minister's or their representatives appointed for the purpose of the Contract;
 - 1.1.4. “Work”, unless otherwise expressed in the Contract, means all the activities, services, goods, equipment and things required to be done, delivered or performed by the Contractor under the Contract.

GC2. Date of Completion of Work and Description of Work

- 2.1. The Contractor shall, between the start date and the end date specified in section C3 (Contract Period of the Articles of Agreement), perform and complete with care, skill, diligence and efficiency the Work that is described in the Statement of Work (Annex A).

GC3. Successors and Assigns

- 3.1. The Contract is to the benefit of and binds the successors and permitted assignees of Canada and of the Contractor.

GC4. Subcontractors

- 4.1. Subcontractors must obtain the equivalent level of screening or clearance as deemed required for the Contractor.
- 4.2. All contracts and subcontracts with outside parties which contain security requirements are not to be awarded without prior written permission from the Contracting Authority.

GC5. Assignment

- 5.1. The Contractor must not assign the Contract without first obtaining the written consent of the Contracting Authority. Any assignment made without that consent is void and will have no effect. The assignment will be effective upon execution of an assignment agreement signed by the Parties and the assignee.
- 5.2. Assignment of the Contract does not relieve the Contractor from any obligation under the Contract and it does not impose any liability upon Canada.

GC6. Time of the Essence and Excusable Delay

- 6.1. It is essential that the Work be performed within or at the time stated in the Contract.
- 6.2. A delay in the performance by the Contractor of any obligation under the Contract that is caused by an event that:
 - a. is beyond the reasonable control of the Contractor;

- b. could not reasonably have been foreseen;
 - c. could not reasonably have been prevented by means reasonably available to the Contractor; and
 - d. occurred without the fault or neglect of the Contractor, will be considered an “Excusable Delay” if the Contractor advises the Contracting Authority of the occurrence of the delay or of the likelihood of the delay as soon as the Contractor becomes aware of it. The Contractor must also advise the Contracting Authority, within fifteen (15) working days, of all the circumstances relating to the delay and provide to the Contracting Authority for approval a clear work around plan explaining in detail the steps that the Contractor proposes to take in order to minimize the impact of the event causing the delay.
- 6.3. Any delivery date or other date that is directly affected by an Excusable Delay will be postponed for a reasonable time that will not exceed the duration of the Excusable Delay.
 - 6.4. However, if an Excusable Delay has continued for thirty (30) days or more, the Contracting Authority may, by giving notice in writing to the Contractor, terminate the Contract. In such a case, the Parties agree that neither will make any claim against the other for damages, Costs, expected profits or any other loss arising out of the termination or the event that contributed to the Excusable Delay. The Contractor agrees to repay immediately to the Minister the portion of any advance payment that is unliquidated at the date of the termination.
 - 6.5. Unless Canada has caused the delay by failing to meet an obligation under the Contract, Canada will not be responsible for any Costs incurred by the Contractor or any of its subcontractors or agents as a result of an Excusable Delay.

GC7. Indemnification

- 7.1. The Contractor shall indemnify and save harmless Canada, the Minister and their employees, servants and agents from and against all claims, losses, damages, costs, expenses, actions and other proceedings, made, sustained, brought, prosecuted, threatened to be brought or prosecuted, in any manner based upon, occasioned by or attributable to any injury to or death of a person or damage to or loss of property arising from any wilful or negligent act, omission or delay on the part of the Contractor, the Contractor's employees, servants, agents or subcontractors in performing the Work or as a result of the Work.
- 7.2. The Contractor shall indemnify and save harmless Canada, the Minister and their employees, servants and agents from all costs, charges and expenses whatsoever that Canada sustains or incurs in all claims, actions, suits and proceedings for the use of the invention claimed in a patent, or infringement or alleged infringement of any patent or any registered industrial design or any copyright or other intellectual property right resulting from the performance of the Contractor's obligations under the Contract, and in respect of the use of or disposal by Canada of anything furnished pursuant to the Contract.
- 7.3. The Contractor's liability to indemnify, save harmless or reimburse Canada under the Contract shall not affect or prejudice Canada from exercising any other rights under law.
- 7.4. The Contractor agrees that Canada shall not be liable for, and agrees to protect, indemnify and save harmless Canada, the Minister and their employees, servants and agents with respect to, any injury or damage (including death) to the Contractor or to the person of any officer, servant or agent of the Contractor or for the loss of or damage to the

property of the Contractor or its officers, servants or agents in any manner based upon, occasioned by, or in any way attributable to the performance of the said Work unless the injury, loss or damage is caused by the negligence of an employee, servant or agent of Canada while acting within the scope of his or her employment.

GC8. Notices

- 8.1. Where in the Contract any notice, request, direction, or other communication is required to be given or made by either Party, it shall be in writing and is effective if delivered in person, sent by registered mail, facsimile or electronic mail addressed to the Party for whom it is intended at the address mentioned in the Contract and any notice, request, direction or other communication shall be deemed to have been given by registered mail, when the postal receipt is acknowledged by the other Party; and facsimile or electronic mail, when transmitted. The address of either Party may be changed by notice in the manner set out in this provision.

GC9. Termination for Convenience

- 9.1. At any time before the completion of the Work, the Contracting Authority may, by giving notice in writing to the Contractor, terminate for convenience the Contract or part of the Contract. Once such a notice of termination for convenience is given, the Contractor must comply with the requirements of the termination notice. If the Contract is terminated in part only, the Contractor must proceed to complete any part of the Work that is not affected by the termination notice. The termination will take effect immediately or, as the case may be, at the time specified in the termination notice.
- 9.2. If a termination notice is given pursuant to subsection 9.1, the Contractor will be entitled to be paid, for Costs that have been reasonably and properly incurred to perform the Contract to the extent that the Contractor has not already been paid or reimbursed by Canada. The Contractor will be paid:
- a. on the basis of the Contract Dollar Value, for all completed Work that is inspected and accepted in accordance with the Contract, whether completed before, or after the termination in accordance with the instructions contained in the termination notice;
 - b. the Cost to the Contractor plus a fair and reasonable profit for all Work terminated by the termination notice before completion; and
 - c. all Costs incidental to the termination of the Work incurred by the Contractor but not including the Cost of severance payments or damages to employees whose services are no longer required, except wages that the Contractor is obligated by statute to pay.
- 9.3. The Minister may reduce the payment in respect of any part of the Work, if upon inspection, it does not meet the requirements of the Contract.
- 9.4. The total of the amounts, to which the Contractor is entitled to be paid under this section, together with any amounts paid, due or becoming due to the Contractor must not exceed the Contract Dollar Value. The Contractor will have no claim for damages, compensation, loss of profit, allowance arising out of any termination notice given by Canada under this section except to the extent that this section expressly provides. The Contractor agrees to repay immediately to Canada the portion of any advance payment that is unliquidated at the date of the termination.

GC10. Termination Due to Default of Contractor

- 10.1. The Minister may, by notice to the Contractor, terminate all or any part of the Work if:

- 10.1.1 the Contractor becomes bankrupt or insolvent, makes an assignment for the benefit of creditors, or takes the benefit of any statute relating to bankrupt or insolvent debtors, or if a receiver is appointed under a debt instrument or a receiving order is made against the Contractor, or an order is made or a resolution passed for the winding down of the Contractor, the Contracting Authority may, to the extent permitted by the laws of Canada, by giving written notice to the Contractor, immediately terminate for default the Contract or part of the Contract; or
- 10.1.2 the Contractor fails to perform any of the Contractor's obligations under the Contract, or, in the Minister's view, so fails to make progress as to endanger performance of the Contract in accordance with its terms.

- 10.2. In the event that the Minister terminates the Work in whole or in part under GC10.1, the Minister may arrange, upon such terms and conditions and in such manner as the Minister deems appropriate, for all or part of the Work to be completed that was so terminated, and the Contractor shall be liable to Canada for any excess costs relating to the completion of the Work.
- 10.3. Upon termination of the Work under GC10.1, the Minister may require the Contractor to deliver and transfer title to Canada, in the manner and to the extent directed by the Minister, any finished Work which has not been delivered and accepted prior to such termination and any materials or Work-in-process which the Contractor has specifically acquired or produced for the fulfilment of the Contract. Canada shall pay the Contractor for all finished Work delivered pursuant to the direction of, and accepted by, the Minister, the Cost to the Contractor of the finished Work plus the proportionate part of any fee fixed by the Contract and shall pay or reimburse the Contractor the fair and reasonable Cost to the Contractor of all materials or Work-in-process delivered pursuant to the direction. Canada may withhold from the amounts due to the Contractor the sums that the Minister determines to be necessary to protect Canada against excess Costs for the completion of the Work.
- 10.4. The Contractor shall not be entitled to be reimbursed any amount which, taken together with any amounts paid or becoming due to the Contractor under the Contract, exceeds the Contract Dollar Value applicable to the Work or the particular part of the Work.

GC11. Records to be Kept by Contractor

- 11.1. The Contractor shall keep proper accounts and records of the cost of the Work and of all expenditures or commitments made by the Contractor including invoices, original receipts and vouchers, which shall at reasonable times be open to audit and inspection by the authorized representatives of the Minister who may make copies and take extracts.
- 11.2. The Contractor shall afford facilities for audit and inspection and shall furnish the authorized representatives of the Minister with such information as the Minister or they may from time to time require with reference to the documents referred to in GC11.1.
- 11.3. The Contractor shall not dispose of the documents referred to in GC11.1 without the written consent of the Minister, but shall preserve and keep them available for audit and inspection for the period of time specified elsewhere in the Contract or, in the absence of such specification, for a period of six years following completion of the Work.

GC12. Conflict of Interest

12.1. The Contractor acknowledges that individuals who are subject to the provisions of the *Conflict of Interest Act*, 2006, c. 9, s. 2, the *Conflict of Interest Code for Members of the House of Commons*, the *Values and Ethics Code for the Public Service* or all other codes of values and ethics applicable within specific organizations cannot derive any direct benefit resulting from the Contract.

GC13. Contractor Status

13.1. This is a Contract for the performance of services and the Contractor is an independent contractor engaged by Canada to perform the Work. Nothing in the Contract is intended to create a partnership, a joint venture or an agency between Canada and the other Party or Parties. The Contractor must not represent itself as an agent or representative of Canada to anyone. Neither the Contractor nor any of its personnel is engaged as an employee or agent of Canada. The Contractor is responsible for all deductions and remittances required by law in relation to its employees.

GC14. Conduct of the Work

14.1. 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.

14.2. 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; and
- f. provide effective and efficient supervision to ensure that the quality of workmanship meets the requirements of the Contract.

14.3. The Work must not be performed by any person who, in the opinion of Canada, is incompetent, unsuitable or has conducted himself/herself improperly.

GC15. Member of Parliament

15.1. No Member of Parliament shall be admitted to any share or part of this Contract or to any benefit to arise from this Contract.

GC16. Protection of Work

16.1. The Contractor shall keep confidential all information provided to the Contractor by or on behalf of Canada in connection with the Work, including any information that is confidential or proprietary to third parties, and all information conceived, developed or produced by the Contractor as part of the Work where copyright or any other intellectual property rights in such information (except a licence) vests in Canada under the Contract. The Contractor shall not disclose any such information to any person without the written permission of the Minister, except that the Contractor may disclose to a subcontractor information necessary for the performance of the

subcontract, on the condition that the subcontractor agrees that it will be used solely for the purposes of such subcontract. Information provided to the Contractor by or on behalf of Canada shall be used solely for the purpose of the Contract and shall remain the property of Canada or the third party, as the case may be. Unless the Contract otherwise expressly provides, the Contractor shall deliver to Canada all such information, together with every copy, draft, working paper and note thereof that contains such information, upon completion or termination of the Contract or at such earlier time as the Minister may require. This section does not apply to any information that:

- 16.1.1. is publicly available from a source other than the Contractor; or
- 16.1.2. is or becomes known to the Contractor from a source other than Canada, except any source that is known to the Contractor to be under an obligation to Canada not to disclose the information.

16.2. When the Contract, the Work, or any information referred to in GC16.1 is identified as TOP SECRET, SECRET, CONFIDENTIAL or PROTECTED by Canada,

- 16.2.1. the Contractor shall, at all times, take all measures reasonably necessary for the safeguarding of the material so identified, including any other instructions issued by the Minister; and
- 16.2.2. the Minister shall be entitled to inspect the Contractor's premises and the premises of a subcontractor at any tier for security purposes at any time during the term of the Contract, and the Contractor shall comply with, and ensure that any subcontractor complies with, all written instructions issued by the Minister dealing with the material so identified, including any requirement that employees of the Contractor or of any subcontractor execute and deliver declarations relating to reliability screenings, security clearances and other procedures.

GC17. Contingency Fees, Auditing and Public Disclosure

17.1. The Contractor declares that the Contractor has not, directly or indirectly, paid or agreed to pay, and will not, directly or indirectly, pay a Contingency Fee to any individual for the solicitation, negotiation or obtaining of this Contract if the payment of the fee would require the individual to file a return under section 5 of the *Lobbying Act* R.S.C., 1985, c. 44 (4th Supp.).

17.2. All accounts and records relating to any payment by the Contractor of fees or other compensation for the solicitation, obtaining or negotiation of the Contract shall be subject to the accounting and auditing provisions of this Contract.

17.3. The Contractor consents, in the case of a contract that has a value in excess of \$10,000, to the public disclosure of basic information - other than information described in any of paragraphs 20(1)(a) to (d) of the *Access to Information Act* - relating to the Contract.

17.4. If the Contractor makes a false declaration under clause 17.1 or 21.1 or fails to comply with the terms set out in clause 17.2 or 17.3, it is an act of default under the Contract and the Contractor agrees, in addition to any other remedies that may be available against the Contractor, to immediately return any advance payments and agrees that the Contracting Authority may terminate the Contract in accordance with the default provisions of this Contract.

17.5. In this section, "Contingency Fee" means any payment or other compensation that is contingent upon or is

calculated upon the basis of a degree of success in soliciting or obtaining a government contract or negotiating the whole or any part of its terms.

GC18. Work Force Reduction Programs

- 18.1. The Contractor acknowledges and agrees that any person, including the Contractor, carrying out this Contract, shall make available to the Contracting Authority any details of the status of the person with respect to cash out benefits as well as details of any pension payments under work force reduction programs.
- 18.2. The Contractor shall, if asked in writing and where necessary, sign or cause to have signed on behalf of any person, a waiver of privacy with respect to any and all information in relation to any such benefits and payments.

GC19. Amendments

- 19.1. No amendment of the Contract nor waiver of any of the terms and provisions shall be deemed valid unless effected by a written amendment. For greater certainty, to be effective, any amendment to the Contract must be done in writing by the Contracting Authority and the authorized representative of the Contractor.

GC20. Replacement Personnel

- 20.1. The Contractor shall provide the services of the persons named in its bid and any additional persons necessary to perform the Work and provide the services required under this Contract, unless the Contractor is unable to do so for reasons beyond the Contractor's control.
- 20.2. Should the Contractor, at any time, be unable to provide their services, the Contractor shall be responsible for providing replacements who shall be of similar ability and attainment and who shall be acceptable to the Contracting Authority. In such case the Contractor shall notify the Contracting Authority in writing and provide:
- 20.2.1. the reason for the removal of the named person from the project;
- 20.2.2. the name of the proposed replacement;
- 20.2.3. an outline of the qualifications and experience of the proposed replacement; and
- 20.2.4. an accepted security clearance certificate, if applicable.
- 20.3. The notice shall be sent at least seven (7) days in advance of the date upon which the replacement is to commence Work. Any change in the terms and conditions of this Contract which result from a replacement of personnel shall be effected by a contract amendment.
- 20.4. Notwithstanding the foregoing, the Contractor is required to perform the Work and provide the services in accordance with the terms of this Contract.

GC21. Criminal Code of Canada

- 21.1. The Contractor agrees to comply with the Code of Conduct for Procurement (the "Code") and to be bound by its terms. The Code can be accessed at the following Internet address: <http://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/contexte-context-eng.html> Furthermore, in addition to the Code, the Contractor must comply with the terms set out in this section.
- 21.2. The Contractor declares and it is a term of this Contract that the Contractor has, and any of the Contractor's employees assigned to the performance of the Contract have, not never been convicted of an offence, other than an offence for which a pardon has been granted under the following sections of the *Criminal Code* of Canada:
- 21.2.1. Section 121, Frauds on the government;
- 21.2.2. Section 124, Selling or purchasing office; or
- 21.2.3. Section 418, Selling defective stores to Canada.

GC22. Inspection/Acceptance

- 22.1. All the Work is subject to inspection and acceptance by Canada. Inspection and acceptance of the Work by Canada does not relieve the Contractor of its responsibility for defects or other failures to meet the requirements of the Contract. Canada will have the right to reject any Work that is not in accordance with the requirements of the Contract and require its correction or replacement at the Contractor's expense.

GC23. Taxes

- 23.1. Federal governments and agencies are to pay Applicable Taxes.
- 23.2. Applicable Taxes will be paid by Canada as provided in the Invoice Submission section. It is the sole responsibility of the Contractor to charge Applicable Taxes at the correct rate in accordance with applicable legislation. The Contractor agrees to remit to appropriate tax authorities any amounts of Applicable Taxes paid or due.
- 23.3. The Contractor is not entitled to use Canada's exemptions from any tax, such as provincial sales taxes, unless otherwise specified by law. The Contractor must pay applicable provincial sales tax, ancillary taxes, and any commodity tax, on taxable goods or services used or consumed in the performance of the Contract (in accordance with applicable legislation), including for material incorporated into real property.
- 23.4. In those cases where Applicable Taxes, customs duties, and excise taxes are included in the Contract Price, the Contract Price will be adjusted to reflect any increase, or decrease, of Applicable Taxes, customs duties, and excise taxes that will have occurred between bid submission and contract award. However, there will be no adjustment for any change to increase the Contract Price if public notice of the change was given before bid submission date in sufficient detail to have permitted the Contractor to calculate the effect of the change.
- 23.5. Tax Withholding of 15 Percent – Canada Revenue Agency Pursuant to the *Income Tax Act*, 1985, c. 1 (5th Supp.) and the *Income Tax Regulations*, Canada must withhold 15 percent of the amount to be paid to the Contractor in respect of services provided in Canada if the Contractor is not a resident of Canada, unless the Contractor obtains a valid waiver from the *Canada Revenue Agency*. The amount withheld will be held on account for the Contractor in respect to any tax liability which may be owed to Canada.

GC24. Title

- 24.1. Except as otherwise provided in the Contract including the intellectual property provisions, and except as provided in subsection 24.2, title to the Work or any part thereof shall vest in Canada upon delivery and acceptance thereof by or on behalf of Canada.
- 24.2. Except as otherwise provided in the intellectual property provisions of the Contract, upon any payment being made to the Contractor for or on account of materials, parts, Work-in-process or finished Work, either by way of progress payments or accountable advances or otherwise, title in and to all materials, parts, Work-in-process and finished Work so paid for shall vest in and remain in Canada unless already so vested under any other provision of the Contract.
- 24.3. Notwithstanding any vesting of title referred to in this section and except as otherwise provided in the Contract, the risk of loss or damage to the materials, parts, Work-in-process or finished Work or part thereof so vested shall remain with the Contractor until their delivery to Canada in accordance with the Contract. The Contractor shall be

- liable for any loss or damage to any part of the Work caused by the Contractor or any subcontractor after such delivery.
- 24.4. Any vesting of title referred to in subsection 24.2 shall not constitute acceptance by Canada of the materials, parts, Work-in-process or finished Work, and shall not relieve the Contractor of its obligation to perform the Work in accordance with the Contract.
- 24.5. Where title to any materials, parts, Work-in-process or finished Work becomes vested in Canada, the Contractor shall, upon the Minister's request, establish to the Minister's satisfaction that the title is free and clear of all claims, liens, attachments, charges or encumbrances and shall execute such conveyances thereof and other instruments necessary to perfect that title as the Minister may request.
- 24.6. If the Contract is a defence contract within the meaning of the *Defence Production Act*, R.S. 1985, c. D-1, title to the Work or to any materials, parts, Work-in-process or finished Work shall vest in Canada free and clear of all claims, liens, attachments, charges or encumbrances, and the Minister shall be entitled at any time to remove, sell or dispose of it or any part of it in accordance with section 20 of that Act.
- GC25. Entire Agreement**
- 25.1. The Contract constitutes the entire and only agreement between the Parties and supersedes all previous negotiations, communications and other agreements, whether written or oral, unless they are incorporated by reference in the Contract. There are no terms, covenants, representations, statements or conditions binding on the Parties other than those contained in the Contract.
- GC26. Harassment in the Workplace**
- 26.1. 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 the Prevention and Resolution of Harassment in the Workplace, which is also applicable to the Contractor, is available on the Treasury Board Secretariat of Canada website.
- 26.2. 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.
- GC27. No Bribe or Conflict**
- 27.1. The Contractor declares that no bribe, gift, benefit, or other inducement has been or will be paid, given, promised or offered directly or indirectly to any official or employee of Canada or to a member of the family of such a person, with a view to influencing the entry into the Contract or the administration of the Contract.
- 27.2. The Contractor must not influence, seek to influence or otherwise take part in a decision of Canada knowing that the decision might further its private interest. The Contractor must have no financial interest in the business of a third party that causes or would appear to cause a conflict of interest in connection with the performance of its obligations under the Contract. If such a financial interest is acquired during the period of the Contract, the Contractor must immediately declare it to the Contracting Authority.
- 27.3. The Contractor warrants that, to the best of its knowledge after making diligent inquiry, no conflict exists or is likely to arise in the performance of the Contract. In the event the Contractor becomes aware of any matter that causes or is likely to cause a conflict in relation to the Contractor's performance under the Contract, the Contractor must immediately disclose such matter to the Contracting Authority in writing.
- 27.4. If the Contracting Authority is of the opinion that a conflict exists as a result of the Contractor's disclosure or as a result of any other information brought to the Contracting Authority's attention, the Contracting Authority may require the Contractor to take steps to resolve or otherwise deal with the conflict or, at its entire discretion, terminate the Contract for default. Conflict means any matter, circumstance, interest, or activity affecting the Contractor, its personnel or subcontractors, which may or may appear to impair the ability of the Contractor to perform the Work diligently and independently.
- GC28. Government Property**
- 28.1. The Contractor must take reasonable and proper care of all Government property while it is in its possession or subject to its control. The Contractor is responsible for any loss or damage resulting from its failure to do so other than loss or damage caused by ordinary wear and tear.
- GC29. Suspension of Work**
- 29.1. The Contracting Authority may at any time, by giving written notice, order the Contractor to suspend or stop the Work or part of the Work under the Contract. The Contractor must immediately comply with any such order in a way that minimizes the cost of doing so.
- GC30. Right of Set-Off**
- 30.1. Without restricting any right of set-off given by law, the Minister may set-off against any amount payable to the Contractor under the Contract, any amount payable to the Government of Canada by the Contractor under the Contract or under any other current contract. The Minister may, when making a payment pursuant to the Contract, deduct from the amount payable to the Contractor any such amount payable to the Government of Canada by the Contractor which, by virtue of the right of set-off, may be retained by the Government of Canada.
- GC31. Powers of Canada**
- 31.1. All rights, remedies, powers and discretions granted or acquired by Canada under the Contract or by law are cumulative, not exclusive.
- GC32. International Sanctions**
- 32.1. Persons in Canada, and Canadians outside of Canada, are bound by economic sanctions imposed by Canada. As a result, the Government of Canada cannot accept delivery of goods or services that originate, either directly or indirectly, from the countries or persons subject to economic sanctions.
- 32.2. The Contractor must not supply to the Government of Canada any goods or services which are subject to economic sanctions.
- 32.3. The Contractor must comply with changes to the regulations imposed during the period of the Contract. The Contractor must immediately advise Canada if it is unable to perform the Work as a result of the imposition of economic sanctions against a country or person or the addition of a good or service to the list of sanctioned

goods or services. If the Parties cannot agree on a work around plan, the Contract will be terminated for the convenience of Canada in accordance with section GC9.

GC33. Transportation Costs

33.1. If transportation Costs are payable by the Minister under the Contract and the Contractor makes the transportation arrangements, shipments must be made by the most direct and economical means consistent with normal shipping practice. The Costs must be shown as a separate item on the invoice.

GC34. Contract administration and dispute resolution

34.1. In the event that concerns or issues arise regarding the application of the terms and conditions of a contract, or regarding its administration, the Contractor should contact the contracting officer identified in the Contract to schedule a meeting by phone or in person to discuss and/or resolve any disagreements or misunderstandings. After this initial meeting has taken in place, and if needed, contractors will be provided with information on other dispute resolution options available to them such as the Office of the Procurement Ombudsman (OPO) or other appropriate recourses.

34.2. At the request and consent of both Parties, the Office of the Procurement Ombudsman may be requested to participate in an alternative dispute resolution process to resolve any dispute between the Parties respecting the interpretation or application of the terms and conditions of the resulting Contract and their consent to bear the costs of such a process. The Office of the Procurement Ombudsman may be contacted by phone at 1-866-734-5169 or by email at boa.opo@boa.opo.gc.ca.

GC35. Transportation Carriers' Liability

35.1. The Government of Canada's policy of underwriting its own risks precludes payment of insurance or valuation charges for transportation beyond the point at which ownership of goods passes to the Government of Canada (determined by the FOB point of Incoterms). Where increased carrier liability is available without charge, the Contractor must obtain the increased liability for shipment.

GC36. Integrity Provisions in Contracts

36.1 Statement

- a. The Contractor must comply with the [Code of Conduct for Procurement](#) and must comply with the terms set out in these Integrity Provisions.
- b. The Contractor confirms that it understands that convictions of certain offences, a false declaration in its bid, a false declaration under the Contract or failing to maintain up-to-date information requested may lead to a termination for default. If the Contractor or any of its Affiliates fail to remain free and clear of any convictions and any conditional or absolute discharges specified in these Integrity Provisions during the contract period, Canada may, following a notice period, terminate for default. The Contractor understands that a termination for default will not restrict Canada's right to exercise any other remedies that may be available against the Contractor and agrees to immediately return any advance payments.

36.2 List of Names

The Contractor must immediately inform Canada in writing of any changes affecting the list of names of directors and owners during the contract period.

36.3 Information Verification

The Contractor certifies that it is aware, and its Affiliates

are aware, that Canada may verify at any time during the contract period, the information provided by the Contractor, including the information relating to the acts or convictions and any conditional or absolute discharges specified in these Integrity Provisions. Canada may request additional information, validations from a qualified third party, consent forms and other evidentiary elements proving identity and eligibility to contract with Canada.

36.4 Lobbying Act

The Contractor certifies that neither it nor its Affiliates have directly or indirectly, paid or agreed to pay, and will not, directly or indirectly, pay a contingency fee to any individual for the solicitation, negotiation or obtaining of the Contract if the payment of the fee would require the individual to file a return under section 5 of the [Lobbying Act](#).

36.5 Canadian Offences Resulting in Legal Incapacity

- a. The Contractor has certified that neither it nor any of its Affiliates have been convicted of or have pleaded guilty to an offence under any of the following provisions, which result in legal incapacity under section 750(3) of the [Criminal Code](#), and for which they have not been pardoned or received a record of discharge under the Canadian Pardons subsection:
 - i. paragraph 80(1)(d) (*False entry, certificate or return*), subsection 80(2) (*Fraud against Her Majesty*) or section 154.01 (*Fraud against Her Majesty*) of the [Financial Administration Act](#), or
 - ii. section 121 (*Frauds on the government and Contractor subscribing to election fund*), section 124 (*Selling or Purchasing Office*), section 380 (*Fraud*) for fraud committed against Her Majesty or section 418 (*Selling defective stores to Her Majesty*) of the [Criminal Code](#), or
- b. the Contractor has not been convicted of or pleaded guilty to the offences described in paragraph (a) and has certified that it has not directed, influenced, authorized, assented to, acquiesced in or participated in the commission or omission of the acts or offences that would render that Affiliate ineligible to be awarded a contract under (a).

36.6 Canadian Offences

The Contractor has certified that:

- a. it and its Affiliates have not, in the last three years, from the date of contract award, been convicted of or pleaded guilty to an offence under any of the following provisions for which it would be ineligible for contract award under these Integrity Provisions and for which they have not been pardoned or received a record of discharge under the Canadian Pardons subsection:
 - i. section 119 (*Bribery of judicial officers, etc*), section 120 (*Bribery of officers*), section 346 (*Extortion*), sections 366 to 368 (*Forgery and other offences resembling forgery*), section 382 (*Fraudulent manipulation of stock exchange transactions*), section 382.1 (*Prohibited insider trading*), section 397 (*Falsification of books and documents*), section 422 (*Criminal breach of contract*), section 426 (*Secret commissions*), section 462.31 (*Laundering proceeds of crime*) or sections 467.11 to 467.13 (*Participation in activities of criminal organization*) of the [Criminal Code](#), or
 - ii. section 45 (*Conspiracies, agreements or arrangements between competitors*), section 46 (*Foreign directives*), section 47 (*Bid rigging*), section 49 (*Agreements or arrangements of federal financial institutions*), section 52 (*False*

- or misleading representation), section 53 (*Deceptive notice of winning a prize*) of the [Competition Act](#), or
- iii. section 239 (*False or deceptive statements*) of the [Income Tax Act](#), or
- iv. section 327 (*False or deceptive statements*) of the [Excise Tax Act](#), or
- v. section 3 (*Bribing a foreign public official*), section 4 (*Accounting*), or section 5 (*Offence committed outside Canada*) of the [Corruption of Foreign Public Officials Act](#), or
- vi. section 5 (*Trafficking in substance*), section 6 (*Importing and exporting*), or section 7 (*Production of substance*) of the [Controlled Drugs and Substance Act](#), or
- b. the Contractor has not been convicted of or pleaded guilty to the offences described in paragraph (a) and has certified that it has not directed, influenced, authorized, assented to, acquiesced in or participated in the commission or omission of the acts or offences that would make that Affiliate ineligible for contract award.
- 36.7 Foreign Offences**
The Contractor has certified that:
- a. it and its Affiliates have not, in the last three years, from the date of contract award, been convicted of or pleaded guilty to an offence in a jurisdiction other than Canada of having committed an act or omission that would, in Canada's opinion, be similar to an offence referenced in the Canadian Offences Resulting in Legal Incapacity and the Canadian Offences subsections and for which it would be ineligible for contract award under these Integrity Provisions and for which they have not been pardoned or received a record of discharge under the Foreign Pardons subsection:
- i. the court before which the Contractor or the Affiliate of the Contractor appeared acted within the court's jurisdiction;
- ii. the Contractor or the Affiliate of the Contractor appeared during the court's proceedings or submitted to the court's jurisdiction;
- iii. the court's decision was not obtained by fraud; and
- iv. the Contractor or the Affiliate of the Contractor was entitled to present to the court every defence that the Contractor or the Affiliate of the Contractor would have been entitled to present had the proceeding been tried in Canada; or
- b. it has not been convicted of or pleaded guilty to the offences described in paragraph (a) and has certified that it has not directed, influenced, authorized, assented to, acquiesced in or participated in the commission or omission of the acts or offences that would render that Affiliate ineligible to be awarded a contract under (a).
- 36.8 Ineligibility to Contract with Canada**
a. The Contractor confirms that it understands that if after contract award they have been convicted of certain offences, as described in the Canadian Offences Resulting in Legal Incapacity, the Canadian Offences and the Foreign Offences subsections, they will be ineligible to contract with Canada. If, after contract award, a Contractor becomes ineligible for contract award, Canada may, following a notice period, declare the Contractor to be ineligible and, to the extent that a contract has been awarded:
- i. terminate the contract for default; or
- ii. require the Contractor to enter into an Administrative Agreement with the Minister of PWGS on such terms and conditions as are necessary to safeguard the integrity of the procurement process.
- b. The Contractor confirms that it understands that where its Affiliate has been convicted of certain offences, as described in the Canadian Offences Resulting in Legal Incapacity, the Canadian Offences and the Foreign Offences subsections, the Affiliate is ineligible to contract with Canada. If, after contract award, an Affiliate of a Contractor becomes ineligible to contract with Canada, Canada may, following a notice period, declare the Contractor to be ineligible and, to the extent that a contract has been concluded:
- i. terminate the contract for default if, in the opinion of Canada, there is evidence that the Contractor directed, influenced, authorized, assented to, acquiesced in or participated in the commission or omission of certain acts or offences that make that Affiliate ineligible; or
- ii. require the Contractor to enter into an Administrative Agreement with the Minister of PWGS on such terms and conditions as are necessary to safeguard the integrity of the procurement process.
- c. The Contractor confirms that it understands that where it has been declared to be ineligible to contract with Canada under the [Ineligibility and Suspension Policy](#), it is also ineligible to contract with Canada under these Integrity Provisions for the duration of the period that has been determined by the Minister of PWGS. Where the Contractor has been declared to be ineligible under the [Ineligibility and Suspension Policy](#) after contract award, Canada may, following a notice period:
- i. terminate the contract for default; or
- ii. require the Contractor to enter into an Administrative Agreement with the Minister of PWGS on such terms and conditions as are necessary to safeguard the integrity of the procurement process.
- d. The Contractor confirms that it understands that where it or its Affiliates have been held responsible for breaches under the Lobbying Act subsection, it is ineligible to contract with Canada under these Integrity Provisions for the duration of the period that has been determined by the Minister of PWGS. Where the Contractor has been declared to be ineligible under the [Ineligibility and Suspension Policy](#) after contract award, Canada may, following a notice period:
- i. terminate the contract for default; or
- ii. require the Contractor to enter into an Administrative Agreement with the Minister of PWGS on such terms and conditions as are necessary to safeguard the integrity of the procurement process.
- 36.9 Declaration of Offences Committed**
The Contractor understands that it has a continuing obligation to immediately declare all convictions to Canada under the Canadian Offences Resulting in Legal Incapacity, the Canadian Offences and the Foreign Offences subsections.
- 36.10 Period of Ineligibility**
The following rules determine the period for which a Contractor or its Affiliate that has been convicted of certain offences is, ineligible to contract with Canada:
- a. for all offences referenced under the Canadian Offences Resulting in Legal Incapacity subsection for which a Contractor or its Affiliate has pleaded guilty to or has been convicted of, the period of ineligibility

- to be awarded a contract is indefinite, subject to the Canadian Pardons subsection;
- b. subject to an Administrative Agreement, for all offences referenced under the Canadian Offences and Foreign Offences subsections for which a Contractor or its Affiliate has pleaded guilty to or been convicted of, as the case may be, in the last three years, the period of ineligibility to contract with Canada is ten years from the date of determination by the Minister of PWGS, subject to the Canadian Pardons and Foreign Pardons subsections;
 - c. subject to an Administrative Agreement, for all breaches under the Lobbying Act subsection for which a Contractor or its Affiliate has been found responsible, in the last three years, the period of ineligibility to contract with Canada is ten years from the date of determination by the Minister of PWGS.
- 36.11 Canadian Pardons**
A determination of ineligibility to contract with Canada will not be made or maintained by the Minister of PWGS under these Integrity Provisions, in respect of an offence or act that gave rise or that could give rise to a determination of ineligibility, if the Contractor or its Affiliate has:
- a. been granted an absolute discharge in respect of the offence, or has been granted a conditional discharge in respect of the offence and those conditions have been satisfied;
 - b. been granted a pardon under Her Majesty's royal prerogative of mercy;
 - c. been granted a pardon under section 748 of the [Criminal Code](#);
 - d. received a record of suspension ordered under the [Criminal Records Act](#); and
 - e. been granted a pardon under the [Criminal Records Act](#), as that Act read immediately before the day section 165 of the [Safe Streets and Communities Act](#) comes into force.
- 36.12 Foreign Pardons**
A determination of ineligibility to contract with Canada will not be made or maintained, as the case may be, by the Minister of PWGS in respect of matters referenced in the Foreign Offences subsection and with respect to an

offence or act that gave rise or will give rise to a determination of ineligibility, if the Contractor or its Affiliate, has at any time, benefited from foreign measures that are similar to Canadian pardons at the sole discretion of Canada, conditional discharges, absolute discharges, records of suspension, or restoration of legal capacities by the Governor in Council.

36.13 Period of Ineligibility for Breaching Administrative Agreements

The Contractor confirms that it understands that where it has concluded an Administrative Agreement and that it has breached any of its terms and conditions, the Minister of PWGS will lengthen the period of ineligibility for a period to be determined by the Minister of PWGS.

36.14 Obligations on Subcontractors

The Contractor confirms that it understands that to the extent that it relies on a subcontractor(s) to perform the Contract, the Contractor will not enter into a subcontract with a company that has been convicted of or pleaded guilty or an Affiliate of the company has been convicted of or pleaded guilty, as the case may be, to any of the offences referenced in the Canadian Offences Resulting in Legal Incapacity, the Canadian Offences and the Foreign Offences subsections for which no pardon or equivalent has been received under the Canadian Pardons and Foreign Pardons subsections, without the prior written approval of the Minister of PWGS. Where the Contractor has entered into a contract with an ineligible subcontractor and for which no prior written approval has been received by Canada, the Minister of PWGS will declare the Contractor to be ineligible to contract with Canada for a period of five years.

GC37. Entire Agreement

37.1 The Contract constitutes the entire and only agreement between the Parties and supersedes all previous negotiations, communications and other agreements, whether written or oral, unless they are incorporated by reference in the Contract. There are no terms, covenants, representations, statements or conditions binding on the Parties other than those contained in the Contract.

3. TERMS OF PAYMENT

TP1. Payment

- 1.1. Payments under this Contract, except advance payments, shall be conditional upon performance, completion and delivery of the Work, or any part of the Work to the satisfaction of the Minister but subject to the submission and receipt by Canada of a claim for payment.
- 1.2. Subject to parliamentary appropriation of funds and to TP1.1, payment by the Minister for the Work shall be made:
 - 1.2.1. in the case of an advance payment, within thirty (30) days of the signing of this Contract by both Parties or within thirty (30) days of receipt of an invoice requesting payment, whichever is later,
 - 1.2.2. in the case of progress payment, within thirty (30) days following the date of receipt of a duly completed Work or progress report or within thirty (30) days of receipt of an invoice requesting payment, whichever is later, and
 - 1.2.3. in the case of a final payment, within thirty (30) days following the date of receipt of the completed Work or within thirty (30) days of receipt of an invoice requesting payment whichever is later.
- 1.3. For purposes of this Contract, a full day is any period of seven and one half (7.5) hours within any twenty-four (24) hour period.
- 1.4. If the Contractor is engaged in the performance of the Work for any period that exceeds or is less than a full day, the Contractor will be paid a pro-rata portion of the firm daily rate that corresponds to the number of hours during which the Contractor was so engaged.
- 1.5. If Canada has any objections to the form of the invoice or the substantiating documentation, within fifteen (15) days of its receipt, Canada shall notify the Contractor of the nature of the objection.
- 1.6. "Form of the invoice" means an invoice which contains or is accompanied by such substantiating documentation as Canada requires. Failure by Canada to act within fifteen (15) days only results in the date specified in TP1.1 of the clause to apply for the sole purpose of calculating interest on overdue accounts.
- 1.7. Notwithstanding any other provision of the Contract, no payment shall be made to the Contractor unless and until, with respect to all parts of the Work in respect of which payment is claimed, the Contractor, where required to do so, establishes to the satisfaction of the Minister that such parts of the Work will be free from all claims, liens, attachments, charges or encumbrances.

TP2. Interest on Overdue Accounts

- 2.1. For the purposes of this section:
 - (a) "average rate" means the simple arithmetic mean of the bank rates in effect at 4:00 p.m. Eastern Standard Time each day during the calendar month which immediately precedes the calendar month in which payment is made, where the "bank rate" means the rate of interest established from time to time by the Bank of Canada as the minimum rate at which the Bank of Canada makes short term advances to members of the Canadian Payments Association;
 - (b) "date of payment" means the date of the negotiable instrument drawn by the Receiver General for Canada and given for payment of an amount due and payable;
 - (c) an amount is "due and payable" when it is due and payable by Canada to the Contractor in accordance with the terms of the Contract; and
 - (d) an amount becomes "overdue" when it is unpaid on the first day following the day upon which it is due and payable.

- 2.2. Canada shall be liable to pay to the Contractor simple interest at the average rate plus three (3) percent per annum on any amount that is overdue, from the date such amount becomes overdue until the day prior to the date of payment, inclusive. Interest shall be paid without notice from the Contractor except in respect of payment which is less than 15 days overdue. No interest will be payable or paid in respect of payment made within such 15 days unless the Contractor so requests after payment has become due.
- 2.3. Canada shall not be liable to pay interest in accordance with this clause if Canada is not responsible for the delay in paying the Contractor.
- 2.4. Canada shall not be liable to pay interest on overdue advance payments.

TP3. Appropriation

- 3.1. In accordance with section 40 of the *Financial Administration Act*, payment under the Contract is subject to there being an appropriation for the particular service for the fiscal year in which any commitment hereunder would come in course of payment.

TP4. Travel and Living Expenses

Travel and living expenses incurred by the Contractor are entirely subject to the content of the current National Joint Council Travel Directive (<http://www.njc-cnm.gc.ca/directive/travel-voyage/index-eng.php>) and the Treasury Board Secretariat Special Travel Authorities, Section 7, "Persons on Contract" (http://www.tbs-sct.gc.ca/pubs_pol/hrpubs/tbm_113/statb-eng.asp). Travel and living expenses are considered to be part of the total Cost of the Contract. Expenses which exceed the Directive will not be paid. Prior authorization for projected travel and living expenses is required.

4.1. General

- 4.1.1. Travel and living expenses are to be claimed at actual Cost but are not to exceed current National Joint Council Travel Directive.
- 4.1.2. A statement indicating the names of travellers; places visited; dates and length of visits; and purpose of travel must be submitted with each claim for travel and living expenses.
- 4.1.3. Insurance for all methods of travel; accidents; illness; cancellations; immunizations; and other obligations are the sole responsibility of the Contractor.

4.2. Method of Transportation

- 4.2.1. Air travel. The standard for air travel is economy class only. Upgrades to Business or First class are the sole financial responsibility of the Contractor.
- 4.2.2. Rail Travel. The standard for rail travel is the next higher class after the full economy class.
- 4.2.3. Rental vehicle. The standard for rental vehicles is mid size. Vehicle rental must be pre-approved by the Project Authority.
- 4.2.4. Private vehicle. The Contractor may claim only for distances necessarily driven solely on government business, using the most direct, safe and practical road routes. The rate per kilometre which is payable is specified in the current National Joint Council Travel Directive. Insurance is the responsibility of the Contractor. Canada will not assume responsibility for deductible amounts related to comprehensive or collision coverage.

4.3. Meal, accommodation, transportation and other allowances

- 4.3.1. For same day travel, with no overnight stay, the applicable meals allowance is paid, as specified in the current National Joint Council Travel Directive. Receipts are not required.
- 4.3.2. For same day travel, with no overnight stay, the applicable transportation allowance is paid, as specified in the current National Joint Council Travel Directive. Copies of the receipts must be provided, except when private, non-commercial accommodation is used. Original receipts may be requested at any time by Canada, if so, the Contractor must provide original receipts prior to any payment being made.
- 4.3.3. For travel of two (2) or more consecutive days, the applicable meal allowances, and the incidental expenses allowances per day are paid, as specified in the current National Joint Council Travel Directive. Receipts are not required.
- 4.3.4. For travel of two (2) or more consecutive days, the applicable travel and accommodation allowances per day are paid, as specified in the current National Joint Council Travel Directive. Copies of the receipts must be provided, except when private, non-commercial accommodation is used. Original receipts may be requested at any time by Canada, if so, the Contractor must provide original receipts prior to any payment being made.
- 4.3.5. Meal allowances are not paid in respect of meals included in a fare (e.g. airplane or club-car ticket), or provided free of charge in a government mess, or included as part of the Cost of an event or other function.
- 4.3.6. Professional fees, or similar equivalent Costs cannot be claimed for travel time.
- 4.3.7. Receipts and vouchers for accommodation and transportation are required to be submitted with each claim, except when private, non-commercial accommodation is used. Luxury accommodation is not permitted. Original receipts may be required upon request from Canada, if so, the Contractor must provide original receipts.
- 4.3.8. Entertainment is not an allowable expense.

4. INTELLECTUAL PROPERTY

IP3. Contractor to Own Copyright

- 1.1 In this section, “Material” means anything that is created by the Contractor as part of the Work under the Contract, that is required by the Contractor to be delivered to Canada and in which copyright subsists.
- 1.2 Copyright in the Material belongs to the Contractor as soon as it comes into existence. Despite the Contractor’s ownership of copyright in the Material, Canada has unrestricted ownership rights in the deliverables under the Contract. This includes the right to make them available for public use, whether for a fee or otherwise, sell them or otherwise transfer ownership in them.
- 1.3 As Canada has contributed to the cost of developing the Material, the Contractor hereby grants to Canada a non-exclusive, perpetual, irrevocable, world-wide, fully-paid and royalty-free license to exercise the copyright in the Material for Canada’s activities. Subject to any exception described in the Contract, this license allows Canada to do anything that it would be able to do if it were the owner of the copyright in the Material, other than exploit it commercially in competition with the Contractor and transfer or assign ownership of it.
- 1.4 This license also includes the right to: a) disclose the Material to other governments for information purposes; and b) the right to disclose the Material to third parties bidding on or negotiating contracts with Canada and to sublicense or otherwise authorize the use of that information by any contractor engaged by Canada solely for the purpose of carrying out such contracts.
- 1.5 This license cannot be restricted in any way by the Contractor providing any form of notice to the contrary, whether or not attached to any deliverable.
- 1.6 The Contractor represents and warrants that it has the right to grant to Canada the license. If the copyright in the Material is or will be owned by a subcontractor or any other third party, the Contractor must have or obtain promptly a license from that subcontractor or third party that permits compliance with this section or arrange, without delay, for the subcontractor or third party to grant promptly any required license directly to Canada.
- 1.7 The copyright arising from any modification, improvement or development of the Material that is effected by or for Canada in the exercise of this license will belong to Canada, or in such person as Canada will decide. Copyright in any translation of the Material made by Canada will belong to Canada, without prejudice to the copyright in the original Material.
- 1.8 Canada may use independent contractors in the exercise of its rights under this section.
- 1.9 Canada will reproduce the Contractor’s copyright notice, if any, on all copies of the Material.
- 1.10 No restrictions other than those set out in this section will apply to Canada’s use of copies or translated versions of the Material.
- 1.11 At the request of the Minister, the Contractor shall provide to Canada, at the completion of the Work or at such other time as the Minister may require, a written permanent waiver of moral rights, in a form acceptable to the Minister, from every author that contributed to the Material. If the Contractor is an author of the Material, the Contractor hereby permanently waives the Contractor’s moral rights in the Material.
- 1.12 The Contractor agrees to provide Canada, upon request, with a copy of all working papers, documentation and information collected or prepared by the Contractor for the purposes of this Contract.

ANNEX A – STATEMENT OF WORK

1. Scope

1.1. Title

Particulate Matter Component Risk Analysis and Concentration-Response Function

1.2. Introduction

Ambient particulate matter (PM) refers to a range of varied substances from human and natural sources, which exist as liquid droplets or solids over a wide range of sizes. When these particles are suspended in the air, they form important components of air pollution. These particles are either emitted directly, from a wide range of sources, or are formed in the atmosphere from the chemical changes of gasses such as sulfur oxides, nitrogen oxides and volatile organic compounds.

A number of studies from epidemiology, toxicology and controlled-exposure experiments have reported the adverse health effects of PM (which vary from illnesses related to the heart or lungs, to early death) but fewer studies have been done to estimate the public health risk attributable to the individual components of PM, or to examine the way in which risk varies over the level of exposure (concentration-response (C-R) shape) for PM mass or components. New methods have recently been developed to flexibly characterize the C-R shape between air pollution and health outcomes for long-term (chronic) exposure, but these have not been applied to short-term (acute) exposure.

The primary goal of the project will be to investigate the adverse health risk attributable to components of PM_{2.5}, and to examine the shape of the concentration-response (C-R) function for PM_{2.5} and its components. To achieve this goal, the study has been broken into three overlapping phases. The first phase (2016-2017) will focus on the collection, validation and interpolation of reliable data for PM_{2.5} mass and its components. The second phase (2017-2018) will focus on statistical models and methods for estimation of annual adverse health risks due to PM_{2.5} and its components, beginning with mortality and proceeding to morbidity. The third phase (2018-2019) will extend these risks into estimation of the PM_{2.5} concentration-response curve, both locally for cities, and nationally for the Canadian population if the number of cities is not too small for statistical power of risk estimates. The first phase is considered below.

1.3. Objectives of the Requirement

This work is supposed to provide information on the following questions:

- (1) What PM components have reasonable data availability for risk estimates in Canada? We need a list of PM components.
- (2) What models have been developed PM components?
- (3) Are there good models to be applied to Canada PM components? If so, what to be modified or improved?
 - a. One model would be good for all PM components in the list from (1)?
 - b. If not, what would be main factors to determine risk models?
- (4) How to best model multiple PM component models?
- (5) Any differences in model between mortality and morbidity?
- (6) How best to deal with pre-2000 PM data?
- (7) How best to model the interaction between temperature and PM components if exists?

1.4. Background and Specific Scope of the Requirement

For this study, the research team needs a complete, comprehensive database of PM_{2.5} component data for a large number, preferably at least 24, Canadian census divisions. The work will require organization and construction of a large-scale national database of PM_{2.5} components and estimated mass series, as well as extensive time series screening and use of modern, high-efficiency time series interpolators. The final product should be an open source, easily used database of PM_{2.5} time series for the geographic regions of interest in the study.

2. Requirements

2.1. Tasks, Activities, Deliverables and Milestones

In order to develop and investigate the Concentration-Response curve for PM2.5, and further explore the population health risk due to the same, the following development and investigations are necessary.

- (a) Literature reviews on PM component analysis and risk models in Canada first and then other countries.
- (b) Collection of PM2.5 component data from ground monitoring instruments and estimated mass data supported by land-use regression and chemical transport models, and creation of a raw data input database. PM2.5 mass data obtained from Canadian instruments is available from the late 1990s, with reasonable coverage of the country beginning around 2000. The limited data availability prior to 2000 is problematic for inferences from models, so these data will be largely excluded from analysis.
- (c) Screening and investigation of the raw database, prioritizing data sources and establishing guidelines for the use of the data for the rest of the project. Monitored data will be screened for obvious outliers and measurement errors, with a predictive time series model used as an outlier detector. An attempt will be made to detect issues arising from changes in instrumentation over time, with secondary meta-data being used to supplement the time series. Secondary PM2.5 data, in particular data from hybrid and chemical transport models, will be used as secondary data sources for the detection and screening procedure; a use for which they are suited despite their more limited temporal resolution. These secondary data will also be reverse-screened using the ground-level monitoring data.
- (d) Interpolation and reconstruction of relevant (and applicable) component and mass series, as collected and screened in the previous. Use of modern, robust, high-efficiency interpolation techniques such as *Hybrid Wiener Interpolators* is required to sufficiently explore the structural nature of the PM2.5 data series.
- (e) And, finally, production of a validated database of PM2.5 component data for general use, both in this research project and by others in the future. This database will be accessible on multiple architectures, be portable across many computers, and should require no special software beyond easily available Open-Source packages such as the R programming environment.
- (f) Using the existing framework for AHI and the validated PM2.5 data, short-term (acute; days-to-weeks period) associations between PM2.5 mass and components and cause-specific mortality will be estimated. SLP time smoothers will be used in a generalized Poisson regression framework to remove unmeasured confounding and long time-scale associations (e.g., seasonal and annual trends and periodicities). Various drug-demo-socio-economic factors will be considered as part of the regression framework, in particular to distinguish between component variations across Canada (e.g., agriculture-heavy PM2.5 vs. heavy industry PM2.5 vs. traffic-specific PM2.5 may often be represented via a socioeconomic proxy variable representing the environment).
- (g) Results from the DLNM model will be compared and contrasted with both coarse single-day lag models, and also the synthetic lag approach, a new method recently developed for the AHI project. Through careful examination of the pollutant series it is possible to isolate statistically significant components (called line components) which can individually be phase aligned (lagged) so as to match the phase (absolute lag of the) CP mortality. Any differences between total PM2.5 mass and its component series will be carefully investigated.
- (h) The short-term associations from cause-specific mortality will be extended to morbidity (hospitalization) records. As there are different structural considerations between mortality and morbidity, care will have to be taken for temporal aggregation and sample step, e.g., morbidity may be considered as weekly counts, with various weekly metrics of PM2.5 components considered as predictors in the model. This may allow for use of 6-day sampled data and extension back in time for the models.

- (i) Using a recent Canadian cohort study's approach for estimating Concentration-Response curves (previously applied to long-term total PM_{2.5} mass) but mapped to short-term exposure to PM_{2.5} mass (or specific PM_{2.5} components, if applicable), the C-Rs will be examined to attempt to flexibly characterize the C-R function for each city or region. These city- or region-specific C-R functions will then be combined in a Bayesian hierarchical fashion, extending techniques developed in a related project for pooling of non-linear concentration response functions.

Health Canada will be providing some raw data and information on estimated mass that the contractor will use to perform the activities described in Section 2.1. It is expected items (a)-(e) above will be completed in the first year, with items (e) onward to be done in future years if we choose to pick up the option.

The following sequence of work products will be prepared during this period:

1st report on December 5, 2016: Progress report #1 prepared by the contractor.

Final report on March 13, 2017: A final report for FY2016 prepared by the contractor.

The Contractor must submit one (1) electronic copy of reports to the Project Authority outlining the accomplishments for the given period, open issues and upcoming milestones on a biweekly basis.

2.2. Specifications and Standards

All data collection, screening and interpolation conducted under this contact, along with any recommendations for further research and use of the data, will be summarized in a written report of 40-60 pages for progress reports and extended up to 100 pages for the final report. In addition to the final report, delivery of a robust database of screened and interpolated PM_{2.5} data is required. The report will describe the sources of all data used in the development, the statistical methods applied, and the results obtained, including a summary of available data for further use. The final report will include an executive summary of 2-3 pages, and all data developed will be delivered on two encrypted portable storage device (eg: USB).

2.3. Technical, Operational and Organizational Environment

This work is part of the CESI initiative headed by Environment Canada and is being done in collaboration with Environment Canada and Statistics Canada. The proposed study work extends some technical aspects originally developed by the contractor in previous research. The organization of the study will be facilitated by regular teleconferences and in-person meetings.

2.4. Method and Source of Acceptance

All analyses will be summarized in a written report which will describe the sources of all data used in these analyses, the statistical methods applied, and the results obtained. The Departmental Representative will assess the work in terms of quality, provide feedback to the Contractor, request any necessary modifications, and be responsible for determining final acceptance of the report.

2.5. Reporting Requirements

Refer to Section 2.1.

The Departmental Representative will arrange meetings with the contractor on a regular basis (biweekly, via email, phone, video conference, or in person) to discuss current progress and updates.

Health Canada needs to provide comments/suggestions on progress reports and final report submitted by the contractor within 10 working days.

2.6. Project Management Control Procedures

Refer to Section 2.5, "Reporting Requirements"

2.7. Security Requirements

There are no security requirements. Refer to Annex “C” for further details.

3.7 Insurance Requirements

It is 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 contract 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

Not applicable.

3. Project Schedule

3.1. Expected Start and Completion Dates

The services of the Contractor will be required for a period of approximately one year commencing on or about the 15th of October, 2016. The expected completion date of this project is the 31th of March, 2017.

However, Health Canada reserves the right to pick up two (2) one-year option periods that will be built into the contract.

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

1st report on December 5, 2016: Progress report #1 prepared by the contractor.

Final report on March 13, 2017: A final report for FY2016 prepared by the contractor.

Budget

<u>Payment</u>	<u>Deliverables</u>	<u>Amount</u>	<u>Due Date</u>
#1	A progress report #1	\$30,000	December 5, 2016
#2	A final report	\$30,000	March 13, 2017

The total is \$60,000 plus applicable tax, and there are two more *optional* years for the same amount of money on condition that funding is available and contractor's work is satisfactory.

4. Required Resources or Types of Roles to be Performed

The contractor(s) should have experience working with various types of data, including time series data (especially environmental time series), health data and climate data, and expertise with many different statistical methodologies and models, including the generalized additive model, spectral analysis, smoother functions, Bayesian hierarchical models, and in particular, robust time series interpolation and reconstruction.

Applicable Documents and Glossary

4.1. Applicable Documents

Not applicable.

4.2. Relevant Terms, Acronyms and Glossaries

Not applicable.

ANNEX B – BASIS OF PAYMENT

1. BASIS OF PAYMENT

- 1.1.** Canada will pay the Contractor for the satisfactory performance of the agreed to services an amount not to exceed \$_____, inclusive of all expenses, customs and duties, and applicable taxes.
- 1.2.** 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.
- 1.3.** 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 Contracting 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 Contracting 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.

2. PRICE BREAKDOWN

2.1. OPTION 2 - PROFESSIONAL SERVICES

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.

Labour resources	Per diem (CAD \$)	Level of effort (number of days)	Total price (CAD \$)

Resource #1 (name, labour category)			\$_____
Resource #2 (name, labour category)			\$_____
Resource #3 (name, labour category)			\$_____
Other resources (name, labour category)			\$_____
Other expenses			\$_____
Subtotal (excluding GST/HST)			\$_____
Estimated applicable taxes			\$_____
TOTAL			\$_____

OR

2.2. OPTION 3 – MILESTONES

The schedule of milestones for which payments will be made in accordance with the Contract is as follows. These amounts do not include GST/HST.

Schedule of Milestones	Delivery date	Firm amount
#1.		\$_____
#2.		\$_____
#3.		\$_____
Subtotal (excluding GST/HST)		\$_____
Estimated applicable taxes		\$_____
TOTAL		\$_____

2.3. Travel and Living Expenses

Not applicable.

2.4. Miscellaneous expenses (if applicable)

ANNEX C – SECURITY REQUIREMENTS**THERE IS NO SECURITY REQUIREMENT**

Information which is to be used in the development of the contracted product, as reference material or otherwise made available to the contractor must be unclassified material and considered to be releasable to the public by HC/PHAC and/or The Government of Canada.

No Protected or Classified information is to be made available to the contractor, used in the production of the contracted product, or produced as a result of this contract.

Unscreened contractors must be escorted by an employee or Commissionaire at all times when visiting GoC facilities.